

# New Mexico Airport System Plan Update



# NEW MEXICO AIRPORT SYSTEM PLAN UPDATE

Prepared for

The New Mexico Department of Transportation

By



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# INTRODUCTION



# INTRODUCTION

## PURPOSE

Aviation is an important part of New Mexico's transportation infrastructure providing its citizens and businesses access to critical services, such as air ambulance services, firefighting, agricultural spraying, law enforcement, military training, business travel, air cargo services, pilot training, and tourism. In order to maintain and enhance the state's aviation transportation infrastructure, an

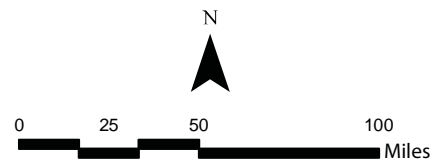
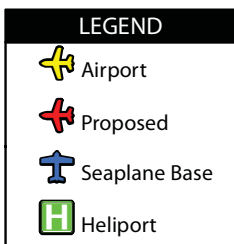
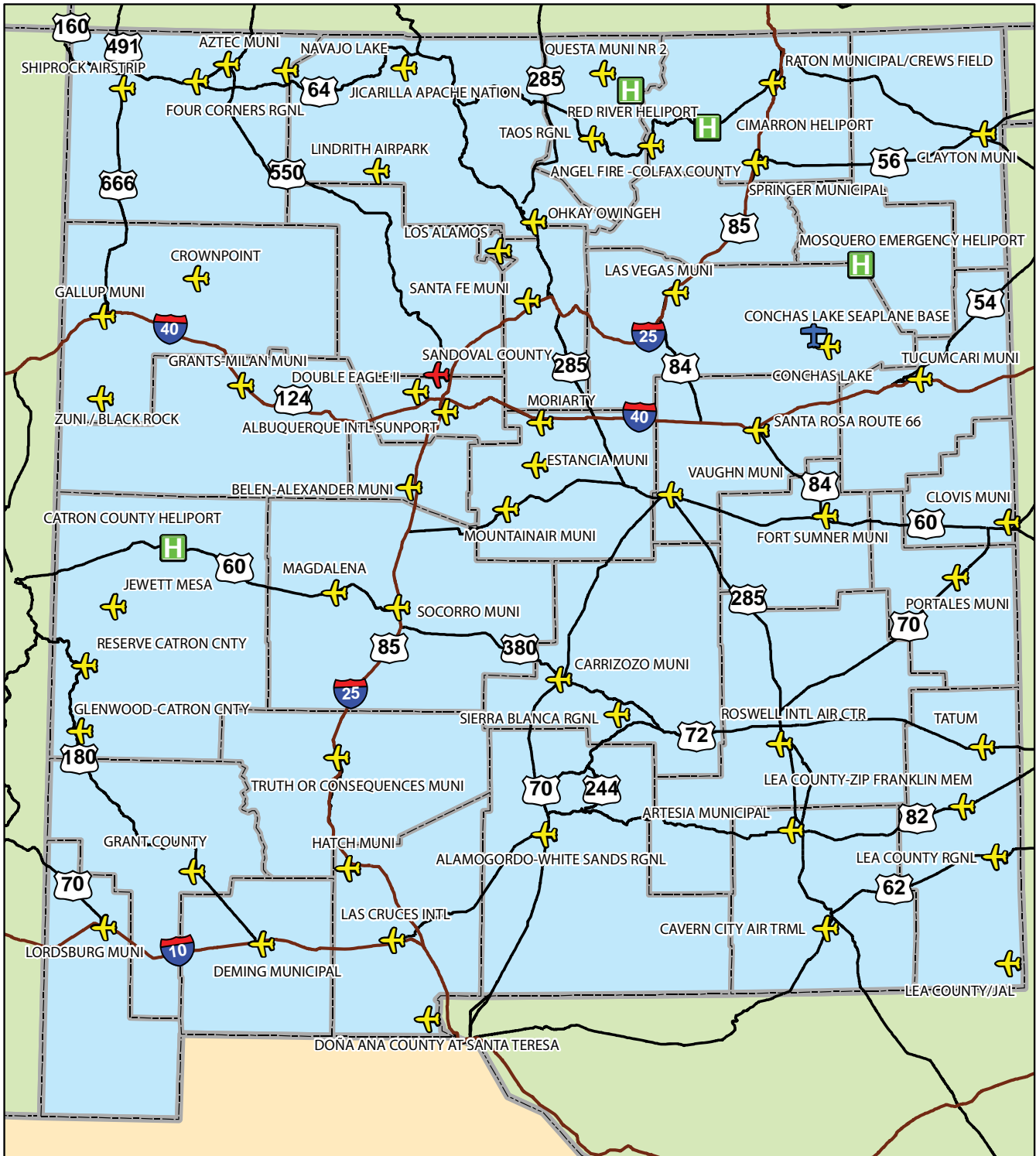
***The NMASP serves as a working blueprint of the long range orderly development for airports in New Mexico.***

update of the New Mexico Airport System Plan (NMASP) is being done to evaluate the needs of the State's airport system, justify funding for needed airport improvements, and provide information for governmental and other entities concerning the value, use, and needs of the New Mexico's system of airports identified on **Exhibit A**. The NMASP serves as a working blueprint of the long range orderly development for airports in New Mexico, as

well as a bridge between the State's goals and the Federal Aviation Administration's (FAA) *National Plan of Integrated Airport Systems* (NPIAS). The study was funded by the New Mexico Department of Transportation Aviation Division (NMDOTAD) and the FAA.

As part of the NMASP update process, airport and airport-related facilities needed to meet the current and future air transportation demands will be developed, as well as the extent, nature, location, and timing of airport improvements. The aeronautical role of existing and recommended new airports will also be identified, as well as the economic benefit these facilities provide to the State.







## **RESPONSIBLE AGENCY**

NMDOTAD was created in 1963 to cooperate with all public and private agencies and organizations, state, local and federal, to encourage and advance general aviation in New Mexico. In carrying out this mission, the NMDOTAD coordinates and administers state grants for improving the aviation infrastructure in the State of New Mexico. It also authorizes the expenditure of money from the state aviation fund. The NMDOTAD also provides the following services:

- Supports and encourages air service to the smaller communities.
- Provides planning and technical support in developing and maintaining the State's airports.
- Responsible for the registration of all aircraft based in New Mexico and for the licensing of aircraft dealers.
- Assembles, and distributes to the public, information relating to aviation, landing fields, beacons, and other matters pertaining to aviation.
- Publishes the New Mexico Aeronautical Chart and provides for the gathering and dissemination of information related to aviation safety, inspection, regulatory, and compliance knowledge.
- Conducts inspections of New Mexico airports on behalf of the Federal Aviation Administration.

## **PLANNING PROCESS**

This planning effort updates the previous NMAASP, which was completed in 2009. The system plan is part of an ongoing planning process which regularly reviews, evaluates, and documents capital improvement needs at the State's system of publicly owned airports and projects funding to finance their implementation over the planning period.

The process for developing the NMAASP included establishing a planning advisory committee. The committee is composed of a combination of elected officials, FAA and other state agency representatives, airport managers and commissioners, and aviation industry and pilot representatives. A list of the committee members can be found in Appendix D. The planning advisory committee met three times during the preparation of the plan to review working papers and discuss findings and recommendations. This information was also made available to the general public at a series of public information meetings held at various locations around the state at various stages during the preparation of the system plan. In addition, presentations regarding the study were made at the New Mexico State Aviation Conference in both 2015 and 2016.

## **GOALS AND PERFORMANCE MEASURES**

An essential step in the preparation of the NMAASP was to identify goals for the aviation system that serves the State of New Mexico. Previous NMAASP plans included four goals, which supported the primary goal of identifying airport development projects that best enhance the safety and utility of the New Mexico airport system. The goals for this NMAASP update are comparable to the goals established



in previous NMSAPs. The New Mexico airport system's adequacies, deficiencies, and surpluses were evaluated against this plan's goals and associated objectives. The following sections of this chapter discuss goals and objectives.

### **Goal 1: Increase/Enhance Safety and Security**

The safety and security of airports within New Mexico's airport system continues to be a top priority. Safety and security deficiencies were identified and recommendations made to bring system airports into compliance with minimum airport design standards and safe airport operating guidelines. Airport development projects designed to meet safety standards and enhance security measures are typically very high priority projects within FAA's system. The level of resources needed, type of improvement project, service level, and airport's role were also key factors for determining priority for safety and security projects.

*The New Mexico airport system's adequacies, deficiencies, and surpluses were evaluated against this plan's goals and associated objectives.*

#### Objectives that Increase/Enhance Safety and Security

- Runway Safety Area Compliance
- Clear Runway Approach Paths
- Provide Visual Glide Slope Indicator Approach Systems
- Runway Wind Coverage
- Adoption of Emergency Response Plans
- Adequate Perimeter Fencing
- Adoption of Security Plans

### **Goal 2: Preserve/Protect Investment in Airports**

Local communities, the State of New Mexico, and the FAA have all made significant historical and on-going investments into the State's airport system. Preservation of the State's airport system begins by maintaining airport facilities using proper planning tools, such as airport layout plans, master/action plans, and pavement condition surveys. Protection of the airport is accomplished by enhancing the compatibility of surrounding land uses in the immediate vicinity of the airport.

#### Objectives that Preserve/Protect Investment in Airports

- Prepare/Maintain a Current Airport Layout Plan
- Prepare/Maintain a Current Master/Action Plan
- Prepare/Maintain Pavement Condition Surveys
- Promote/Maintain Compatible Land Use Zoning (Noise, Height, and Hazard)



### **Goal 3: Accommodate Existing and Projected Aviation Demand**

The State's airport system should provide an adequate level of facilities necessary to accommodate demand from both current and projected future airport users. Airport users include the commercial and general aviation aircraft operators, aviation-related businesses, and the traveling public.

#### Objectives that Accommodate Existing and Projected Aviation Demand

- Federal, State, and Local Regulation Compliance
- Provide Adequate Runway Facility (Length, Width, and Strength)
- Provide Adequate Instrument Approach and Weather Reporting
- Enhance/Maintain Necessary Airport Rescue Firefighting Facilities
- Provide Necessary Facilities to Support Emergency Medical Service Activities
- Provide Necessary Facilities to Support Commercial Service Activities

### **Goal 4: Support Economic Growth of the Community**

Airports themselves are typically not generators of significant economic activity. However, their presence and utility lend assistance in economic growth and diversification. The emphasis of this goal is to support airports in their efforts to stimulate economic activity.

#### Objectives that Support Economic Growth of the Community

- Enhance and Support Airport Services (FBO, 24/7 Fuel, Jet Fuel, Parking Apron, Hangars, Rental Cars, etc.)
- Enhance and Support Airport Business/Industrial Parks
- Enhance and Support Flight Schools
- Enhance and Support Commercial Service
- Enhance and Support Aviation-related Recreation and Tourism
- Establish a Community Outreach Program

## **ABOUT THIS DOCUMENT**

The NMASP includes six chapters as described below. These chapters are based on the previous 2009 NMASP, Economic Impact Study, and Capital Improvement Plan developed by the NMDOTAD.

**Inventory** – This includes a collection of current facility and activity data for all system airports. Data for this study was obtained through an inventory survey and on-site visits to each study airport. Additionally, all available airport master/action plans and airport layout plans were reviewed during the inventory process. Data from the inventory effort is summarized Chapter One of this document.

**Aviation Forecasts** – This task provides five, ten and twenty-year projections of key commercial and general aviation demand. A summary of the aviation forecast analysis and results can be found in Chapter Two of this document.





**Airport Classification Analysis** – Chapter Three of the NMASP evaluates the contribution each airport provides to New Mexico’s existing system of airports and establishes a baseline condition for the system’s performance. This baseline condition will assist NMDOTAD in developing a system of airports that provides an appropriate and safe level of service to communities and airport users throughout the state.

**System Analysis and Recommendations** – Chapter Four of the NMASP is a performance-based assessment of New Mexico’s investment in the airport system and how this investment correlates to meaningful system improvements. This performance measure analysis will include an update of performance measures utilized in the previous system plan, as well as new measures deemed applicable given the current aviation environment, including the ability of the airports to meet the system requirements set forth as part of the airport classifications.

**Economic Impact Analysis** – The NMASP economic analysis is summarized in Chapter Five. The economic impact analysis measures the impact that each system airport has on state and local economies. Economic impact assessments consist of direct, indirect, and multiplier effects. The impacts are identified for each system airport based on a series of airport management, business, and airport tenant surveys. The economic impacts are measured in terms of jobs, payroll, and output. Other qualitative impacts, such as community benefits/services, are also presented.

**Capital Improvement Program** – The Capital Improvement Programs presented in Chapter Six include both financially constrained and unconstrained projects based on the Overall Development Objective concept, and are based on three planning horizon periods: short term (1-5 years), mid-term (6-10 years), and long term (11-20 years).

The information in this document was primarily collected and evaluated in 2014 and early 2015. It should be noted that airports continued to develop and change during this process. Major projects completed late in the System Plan that are not depicted as existing facilities include:

- Zuni Black Rock Airport - new airport
- Taos Regional Airport - second paved runway
- Belen-Alexander Airport – second paved runway

An automated weather observation system (AWOS) was also installed at Doña Ana County Jetport at Santa Teresa.

Finally, commercial air service was discontinued at Los Alamos Airport.

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<sup>1</sup> New Mexico State statute 64-1-15 establishes the “state aviation fund.” All income to the state aviation fund is appropriated to the New Mexico Department of Transportation Aviation Division and used for air service assistance programs, planning, program administration, construction, equipment, materials, and maintenance of system airports.





CHAPTER ONE

# INVENTORY



## Chapter One

# INVENTORY

### INTRODUCTION

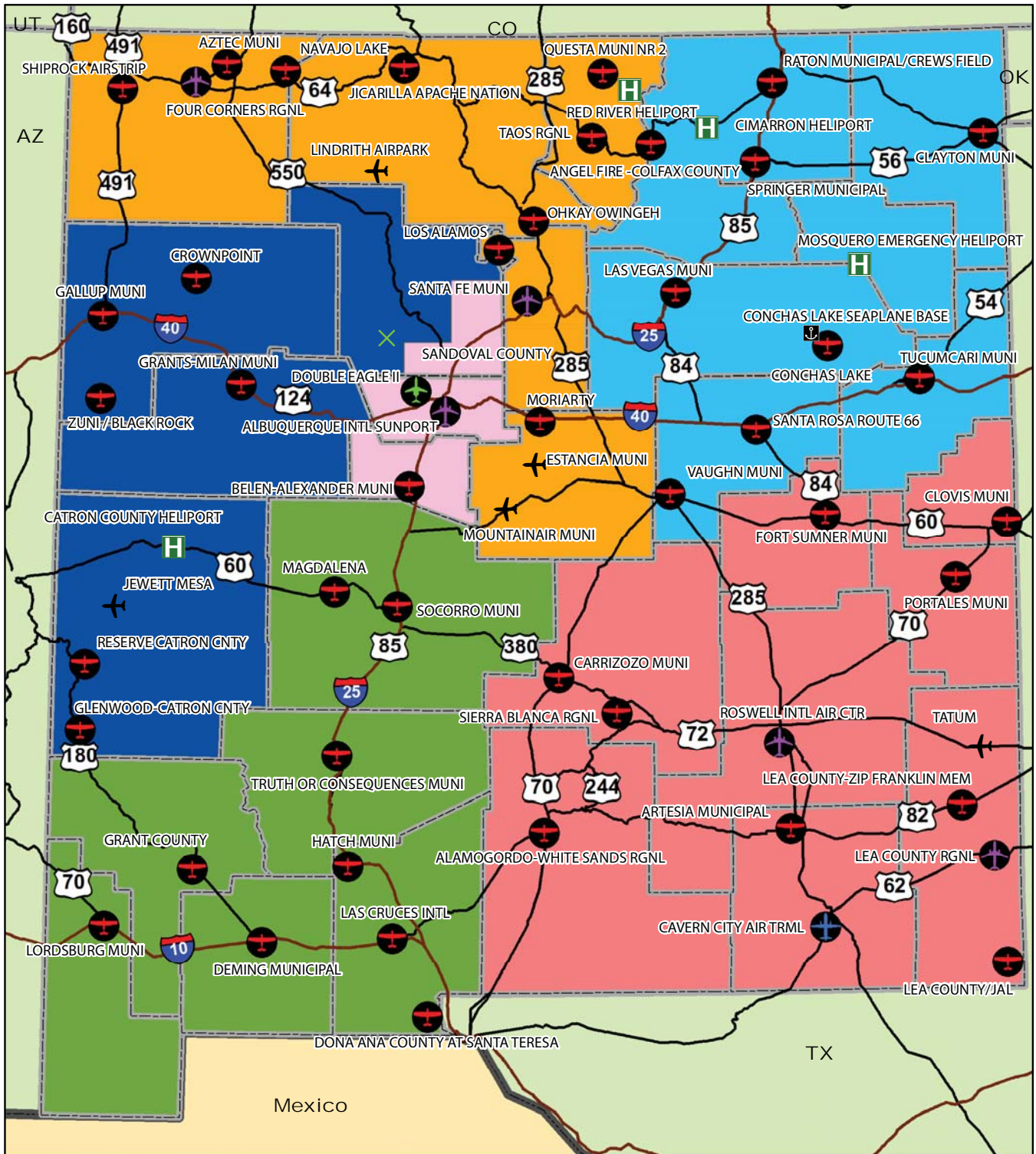
An accurate and complete inventory is essential to the success of the planning effort since findings and assumptions made in the plan are dependent upon collected information. This information was obtained from state and Federal Aviation Administration (FAA) data sources, recent airport master plans, and interviews with the New Mexico Aviation Division and local airport operator surveys and interviews.

The data collected in the returned surveys and during the on-site visits was reviewed and entered into a central database for future reference. The data is provided in tabular format throughout this chapter and includes information ranging from airport contact information to aviation services. The tables in this chapter highlight important information used in later sections of the plan.

### NEW MEXICO AIRPORT SYSTEM

The New Mexico Airport System (NMAS) is comprised of 61 publicly owned public use aviation facilities. The facilities, summarized in **Table 1A**, include 55 airports, four heliports, one seaplane base, and one proposed airport. The locations of the NMAS facilities are depicted on **Exhibit 1A**. As shown in the exhibit, system facilities are located within 30 of New Mexico's 33 counties. Additionally, NMDOT groups counties into districts for administrative purposes. **Table 1B** summarizes aviation facilities by district and notes the counties which comprise each district.





NPIAS Service Level

- Commercial Service Primary (5)
- Commercial Service Non Primary (1)
- Reliever (1)
- General Aviation (43)

Non-NPIAS

- Airport (5)
- Heliport (4)
- Seaplane Base (1)
- Proposed (1)

NMDOT District

- 1
- 2
- 3
- 4
- 5
- 6

N

0 20 40 80  
Miles



**TABLE 1A**  
**New Mexico Airport System Plan Facilities**

Facility	ID	Associated City	Type	Elevation (Feet MSL)	NPIAS Service Level	FAA GA Asset Service Level	NMDOT District
Alamogordo-White Sands Airport	ALM	Alamogordo	A	4,200	GA	Regional	2
Albuquerque International Sunport	ABQ	Albuquerque	A	5,355	P	Unclassified	3
Angel Fire - Colfax County Airport	AXX	Angel Fire	A	8,380	GA	Unclassified	4
Artesia Municipal Airport	ATS	Artesia	A	3,544	GA	Regional	2
Aztec Municipal Airport	N19	Aztec	A	5,882	GA	Local	5
Belen-Alexander Municipal Airport	E80	Belen	A	5,194	GA	Local	3
Carlsbad - Cavern City Air Terminal	CNM	Carlsbad	A	3,295	CS	Regional	2
Carrizozo Municipal Airport	F37	Carrizozo	A	5,371	GA	Basic	2
Clayton Municipal Airpark	CAO	Clayton	A	4,970	GA	Basic	4
Clovis Municipal Airport	CVN	Clovis	A	4,216	GA	Regional	2
Conchas Lake Airport	E89	Conchas Dam	A	4,230	GA	Basic	4
Crownpoint Airport	OE8	Crownpoint	A	6,696	GA	Basic	6
Deming Municipal Airport	DMN	Deming	A	4,314	GA	Local	1
Doña Ana County Jetport at Santa Teresa	5T6	Santa Teresa	A	4,113	GA	Regional	1
Double Eagle II Airport	AEG	Albuquerque	A	5,837	R	Regional	3
Dulce-Jicarilla Apache Nation Airport	24N	Dulce	A	7,618	GA	Basic	5
Ohkay Owingeh Airport	E14	Espanola	A	5,790	GA	Basic	5
Estancia Municipal Airport	E92	Estancia	A	6,100	Non-NPIAS	Unclassified	5
Farmington Four Corners Regional Airport	FMN	Farmington	A	5,506	P	Unclassified	5
Ft. Sumner Municipal Airport	FSU	Ft. Sumner	A	4,165	GA	Basic	2
Gallup Municipal Airport	GUP	Gallup	A	6,472	GA	Local	6
Glenwood-Catron County Airport	E94	Glenwood	A	5,428	GA	Unclassified	6
Grant County - Silver City Airport	SVC	Silver City	A	5,446	GA	Local	1
Grants-Milan Municipal Airport	GNT	Grants	A	6,537	GA	Basic	6
Hatch Municipal Airport	E05	Hatch	A	4,080	GA	Basic	1
Jewett Mesa Airport*	13Q	Apache Creek	A	7,681	Non-NPIAS	Unclassified	6
Las Cruces International Airport	LRU	Las Cruces	A	4,457	GA	Regional	1
Las Vegas Municipal Airport	LVS	Las Vegas	A	6,877	GA	Basic	4
Lea County-Hobbs Regional Airport	HOB	Hobbs	A	3,661	P	Regional	2
Lea County-Jal Airport	E26	Jal	A	3,118	GA	Unclassified	2
Lea County-Zip Franklin Memorial Airport	E06	Lovington	A	3,979	GA	Basic	2
Lindrith Airpark	E32	Lindrith	A	7,202	Non-NPIAS	Unclassified	5
Lordsburg Municipal Airport	LSB	Lordsburg	A	4,289	GA	Basic	1
Los Alamos County Airport	LAM	Los Alamos	A	7,171	GA	Local	5
Magdalena Airport	N29	Magdalena	A	6,727	GA	Unclassified	1
Moriarty Municipal Airport	OE0	Moriarty	A	6,204	GA	Local	5
Mountainair*	M10	Mountainair	A	6,492	Non-NPIAS	Unclassified	5
Navajo Lake Airport	1V0	Navajo Dam	A	6,475	GA	Unclassified	5
Portales Municipal Airport	PRZ	Portales	A	4,078	GA	Local	2
Questa Municipal No. 2 Airport	N24	Questa	A	7,700	GA	Unclassified	5
Raton Crews Field Municipal Airport	RTN	Raton	A	6,352	GA	Local	4
Reserve Catron County Airport	T16	Reserve	A	6,360	GA	Basic	6
Roswell International Air Center	ROW	Roswell	A	3,671	P	Unclassified	2
Santa Fe Municipal Airport	SAF	Santa Fe	A	6,349	P	Unclassified	5
Santa Rosa Route 66 Airport	SXU	Santa Rosa	A	4,791	GA	Basic	4
Shiprock Airstrip	5V5	Shiprock	A	5,270	GA	Basic	5
Sierra Blanca Regional Airport	SRR	Ruidoso	A	6,814	GA	Regional	2
Socorro Municipal Airport	ONM	Socorro	A	4,875	GA	Basic	1
Springer Municipal Airport	S42	Springer	A	5,891	GA	Basic	4





**TABLE 1A (Continued)**  
**New Mexico Airport System Plan Facilities**

Facility	ID	Associated City	Type	Elevation (Feet MSL)	NPIAS Service Level	FAA GA Asset Service Level	NMDOT District
Taos Regional Airport	SKX	Taos	A	7,095	GA	Local	5
Tatum Airport*	18T	Tatum	A	3,986	Non-NPIAS	Unclassified	2
Truth Or Consequences Municipal Airport	TCS	Truth Or Consequences	A	4,862	GA	Local	1
Tucumcari Municipal Airport	TCC	Tucumcari	A	4,065	GA	Basic	4
Vaughn Municipal Airport	N17	Vaughn	A	5,928	GA	Basic	4
Zuni-Black Rock Airport	ZUN	Zuni Pueblo	A	6,454	GA	Basic	6
Mosquero Heliport*	N01	Mosquero	H	5,590	Non-NPIAS	Unclassified	4
Red River Heliport*	N02	Red River	H	8,617	Non-NPIAS	Unclassified	5
Catron County Heliport*	C54	Quemado	H	7,205	Non-NPIAS	Unclassified	6
Cimarron Heliport*	C12	Cimarron	H	6,460	Non-NPIAS	Unclassified	4
Conchas Lake Seaplane Base*	E61	Conchas Lake	SPB	4,201	Non-NPIAS	Unclassified	4
Sandoval County Airport	Proposed	Proposed	SPB Proposed	-	Non-NPIAS	Unclassified	6

P – Commercial Service (Primary)

CS – Commercial Service (Non-Primary)

GA – General Aviation

R - Reliever

A – Airport

H – Heliport

SPB – Seaplane Base

\* Airport or Heliport not included in the 2009 New Mexico System Plan. This plan updates the 2009 New Mexico Airport System Plan which included a total of 51 existing airports and two proposed airports. All 51 of the 2009 NMAASP airports are included within this study.

Source: New Mexico Department of Transportation Aviation Division, 2014 FAA 5010 Database, and 2015-2019 *National Plan of Integrated Airport Systems*

**TABLE 1B**  
**System Plan Distribution of Airport Facilities by NMDOT District and County**

NMDOT District	County	Airport Facilities
1	Doña Ana, Grant, Hidalgo, Luna, Sierra, Socorro	9
2	Chaves, Curry, De Baca, Eddy, Lea, Lincoln, Otero, Roosevelt	13
3	Bernalillo, Valencia	3
4	Colfax, Guadalupe, Harding <sup>1</sup> , Mora <sup>1</sup> , Quay, San Miguel, Union	12
5	Los Alamos, Rio Arriba, San Juan, Santa Fe, Taos, Torrance	15
6	Catron, Cibola, McKinley, Sandoval <sup>2</sup>	9
<b>Total</b>		<b>61</b>

<sup>1</sup> No NMAASP airports are within this county.

<sup>2</sup> Total includes one proposed airport for Sandoval County.

## NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS (NPIAS)

The *National Plan of Integrated Airport Systems* (NPIAS) identifies airports that are important to national transportation and includes all commercial service airports, all reliever airports, and selected general aviation airports. Overall, the NPIAS includes 3,331 existing airports which are considered sig-



nificant to the national air transportation system. The NPIAS is published and used by the FAA in administering the Airport Improvement Program (AIP), which is the source of federal funds for airport improvement projects across the country. The AIP program is funded exclusively by user fees and user taxes, such as those on fuel and airline tickets. The 2015-2019 NPIAS estimates that \$33.5 billion worth of needed airport improvements are eligible for AIP funding across the country over the next five years. An airport must be included in the NPIAS to be eligible for federal funding assistance through the AIP.

Airports are grouped into two major categories: primary and non-primary. Primary airports are defined as public airports receiving scheduled air carrier service with 10,000 or more enplaned passengers per year. Non-primary airports are mainly used by general aviation aircraft. Included in the non-primary category are non-primary commercial service airports (public airports receiving scheduled passenger service and between 2,500 and 9,999 enplaned passengers per year); general aviation airports; and reliever airports.

The New Mexico Airport System includes 50 NPIAS airports. As noted in **Table 1A**, six airports are classified as Commercial Service airports in New Mexico. These six airports include Albuquerque International Sunport, Cavern City Air Terminal, Four Corners Regional, Lea County Regional, Roswell International Air Center, and Santa Fe Municipal. Of these, Cavern City Air Terminal is the only non-primary commercial service airport; the remaining locations are classified as primary.

***The New Mexico Airport System includes 50 NPIAS airports.***

Of the remaining 44 NPIAS airports, only Double Eagle II Airport in Albuquerque, NM is classified as a reliever airport. Reliever airports are defined by the FAA as high-capacity general aviation airports located in or near a major metropolitan area. To be classified as a reliever airport, 100 or more aircraft must be based at the location or the airport must have at least 25,000 itinerant operations. The purpose of the reliever airports is to provide a viable alternative to using larger, congested airports.

The remaining 43 airports are classified as General Aviation. General Aviation airports that do not receive scheduled commercial service or that do not meet the criteria for classification as a commercial service airport are included in the NPIAS as general aviation airports if they account for enough activity (having usually at least 10 based aircraft) and are at least 20 miles from the nearest NPIAS airport. They are the closest source of air transportation for about 19 percent of the population and are particularly important to rural areas.

Eleven New Mexico Airport System facilities are not included in the NPIAS. These include five general aviation airports, four heliports, one seaplane base, and one proposed airport.



## GENERAL AVIATION AIRPORT ASSET STUDIES

In 2012 and 2014, the FAA published a document titled, *General Aviation Airports: A National Asset (ASSET 1)* and *ASSET 2: In-Depth Review of 497 Unclassified Airports*. The study categorizes airports within four groups (national, regional, local, and basic) and identifies general functions associated with each category. These classifications generally correspond to the recommended role the airport will be assigned in forthcoming editions of the NPIAS. Of the 2,952 general aviation airports included in the ASSET 1 study, 497 were not specifically classified due to types of activity and characteristics that did not provide for clear classification within one of the four groups. These 497 airports were later studied and assigned a classification as part of the ASSET 2 study. The Asset study classification for New Mexico Airport System facilities is presented in **Table 1A**. A total of 46 New Mexico System airports are included in the Asset studies, and the classifications for these airports are summarized in **Table 1C**. Airports not included in the Asset studies, but identified as part of New Mexico Airport System Plan, will be evaluated and given a state system classification as part of this study.

**TABLE 1C**

### New Mexico Airport System

#### General Aviation Airport Asset Classification Summary

Classification	Count
National	0
Regional	9
Local	11
Basic	21
Unclassified	5
Total	46

Source: *General Aviation Airports: A National Asset (ASSET 1)* and *ASSET 2: In-Depth Review of 497 Unclassified Airports*

Note: This summary only includes the 46 New Mexico Airports included in the Asset studies. Non-NPIAS, heliports, commercial service, and seaplane base facilities are not included in this total.

## LOCAL AVIATION PLANNING

Planning for airports and heliports on the local level generally is done by preparing an airport master plan, action plan, or airport layout plan (ALP) narrative report. An airport master plan is a comprehensive study of an airport and usually describes the short, medium, and long-term development plans to meet future aviation demand. Elements of an airport master plan include an inventory of existing conditions, aviation forecasts, facility requirements, alternatives evaluation, facility implementation plan, financial analysis, and ALP preparation.

Airport action plans and ALP narrative reports are lesser planning efforts containing elements of a master plan focused on specific need or needs of the airport. Both the action plan and ALP narrative report



result in an implementation plan and updated ALP. **Table 1D** lists the New Mexico airports that have master plans, action plans, and ALP narrative reports on file with the NMDOTAD.

**TABLE 1D**  
**New Mexico Airport System Plan**  
**Planning Study and ALP Summary**

Facility	ID	Planning Study Type	Planning Study Year	ALP Year
Alamogordo-White Sands	ALM	Master Plan	2015 <sup>1</sup>	2003
Albuquerque International Sunport	ABQ	Master Plan	2016 <sup>1</sup>	2014
Angel Fire - Colfax County Airport	AXX	Action Plan	2015 <sup>1</sup>	2008
Artesia Municipal Airport	ATS	Action Plan	2010	2012
Aztec Municipal Airport	N19	Action Plan	2008	2008
Belen-Alexander Municipal Airport	E80	Action Plan	2005	2007
Carlsbad - Cavern City Air Terminal	CNM	Master Plan	2015 <sup>1</sup>	1997
Carrizozo Municipal Airport	F37	Action Plan	2009	2009
Clayton Municipal Airpark	CAO	Action Plan	2013	2012
Clovis Municipal Airport	CVN	Action Plan	2015 <sup>1</sup>	2012
Conchas Lake State Park	E89	Action Plan	2000	2001
Crownpoint Airport	OE8	System Plan	2015 <sup>1</sup>	-
Deming Municipal Airport	DMN	Master Plan	2010	2010
Doña Ana County Jetport at Santa Teresa	5T6	Master Plan	2008	2007
Double Eagle II Airport	AEG	Master Plan	2016 <sup>1</sup>	2003
Dulce-Jicarilla Apache Nation Airport	24N	ALP Report	2012	2012
Ohkay Owingeh Airport	E14	ALP Update	2011	2007
Estancia Municipal Airport	E92	Action Plan	2004	2004
Farmington Four Corners Regional Airport	FMN	Master Plan	2013	2013
Ft. Sumner Municipal Airport	FSU	-	-	-
Gallup Municipal Airport	GUP	-	-	2007
Glenwood-Catron County Airport	E94	Master Plan	2005	2004
Grant County - Silver City Airport	SVC	Action Plan	2016 <sup>1</sup>	2005
Grants-Milan Municipal Airport	GNT	Action Plan	2007	2007
Hatch Municipal Airport	E05	Action Plan	2004	1998
Jewett Mesa Airport*	13Q	-	-	-
Las Cruces International Airport	LRU	Master Plan	2016 <sup>1</sup>	2008
Las Vegas Municipal Airport	LVS	Action Plan	2007	2006
Lea County-Hobbs Regional Airport	HOB	System Plan	2015 <sup>1</sup>	2014
Lea County-Jal Airport	E26	System Plan	2015 <sup>1</sup>	2014
Lea County-Zip Franklin Memorial Airport	E06	System Plan	2015 <sup>1</sup>	2014
Lindrith Airpark	E32	-	-	-
Lordsburg Municipal Airport	LSB	Action Plan	2010	2003
Los Alamos County Airport	LAM	Master Plan	2012	2012
Magdalena Airport	N29	Master Plan	2010	2009
Moriarty Municipal Airport	OE0	Action Plan	2008	2007
Mountainair Airport*	M10	Action Plan	2015 <sup>1</sup>	-
Navajo State Park Airport	1V0	Action Plan	-	2002
Portales Municipal Airport	PRZ	Action Plan	2016 <sup>1</sup>	2002
Questa Municipal No. 2 Airport	N24	ALP Report	2012	-
Raton Crews Field Municipal Airport	RTN	Action Plan	2005	2002
Reserve Catron County Airport	T16	Master Plan	2012	-
Roswell International Air Center	ROW	Master Plan	2012	2003
Santa Fe Municipal Airport	SAF	Master Plan	2016 <sup>1</sup>	2016 <sup>1</sup>
Santa Rosa Route 66 Airport	SXU	Action Plan	2011	2003
Shiprock Airstrip	5V5	System Plan	2015 <sup>1</sup>	-
Sierra Blanca Regional Airport	SRR	Master Plan	2015 <sup>1</sup>	2006
Socorro Municipal Airport	ONM	Action Plan	2010	2001



**TABLE 1D (Continued)**

**New Mexico Airport System Plan  
Planning Study and ALP Summary**

Facility	ID	Planning Study Type	Planning Study Year	ALP Year
Springer Municipal Airport	S42	Action Plan	2015 <sup>1</sup>	2006
Taos Regional Airport	SKX	-	-	2003
Tatum Airport*	18T	-	-	-
Truth Or Consequences Municipal Airport	TCS	Action Plan	2008	2007
Tucumcari Municipal Airport	TCC	Master Plan	2012	2012
Vaughn Municipal Airport	N17	-	-	2006
Zuni-Black Rock Airport	ZUN	-	-	-
Mosquero Heliport*	N01	-	-	-
Red River Heliport*	N02	-	-	-
Catron County Heliport*	C54	-	-	-
Cimarron Heliport*	C12	-	-	-
Conchas Lake Seaplane Base*	E61	-	-	-
Sandoval County Airport	Proposed	Feasibility Study	2007, 2015 <sup>1</sup>	-

\* Airport or Heliport not included in the 2009 New Mexico System Plan. This plan updates the 2009 New Mexico Airport System Plan which included a total of 51 existing airports and two proposed airports. All 51 of the 2009 NMASP airports are included within this study.

Source: New Mexico Department of Transportation Aviation Division

<sup>1</sup> Estimated year of completion

As indicated in **Table 1D**, 16 airports have completed, or are in the process of completing, airport master plans and 23 airports have completed action plans or ALP narrative reports in New Mexico. Lea County and the Navajo Nation have independently conducted local system plans for airports within their geographic boundaries.

The proposed airport in Sandoval County completed a feasibility study in 2007, which will be updated in 2015. The proposed Black Rock Airport is currently under construction. The remaining 13 airports do not have local planning documents on file with the NMDOTAD.

## Airport Design Classification

The FAA has established several aircraft classification systems that group aircraft types based on their performance (approach speed in landing configuration) and on design characteristics (wingspan and landing gear configuration). These classification systems are used to determine the appropriate airport design standards for specific airport elements, such as runways, taxiways, taxilanes, and aprons. The selection of appropriate FAA design standards for the development and location of airport facilities is based primarily on the characteristics of the aircraft which are currently using or are expected to use an airport.

The classification system used for airport planning is the Airport Reference Code. The ARC is an airport designation that combines the Airport Approach Category (AAC) and the Airplane Design Group (ADG). The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the Airport.



**Aircraft Approach Category (AAC):** A grouping of aircraft based on a reference landing speed ( $V_{REF}$ ), if specified, or if  $V_{REF}$  is not specified, 1.3 times stall speed ( $V_{SO}$ ) at the maximum certificated landing weight.  $V_{REF}$ ,  $V_{SO}$ , and the maximum certificated landing weight are those values as established for the aircraft by the certification authority of the country of registry.

The AAC generally refers to the approach speed of an aircraft in landing configuration. The higher the approach speed, the more restrictive the applicable design standards. The AAC, depicted by a letter A through E, is the aircraft approach category as it relates to aircraft approach speed (operational characteristic). Aircraft in AAC A and B include pistons, turboprops, and small general aviation jets. Aircraft in AAC C, D, and E include medium-sized general aviation jets up to larger commercial jets. The AAC generally applies to runways and runway-related facilities, such as runway width, runway safety area (RSA), runway object free area (ROFA), runway protection zone (RPZ), and separation standards.

**Airplane Design Group (ADG):** The ADG, depicted by a Roman numeral I through VI, is a classification of aircraft which relates to aircraft wingspan or tail height (physical characteristic). When the aircraft wingspan and tail height fall in different groups, the higher group is used. The ADG influences design standards for taxiway safety area (TSA), taxiway object free area (TOFA), apron wingtip clearance, and various separation distances.

**Table 1E** includes the highest ARC for each airport in the system. Airports with multiple runways may have multiple ARCs. As indicated in the table, the airport with the highest ARC is Albuquerque International Sunport at D-V. There are several airports with the lowest ARC of A-I. Of the 39 airports for which ARC information is available, four are AAC Category A, 28 are Category B, four are Category C, and three are Category D. Additionally, there are 15 Group I runways, 19 Group II runways, three Group 3 runways, and one runway each in Groups IV and V. ARC B-II is the most prevalent ARC within the system at 15, followed closely by B-I at 11 runways.

## AIRPORTS

***There are 97 runways within the New Mexico Airport System.***

## RUNWAYS

There are 97 runways within the New Mexico Airport System. As summarized in **Table 1E**, the longest runway is 13,793 feet (Runway 8/26 at Albuquerque International Sunport) and the shortest runway is 2,442 feet (Runway 8/26 at Clovis Municipal Airport). The three types of runway surfaces are asphalt, concrete and dirt/turf. Of the 97 runways in the New Mexico Airport System, 75 are asphalt, 4 are concrete and 17 are non-paved surfaces (dirt, gravel, turf). Additionally, one runway in the system is constructed of a combination of asphalt and concrete. Runway widths within the system range between 45 and 150 feet wide.





**TABLE 1E**  
**New Mexico Airport System Plan Runways**

ID	Runway ID	Length	Width	Surface Type	ARC	Pavement Strength Rating (1,000 lbs)			
						S	D	2D	2D/2D2
ALM	16/34	3,549	190	Dirt	B-II	-	-	-	-
ALM	03/21	9,205	150	Asphalt	B-III	54	74	120	-
ABQ	08/26	13,793	150	Concrete	D-V	100	210	360	720
ABQ	03/21	10,000	150	Concrete	D-IV	100	210	360	720
ABQ	12/30	6,000	150	Concrete	B-III	65	120	155	-
AXX	17/35	8,900	100	Asphalt	B-II	30	45	-	-
ATS	03/21	6,800	150	Asphalt	B-II	40	57	-	-
ATS	12/30	6,853	150	Asphalt	B-II	40	57	-	-
N19	04/22	2,850	40	Asphalt	A-I	8	-	-	-
N19	08/26	4,314	60	Asphalt	A-I	10	-	-	-
E80	03/21	6,601	60	Asphalt	B-I	12.5	-	-	-
CNM	08/26	5,334	75	Asphalt	B-II	19	-	-	-
CNM	14L/32R	4,616	150	Asphalt	B-II	8	12.5	-	-
CNM	14R/32L	5,837	100	Asphalt	B-II	30	45	-	-
CNM	03/21	7,854	150	Asphalt	C-II	62	88	140	-
F37	15/33	2,500	90	Dirt	A-I	-	-	-	-
F37	06/24	4,900	75	Asphalt	B-II	12	-	-	-
CAO	12/30	4,106	60	Asphalt	B-I	-	-	-	-
CAO	02/20	6,307	75	Asphalt	A-II	16.5	-	-	-
CVN	12/30	5,697	150	Asphalt	B-II	42	50	-	-
CVN	08/26	2,442	75	Turf	A-I	-	-	-	-
CVN	04/22	7,200	150	Asphalt	B-II	45	57	-	-
E89	09/27	4,800	60	Asphalt	A-I	13	-	-	-
OE8	18/36	5,820	60	Asphalt	A-I	-	-	-	-
DMN	04/22	5,675	60	Asphalt	B-I	12	-	-	-
DMN	08/26	8,018	75	Asphalt	B-II	20	-	-	-
5T6	10/28	9,550	100	Asphalt	B-III	20	-	-	-
AEQ	17/35	5,993	100	Asphalt	D-II	30	-	-	-
AEQ	04/22	7,398	100	Asphalt	D-II	30	-	-	-
24N	17/35	7,500	75	Asphalt	B-II (Small)	12.5	-	-	-
E14	16/34	5,007	75	Asphalt	A-I	18	-	-	-
E92	08/26	4,000	50	Gravel	A-I	-	-	-	-
FMN	05/23	6,500	150	Asphalt	B-II	47	66	-	-
FMN	07/25	6,704	100	Asphalt	B-II	50	90	-	-
FSU	03/21	5,802	75	Asphalt	B-II	25	-	-	-
FSU	08/26	5,254	60	Asphalt	B-II	17	-	-	-
GUP	06/24	7,316	100	Asphalt	B-II	45	55	-	-
E94	01/19	3,700	84	Dirt	B-I	-	-	-	-
SVC	08/26	6,802	100	Asphalt	B-II	75	100	-	-
SVC	03/21	4,537	80	Dirt	B-II	-	-	-	-
SVC	12/30	4,675	75	Dirt	B-II	-	-	-	-
SVC	17/35	5,473	75	Dirt	B-II	-	-	-	-
GNT	13/31	7,172	75	Asphalt	B-II	12	-	-	-
E05	11/29	4,110	60	Asphalt	A-I	9	-	-	-
13Q	06/24	5,200	45	Dirt	A-I	-	-	-	-
LRU	08/26	6,009	100	Asphalt	C-II	70	120	-	-
LRU	04/22	7,501	105	Asphalt	C-II	30	30	30	30
LRU	12/30	7,506	100	Concrete	C-II	70	120	-	-
LVS	14/32	8,199	75	Asphalt	B-II	20	-	-	-
LVS	02/20	5,006	75	Asphalt	B-II	20	-	-	-
HOB	17/35	4,998	100	Asphalt	B-I vis	32	50	-	-
HOB	12/30	6,002	150	Asphalt	B-II	90	120	-	-
HOB	03/21	7,398	150	Asphalt	C-II	65	100	-	-



**TABLE 1E (Continued)**  
**New Mexico Airport System Plan Runways**

ID	Runway ID	Length	Width	Surface Type	ARC	Pavement Strength Rating (1,000 lbs)			
						S	D	2D	2D/2D2
E26	09/27	2,604	50	Asphalt	B-I vis	12	-	-	-
E26	01/19	4,704	60	Asphalt	B-I vis	23	-	-	-
E06	12/30	4,409	60	Asphalt	B-I vis	12	-	-	-
E06	03/21	6,001	75	Asphalt	B-I	12	-	-	-
E32	07/25	3,300	75	Dirt	A-I	-	-	-	-
LSB	01/19	3,250	50	Dirt	B-I (Small)	-	-	-	-
LSB	12/30	5,011	75	Asphalt	B-II	-	-	-	-
LAM	09/27	6,000	120	Asphalt	B-I	43	-	-	-
N29	02/20	6,062	50	Dirt-Gravel	B-I (Small)	-	-	-	-
OEO	08/26	7,700	75	Asphalt	B-II	-	-	-	-
OEO	18/36	6,200	75	Asphalt	B-II	-	-	-	-
M10	08/26	2,578	50	Dirt	A-I	-	-	-	-
1V0	06/24	4,995	60	Asphalt	B-I	12	-	-	-
PRZ	08/26	4,560	60	Asphalt	B-I	-	-	-	-
PRZ	01/19	5,700	60	Asphalt	B-I	-	-	-	-
N24	17/35	6,861	75	Asphalt	B-II	12.5	-	-	-
RTN	07/25	4,404	75	Asphalt	B-II	12	-	-	-
RTN	02/20	7,620	75	Asphalt	B-II	18	-	-	-
T16	06/24	4,777	50	Asphalt	B-II	12.5	-	-	-
ROW	17/35	9,999	100	Asphalt	C-III	77	104	165	-
ROW	03/21	13,001	150	Asphalt-Concrete	D-V	100	200	400	-
SAF	10/28	6,301	75	Asphalt	B-II	30	-	-	-
SAF	15/33	6,316	100	Asphalt	C-II	48	65	105	-
SAF	02/20	8,366	150	Asphalt	D-II	48	65	105	-
SXU	01/19	5,013	75	Asphalt	B-II	-	-	-	-
SXU	08/26	4,294	60	Asphalt	A-I	-	-	-	-
SV5	02/20	4,840	75	Asphalt	B-II	11	-	-	-
SRR	12/30	6,309	75	Asphalt	B-II	12.5	-	-	-
SRR	06/24	8,120	100	Asphalt	C-III	60	115	-	-
ONM	06/24	4,590	60	Asphalt	B-I	-	-	-	-
ONM	15/33	5,841	100	Asphalt	B-I	45	75	-	-
S42	01/19	5,003	60	Asphalt	B-I	14.5	-	-	-
SKX	04/22	5,803	75	Asphalt	B-II	24	-	-	-
18T	12/30	2,920	60	Asphalt	A-I	10	-	-	-
18T	05/23	2,990	75	Asphalt	na	-	-	-	-
TCS	15/33	3,001	140	Gravel	A-I	-	-	-	-
TCS	11/29	6,981	190	Gravel	A-I	-	-	-	-
TCS	07/25	2,933	130	Gravel	A-I	-	-	-	-
TCS	13/31	7,202	75	Asphalt	B-I	12.5	-	-	-
TCS	01/19	3,302	130	Gravel	A-I	-	-	-	-
TCC	03/21	7,108	100	Asphalt	B-I	25	-	-	-
TCC	08/26	4,600	60	Asphalt	B-I (Small)	12	-	-	-
N17	09/27	5,150	60	Asphalt	B-I	12.5	-	-	-
ZUN	06/24	4,807	50	Asphalt	B-I	-	-	-	-

Pavement Strength Rating: Single wheel landing gear (S), dual wheel landing gear (D), dual tandem landing gear (2D) and double dual tandem wheel type landing gear (2D/2D2).

Source: FAA Airport/Facility Directory, 2014

The pavement strength rating for each of the runways within the New Mexico Airport System is also presented in **Table 1E**. Greater pavement strength is an indication of the runway material's ability to withstand repeated use by larger, heavier aircraft on a regular basis. While the pavement strength rating is not the maximum weight limit, aircraft weighing more than the certified strength can only oper-



ate on the runway on an infrequent basis. Heavy aircraft operations can shorten the life span of airport pavements if they are not designed to handle these aircraft. The FAA has adopted a standardized methodology for reporting pavement strengths which applies only to pavements with bearing strengths of 12,500 pounds or greater. As indicated in the table, pavement strengths are listed in four categories related to the landing gear configuration of the aircraft: single wheel landing gear (S), dual wheel landing gear (D), dual tandem landing gear (2D) and double dual tandem wheel type landing gear (2D/2D2). Where no information is available, the pavement strength has not been calculated or it is less than 12,500 pounds.

As runway use is normally dictated by wind conditions, the primary runway generally provides superior wind coverage when compared to other runways at the airport. The direction of takeoffs and landings are generally determined by the speed and direction of the wind. For the operational safety and efficiency of an airport, it is desirable for the primary runway of an airport's runway system to be oriented as close as possible to the direction of the prevailing wind. This reduces the impact of crosswind components during landing or takeoff. Generally, additional runways with different orientations than the primary runway are constructed when the orientation of the primary runway does not provide sufficient wind coverage. As summarized in **Table 1F**, of the 55 airports in the system, 25 have single runways and 30 have two or more runways. All the single runway airports are classified as General Aviation within the NPIAS. Additionally, all the designated Commercial Service airports have two or more runways.

*Of the 55 airports in the system, 25 have single runways and 30 have two or more runways. All the designated Commercial Service airports have two or more runways.*

**TABLE 1F**  
**New Mexico Airport System Plan**  
**Percent of Airports by Service Level with One or More Runways**

Airport Type	Number of Airports	Number (Percent) Single Runway Only	Number (Percent) with Two or More Runways
Commercial Service Primary	5	0	5 (100%)
Commercial Service Non-Primary	1	0	1 (100%)
Reliever	1	0	1 (100%)
General Aviation	43	21 (49%)	22 (51%)
Non-NPIAS	5	4 (80%)	1 (20%)
<b>Total</b>	<b>55</b>	<b>25 (45.5%)</b>	<b>30 (54.5%)</b>

**Note:** This table does not include the proposed Sandoval County airport.

Elevation is also a factor for aviation facilities, particularly when considering runway length. Density altitude, which affects aircraft performance along with temperature and to a lesser extent, humidity, decreases as elevation increases. Higher density altitude also negatively affects aircraft engine performance, which can require longer runway lengths for aircraft departing an airport. Additionally, aircraft may need additional landing length due to the potential for increased true airspeeds. **Table 1G** groups the aviation facilities within elevation ranges and includes the longest runway for each range.



**TABLE 1G**  
**New Mexico Airport System**  
**Facility Elevation Summary**

Elevation Range (Feet MSL)	Facilities	Percent of Facilities	Longest Runway in Elevation Range
3,100 – 4,000	7	11.5	13,001
4,001 – 5,000	16	26.2	9,550
5,001-6,000	13	21.3	13,793
6,001-7,000	15	24.6	8,366
7,001-8,000	7	11.5	7,500
> 8,000	2	3.3	8,900
Proposed	1	1.6	-
<b>TOTAL</b>	<b>61</b>	<b>100</b>	<b>-</b>

## Pavement Condition

In 2014, NMDOTAD conducted a pavement condition assessment at the 48 airports in the system with paved surfaces. The study, known as Airport Pavement Management System (APMS), consisted of a visual inspection and evaluation in accordance with FAA guidance. A pavement condition index number (PCI) was assessed for all studied airport pavements. The PCI is a number between 0 and 100, with 100 being the best pavement rating and 0 being the worst. The overall PCI for the 48 airports was determined to be 66. Individual pavement type ratings are as follows: runways (PCI 72), taxiways (PCI 67), t-hangars (PCI 66), aprons and helipads (PCI 55). **Table 1H** summarizes PCI by facility use type. The complete study, which includes PCI for all studied pavement surfaces, is available from NMDOT-AD.

The most common PCI found, was a PCI from 56-70 with some 25,000,000 square feet (sf) of pavement area. The next most common PCI was from 71-85, with just under 25,000,000 sf of pavement area. Third was the best PCI rating of 86-100 with some 19,000,000 sf of pavement area. Next was the PCI of 41-55, which consists of approximately 14,000,000 sf of pavement area.

**TABLE 1H**  
**Pavement Condition Index Summary**

Facility Type <sup>1</sup>	Pavement Condition Index (PCI) for All Pavement in Study
Primary Commercial Service	62
Non-Primary Commercial Service	63
Reliever	81
General Aviation	68
Non-NPIAS	53
<b>Overall</b>	<b>66</b>

Source: Airport Pavement Management System (APMS), New Mexico Department of Transportation Aviation Division, 2014

<sup>1</sup> APMS includes information for 48 airports



The lowest two PCI categories, 0 to 25 and 26 to 40 comprise 6,000,000 sf and 7,000,000 sf of pavement area respectively.

The critical PCI was determined to be 75 for Part 139 airport runways and 70 for non-Part 139 airport runways. Below this threshold, major rehabilitation/reconstruction is recommended. Above this threshold, preventive maintenance is recommended (crack seal, surface seal, etc.)

Further analysis of the APMS shows that a total of 76 runways were evaluated. Of these, 20 runways had PCIs of 85-100, 19 runways had PCIs of 70-85, 22 runways had PCIs of 55-70, eight runways had PCIs of 40-55, three runways had PCIs of 25-40, and five runways had PCIs of 0-25.

The most severe runways (PCI 0-25) include Aztec Municipal Airport Runway 4-22, Doña Ana Jetport at Santa Teresa County Runway 10-28, Lea County Regional Airport Runway 17-35, Lee County-Jal Airport Runway 9-27, and Zuni Airport Runway 6-24. As of this writing, construction has begun on a new airport at Zuni/Black Rock.

The next most severe runways (PCI 25-40) include Gallup Municipal Airport Runway 6-24, Lea County Regional Airport Runway 12-30, and Shiprock Airstrip Runway 2-20.

The average condition runways (PCI 40-55) include Artesia Municipal Airport Runway 12-30 and the outer portion of Runway 3-24, Carlsbad-Cavern City Air Terminal Runway 14L-32R (keel section), Clayton Municipal Airport Runway 2-20, Deming Municipal Airport Runway 8-26, Grants-Milan Municipal Airport Runway 13-31, Reserve-Catron County Airport Runway 6-24, and Tucumcari Municipal Airport Runway 3-21.

The data also shows that a total of 118 taxiways were evaluated. Of these, 23 taxiways had PCIs of 85-100, 28 taxiways had PCIs of 70-85, 24 taxiways had PCIs of 55-70, 11 taxiways had PCIs of 40-55, three taxiways had PCIs of 25-40, and 12 taxiways had PCIs of 0-25.

The most severe taxiway conditions (PCI 0-25) are located at Carlsbad-Cavern City Air Terminal Taxiway C, Carrizozo Municipal Airport Taxiway A, Clovis Municipal Airport Taxiway A, Doña Ana County Jetport at Santa Teresa Taxiway B, Ft. Sumner Municipal Airport Taxiway B, Gallup Municipal Airport Taxiway A, Raton Crews Field Municipal Airport Taxiway B, Shiprock Airstrip Taxiway A, and Tucumcari Municipal Airport Taxiways A, B, and C.

The next most severe conditions (PCI 25-40) are located at Deming Municipal Airport Taxiways E and F and Santa Fe Municipal Airport Taxiway G.

## **TAXIWAYS**

***Twenty-seven of the 55 airports have a full parallel taxiway associated with the primary runway.***

Taxiways are constructed primarily to facilitate aircraft movements to and from the runway system. Some taxiways are necessary to simply provide access between the aircraft parking aprons and run-



ways, whereas other taxiways become necessary as activity increases at an airport to provide safe and efficient access to and from the runway. For taxiways associated with a specific runway, a classification based on their relative geometry and function can be assigned. For the purposes of this report, the following classifications are used for the primary runways at each airport: full parallel, partial parallel, stub/turnaround, no taxiway. These classifications were made based on site visits and a review of aerial photography and summarized in **Table 1J**. As indicated in the table, 27 of the 55 airports have a full parallel taxiway associated with the primary runway. Additionally, there are 11 primary runways with partial parallel taxiways and 15 primary runways with stub/turnaround taxiways. There are 2 primary runways with no associated taxiway system.



**TABLE 1J**  
New Mexico Airport System Plan  
Taxiway System Type for Primary Runway

Taxiway System	Number of Airports	% of Airports
Full Parallel	27	49.1%
Partial Parallel	11	20.0%
Stub/Turn Around	15	27.3%
No Taxiway	2	3.6%
<b>Total</b>	<b>55</b>	<b>100%</b>

## NAVIGATIONAL AIDS

Navigational aids (NAVAIDS) are electronic devices that transmit radio frequencies which pilots of properly equipped aircraft can translate into point-to-point guidance and position information. These systems are generally owned and maintained by the FAA and are discussed in the following sections.

### Airfield Lighting

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





*Identification Lighting:* The location of the airport at night is universally identified by a rotating beacon. The rotating beacon projects two beams of light, one white and one green, 180 degrees apart. Within the 61 airports and heliports in the New Mexico Airport System, 50 have rotating beacons. A complete listing of the airfield lighting systems can be found in **Appendix B, Table B3**.

*Runway and Taxiway Lighting/Signage:* Runway edge lighting utilizes light fixtures placed near the edge of the pavement to define the lateral limits of the pavement. This lighting is essential for safe operations during night and/or times of low visibility to maintain safe and efficient access to and from the runways and aircraft parking areas. Runway edge lighting systems are classified by a standardized intensity rating which includes Low, Medium, and High. Of the 97 runways in the New Mexico Airport System, four are equipped with high intensity, 61 are equipped with medium intensity, and one is equipped with low intensity lighting. A complete listing can be found in **Appendix B, Table B4**.

### **Visual Glide Slope Approach Aids**

Visual glide slope approach systems use a series of lights to provide visual guidance to pilots landing at an airport. Two major types are currently used, visual approach slope indicator (VASI) and precision approach path indicator (PAPI). A third type of visual glide slope approach system, pulsating visual approach slope indicator (PLASI), is also used at some airports within the system.

VASIs radiate a directional pattern of high intensity red and white focused light beams which indicate to the pilot that whether the aircraft is above the path or below the path. There are many different configurations for VASIs ranging from two to sixteen light bars. Although still maintained, VASIs are no longer installed as a new facility at airports. VASIs installations are specific to the runway end; of the 194 runway ends in the New Mexico Airport System, 36 are equipped with VASIs. A complete listing can be found in **Appendix B, Table B7**.

PAPIs are comparable with VASIs, but provide a sharper contrast between the lights when compared to VASIs. PAPIs are installed on 38 of the runway ends within the New Mexico Airport System.

PLASIs visually provide vertical glide path information, including position and direction correct position and direction in relation to the correct glide path. This information is communicated to the pilot through a lighting system that projects four horizontal bands of light, only one of which is visible to the pilot. If the pilot is on the correct path, the center band of a steady white light is visible; if the path is incorrect, separate lights, which indicate path correction guidance, are visible. PLASIs are installed on 20 of the runway ends within the New Mexico Airport System.

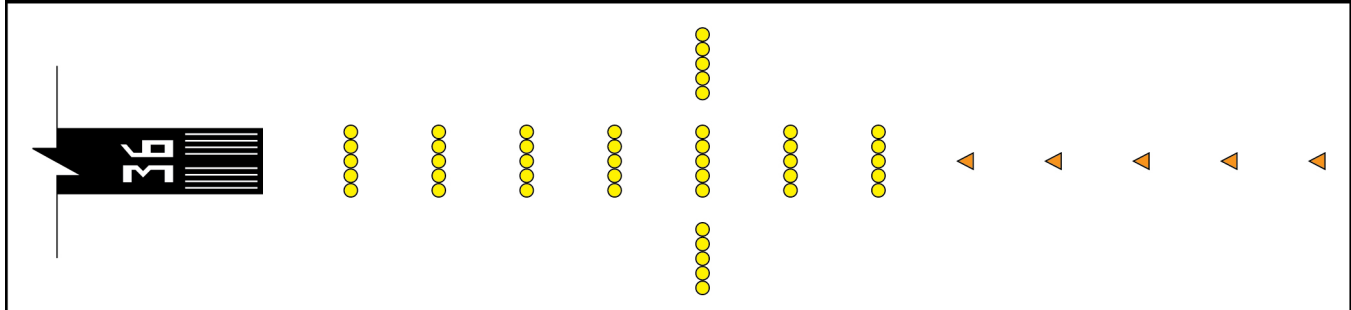
A complete listing of the visual glide slope approach aids can be found in **Appendix B, Table B7**.



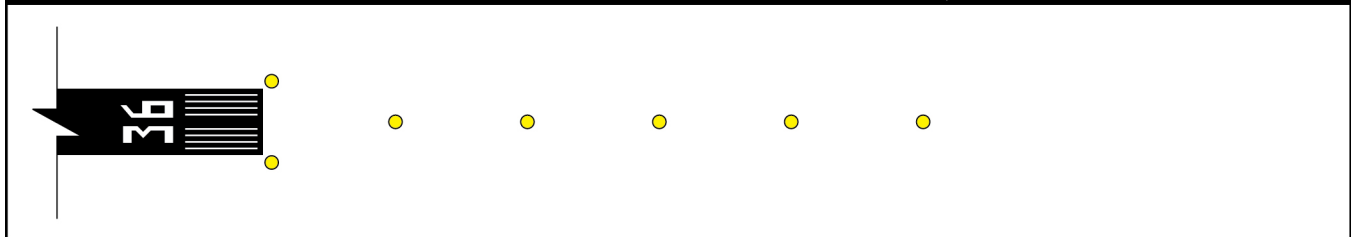
## Approach Lighting Systems

Approach lighting systems (ALS) provide visual guidance to pilots with radiating light beams which indicate the extended runway centerline. Four types of ALS are available within the New Mexico Airport System: medium intensity approach lighting system (MALSR), MASLR, MALS supplemented with runway alignment indicator lights (RAIL) and omnidirectional approach lighting system (ODALS).

### MALSR (medium intensity approach lighting system with runway alignment indicator lights)



### ODALS (omnidirectional approach lighting system)



MALS installations include a combination of constant and flashing lights to indicate the runway centerline location and threshold location. The configuration of the lights also indicates the distance from the runway threshold. The RAIL portion of the MALSR is a linear progression of strobe lights which provides pilots with a rapid, visual cue of the runway centerline. There are eight runway ends with MALSR capability and one runway end with a MALS. A complete listing of the approach lighting systems can be found in **Appendix B, Table B5**.

ODALS include a series of seven omnidirectional flashing lights located in the runway approach area. Five of the lights are aligned with the runway centerline and the remaining two lights are at a lateral distance of 40 feet from the runway edge to indicate the location of the runway threshold. There are ten runway ends with ODALS installed.

## Instrument Landing Systems

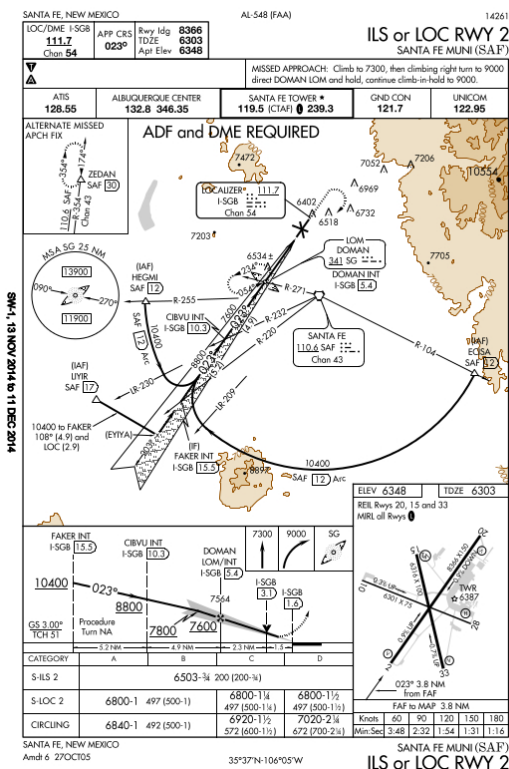
Instrument landing systems (ILS) are ground-based precision approach systems that provide course and vertical guidance to landing aircraft with specialized equipment. These systems are commonly comprised of the following components: localizer array, glideslope antenna, outer marker, middle



marker, and approach lights. There are 10 ILS installed at airports within the New Mexico Airport System. A complete list of the instrument landing systems can be found in **Appendix B, Table B6**.

## Other Navigational Aids

In addition to the NAVIDS discussed above, FAA maintains a system of very high frequency omnidirectional radio range antennas (VOR). VORs are used as the basis for navigation in the national airspace system. The ground based component of the VOR aids in electronic navigation by transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. This signal may be received by properly equipped aircraft. Frequently, distance measuring equipment (DME) is combined with a VOR facility (VOR-DME) to provide distance as well as direction information to the pilot. Military tactical air navigation aids (TACANs) and civil VORs are commonly combined to form a VORTAC. The VORTAC provides distance and direction information to both civil and military pilots. As discussed below, VORs can be used to support instrument approach procedures for airports; however, not all VOR facilities are located at aviation facilities. Depending on coverage, some VORs are located at independent sites. There are 21 VORs in the State of New Mexico, three which are located on airports. Additionally, there are seven DME installations and one TACAN installation on airports within the New Mexico Airport System. A complete listing of these referenced navigational aids can be found in **Appendix B, Table B8.**



## APPROACH PROCEDURES

*Instrument Approach Procedures.* Instrument approach procedures are a series of predetermined maneuvers established by the FAA, using electronic navigational aids that assist pilots in locating and landing at an airport, especially during instrument flight conditions. FAA manages publication of the procedures for each airport nationwide and publishes updated procedures on a 56-day cycle as part of the Terminal Procedures Publication, which ensures a uniform and readily available source of information for pilots. Instrument approach procedures are first grouped as either precision or non-precision approaches. Precision instrument approaches provide vertical descent information and course guidance information to the pilot. Non-precision approaches only provide course guidance to the pilot, with one exception. The relatively new GPS localizer performance with vertical guidance (LPV) approaches are currently categorized by the FAA as a non-precision approach even though it provides vertical guidance.



**Table 1K** summarizes the types of approaches available at New Mexico Airport System facilities. Based on FAA records, 30 airports within the system have at least one published instrument approach procedure, and many airports have more than one published instrument approach procedure. All procedures listed below, except RNAV (RNP) and RNAV (GPS), rely on ground-based equipment which transmits information to the pilot using specifically-designed cockpit equipment to receive the information. The ground-based equipment, depending on the complexity of the system, can range from a single antenna for a non-directional beacon to ILS, which is comprised of several elements. In contrast, the RNAV (RNP) and RNAV (GPS) approaches use position information from the same 48-satellite constellation accessed by the public with consumer-grade GPS units. Due to lower maintenance costs associated with GPS approaches, instrument approach procedures have become more widely available. As indicated in **Table 1K**, RNAV (GPS) procedures are the most widely available type (65) within the New Mexico Airport System, followed by VOR approaches (28) and ILS approaches. (11). A complete listing of instrument approach procedures listed by airport can be found in **Appendix B, Table B8**.

**TABLE 1K**  
**New Mexico Airport System Plan**  
**Instrument Approach Procedure Summary**

Procedure Type	Count
HI-TACAN	1
HI-ILS	2
ILS	4
ILS or LOC	7
LOC	2
LOC/DME	2
NDB	2
RNAV (RNP)	6
RNAV (GPS)	65
RADAR	1
VOR	28
<b>Total</b>	<b>120</b>

DME – Distance Measuring Equipment

GPS – Global Positioning System

HI - Indicates a high-altitude option for an instrument approach procedure. Used as a pre-fix only.

ILS – Instrument Landing System

LOC – Localizer

NDB – Non-Directional Beacon

RADAR – Radio detection and Ranging

RNAV – Area Navigation

RNP - Required Navigation Performance

TACAN - Tactical Air Navigation

VOR – Very high frequency Omnidirectional Radar

**Visual Approach Procedures.** As described by FAA’s Aeronautical Information Manual, a visual approach authorizes a pilot flying under Instrument Flight Rules (IFR) to proceed visually to the airport while remaining “clear of clouds.” Use of a visual approach requires the pilot to have either the airport



or the preceding identified aircraft in sight. Additionally, there are cloud ceiling and visibility minimum requirements that must be met for visual approach procedures. For the purposes of this report, runway ends without a published instrument approach procedure are counted as visual approaches. Based on this assumption, there are 135 visual approach procedures.

## WEATHER REPORTING

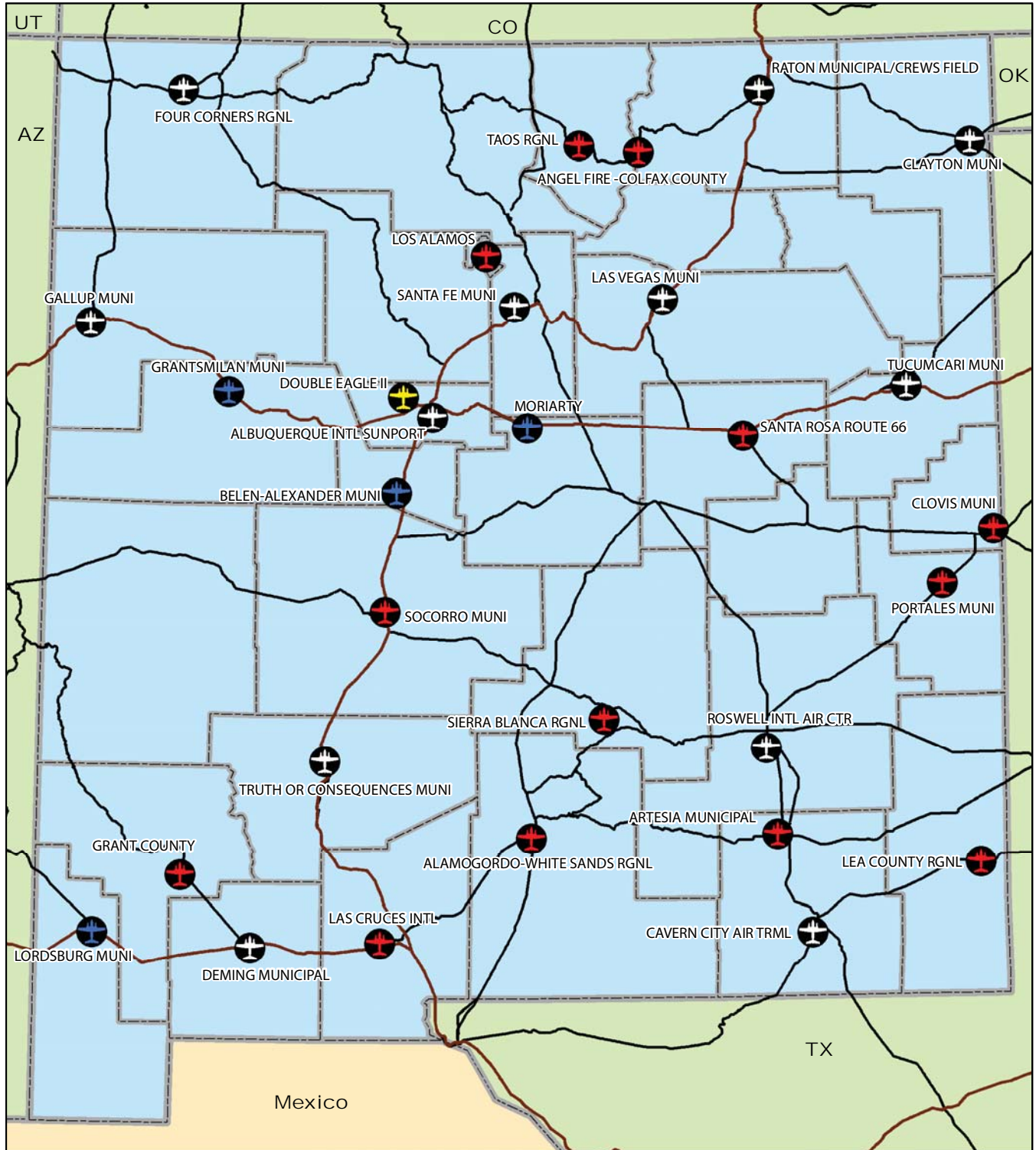
**Weather Stations.** Information regarding current weather conditions is essential to a safe airport system. Pilots access weather information in the pre-flight planning phase as well as during flight. One of the many sources of weather information available to pilots comes from a network of automated surface weather observation stations, some of which are located at aviation facilities. Two general types of systems can be located at airports to provide a continuous source of weather information: automated weather observing system (AWOS) and automated surface observing system (ASOS). The AWOS are generally installed by FAA and maintained by the airport sponsor. These units broadcast a weather report, updated at least once per minute over a local radio frequency which pilots can access through their cockpit radio. Several different versions of the AWOS system are available and are classified based on the sensor configuration installed at the individual site. ASOS stations differ from AWOS stations in that they are cooperatively operated by the FAA, United States Weather Service, and Department of Defense and are not exclusively located at airports. Updated information from ASOS stations is available hourly. The weather information is transmitted to pilots through computer-generated voice messages using FAA-approved ground-to-air radio equipment. Weather information is also available by calling a specific telephone number associated with the station. **Exhibit 1B** presents the distribution of the aviation-related weather reporting stations within the New Mexico Airport System, and **Table 1L** provides a summary of the stations.

**TABLE 1L**  
**New Mexico Airport System**  
**Weather Reporting Station Summary**

Facility	ID	Type	Frequency	ATCT
Alamogordo-White Sands	ALM	AWOS-3	127.825	No
Albuquerque International Sunport	ABQ	ASOS	118.0	Yes
Angel Fire - Colfax County Airport	AXX	AWOS-3	118.025	No
Artesia Municipal Airport	ATS	AWOS-3	126.725	No
Belen-Alexander Municipal Airport	E80	AWOS-3PT	118.550	No
Carlsbad - Cavern City Air Terminal	CNM	ASOS	118.375	No
Clayton Municipal Airpark	CAO	ASOS	120.625	No
Clovis Municipal Airport	CVN	AWOS-3	135.375	No
Deming Municipal Airport	DMN	ASOS	118.525	No
Double Eagle II Airport	AEG	AWOS	119.025	Yes
Farmington Four Corners Regional Airport	FMN	ASOS	127.15	Yes
Gallup Municipal Airport	GUP	ASOS	118.375	No
Grant County - Silver City Airport	SVC	AWOS-3	126.725	No
Grants-Milan Municipal Airport	GNT	AWOS-3PT	118.300	No
Las Cruces International Airport	LRU	AWOS-3	119.025	No









**TABLE 1L (Continued)**  
**New Mexico Airport System**  
**Weather Reporting Station Summary**

Facility	ID	Type	Frequency	ATCT
Las Vegas Municipal Airport	LVS	ASOS	118.525	No
Lea County-Hobbs Regional Airport	HOB	AWOS-3	119.750	Yes
Lordsburg Municipal Airport	LSB	AWOS-3PT	118.1	No
Los Alamos County Airport	LAM	AWOS-3	124.175	No
Moriarty Municipal Airport	OE0	AWOS-3PT	118.05	No
Portales Municipal Airport	PRZ	AWOS-3	118.175	No
Raton Crews Field Municipal Airport	RTN	ASOS	118.375	No
Roswell International Air Center	ROW	ASOS	128.48	Yes
Santa Fe Municipal Airport	SAF	ASOS	128.55	Yes
Santa Rosa Route 66 Airport	SXU	AWOS-3	118.1	No
Sierra Blanca Regional Airport	SRR	AWOS-3	126.475	No
Socorro Municipal Airport	ONM	AWOS-3	118.325	No
Taos Regional Airport	SKX	AWOS-3	132.975	No
Truth Or Consequences Municipal Airport	TCS	ASOS	120.675	No
Tucumcari Municipal Airport	TCC	ASOS	119.275	No
<b>Summary and Reporting Characteristics</b>				
AWOS (altimeter setting, wind data, temperature, dew point, and density altitude)				1
AWOS-3 (Reports AWOS + altimeter setting, wind data, temperature, dew point, and density altitude, visibility, cloud/ceiling data)				13
AWOS-3PT Reports AWOS-3 plus precipitation identification and thunderstorm/lightning				4
ASOS (cloud height, visibility, precipitation type, freezing rain, pressure, temperature, wind direction/speed, rainfall)				12
<b>Total</b>				<b>30</b>

**Wind Cones.** Wind cones provide visual indication of prevailing wind direction at an airfield or heliport. Some wind cones are lighted, while others are not. Depending on the runway configuration and size of the facility, some locations within the system may have more than one wind cone. Within the New Mexico Airport System, there are 48 lighted wind cones and ten non-lighted wind cones.

## PART 139 CERTIFICATION

FAA has established a certification process for airports serving air carrier operations. The process is codified within Code of Federal Regulations Title 14, Part 139 and identifies four classes of Part 139 Airports:

- **Class I Airport** — an airport certificated to serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft.
- **Class II Airport** — an airport certificated to serve scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.



- **Class III Airport** — an airport certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.
- **Class IV Airport** — an airport certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled large or small air carrier aircraft.

For the purposes of these classifications, large air carrier aircraft are defined as those designed for at least 31 passengers, and small air carrier aircraft are designed for more than nine, but less than 31 passengers. It is important to note that although an airport has Part 139 certification, it may not have active scheduled services. Additionally, these airports may not be classified as primary or non-primary commercial service airports within the NPIAS. **Table 1M** summarizes the ten airports with Part 139 certification within the New Mexico Airport System. Of the ten, four are Class I (ABQ, HOB, ROW, SAF), one is Class II (CNM), three are Class III (CVN, FMN, SVC), and two are Class IV (LRU, SRR).

As indicated in the table, all eight of the Class I, II, and III airports have active scheduled service. The remaining two Class IV airports, by definition, are not certificated to accommodate scheduled service; they may only serve unscheduled passenger operations of large air carrier aircraft.

## ESSENTIAL AIR SERVICE

Three airports in the New Mexico Airport System (Cavern City Air Terminal, Clovis Municipal, and Grant County-Silver City) are designated as Essential Air Service (EAS) airports.<sup>i</sup> EAS airports are part of a program put in place by the federal government to guarantee that small communities will continue to be served by certificated air carriers after the *Airline Deregulation Act* passed in 1978.

## AIRCRAFT RESCUE AND FIREFIGHTING SERVICES

In conjunction with the Part 139 classifications, airports must meet certain operational and safety requirements, one of which is availability of aircraft rescue and firefighting services (ARFF) which is described with an indexed classification system. An airport's ARFF index is determined by a combination of the length of air carrier aircraft operating at the airport and the average daily departures of air carrier aircraft from the airport and includes the five following indices:

- Index A includes aircraft less than 90 feet in length.
- Index B includes aircraft at least 90 feet but less than 126 feet in length.
- Index C includes aircraft at least 126 feet but less than 159 feet in length.
- Index D includes aircraft at least 159 feet but less than 200 feet in length.
- Index E includes aircraft at least 200 feet in length.

As indicated in **Table 1M**, nine of the ten Part 139 certificated airports have Index A ARFF capabilities and Albuquerque International Sunport has Index C capabilities.



**TABLE 1M**  
**New Mexico Airport System**  
**Part 139 Certification Summary**

Airport	ID	Part 139 Classification <sup>1</sup>	ARFF Index <sup>1</sup>	Scheduled Passenger Service
Albuquerque International Sunport	ABQ	Class I	C	Yes
Carlsbad - Cavern City Air Terminal	CNM	Class II	A	Yes
Clovis Municipal Airport	CVN	Class III	A	Yes
Farmington Four Corners Regional Airport	FMN	Class III	A	Yes
Grant County - Silver City Airport	SVC	Class III	A	Yes
Las Cruces International Airport	LRU	Class IV	A	No
Lea County-Hobbs Regional Airport	HOB	Class I	A	Yes
Roswell International Air Center	ROW	Class I	A	Yes
Santa Fe Municipal Airport	SAF	Class I	A	Yes
Sierra Blanca Regional Airport	SRR	Class IV	A	No

<sup>1</sup> FAA Part 139 Airport Certification List as of October 27, 2014

## FUEL SERVICES

Two types of fuel are used by aircraft using the facilities within the New Mexico Airport System: aviation gasoline (also known as avgas or 100LL) and Jet-A. Avgas is used in piston powered airplanes and helicopters, while Jet-A is used in turboprop and jet powered aircraft. As indicated in **Table 1N**, of the 60 existing facilities in the New Mexico Airport System, 34 have either Jet A and Avgas or only Avgas available. The remaining 26 facilities do not have fuel available. A complete listing of fuel service availability by airport can be found in **Appendix B, Table B10**.



**TABLE 1N**  
**New Mexico Airport System**  
**Fuel Type Summary**

Facility Type	Jet A & AvGas		AvGas Only		None		Total	
	Count	%	Count	%	Count	%	Count	%
Primary Commercial Service	5	8.3	0	0.0	0	0.0	5	8.3
Non-Primary Commercial Service	1	1.7	0	0.0	0	0.0	1	1.7
Reliever	1	1.7	0	0.0	0	0.0	1	1.7
General Aviation	23	38.3	4	6.7	21	35.0	48	80
Heliport	0	0.0	0	0.0	4	6.7	4	6.7
Seaplane Base	0	0.0	0	0.0	1	1.7	1	1.7
Total	30	50	4	5.0	26	43.3	60	100

Note: Non-NPIAS airports are included in the General Aviation Classification. This table does not include the proposed Sandoval County airport.

In recent years, self-service fueling options have become increasingly popular due to lower costs associated with staffing a fueling facility. Additionally, self-service options can be considered more convenient as they can be made available to pilots 24 hours a day. As summarized in **Table 1P**, of the 60 existing facilities in the New Mexico Airport System, seven locations have self-service options for Jet A and 18 locations have self-service options for Avgas. A complete listing of fuel availability by airport can be found in **Appendix B, Table B11**.

**TABLE 1P**  
**New Mexico Airport System**  
**Self Service Fuel Summary**

	Jet A	Avgas
None	31	26
Full Service and Self Service	4	6
Full Service Only	22	15
Self Service Only	3	13
Total	60	60

## OTHER GENERAL AVIATION FACILITIES

Additional amenities such as a terminal building, aircraft parking, and rental car availability can enhance the travel experience for business and recreational aviation users of general aviation airports. For the purposes of this report, terminal facilities, at a minimum, include publicly available restrooms and a pilot rest area/lounge. Aircraft parking facilities available for rent include either tie-downs, which are uncovered spaces with a cabling system available to secure aircraft, to fully enclosed hangar spaces which provide additional protection. In addition to rental car availability at commercial service



airports, some general aviation airports have rental car service available for recreational and business travelers. **Table 1Q** summarizes the availability of terminal areas, aircraft parking (tie downs and hangars), and rental cars. A complete listing of general aviation amenities by airport can be found in **Appendix B, Table B12**.

**TABLE 1Q**

**New Mexico Airport System  
General Aviation Amenities**

Type	# of Facilities with Amenity Available
Terminal	35
Tie Down (rental)	48
Hangar (rental)	29
Rental Car	16

## HELIPORTS

There are four publicly-owned public use heliports within the New Mexico Airport System. These heliports were financed by the New Mexico Department of Transportation to enhance the state's emergency response capabilities. The four heliports (Catron County, Cimarron, Mosquero, and Red River) each have one concrete landing helipad. Red River Heliport is a 55-foot square, and the remaining three are 65-foot square pads. Each facility is encompassed by a security fence with a coded lock and can be accessed by a circular drive to facilitate unimpeded access by emergency vehicles. In accordance with FAA design standards, the heliports each have a touchdown and liftoff area (TLOF) contained within a final approach and takeoff area (FATO). In the case of these facilities, the landing pad is the TLOF and the FATO is delineated with evenly spaced concrete markers. Each helipad also has a windsock and is equipped with edge lighting and a rotating beacon which can be remotely activated by the pilot. **Exhibit 1C** provides aerial views of the four heliports.

*There are four publicly-owned public use heliports within the New Mexico Airport System.*

## SEAPLANE BASE

There is one seaplane base within the New Mexico Airport System. Owned and operated by the United States Army Corps of Engineers, the seaplane base is located on Conchas Lake, which was formed by the United States Army Corps of Engineers' construction of Conchas Dam in the Canadian River. Like its nearby companion facility Conchas Lake Airport, the seaplane base was established to provide recreational access to the lake and adjacent Conchas Lake State Park. The landing area is defined as a 21,120-foot long and 1,320 feet wide area. Due to fluctuations in the lake level, however, the full landing length may not always be available. A docking area is co-located with the watercraft ramp south of the Conchas Lake State Park Central Recreation Area.







Red River Heliport



Cimarron Heliport



Mosquero Emergency Heliport



Catron County Heliport



NOT TO SCALE





## **AVIATION ACTIVITY AND BASED AIRCRAFT**

Aircraft annual operation activity and based aircraft data was collected from various sources including the FAA 5010 Master Record data and interviews with the airports. Six airports in the New Mexico Airport System have an Air Traffic Control Tower (ATCT). These include Albuquerque International Sunport, Double Eagle II Airport, Farmington Four Corners Regional Airport, Lea County Regional Airport, Roswell International Air Center, and Santa Fe Municipal Airport. Therefore, actual operation records at airports without ATCT facilities are not kept and estimates are used.

The busiest airport/heliport in the New Mexico system is the Albuquerque International Sunport with 136,915 annual operations, according to ATCT data. The least active airport/heliport, as reported during the on-site effort and through review of 5010 data, was the Cimarron Heliport with 5 annual operations reported. Other relevant information on operational activity includes the following:

- Thirty-five general aviation airports/heliports reported less than 10,000 annual operations.
- Nine general aviation airports and one commercial service airport reported between 10,000 and 25,000 annual operations.
- Eight airports reported between 25,000 and 50,000 annual operations with six being general aviation airports and two being a commercial service airport.
- Santa Fe Municipal and Las Cruces International were the only airports to report between 50,000 and 100,000 annual operations.
- The Albuquerque International Sunport and Double Eagle II were the only airports to report more than 100,000 operations.

The airport/heliport with the greatest number of based aircraft in the New Mexico system is Santa Fe Municipal Airport with 195 reported based aircraft according to FAA's 5010 Airport Master Records. In contrast, there are 15 general aviation airports and heliports that reported no based aircraft. Other relevant information on based aircraft includes the following:

- Twelve general aviation airports/heliports reported less than 10 based aircraft.
- Fifteen general aviation airports and three commercial service airports reported 10 or more, but less than 50 based aircraft.
- Four general aviation airports reported 50 or more, but less than 100 based aircraft.
- Six airports reported 100 or more based aircraft; two general aviation and four commercial service airports.

## **NAVIGATION**

### **AIR TRAFFIC MANAGEMENT**

The *Federal Aviation Administration Act of 1958* established the FAA as the responsible agency for the control and use of navigable airspace within the United States. The FAA established the National Air-



space System (NAS) to protect persons and property on the ground and to establish a safe and efficient airspace environment for civil, commercial, and military aviation. The NAS covers the common network of U.S. airspace, including: air navigation facilities; airports and landing areas; aeronautical charts; associated rules, regulations, and procedures; technical information; and personnel and material. Air traffic is managed with the use of FAA's Air Route Traffic Control Centers (ARTCC) and local Airport

***Nationwide, there are 22 ARTCCs, including a facility in Albuquerque. The Albuquerque ARTCC provides coverage for much of New Mexico and portions of Arizona and Texas.***

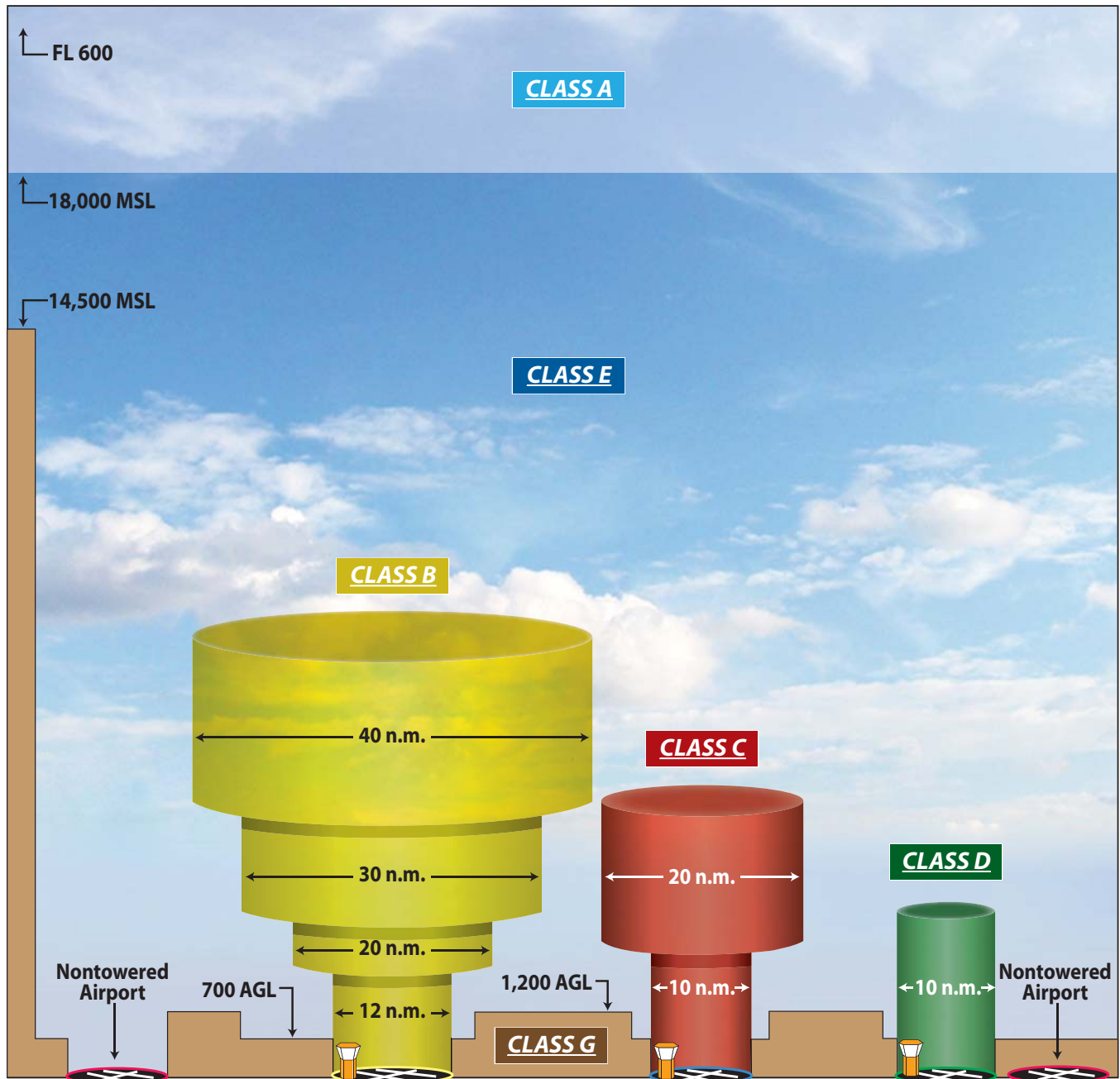
Traffic Control Towers (ATCT). ARTCCs provide air traffic control service to aircraft operating on instrument flight rule (IFR) flight plans within controlled airspace. Nationwide, there are 22 ARTCCs, including a facility in Albuquerque. The Albuquerque ARTCC provides coverage for much of New Mexico and portions of Arizona and Texas. The southeast and northwest portions of New Mexico are not covered by Albuquerque ARTCC; rather, these areas are covered by the Fort Worth ARTCC and Denver ARTCC, respectively. As previously discussed, there are six airports with ATCTs: Albuquerque International Sunport, Double Eagle II Airport, Farmington Four Corners Regional Airport, Lea County Regional Airport, Roswell International Air Center, and Santa Fe Municipal Airport.

## **AIRSPACE**

The FAA established a standardized airspace system to regulate the use of airspace for all airports within the United States. Within the FAA's system, airspace is broadly classified as either controlled or uncontrolled in the United States. The difference between controlled and uncontrolled airspace relates primarily to requirements for pilot qualifications, ground-to-air communications, navigation and air traffic services, and weather conditions. Six classes of airspace have been designated in the United States. **Exhibit 1D** shows the airspace structure classifications and terminology established by the FAA and **Exhibit 1E** shows the statewide airspace system. Airspace designated as Classes A, B, C, D, or E is considered controlled airspace. Aircraft operating within controlled airspace are subject to varying requirements for positive air traffic control.

- Class A airspace is controlled airspace and includes all airspace from 18,000 feet mean sea level (MSL) to Flight Level 600 (approximately 60,000 feet MSL).
- Class B airspace is controlled airspace surrounding high activity commercial service airports, such as Los Angeles International Airport. There are no airports within New Mexico with Class B airspace.
- Class C airspace is controlled airspace surrounding medium activity commercial service and some military airports. Albuquerque International Sunport is the only airport in the state with Class C airspace.
- Class D airspace is controlled airspace surrounding low activity commercial service and some general aviation airports with an airport traffic control tower (ATCT). Four airports in the state



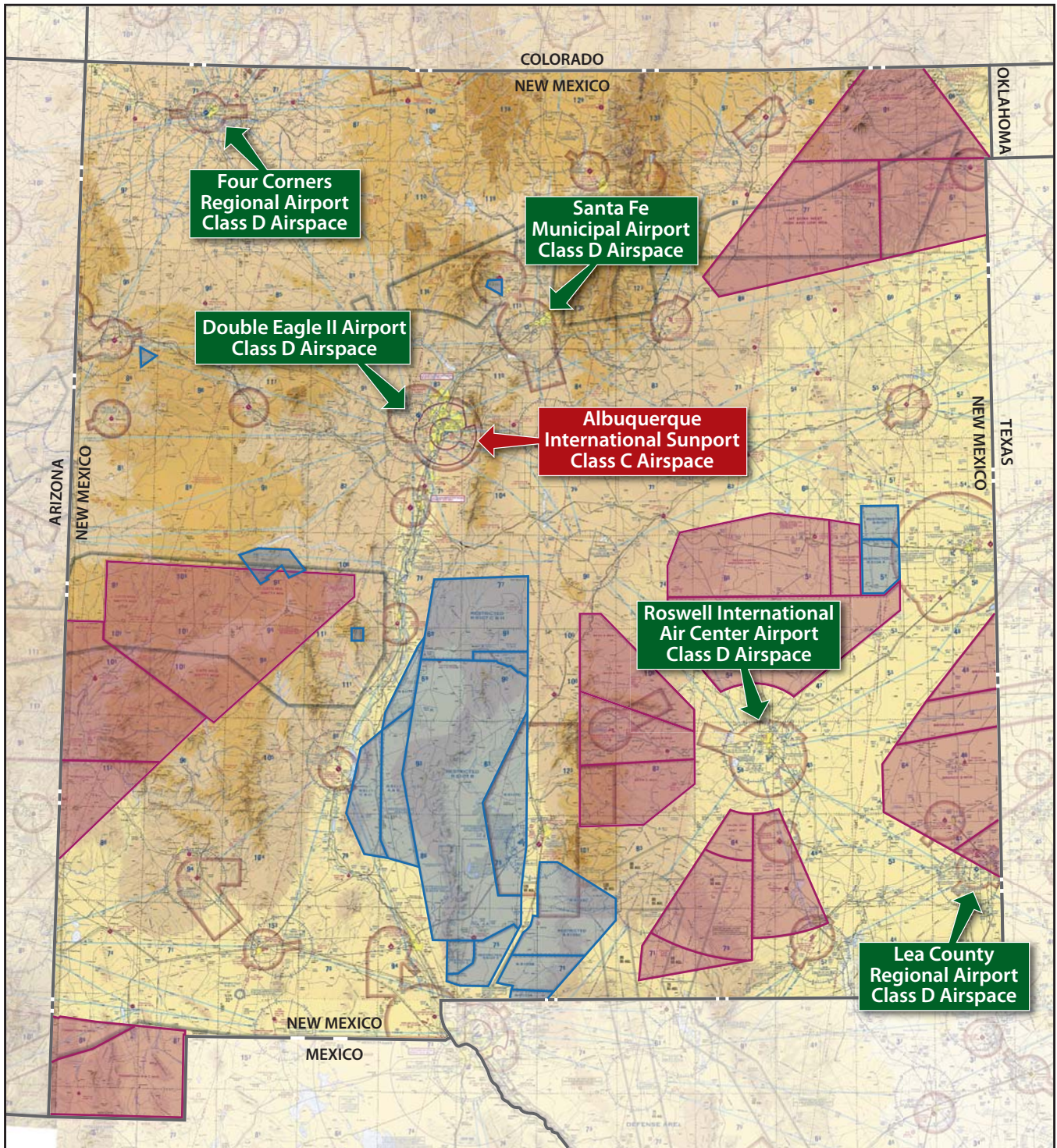


#### DEFINITION OF AIRSPACE CLASSIFICATIONS



- CLASS A** Generally airspace above 18,000 feet MSL up to and including FL 600.
- CLASS B** Generally multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports.
- CLASS C** Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.
- CLASS D** Generally airspace from the surface to 2,500 feet AGL surrounding towered airports.
- CLASS E** Generally controlled airspace that is not Class A, Class B, Class C, or Class D.
- CLASS G** Generally uncontrolled airspace that is not Class A, Class B, Class C, Class D, or Class E.





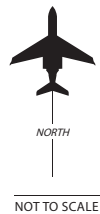


**LEGEND**

-  Military Operations Area (MOA)
-  Restricted Airspace

**Source:** US Department of Commerce, National Oceanic and Atmospheric Administration

- Albuquerque Sectional Chart, October 16, 2014
- Denver Sectional Chart, July 24, 2014
- El Paso Sectional Chart, July 24, 2014
- Phoenix Sectional Chart, October 16, 2014
- Wichita Sectional Chart, July 24, 2014



have Class D airspace: Farmington Four Corners Regional Airport, Lea County Regional Airport, Roswell International Air Center, and Santa Fe Municipal Airport. During periods when the ATCT is closed, Class D airspace reverts to Class E airspace.

- Class E airspace is controlled airspace surrounding an airport that encompasses all instrument approach procedures and low altitude federal airways. Only aircraft conducting instrument flights are required to be in contact with air traffic control when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio contact with air traffic control facilities, visual flight can only be conducted if minimum visibility and cloud ceilings exist.
- Class G airspace is uncontrolled airspace that does not require communication with an air traffic control facility.

### **Special Use Airspace**

Special use airspace is defined as airspace where activities must be confined because of their nature or where limitations are imposed on aircraft not taking part in those activities. The designation of special use airspace identifies for other users the areas where military activity occurs, provides for segregation of that activity from other fliers, and allows charting to keep airspace users informed.

**Restricted Airspace:** Restricted areas contain airspace identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. Activities within these areas must be confined because of their nature or limitations imposed upon aircraft operations that are not a part of those activities or both. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft such as artillery firing, aerial gunnery, or guided missiles. Penetration of restricted areas without authorization from the using or controlling agency may be extremely hazardous to the aircraft and its occupants. There are 16 designated restricted areas within the State of New Mexico airspace, many of which are located within the vicinity of the White Sands Missile Range in the south central area of the state.

**Military Operations Areas (MOA):** An MOA is "airspace established outside Class A airspace to separate or segregate certain nonhazardous military activities from IFR Traffic and to identify for VFR traffic where these activities are conducted." (14 CFR §1.1, U.S.A.) MOAs are often positioned over isolated, rural areas to provide ground separation for any noise nuisance or potential accident debris. Each designated MOA appears on the relevant sectional charts, along with its normal hours of operation, lower and upper altitudes of operation, controlling authority contact, and using agency. There are 22 MOAs within the State of New Mexico. The location of Restricted Airspace and MOAs is depicted on **Exhibit 1E**.

**Radar Coverage.** FAA's Terminal Automation comprises technologies commonly referred to as radar, which enables air traffic controllers to safely and effectively manage airspace. FAA has installed radar





systems at two airport traffic control towers within New Mexico use radar systems: Albuquerque International Sunport and Roswell International Air Center. Albuquerque International Sunport is equipped with a Standard Terminal Automation Replacement System (STARS) and Roswell International Air Center uses Airport Radar Terminal System (ARTS) 2E.

**ADS-B Beacons.** As part of FAA's NextGen program to enhance how aircraft navigate, new technologies, such as the automatic dependent surveillance-broadcast (ADS-B), have been deployed. ADS-B provides in-flight information from an aircraft, including airspeed and location, to air traffic control and to nearby aircraft, equipped with receivers, through a system of satellites and ground stations. Ultimately, this system will replace radar and will include complete coverage of New Mexico. Presently, there are 13 ADS-B ground stations within New Mexico, 11 of which are located at system airports. These airports include: Albuquerque International Sunport, Artesia Municipal Airport, Aztec Municipal Airport, Belen-Alexander Municipal Airport, Las Cruces International Airport, Lordsburg Municipal Airport, Navajo State Park Airport, Roswell International Air Center, Santa Rosa Route 66 Airport, Springer Municipal Airport, and Truth Or Consequences Municipal Airport. These beacons are not owned or maintained by the airport sponsors.

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<sup>i</sup> Department of Transportation Essential Air Service program eligible communities as of November 2013.  
<http://www.dot.gov/policy/aviation-policy/current-list-eligible-eas-communities>







CHAPTER TWO

# FORECASTS



## Chapter Two

# FORECASTS

Planning a future for any facility or system of facilities type must start with a consideration of the demand for the facility or system that may be reasonably expected over a specified period. In airport system planning, forecasts of the variety of components of aviation activity can provide this basis. These components are included within the sectors of commercial service, general aviation, and military activity.

The primary objective of a forecasting effort is to define the magnitude of change that can be expected over time. Because of the cyclical nature of the economy, it is virtually impossible to predict with certainty year-to-year fluctuations in activity when looking twenty years into the future. However, a trend can be established which delineates long-term growth potential. While a single line is often used to express the anticipated growth, it is important to remember that actual growth may fluctuate above and below this line. Thus, forecasts should serve only as guidelines, and planning must remain flexible to respond to unforeseen facility needs.

With this in mind, the New Mexico State Airport System Plan update will be demand-based rather than time-based. As a result, the reasonable levels of activity potential that are derived from the forecasting effort will be related to planning horizon levels rather than dates in time. These planning horizons will be established as levels of activity that will call for consideration of the implementation of the next step in development programming.

Few industries have seen as dynamic changes as the aviation industry since the first powered flight at Kitty Hawk more than a century ago. This spectrum and pace of change in the industry is nearly beyond comprehension, as aviation remains the fastest mode of physical transportation in the world.



Cyclical economies combined with industry changes and major technological breakthroughs have resulted in erratic growth patterns. In addition, regulatory and economic policies can and have had very significant impacts upon activity patterns at most airports.

## **FORECAST APPROACH**

The Federal Aviation Administration (FAA) has oversight responsibility to review and approve aviation forecasts developed in conjunction with airport planning studies. In addition, aviation activity forecasts may be an important input to future benefit-cost analyses associated with airport development, and FAA reviews these analyses when federal funding requests are submitted.

***FAA has improved its forecast model to be a demand-driven forecast for aviation services based upon local and national economic conditions, as well as conditions within the aviation industry.***

The FAA will review individual airport forecasts with the objective of comparing them to its *Terminal Area Forecasts* (TAF) and the *National Plan of Integrated Airport Systems* (NPIAS). Even though the TAF is updated annually, in the past there was almost always a disparity between the TAF and master planning forecasts. This was

primarily because the TAF forecasts did not consider local conditions or recent trends. In recent years, however, the FAA has improved its forecast model to be a demand-driven forecast for aviation services based upon local and national economic conditions, as well as conditions within the aviation industry.

The TAF projections of passenger enplanements and commercial operations at large, medium, and small hubs (including the Albuquerque International Sunport) are based on a bottoms-up approach. The domestic enplanements are forecast by generating origin and destination (O&D) market demand forecasts using the Department of Transportation's (DOT) quarterly 10 percent sample data to model passenger flow on a quarterly basis.

The forecasts of passenger enplanements at non-hub FAA facilities (including the other New Mexico commercial service airports) are based on analysis of historic trends. The commercial operations forecasts are based on the enplanement forecasts, trend analysis, and enplanements per operation. In addition, the commercial forecasts for these airports may be prorated in comparison to national forecast trends by category.

Forecasts of itinerant general aviation operations and local civil operations at FAA facilities are based primarily on time series analysis. Because military operations forecasts have national security implications, the Department of Defense (DOD) provides only limited information on future aviation activity. Hence, the TAF projects military activity at its present level except when FAA has specific knowledge of a change. For instance, DOD may announce a base closing or may shift an Air Force wing from one base to another.



For non-FAA facilities, historic operations in the TAF are from the Form 5010 data. These operations levels are held constant for the forecast unless otherwise specified by a local or regional FAA official.

As stated in FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems* (NPIAS), forecasts should be:

- Realistic;
- Based on the latest available data;
- Reflective of current conditions at the airport (as a baseline);
- Supported by information in the study; and
- Able to provide adequate justification for airport planning and development.

The intent of the forecasting effort of this airport system plan is to provide an understanding of the overall demand within New Mexico. Since the TAF is updated each year and is very current, it will be examined for each airport. Forecasts prepared within the last five years for individual airport master plans, ALP narrative reports, or action plans are also reviewed, as well as the forecasts from the 2009 System Plan. In addition, an opinion of range around each forecast will be developed to be recognized in the demand-based planning of the Airport System Plan. This range will further consider socioeconomic variables, as well as sensitivities to reasonable variances in the air transportation industry that could have an effect on aviation in New Mexico.

This forecast effort was completed during the fourth quarter of 2014. Thus, the 2013 FAA *Terminal Area Forecasts* published in January 2014 were utilized. The following sections of this chapter will discuss the reasonableness of each forecast, as well as establish the opinion of range that will be utilized in the remainder of the system planning process. This will begin with an overview of the trends in aviation at the national level, followed by socioeconomic trends in New Mexico.

## **NATIONAL INDUSTRY TRENDS**

Each year, the FAA updates and publishes a national aviation forecast. Included in this publication are forecasts for the large air carriers, regional/commuter air carriers, general aviation, and FAA workload measures. The forecasts are prepared to meet budget and planning needs of the constituent units of the FAA and to provide information that can be used by state and local authorities, the aviation industry, and the general public. The current edition when this chapter was prepared was FAA *Aerospace Forecasts – Fiscal Years 2014-2034*, published in March 2014. The FAA primarily uses the economic performance of the United States as an indicator of future aviation industry growth. Similar economic analyses are applied to the outlook for aviation growth in international markets. The following discussion is summarized from the FAA Aerospace Forecasts.



## **U.S. ECONOMIC OUTLOOK**

One of the unique features about current economic recovery (now in its 5th year) has been the slow improvement in the nation's unemployment rate. Since 1960, there have been five economic expansions in the U.S. that have lasted longer than 48 months, including this latest expansion. On average, for the prior four expansions, the unemployment rate four years after the peak rate in the recession prior to the expansion has declined by about one-third. The persistently high unemployment rate is thought to be a contributing factor to the slow recovery in consumer spending and aviation demand that has been experienced since 2009.

Now in the fifth year, the effects of the "Great Recession" appear to be diminishing. Economic projections provided to the FAA Aerospace Forecast by IHS Insight, Inc. expects the recovery to begin to accelerate, resulting in a faster growing U.S. economy than in the recent past. Private sector debt levels have been falling, while public sector debt has stabilized. The housing market has been on the rise and the employment market appears to be firming up.

The fiscal stimulus boost has faded, and the economy is depending more on the strength of private demand. In the short term (through 2019), the nation's economic growth is projected to average 3.0 percent annually. Income growth is anticipated to average 3.2 percent over the same time period. Over the long term, the real Gross Domestic Product (GDP) growth and real income growth is forecasted to slow to an annual average of 2.4 percent. The long term stability of the economy will be dependent upon sustaining growth in the workforce and capital stock, as well as improving productivity and competitiveness.

The price of oil has a major effect on air transportation. Oil prices have been declining recently because of an oversupply and are projected to continue to decline through 2015/16. After that, the price is projected to increase by about 2.5 percent per year through 2025, then at the same rate as general inflation through 2034. That inflation rate is projected to be in the range of 1.9 to 2.2 percent annually.

To reflect the inherent uncertainty in projecting economic growth, the FAA Aerospace used high and low economic growth cases in addition to its base case. The optimistic case assumes a successful and partisan-free debt ceiling increase, a credible plan to address Europe's sovereign debt issues, faster foreign economic growth, as well as faster employment growth and sustained improvements in the housing sector. This would result in a 3.3 percent annual GDP growth compared to the 2.7 percent of the base case. At the other end of the spectrum, the pessimistic case assumes partisan politics turns the debt ceiling into a political crisis, and with that uncertainty, cutting spending is the resultant solution. In addition, the Eurozone crisis intensifies and reduces the demand for U.S. imports. The real GDP growth of the pessimistic case averages 2.1 percent annually.



According to the FAA Forecast report, as the economy recovers from the most serious economic downturn and slow recovery in recent history, aviation will continue to grow over the long run. Fundamentally, demand for aviation is driven by economic activity. As economic growth picks up, so will growth in aviation activity. The FAA Forecast calls for passenger growth over the next 20 years to average 2.2 percent annually. In the next five years, however, growth is anticipated to be somewhat muted, primarily due to uncertainty that surrounds the U.S. and global economies, with most growth in passengers taking place in years six through 20.

***The FAA Forecast calls for passenger growth over the next 20 years to average 2.2 percent annually.***

While economic uncertainties still affect the business aviation market, the rate of decline slowed down and a recovery is expected in the near term. The forecast calls for robust growth in the long term outlook, driven by higher corporate profits and the growth of worldwide GDP. Continued concerns about safety, security, and flight delays keep business aviation attractive relative to commercial air travel. The business usage of general aviation aircraft is predicted to expand at a faster pace than that for personal and recreational use. Commercial Service and General Aviation trends and forecasts are discussed further in the following sections.

## **COMMERCIAL SERVICE**

At the end of federal fiscal year (FY) 2013, the U.S. commercial aviation industry consisted of 15 scheduled mainline air carriers that used large passenger jets (over 90 seats) and 63 regional carriers that used smaller piston, turboprop, and regional jet aircraft (up to 90 seats) to provide connecting passengers to the larger carriers. Mainline and regional carriers offer domestic and international passenger service between the U.S. and foreign destinations, although regional carrier international service is confined to the border markets in Canada, Mexico, and the Caribbean. Thirty all-cargo carriers were providing domestic and/or international air cargo service at the end of 2013.

Shaping today's commercial air carrier industry are three distinct trends: (1) continuing industry consolidation and restructuring; (2) continued capacity discipline in response to external shocks; and (3) the proliferation of ancillary revenues.

The restructuring and consolidation of the U.S. airline industry that began in the aftermath of the terror attacks of September 11, 2001 has continued. In recent years, Southwest Airlines has acquired and is integrating the former AirTran network into its operations, as did United with the former Continental Airlines network. The merger of American and US Airways (the third and fifth largest U.S. airlines, respectively) was approved, creating the world's largest airline.

One of the most striking outcomes of industry restructuring has been the unprecedented period of capacity discipline (achieving higher passenger loads through scheduled flight and fleet mix consolidation primarily), especially in domestic markets. Between 1978 and 2000, available seat miles (ASMs) in domestic markets increased at an average annual rate of four percent per year, recording only two years of decline. Even though domestic ASMs shrank by 6.9 percent in FY 2002, following the events of Sep-





tember 11, 2001, growth resumed and by 2007, domestic ASMs were 3.6 percent above the FY 2000 level. However, since 2007, ASMs in the U.S. domestic market have decreased by 7.0 percent, as the industry responded first to the sharp rise in oil prices (up 155 percent between 2004 and 2008) and then the Global Recession that followed (2009 to the present).

The 7.0 percent reduction in domestic capacity since 2007 has not been shared equally between the mainline carriers and their regional counterparts. To better match demand to capacity, the mainline carriers contracted out “thin” routes to their regional counterparts because they could provide lift at a lower cost, or simply removed the capacity altogether. In 2013, the mainline carrier group provided 8.0 percent less capacity than it did in 2007 (and carried 6.6 percent fewer passengers). Capacity flown by the regional group has shrunk by 0.4 percent over the same five-year period (with passengers carried decreasing by 0.5 percent).

The most recent trend to take hold is that of ancillary revenues. Carriers generate ancillary revenues by selling products and services beyond that of an airplane ticket to customers. This includes the unbundling of services previously included in the ticket price, such as checked bags and on-board meals, and by adding new services, such as boarding priority. As a result of capacity reduction, the introduction of ancillary revenue sources, and flat or falling fuel prices, U.S. passenger carriers posted net profits for the fourth consecutive year in 2013.

### **FAA Commercial Service Forecasts**

To determine commercial service potential and the facilities necessary to properly accommodate present and future airline activity, two basic elements must be forecast: passengers and operations. Annual enplaned (boarding) passengers serve as the most basic indicator of demand for commercial pas-

***Although the recession has been officially over for several years, airlines continued to deal with economic uncertainties as business travel budgets remained strained, unemployment persisted, and uncertainty surrounding federal fiscal policy remained.***

senger service activity. The combination of enplanements and deplanements would equal the total passengers using the airport. The annual number of enplanements is the figure utilized by the FAA to determine entitlement funding levels for the airport.

Although the recession has been officially over for several years, airlines continued to deal with economic uncertainties as business travel budgets remained strained, unemployment persisted, and uncertainty surrounding federal fiscal policy (expiration of the payroll tax break in January, sequestration, and a partial shutdown of the federal government) remained. In such an uncertain economic environment, industry capacity growth was restrained (up 0.8 percent in 2013), after only a 0.1 percent increase in 2012. Given the minimal increase in seats available to the traveling public, carriers were still able to raise airfares despite the slow growth in demand.



The FAA provides several measures for commercial airline activity in its *FAA Aerospace Forecasts – Fiscal Years 2014-2034*. After the slight growth experienced in 2013, domestic system capacity (as measured in available seat miles – ASMs) was projected to increase 1.0 percent in 2014. From 2013 through 2034, domestic ASMs are projected to grow 2.0 percent annually. Mainline carrier capacity is forecast to grow an average 2.0 percent through 2034. Regional carrier capacity grew by 2.2 percent and is forecast to grow 2.3 percent annually through 2034. Overall domestic capacity is projected to increase at an average annual rate of 2.1 percent through 2034, which is slightly slower economic growth.

The FAA forecasts indicate that domestic enplanements are anticipated to grow at an average annual rate of 1.9 percent through 2034, with mainline carriers growing at the same rate (1.9 percent). **Exhibit 2A** presents the annual historical and forecast enplanement totals for both large air carriers and commuter airlines in the U.S. as forecast by the FAA.

### **Commercial Aircraft Fleet Mix**

The commercial passenger carrier fleet is also undergoing a transformation. The mainline carriers are retiring older, less fuel-efficient aircraft (e.g., 737-300/400/500, 757/767, and MD-80) and replacing them with more technologically advanced A319/320 and 737-700/800/900 aircraft. The regional carriers are growing their fleet of 70-90 seat regional jet aircraft and reducing their fleet of 50-seat jet aircraft. The total number of aircraft in the U.S. commercial fleet (including regional carriers) was estimated at 6,727 for 2013, a decrease of 184 aircraft from 2012. This includes 3,774 mainline air carrier passenger aircraft (over 90 seats), 740 mainline air cargo aircraft, and 2,213 regional carrier aircraft (jets, turboprops, and pistons).

The number of passenger jets in the mainline fleet is estimated to have increased by 41 in 2013. After 2013, the mainline aircraft fleet was projected to add approximately 65 aircraft annually, totaling 5,112 aircraft in 2034. The mainline narrow-body fleet (including the Embraer 190s) is projected to grow by 42 aircraft annually from 2013-2034. The wide-body fleet (including the Boeing 787 and Airbus A-350) was projected to grow by 23 aircraft annually over the same period. Mainline passenger jet aircraft are forecast to increase 1.5 percent annually through 2034.

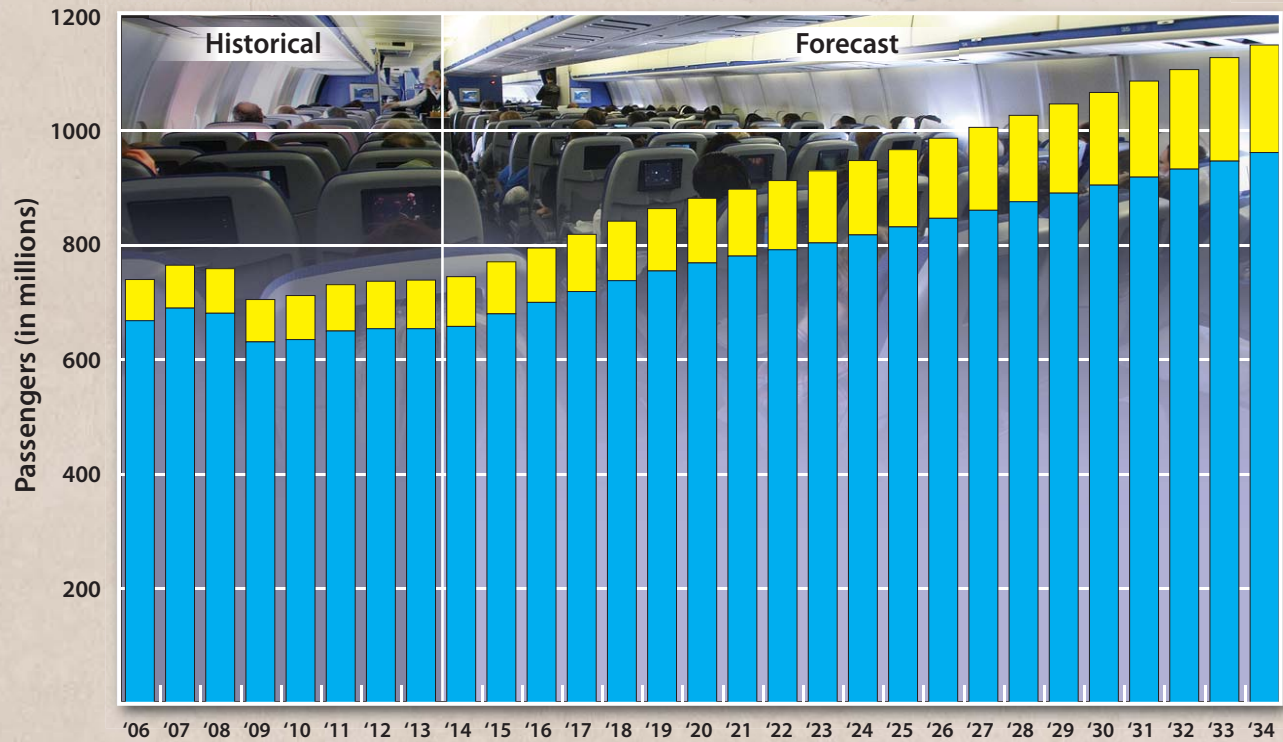
The regional passenger aircraft fleet is estimated to have decreased by 127 aircraft in 2013, as reductions in 50-seat and smaller regional jets and turboprops outpace production of new larger regional jets. After 2013, the regional carrier fleet (turboprops and jets) is expected to decrease by 0.1 percent per year over the remaining years of the forecast period, totaling 2,141 aircraft in 2034. The number of regional jets (90 seats or fewer) is projected to grow from 1,642 in 2013 to 1,953 in 2034, an average annual increase of 0.8 percent. All of the growth in regional jets over the forecast period occurs in the larger, 70- to 90-seat aircraft category. During the forecast period, all regional jets of 50 or less seats are projected to be retired from the fleet.

***During the forecast period, all regional jets of 50 or less seats are projected to be retired from the fleet.***

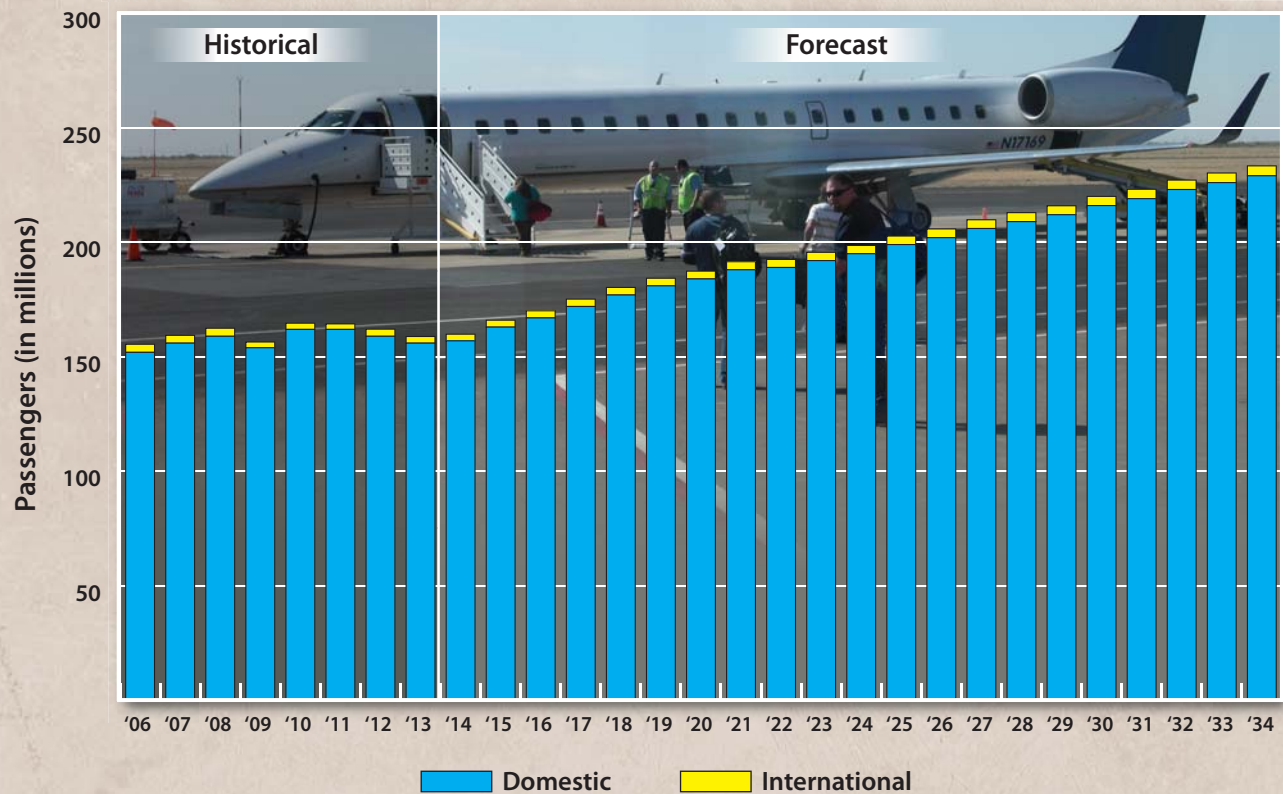




## U.S. Scheduled Commercial Air Carrier Passenger Enplanements



## U.S. Regional / Commuter Scheduled Passenger Enplanements



Source: FAA Aerospace Forecasts, Fiscal Years 2014-2034



Large cargo jet aircraft are forecast to grow from an estimate of 740 in 2013 to a total 1,182 aircraft in 2034. The narrow-body, cargo jet fleet is projected to increase by five aircraft per year over the 20-year forecast period as older 757s and 737s are converted to cargo service. The wide-body, cargo jet fleet is projected to increase by 18 aircraft.

## **GENERAL AVIATION**

General aviation encompasses all portions of civil aviation except commercial service and military operations. To determine the types and sizes of facilities that should be planned to serve general aviation activity, certain elements of this activity must be forecast. These indicators of general aviation demand include based aircraft, aircraft fleet mix, and annual operations.

### **General Aviation Trends and Forecasts**

The FAA forecasts the fleet mix and hours flown for single engine piston aircraft, multi-engine piston aircraft, turboprops, business jets, piston and turbine helicopters, light sport, experimental, and others (gliders and balloons). The FAA forecasts “active aircraft,” not total aircraft. An active aircraft is one that is flown at least one hour during the year. From 2011 through 2013, the FAA undertook an effort to have all aircraft owners re-register their aircraft. This effort resulted in a 6.4 percent decrease in the number of active general aviation aircraft, mostly in the piston category.

After growing rapidly for most of the decade, the demand for business jet aircraft slowed over the past few years, as the industry was hard hit by the 2008-09 economic recession. Nonetheless, the FAA forecast calls for growth through the long-term, driven by higher corporate profits and continued concerns about safety, security, and flight delays. Overall, business aviation is projected to outpace personal/recreational use.

In 2013, the FAA estimated there were 141,325 piston-powered aircraft active in the national fleet. The total number of piston-powered aircraft in the fleet is forecast to decline by 0.3 percent over the next twenty years resulting in 131,625 by 2034. This includes -0.4 percent annually for single engine pistons and -0.5 percent for multi-engine pistons. Conversely, piston-powered helicopters are forecast to grow 1.7 percent annually through 2034.

Total turbine aircraft are forecast to return to growth in the short term and have an annual growth rate of 2.6 percent through 2034. The FAA estimates there were 29,110 turbine-powered aircraft in the national fleet in 2013, and there will be 49,565 by 2034. This includes annual growth rates of 1.6 percent for turboprops, 3.0 percent for business jets, and 3.0 percent for turbine helicopters.

While comprising a much smaller portion of the general aviation fleet, experimental aircraft, typically identified as home-built aircraft, are projected to grow annually by 1.5 percent through 2034. The FAA estimates there were 25,305 experimental aircraft in 2013, and these are projected to grow to 34,440 by 2034. Sport aircraft are forecast to grow 4.1 percent annually through the long term, growing from



2,110 in 2013 to 4,880 by 2034. **Exhibit 2B** presents the historical and forecast U.S. active general aviation aircraft.

The FAA also forecasts total operations based upon activity at control towers across the U.S. Operations are categorized as air carrier, air taxi/commuter, general aviation, and military.

General aviation operations, both local and itinerant, declined significantly as a result of the 2008-2009 recession and subsequent slow recovery. Through 2034, total general aviation operations are forecast to grow 0.5 percent annually. Air taxi/commuter operations are forecast to grow by 0.6 percent through 2023, and then decline slightly through the remainder of the forecast period. Overall, air taxi/commuter operations are forecast to decline by 0.1 percent annually from 2013 through 2034.

### General Aviation Aircraft Shipments and Revenue

As previously discussed, the 2008-2009 economic recession has had a negative impact on general aviation aircraft production, and the industry has been slow to recover. Aircraft manufacturing declined for three straight years from 2008 through 2010. According to the General Aviation Manufacturers Association (GAMA), there is optimism that aircraft manufacturing will stabilize and return to growth, which has been evidenced since 2011. **Table 2A** presents historical data related to general aviation aircraft shipments.

**TABLE 2A**  
**Annual General Aviation Airplane Shipments**  
**Manufactured Worldwide and Factory Net Billings**

Year	Total	SEP	MEP	TP	J	Net Billings (\$millions)
1994	1,132	544	77	233	278	\$3,749
1995	1,251	605	61	285	300	\$4,294
1996	1,437	731	70	320	316	\$4,936
1997	1,840	1043	80	279	438	\$7,170
1998	2,457	1508	98	336	515	\$8,604
1999	2,808	1689	112	340	667	\$11,560
2000	3,147	1,877	103	415	752	\$13,496
2001	2,998	1,645	147	422	784	\$13,868
2002	2,677	1,591	130	280	676	\$11,778
2003	2,686	1,825	71	272	518	\$9,998
2004	2,963	1,999	52	321	591	\$11,918
2005	3,590	2,326	139	375	750	\$15,156
2006	4,053	2,513	242	412	886	\$18,815
2007	4,276	2,417	258	465	1,136	\$21,837
2008	3,970	1,943	176	538	1,313	\$24,772
2009	2,279	893	70	446	870	\$19,474
2010	2,020	781	108	368	763	\$19,715
2011	2,120	761	137	526	696	\$19,097
2012	2,133	790	91	580	672	\$18,873
2013	2,345	900	122	645	678	\$23,450

SEP - Single Engine Piston; MEP - Multi-Engine Piston; TP - Turboprop; J - Turbofan/Turbojet

Source: General Aviation Manufacturers Association 2013 Statbook

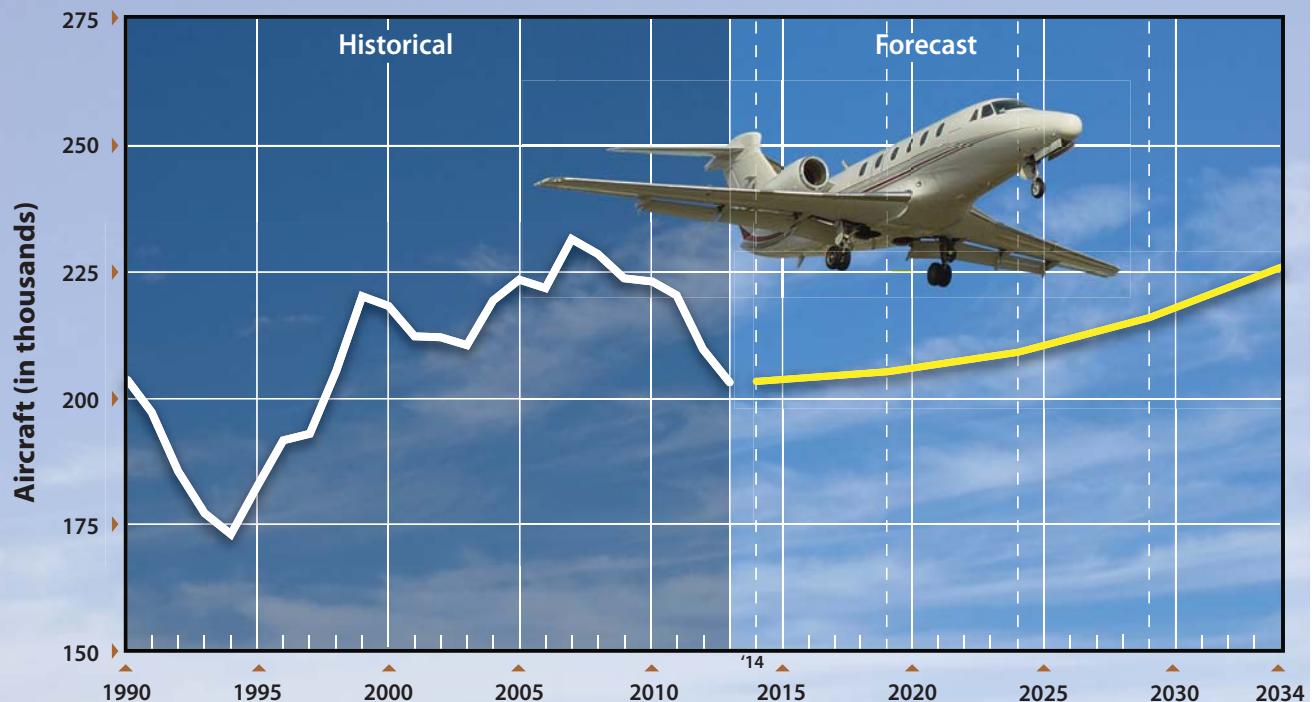






## U.S. Active General Aviation Aircraft

	2014	2019	2024	2029	2034
<b>FIXED WING</b>					
<b>Piston</b>					
Single Engine	122,755	118,700	115,660	113,895	113,975
Multi-Engine	14,180	13,890	13,500	13,155	12,890
<b>Turbine</b>					
Turboprop	10,160	10,355	11,000	12,375	14,370
Turbojet	12,055	13,600	15,800	18,665	22,050
<b>ROTORCRAFT</b>					
Piston	3,430	3,775	4,090	4,405	4,750
Turbine	7,280	8,690	10,150	11,600	13,145
<b>EXPERIMENTAL</b>					
	25,895	28,100	30,130	32,275	34,440
<b>SPORT AIRCRAFT</b>					
	2,240	2,955	3,595	4,315	4,880
<b>OTHER</b>					
	5,025	5,075	5,115	5,155	5,200
<b>TOTAL</b>	<b>203,020</b>	<b>205,140</b>	<b>209,040</b>	<b>215,840</b>	<b>225,700</b>



Source: FAA Aerospace Forecasts, Fiscal Years 2014-2034.

Notes: An active aircraft is one that has a current registration and was flown at least one hour during the calendar year.





Worldwide shipments of general aviation airplanes increased for the third year in a row in 2013. A total of 2,345 units were delivered around the globe, as compared to 2,133 units in 2012. Worldwide general aviation billings were also significantly higher than the previous year, comparable to levels achieved prior to the 2008-09 recession.

**Business Jets:** General aviation manufacturers delivered 768 business jets in 2013, as compared to 672 units in 2012. Similar to 2012, demand was stronger in 2013 for large-cabin business jets than it was for medium and light business jets.

**Turboprops:** In 2013, 645 turboprop airplanes were delivered to customers around the world, an increase of approximately 10 percent from the previous year's figure of 580 for equivalent reporting companies. Overall, the turboprop market has experienced significant gains since 2010.

**Pistons:** Piston deliveries increased from 881 units shipped from equivalent reporting companies in 2012, to 1,022 during 2013. The piston segment continued to fare best for unit deliveries among the three segments by which GAMA tracks the airplane manufacturing industry. This is due in part by deliveries to flight schools in emerging markets.

*Most industry observers believe that the general aviation market, particularly the business aviation market, is in a position for sustained growth.*

Most industry observers believe that the general aviation market, particularly the business aviation market, is in a position for sustained growth. Industry net orders are back to positive and most leading indicators continue to improve. The large jet category of the market is expected to expand faster than the other categories.

The total number of general aviation hours flown is projected to increase an average of 1.4 percent per year over the forecast period. The FAA projects faster growth in hours will occur after 2023, with increases in the fixed wing turbine aircraft fleet, as well as increasing utilization of both single and multi-engine piston aircraft as the aging of this fleet starts to slow down. In the intermediate term, much of the increase in hours flown reflects strong growth in the rotorcraft and turbine jet fleets.

Hours flown by turbine aircraft (including rotorcraft) are forecast to increase 3.2 percent annually over the forecast period, compared to a decline of 0.4 percent for piston-powered aircraft. Although hours flown by piston rotorcraft are forecast to increase an average of 1.8 percent per year during the forecast period, they comprise less than a 10 percent share of the hours flown by general aviation piston aircraft; and thus have a small impact on the overall trend. Jet aircraft are forecast to account for most of the increase, with hours flown increasing at an average annual rate of 4.2 percent over the forecast period. The large increases in jet hours result mainly from the increasing size of the business jet fleet, along with a measured recovery in utilization rates from recession-induced record lows. Turboprop hours are also expected to continue their increase, which were significantly higher than previously estimated.



The number of active general aviation pilots, excluding air transport pilots (ATPs) is projected to increase by 34,000 to 484,425 by 2034. Since airline pilots can no longer operate with only a commercial pilot certificate since August 2013 (excluding a limited number of special cases as specified by 2013 FAA Final Rule for Pilot Certification and Qualification Requirements for Air Carrier Operations), the FAA reduced its commercial pilot forecast compared to the previous year and increased our ATP forecast. Taking this change into consideration, commercial pilots are projected to increase from 108,206 in 2013 to 122,000 in 2034, an average annual increase of 0.6 percent. The number of student pilots is forecast to decline at an average annual rate of 0.2 percent over the forecast period, from 120,285 in 2013 to 116,050 in 2034.

## **NEW MEXICO SOCIOECONOMIC TRENDS AND FORECASTS**

In airport planning, socioeconomic characteristics are collected and examined to derive an understanding of the dynamics of growth within the study area. Socioeconomic information both statewide and in individual airport service areas is an important consideration in the airport system planning process.

The historic trend in elements such as population, employment, gross regional product, income, and sales provides insight into the long term socioeconomic condition of the state. Aviation forecasts are typically related to the population base, economic strength of the region, and the ability of the state and region to sustain a strong economic base over an extended period of time.

Historical and forecast socioeconomic data for New Mexico was from Woods & Poole Economics - *Complete Economic and Demographic Data Source*, 2014. Woods & Poole utilizes information from the U.S. Census Bureau, as well as other national and state organizations for historic data to project future conditions. The information is presented on **Exhibit 2C** and will be discussed further in the following subsections.

### **POPULATION**

The Geospatial and Population Studies Group of the University of New Mexico also prepared a population forecast for the state of New Mexico and each of its counties. The last forecast release was in November of 2012. **Table 2B** and **Exhibit 2D** compares the state population forecasts of the two sources. The UNM forecasts New Mexico's population to grow by 32 percent (1.12 percent annually) between 2010 and 2035, while Woods & Poole forecasts growth of 41 percent (1.37 percent annually) over the same period. The resultant 2035 population forecast of Woods & Poole is 6.5 percent higher than that of UNM. **Exhibit 2E** graphically depicts the population distribution by county.



**TABLE 2B**  
**Population Projections**  
**New Mexico and Counties**

	Actual	Forecast UNM BBER		AAGR*	Forecast W&P CEDDS		AAGR
County	2010	2020	2035	2010-35	2020	2035	2010-35
NEW MEXICO	2,065,913	2,351,724	2,727,118	1.12%	2,371,788	2,904,392	1.37%
Bernalillo	664,425	780,244	932,091	1.36%	764,603	932,131	1.36%
Catron	3,743	3,909	4,005	0.27%	4,127	4,794	0.99%
Chaves	65,778	71,632	80,724	0.82%	73,690	87,223	1.14%
Colfax	13,743	13,631	12,998	-0.22%	14,187	14,880	0.32%
Curry	48,960	52,900	58,611	0.72%	52,025	54,824	0.45%
De Baca	2,015	1,950	1,840	-0.36%	1,901	1,785	-0.48%
Doña Ana	210,477	243,164	286,818	1.25%	259,123	350,983	2.07%
Eddy	53,919	57,908	63,595	0.66%	58,882	66,502	0.84%
Grant	29,413	29,457	29,166	-0.03%	31,048	33,415	0.51%
Guadalupe	4,701	4,765	4,773	0.06%	4,801	4,988	0.24%
Harding	690	684	625	-0.39%	657	571	-0.75%
Hidalgo	4,857	4,818	4,546	-0.26%	4,901	4,883	0.02%
Lea	64,748	78,407	102,090	1.84%	71,327	80,915	0.90%
Lincoln	20,503	21,577	21,959	0.27%	23,249	28,254	1.29%
Los Alamos	18,031	18,063	17,603	-0.10%	19,058	20,012	0.42%
Luna	25,146	28,024	33,399	1.14%	28,733	34,912	1.32%
McKinley	71,812	73,483	72,988	0.06%	80,647	92,176	1.00%
Mora	4,886	4,826	4,548	-0.29%	4,829	4,797	-0.07%
Otero	64,340	66,367	67,064	0.17%	70,128	76,736	0.71%
Quay	9,082	8,891	8,788	-0.13%	9,344	9,651	0.24%
Rio Arriba	40,333	41,026	40,509	0.02%	42,809	45,854	0.51%
Roosevelt	20,038	23,178	26,836	1.18%	21,410	22,538	0.47%
Sandoval	132,387	176,276	243,897	2.47%	169,779	246,189	2.51%
San Juan	130,185	146,388	168,850	1.05%	141,933	164,653	0.94%
San Miguel	29,369	29,157	27,413	-0.28%	30,891	32,873	0.45%
Santa Fe	144,497	164,006	182,410	0.94%	176,461	236,761	1.99%
Sierra	12,017	12,048	12,421	0.13%	13,006	14,715	0.81%
Socorro	17,869	18,008	17,274	-0.14%	19,302	21,516	0.75%
Taos	32,938	36,769	39,850	0.76%	36,124	41,100	0.89%
Torrance	16,381	17,589	19,344	0.67%	18,560	22,493	1.28%
Union	4,542	5,066	5,773	0.96%	4,605	4,784	0.21%
Valencia + Cibola	104,088	117,513	134,310	1.02%	119,648	146,484	1.38%

Sources:

UNM BBER: New Mexico County Population Projections July 1, 2010 to July 1, 2040, Geospatial and Population Studies Group, University of New Mexico. Released November 2012.

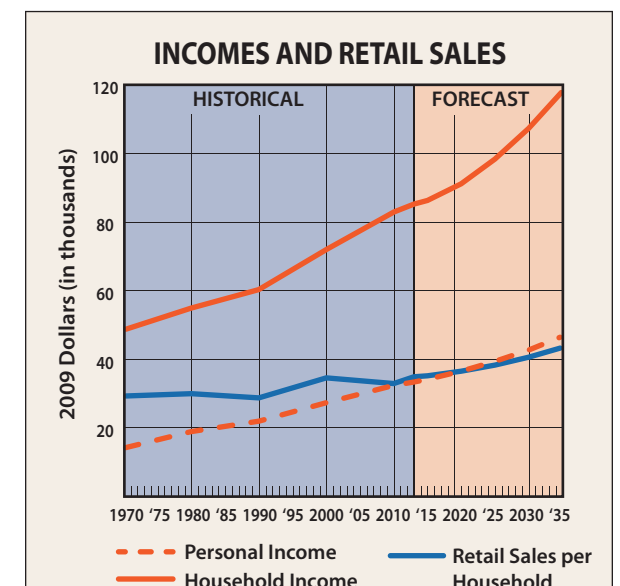
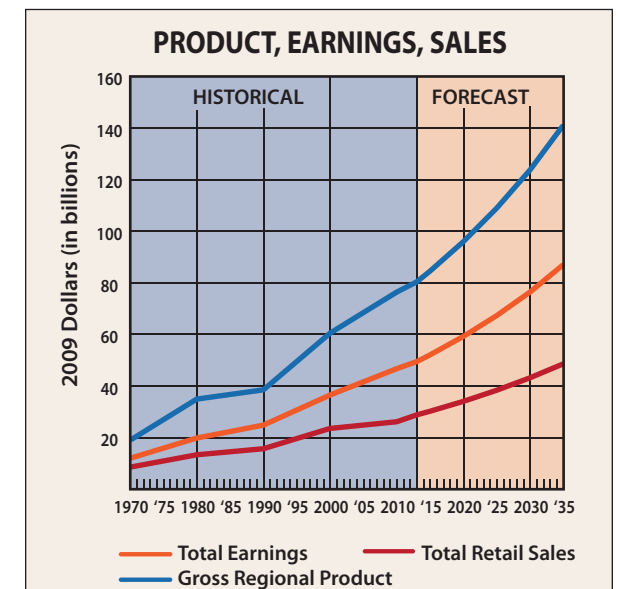
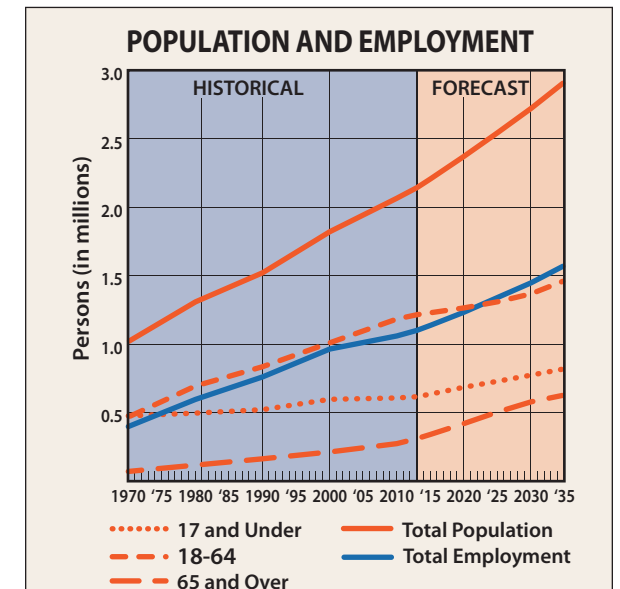
W&P CEDDS: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2014

\*AAGR - Average Annual Growth Rate

As evident from **Exhibit 2C**, the average annual growth rate (AAGR) from 1990 to 2013 of 1.50 percent was higher than either of these forecasts. The Woods & Poole data and projections also in **Exhibit 2C**

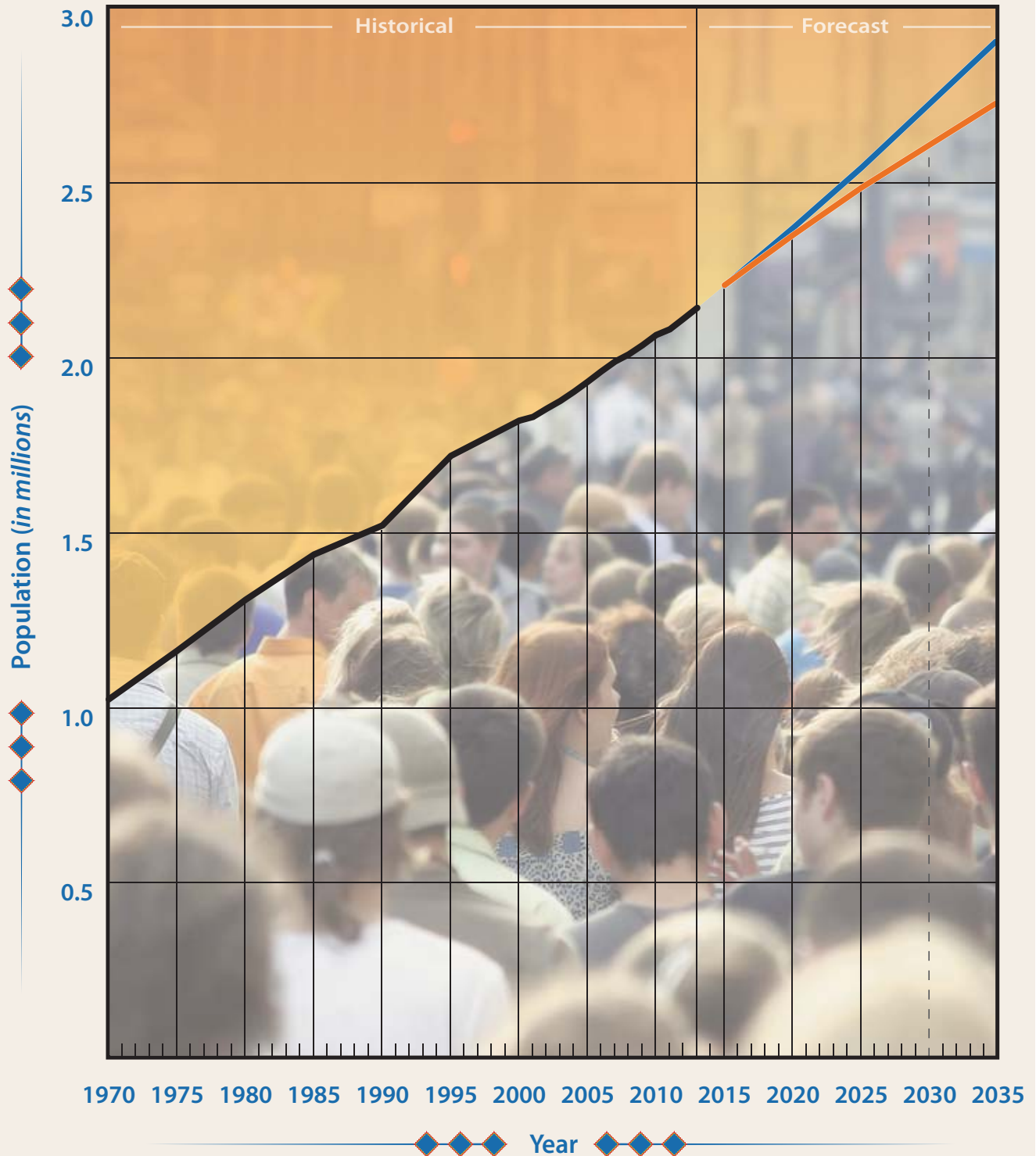


	HISTORICAL							FORECAST					
	1970	1980	1990	2000	2010	2013	AAGR 1990-2013	2015	2020	2025	2030	2035	AAGR 2013-2035
<b>Population</b>													
Total Population	1,024,206	1,309,103	1,521,574	1,821,204	2,065,913	2,143,439	1.50%	2,206,835	2,371,788	2,544,309	2,722,003	2,904,392	1.39%
Median Age (Years)	23.70	27.44	31.13	34.65	36.73	36.89	0.70%	37.12	37.95	38.66	39.22	39.29	0.29%
Ages 17 And Under	476,606	496,935	522,320	597,673	607,569	616,695	0.72%	635,801	685,862	729,554	774,405	819,703	1.30%
Ages 18 To 64 Years	476,524	694,898	835,866	1,010,208	1,184,161	1,215,504	1.60%	1,229,649	1,265,079	1,309,773	1,368,158	1,459,020	0.83%
Ages 65 Years And Over	71,076	117,270	163,388	213,323	274,183	311,240	2.80%	341,385	420,847	504,982	579,440	625,669	3.22%
Total Number Of Households	291,822	445,083	545,909	681,224	793,990	825,375	1.80%	858,873	934,229	1,001,238	1,063,398	1,123,823	1.41%
Persons Per Household	3.40	2.89	2.73	2.62	2.55	2.54	-6.96%	2.52	2.48	2.48	2.50	2.52	0.00%
<b>Employment</b>													
Total Employment	398,903	597,035	761,394	964,673	1,060,445	1,101,300	1.62%	1,137,759	1,233,809	1,337,199	1,448,470	1,568,236	1.62%
Farm	5.0%	3.7%	2.6%	2.3%	2.4%	2.4%		2.4%	2.2%	2.1%	2.0%	1.9%	
Forestry, Fishing, Related Activities & Other	0.5%	0.5%	0.7%	0.6%	0.5%	0.5%		0.5%	0.5%	0.5%	0.5%	0.5%	
Mining	3.6%	0.4%	2.4%	2.0%	2.6%	2.9%		2.8%	2.7%	2.6%	2.5%	2.4%	
Utilities	0.8%	0.7%	0.6%	0.4%	0.4%	0.4%		0.4%	0.4%	0.4%	0.4%	0.4%	
Construction	5.6%	7.2%	5.7%	6.3%	5.8%	5.6%		5.6%	5.7%	5.7%	5.7%	5.8%	
Manufacturing	4.9%	5.4%	5.5%	4.9%	3.3%	3.2%		3.2%	3.0%	2.8%	2.6%	2.5%	
Wholesale Trade	3.0%	3.6%	3.4%	3.0%	2.5%	2.4%		2.4%	2.4%	2.3%	2.3%	2.2%	
Retail Trade	11.2%	11.3%	11.8%	11.7%	10.5%	10.5%		10.5%	10.5%	10.6%	10.6%	10.6%	
Transportation And Warehousing	3.5%	3.2%	2.7%	2.6%	2.2%	2.3%		2.3%	2.3%	2.3%	2.3%	2.2%	
Information	1.3%	1.4%	1.6%	1.9%	1.6%	1.5%		1.5%	1.5%	1.5%	1.5%	1.4%	
Finance And Insurance	3.5%	3.8%	3.6%	3.3%	3.3%	3.3%		3.3%	3.3%	3.3%	3.2%	3.2%	
Real Estate, Rental, & Lease	2.5%	2.8%	2.6%	3.1%	3.8%	3.8%		3.8%	3.8%	3.7%	3.7%	3.7%	
Professional & Technical Services	4.6%	5.1%	6.5%	6.1%	7.4%	7.5%		7.5%	7.7%	7.9%	8.1%	8.3%	
Management Of Companies & Enterprises	0.2%	0.3%	0.3%	0.6%	0.5%	0.5%		0.5%	0.5%	0.6%	0.6%	0.6%	
Administrative & Waste Services	2.9%	3.1%	3.7%	5.3%	5.2%	5.3%		5.4%	5.6%	5.8%	6.0%	6.3%	
Educational Services	0.6%	0.7%	0.9%	1.2%	1.6%	1.7%		1.8%	1.9%	2.0%	2.2%	2.3%	
Health Care And Social Assistance	5.9%	6.2%	7.5%	9.2%	11.3%	11.7%		11.9%	12.5%	13.1%	13.8%	14.4%	
Arts, Entertainment, & Recreation Employment	1.4%	1.5%	1.8%	0.2%	2.2%	2.2%		2.2%	2.2%	2.2%	2.3%	2.3%	
Accommodation & Food Services Employment	6.5%	6.7%	7.6%	7.7%	7.7%	7.8%		7.8%	7.9%	7.9%	8.0%	8.0%	
Other Services, Except Public Administration	4.0%	4.3%	5.1%	5.0%	4.8%	4.8%		4.9%	4.9%	5.0%	5.0%	5.1%	
Federal Civilian Government	6.9%	5.0%	4.2%	3.1%	3.2%	3.0%		2.9%	2.8%	2.6%	2.5%	2.4%	
Federal Military	5.7%	3.7%	3.0%	1.8%	1.6%	1.7%		1.6%	1.5%	1.4%	1.3%	1.2%	
State And Local Government	15.7%	16.1%	16.4%	16.1%	15.7%	15.0%		14.8%	14.2%	13.6%	13.0%	12.5%	
<b>Income &amp; Spending</b>													
Gross Regional Product (In Millions Of 2009 Dollars)	\$19,386.6	\$34,939.95	\$38,526.7	\$60,501.9	\$76,422.0	\$80,394.7	3.25%	\$84,566.5	\$95,985.9	\$108,974.7	\$123,750.6	\$140,561.2	2.57%
Total Earnings (In Millions Of 2009 Dollars)	\$12,195.9	\$19,840.6	\$24,868.2	\$36,519.3	\$46,735.8	\$49,464.1	3.03%	\$52,089.6	\$59,241.6	\$67,316.8	\$76,429.0	\$86,705.8	2.58%
Total Retail Sales (In Millions Of 2009 Dollars)	\$8,557.5	\$13,349.0	\$15,704.2	\$23,569.2	\$26,156.8	\$28,822.5	2.68%	\$30,233.5	\$34,063.1	\$38,365.7	\$43,198.4	\$48,624.8	2.41%
Total Personal Income Per Capita (In 2009 Dollars)	\$14,268	\$18,948	\$21,980	\$27,363	\$32,404	\$33,391	1.83%	\$34,173	\$36,545	\$39,409	\$42,701	\$46,432	1.51%
Mean Household Total Personal Income (In 2009 Dollars)	\$48,805	\$54,948	\$60,328	\$71,985	\$82,917	\$85,243	1.51%	\$86,304	\$91,162	\$98,359	\$107,302	\$117,736	1.48%
Total Retail Sales Per Household (In 2009 Dollars)	\$29,324	\$29,992	\$28,767	\$34,598	\$32,944	\$34,921	0.85%	\$35,201	\$36,461	\$38,318	\$40,623	\$43,267	0.98%



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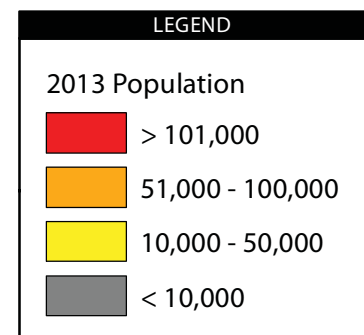
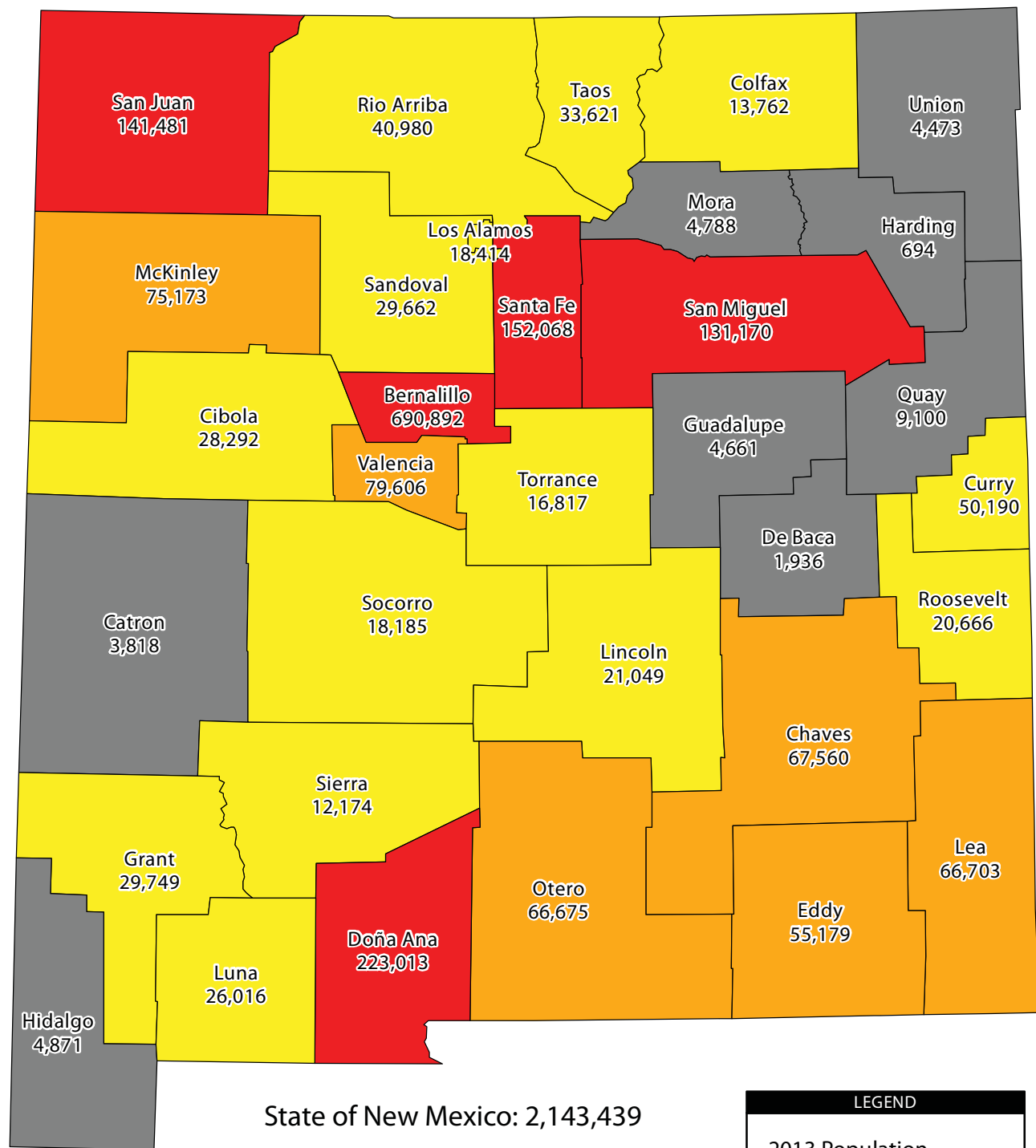




**LEGEND**

- Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2014
- New Mexico County Population Projections July 1, 2010 to July 1, 2040, Geo-spatial and Population Studies Group, University of New Mexico. Released November 2012





Source: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2014.  
Coffman Associates Analysis.



also provide some additional take on the changing make-up related to household size and age. In 1970, the persons per household averaged 3.4. Twenty years later, the average had declined to 2.73. The next 20 years saw the average household size decline to 2.55 persons. The state's household size is projected to stabilize around 2.52 percent over the next 20-plus years.

A decline in the birthrate can be related, at least in part, to this reduction in household size. Other factors include increased life expectancy, the aging of the baby boomer generation, and the increasing attractiveness of New Mexico as a retirement destination. This has also been further reflected over time as the median age in the state has been getting older. In 1970, the median age of New Mexico residents was 23.7 years. By 1990, the median age increased to 31.1. Another 20 years saw the median age grow to 36.9 years. Woods & Poole projects the median age to continue to grow, albeit more slowly, to 39.2 years by 2035.

**Exhibit 2C** also depicts the population by the age groups of youth 17 years and under, the primary adult working ages 18 to 64, and seniors 65 and older. While each age group has grown over the last forty years, the largest rate of growth was in seniors, with the slowest rate of growth in the youth age group, leading to the relatively rapid increase in the median age. In 1970, the state's population was comprised of 46.5 percent children, 46.5 percent primary working age, and just 7 percent seniors. For-

*The senior age group will continue to be the fastest growing age group in the state, but the youth age group will grow faster than the primary working age over the planning period.*

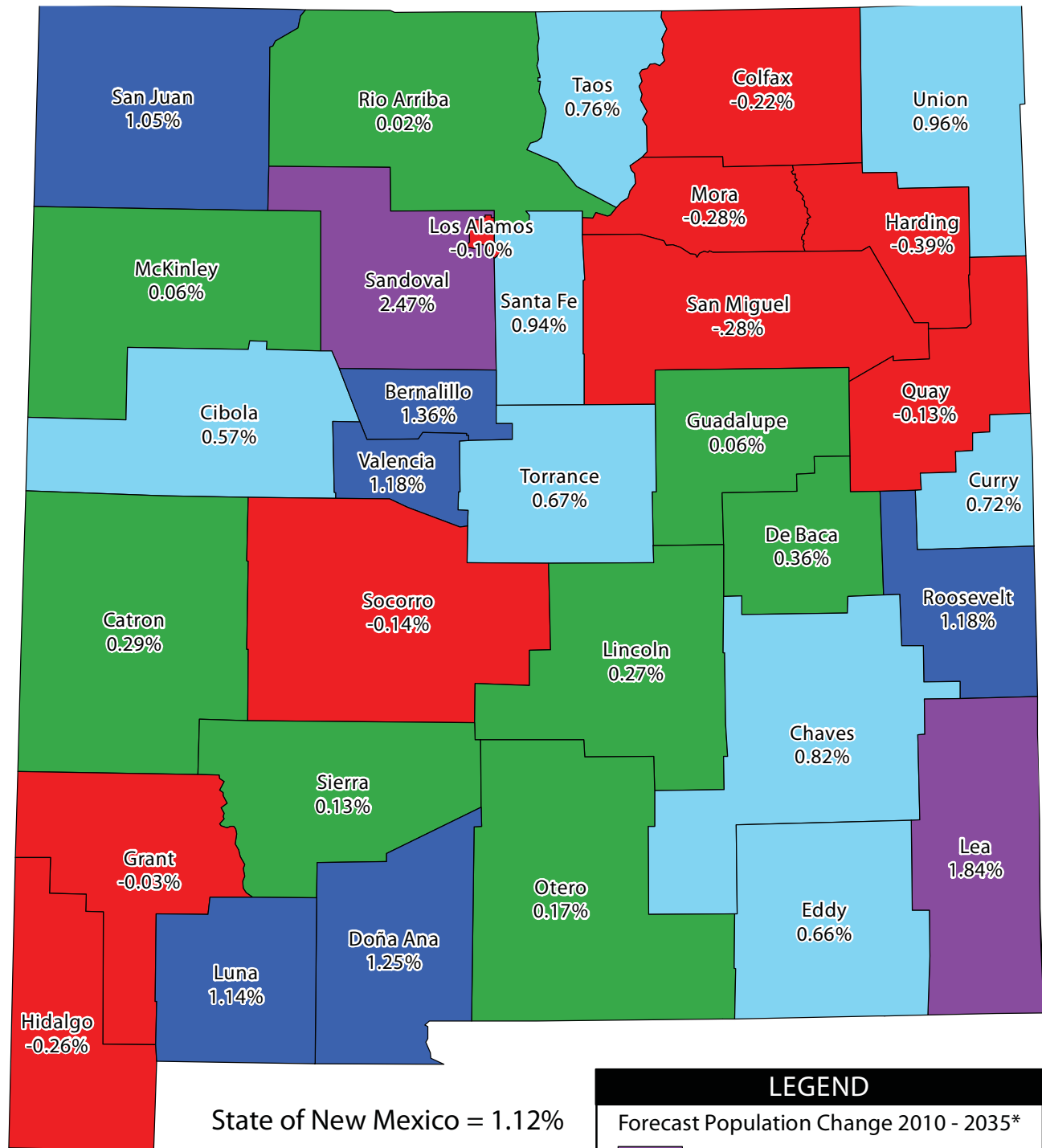
ty years later in 2010, the population was 29.4 percent children, 50.3 percent primary working age, and 13.3 percent seniors. With the baby boomers now entering their senior years, the senior age group will continue to be the fastest growing age group in the state, but the youth age group will grow faster than the primary working age over the planning period. By 2035, the per-

centage of youth will decline slightly to 28.2 percent, while the primary working age group will decline to 50.2 percent. The senior age group will continue to increase its population share to 21.6 percent.

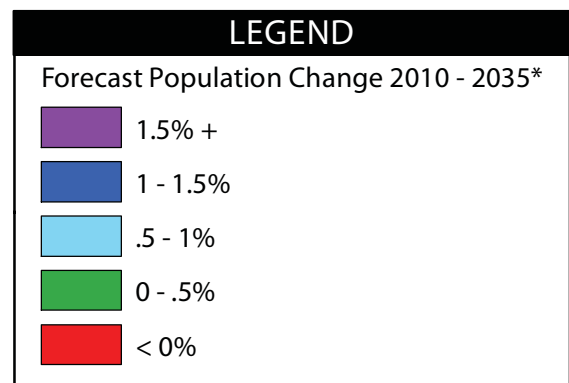
**Table 2B** includes a breakdown and comparison of each population forecast by county for New Mexico. The five most populated counties are Bernalillo, Doña Ana, Santa Fe, Sandoval and San Juan. In 2035, the same five are projected to remain in the top five, but Santa Fe and Sandoval are projected to switch places. Sandoval County has the highest projected growth at approximately 85 percent in both forecasts. Doña Ana and Santa Fe Counties are next at 67 percent and 64 percent in the Woods & Poole forecasts, but are only 36 and 26 percent in the UNM forecast. Lea County at 58 percent and Bernalillo County at 40 percent of second and third in the UNM forecast. Woods & Poole projects Lea County to grow 25 percent, but its forecast for Bernalillo County is essentially the same as UNM's.

Woods & Poole projects three counties, DeBaca, Harding, and Mora, to lose population over the planning period. The more conservative UNM forecast projects those three plus seven other counties to lose population between now and 2010 and 2035. **Exhibit 2F** graphically maps the annual average growth rates for New Mexico's counties.





Source: New Mexico County Population Projections July 1, 2010 to July 1, 2040, Geo-spatial and Population Studies Group, University of New Mexico. Released November 2012  
Coffman Associates Analysis.



\*Annual Average Growth Rate



## EMPLOYMENT

**Exhibit 2C** also includes an examination of total employment and employment by sector in New Mexico since 1970, and the Woods & Poole projections through 2035. Employment in the state has nearly doubled since 1970, and has averaged 1.62 percent annually since 1990. A similar average annual rate of employment growth is projected through 2035.

State and local workers have been the largest employment sector in the state over the last 40 years. After growing from 15.7 percent in 1970 to 16.4 percent in 1990, the sector has been experiencing a slow decline to an estimated 15.0 percent in 2013. This has included a decline in the number of workers in recent years due to budget cutbacks related to the 2008-09 recession. The percentage of local government workers is forecast to continue to decline to 12.5 percent by 2035, even though the number of workers will generally increase over the planning period.

Federal civilian and military worker percentages have been on the decline since 1970, from 12.6 percent to 4.8 percent in 2010. By 2035, the percentage of federal workers is forecast to decline to 3.6 percent. The number of federal civilian workers has and will continue to grow despite the percentage declines. The number of military workers reached its peak at just over 24,000 in 1985, then generally declined to just over 14,000 in 2008. In the last few years, military employment in the state has grown back to over 18,000 and is projected to remain in the 18,000 to 19,000 range through 2035.

Manufacturing has been experiencing a general decline in workers since 1995, which is also reflected in the percentage decline shown on the exhibit. That percentage is forecast to continue to decline moving forward, although a slow increase in the number of manufacturing jobs is expected.

The sectors of transportation and warehousing, retail trade, and wholesale trade have seen percentages decline in the past decade; however, all are forecast to maintain a steady share of the job market through 2035.

Health care and social assistance has been the fastest growing employment sector in the state from just 5.9 in 1970 to 11.3 percent in 2010. The sector is projected to become the largest by 2030, growing to 14.4 percent by 2035. Other growing percentages are expected in the services sectors.

## GROSS REGIONAL PRODUCT

As mentioned earlier, the FAA considers the nation's Gross Domestic Product (GDP) as a measure of the economy that affects aviation growth potential. Gross regional product (GRP) is a similar measure of the state and local economies. The true growth is best analyzed after adjusting for inflation. As presented on **Exhibit 2C**, the state's inflation-adjusted GRP increased at an annual average rate of 3.25 percent between 1990 and 2013. Woods & Poole forecasts the GRP to grow at

***Woods & Poole forecasts the GRP to grow at an annual average of 2.57 percent through 2035.***





an annual average of 2.57 percent through 2035. This compares to the FAA's base case national GDP growth rate of 2.7 percent.

**Table 2C** presents the Woods & Poole GRP forecasts for each New Mexico County. Bernalillo County GRP comprised 40 percent of the state's GRP in 2010. With a growth rate slightly higher than the state average, the county is expected to comprise 41 percent by 2035. The next largest county GRP's in order are Santa Fe, Dona Ana, San Juan and Lea Counties. By 2035 the forecasts anticipate Santa Fe and San Juan exchanging places and Sandoval replacing Lea County in the top five.

**TABLE 2C**  
**Gross Regional Product Projections (million 2009\$), New Mexico and Counties**  
**Woods & Poole 2014**

County	Actual	Forecast			AAGR
	2010	2020	2025	2035	2010-35
NEW MEXICO	\$76,421.98	\$95,985.90	\$108,974.75	\$140,561.19	2.47%
Bernalillo	\$30,620.68	\$38,671.16	\$44,282.37	\$58,024.69	2.59%
Catron	\$96.86	\$112.98	\$121.73	\$141.29	1.52%
Chaves	\$1,915.74	\$2,417.83	\$2,759.62	\$3,601.79	2.56%
Colfax	\$437.83	\$505.78	\$554.88	\$667.64	1.70%
Curry	\$1,903.59	\$2,418.97	\$2,693.37	\$3,339.03	2.27%
De Baca	\$62.90	\$72.28	\$76.82	\$86.90	1.30%
Doña Ana	\$5,972.70	\$7,605.68	\$8,761.34	\$11,621.17	2.70%
Eddy	\$3,014.96	\$3,852.84	\$4,299.50	\$5,352.85	2.32%
Grant	\$802.32	\$1,072.20	\$1,188.87	\$1,460.77	2.43%
Guadalupe	\$101.99	\$109.54	\$117.32	\$134.46	1.11%
Harding	\$42.09	\$48.35	\$50.55	\$55.30	1.10%
Hidalgo	\$152.48	\$194.21	\$220.35	\$284.40	2.52%
Lea	\$3,470.99	\$4,341.05	\$4,791.65	\$5,835.34	2.10%
Lincoln	\$554.73	\$705.24	\$794.65	\$1,008.17	2.42%
Los Alamos	\$2,456.81	\$3,211.21	\$3,761.63	\$5,158.02	3.01%
Luna	\$616.23	\$783.51	\$892.49	\$1,158.47	2.56%
McKinley	\$1,736.85	\$1,955.49	\$2,093.87	\$2,399.55	1.30%
Mora	\$96.13	\$114.05	\$127.53	\$160.29	2.07%
Otero	\$2,094.01	\$2,590.26	\$2,881.84	\$3,564.53	2.15%
Quay	\$238.50	\$278.11	\$307.79	\$376.71	1.85%
Rio Arriba	\$873.80	\$949.74	\$1,029.60	\$1,209.42	1.31%
Roosevelt	\$513.24	\$605.96	\$671.14	\$823.14	1.91%
Sandoval	\$2,766.78	\$3,793.82	\$4,434.09	\$6,053.39	3.18%
San Juan	\$5,169.34	\$6,409.73	\$7,166.31	\$8,964.93	2.23%
San Miguel	\$685.75	\$759.62	\$819.87	\$954.69	1.33%
Santa Fe	\$6,090.93	\$7,600.83	\$8,659.17	\$11,231.43	2.48%
Sierra	\$270.52	\$344.00	\$394.21	\$518.17	2.63%
Socorro	\$535.06	\$676.70	\$779.96	\$1,036.34	2.68%
Taos	\$905.08	\$1,068.74	\$1,186.86	\$1,463.92	1.94%
Torrance	\$257.43	\$320.92	\$365.09	\$472.21	2.46%
Union	\$148.53	\$162.22	\$169.20	\$184.12	0.86%
Valencia + Cibola	\$1,817.16	\$2,232.88	\$2,521.11	\$3,218.07	2.31%

Source: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2014

\*AAGR - Average Annual Growth Rate

This coincides with Dona Ana and Sandoval ranking in five counties projected to have the highest GRP growth through 2035 which, in order are: Sandoval; Los Alamos; Doña Ana; Socorro; and Sierra. Sand-



oval County's GRP growth of 3.18 percent also reflects its rank as the fastest growing county population rate at 2.51 percent annually.

The lowest GRPs also tend to align with the lowest county populations. Harding County has the lowest GRP followed by DeBaca, Mora, Catron, and Guadalupe. By 2035, Guadalupe and Mora are projected to switch positions.

Three of these counties are also forecast to have the lowest rate of GRP growth through 2035. In order, these include: Union; Harding; Guadalupe; DeBaca; and McKinley.

## PER CAPITA PERSONAL INCOME

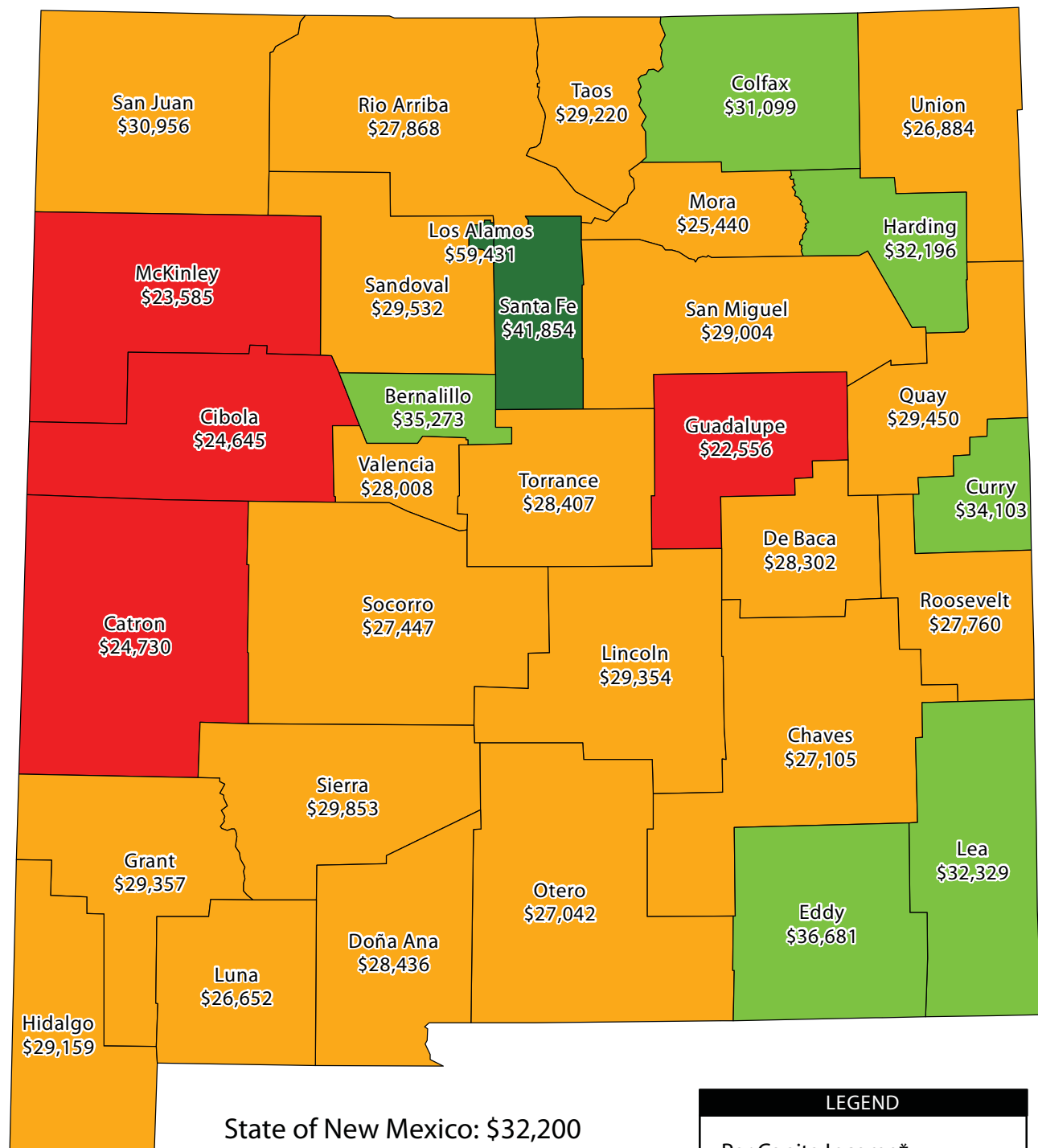
Per capita personal income (PCPI) measure an area's income on an average per person. As with other measures in dollars, growth is best analyzed on with an adjustment for inflation. Also presented on **Exhibit 2C**, inflation-adjusted PCPI grew at an annual average rate of 1.83 percent since 1990. Woods & Poole projects New Mexico's PCPI to grow at 1.51 percent through 2035.

**Table 2D** presents the PCPI forecasts for New Mexico's counties. As of 2010, Los Alamos had the highest PCPI at \$58,273 compared to the state average of \$32,404. The next four highest counties were Santa Fe, Eddy, Harding, and Curry. Union County has the lowest PCPI at \$23,259, followed by McKinley, Guadalupe, Mora, and Catron Counties. **Exhibit 2G** graphically maps the 2010 PCPI of each county.

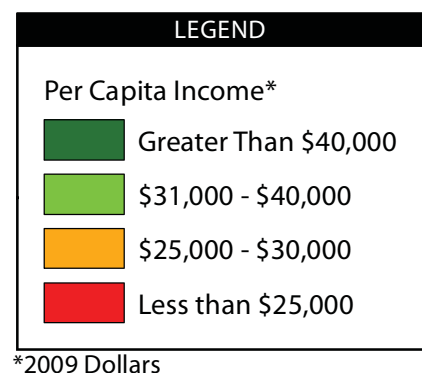
**TABLE 2D**  
Per Capita Personal Income Projections (2009\$), New Mexico and Counties  
Woods & Poole 2014

County	Actual	Forecast			AAGR
	2010	2020	2025	2035	2010-35
NEW MEXICO	\$32,404	\$36,545	\$39,409	\$46,432	1.45%
Bernalillo	\$34,753	\$39,343	\$42,689	\$50,931	1.54%
Catron	\$25,935	\$30,212	\$33,414	\$41,399	1.89%
Chaves	\$28,538	\$32,603	\$34,753	\$40,075	1.37%
Colfax	\$31,214	\$35,824	\$38,673	\$45,444	1.51%
Curry	\$36,113	\$42,024	\$45,561	\$54,252	1.64%
De Baca	\$31,792	\$46,392	\$52,403	\$65,878	2.96%
Doña Ana	\$28,952	\$31,601	\$33,750	\$39,192	1.22%
Eddy	\$40,139	\$44,196	\$47,614	\$55,745	1.32%
Grant	\$29,895	\$36,165	\$39,714	\$48,558	1.96%
Guadalupe	\$24,039	\$26,735	\$28,516	\$32,823	1.25%
Harding	\$38,349	\$47,813	\$51,767	\$61,417	1.90%
Hidalgo	\$30,245	\$37,056	\$41,581	\$52,950	2.27%
Lea	\$34,044	\$38,619	\$41,342	\$47,883	1.37%
Lincoln	\$30,319	\$34,510	\$37,633	\$45,513	1.64%
Los Alamos	\$58,273	\$70,934	\$79,699	\$102,022	2.27%
Luna	\$28,056	\$31,191	\$34,017	\$41,082	1.54%





Source: New Mexico County Population Projections July 1, 2010 to July 1, 2040, Geospatial and Population Studies Group, University of New Mexico. Released November 2012. Coffman Associates Analysis.



**TABLE 2D (Continued)**  
**Per Capita Personal Income Projections (2009\$), New Mexico and Counties**  
**Woods & Poole 2014**

County	Actual	Forecast			AAGR
	2010	2020	2025	2035	2010-35
McKinley	\$23,574	\$27,160	\$29,764	\$36,151	1.72%
Mora	\$25,868	\$31,593	\$34,173	\$40,356	1.79%
Otero	\$28,581	\$32,851	\$35,893	\$43,508	1.70%
Quay	\$30,656	\$35,228	\$38,059	\$44,949	1.54%
Rio Arriba	\$28,040	\$30,299	\$32,330	\$37,132	1.13%
Roosevelt	\$30,385	\$35,704	\$38,418	\$45,038	1.59%
San Juan	\$28,743	\$33,141	\$35,470	\$41,179	1.45%
San Miguel	\$30,026	\$32,472	\$34,705	\$40,076	1.16%
Sandoval	\$31,119	\$34,275	\$36,557	\$42,360	1.24%
Santa Fe	\$41,234	\$45,260	\$48,188	\$55,335	1.18%
Sierra	\$31,138	\$36,760	\$40,656	\$50,403	1.95%
Socorro	\$28,681	\$33,784	\$37,194	\$45,508	1.86%
Taos	\$29,434	\$33,264	\$35,631	\$41,467	1.38%
Torrance	\$28,840	\$33,087	\$35,582	\$41,583	1.47%
Union	\$23,259	\$29,274	\$31,643	\$36,586	1.83%
Valencia + Cibola	\$26,894	\$30,047	\$32,309	\$37,967	1.39%

Source: Woods & Poole Complete Economic and Demographic Data Source (CEDDS) 2014

\*AAGR - Average Annual Growth Rate

The counties projected to have the fastest growing PCPI in order are: DeBaca; Los Alamos; Hidalgo; Grant; and Sierra. While the slowest in order are: Rio Arriba; San Miguel; Santa Fe; Doña Ana; and Sandoval Counties. As a result, the counties projected to have the highest PCPI in 2035 are: Los Alamos; DeBaca; Harding, Eddy, and Santa Fe.

## COMMERCIAL SERVICE IN NEW MEXICO

There are a total of 14 airports in New Mexico that have had scheduled commercial airline passenger service at some time since 2000. As of 2014, there were just nine airports with scheduled service. **Exhibit 2H** presents enplanements at each of the 14 airports since 2000.

***Fourteen airports in New Mexico have had scheduled commercial service at some time since 2000. As of 2014, there were just nine airports with scheduled service.***

The FAA classifies commercial service airports based upon their enplanement levels. Large hub airports are those that enplane over 1.0 percent of the revenue passengers boarding aircraft in the U.S. Phoenix-Sky Harbor International and Denver International are the closest large hubs to New Mexico. Medium airports are those that enplane 0.25 to 1.0 percent of the nation's revenue passenger boardings. Albuquerque International Sunport is classified as a medium hub. Small hub airports are those that airports that enplane between 0.05 and 0.25 of the revenue passenger boardings in the country. There are no small hub airports in the state.



Airports boarding less than 0.05 percent but at least 2,500 passengers annually are classified as non-hub commercial service airports by the FAA. Farmington, Lea County, Roswell, Santa Fe, and Carlsbad Airports qualified as non-hubs in 2013. Airports with at least 10,000 annual enplanements are also classified as primary airports. The Sunport, plus all but Carlsbad of the non-hubs, were primary airports in 2013. This is a key classification because primary airports receive entitlements funding based upon their enplanements levels under the FAA Airport Improvement Program. Farmington fell below the primary level in 2014.

Airports enplaning less than 2,500 passengers are classified as General Aviation Airports, even though they have regularly scheduled commercial service. Clovis, Los Alamos, and Silver City are airports with regularly scheduled service with less than 2,500 annual enplanements in 2013. Los Alamos' enplanements have grown sufficiently in 2014 that it will be reclassified as a non-hub commercial service airport.

**Exhibit 2H** also depicts the total passengers enplaned in the state each year. Enplanements declined in 2001 and 2002 primarily due to an economic recession and the events of September 11, 2001. Traffic then grew to an all-time high of 3,412,878 enplanements in 2007. With the recession of 2008 combined with the ongoing airline restructuring, the state's passenger traffic declined each year through 2014. The 2,588,256 enplanements were down 24 percent from 2007, and 21 percent from 2000.

The exhibit also summarizes the enplanements at non-hub and smaller New Mexico airports with scheduled air service, of which there were 13 at the turn of the century. In 2000, there were 141,045 enplanements; however, Los Alamos and Las Cruces lost air service during that year. Over the next three years, enplanements declined drastically to just 58,006, and Gallup lost air service. For next six years through 2009, passengers remained around 60,000 to 70,000 enplanements, averaging around 63,600. Both Gallup and Las Cruces regained air service, but lost it again during this time along with Taos and Santa Fe. A fourteenth airport, Ruidoso, briefly had air service in 2002 and again in 2008. By 2009, the small communities with air service had dwindled to just eight, as four airports had lost air service in the previous two years.

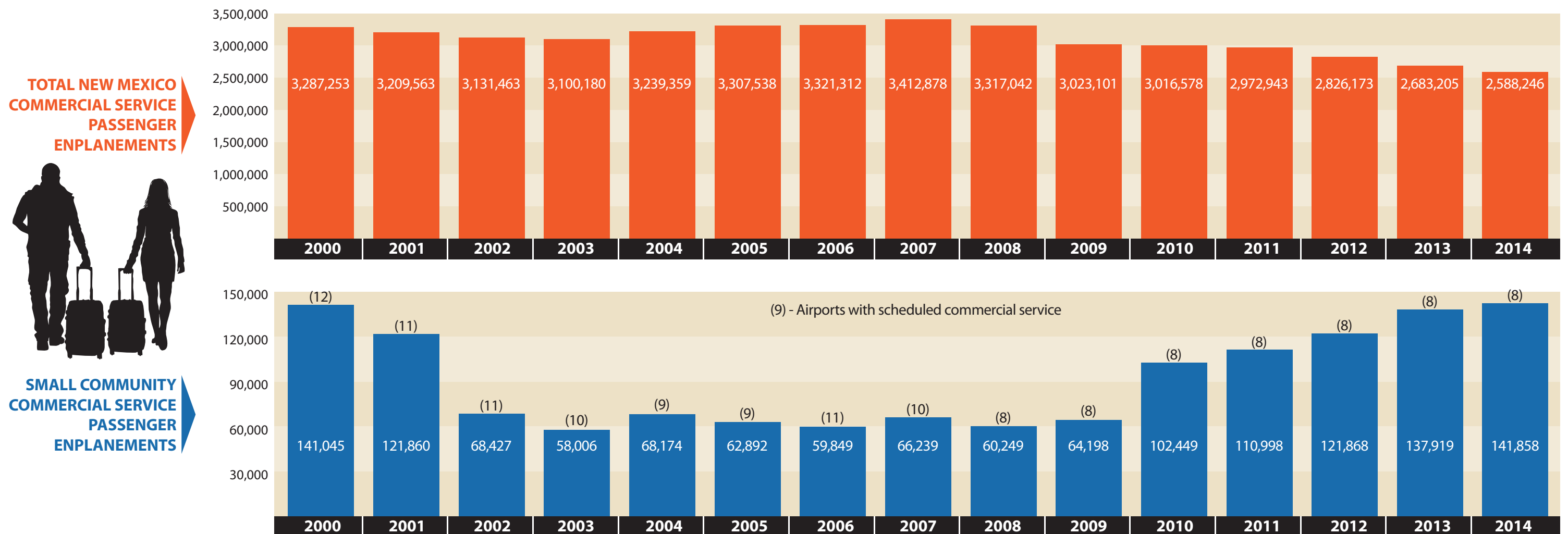
Just as small community air service in the state seemed to be reeling the most from the losses, American Eagle began regional jet service between Roswell and Dallas-Fort Worth International Airport (DFW) in September of 2007. In the first full year of jet service in 2008, enplanements totaled 34,198 at Roswell International Air Center compared to just 8,850 in 2006.

Santa Fe Municipal Airport lost its air service in 2007. Up to that point, the airport had been served by 19-seat turboprop aircraft to Denver. American Eagle began regional jet service between Santa Fe and DFW in June of 2009. In November of that same year, they added a flight to Los Angeles International Airport (LAX). In the first full year of regional jet service, the airport recorded 43,589 enplanements. With the advent of the new jet service in Roswell and Santa Fe, the small community enplanements increased 71 percent in two years from 60,241 to 102,449.





City	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Primary Airports</b>															
Albuquerque (ABQ)	3,146,208	3,087,703	3,063,036	3,042,174	3,171,185	3,244,646	3,261,463	3,346,639	3,256,793	2,958,903	2,914,129	2,861,945	2,704,305	2,545,286	2,446,388
Farmington (FMN)	53,300	46,814	28,818	20,696	30,475	29,004	26,708	26,468	16,876	10,841	13,151	16,322	16,337	14,263	5,670
Hobbs (HOB)	2,342	2,620	1,068	621	1,213	1,533	1,843	2,119	1,754	715	333	7,346	17,111	17,246	18,233
Roswell (ROW)	16,706	12,941	9,296	7,677	8,350	9,198	8,850	14,650	34,198	37,595	38,741	37,262	34,652	32,616	34,780
Santa Fe (SAF)	43,687	40,808	18,153	17,528	19,199	10,386	9,432	10,902	-	9,534	43,589	43,329	47,847	65,845	74,551
<b>Non-Primary Airports</b>															
Carlsbad (CNM)	7,355	6,424	2,616	2,761	3,511	4,240	3,629	2,669	1,910	3,242	2,606	2,707	2,776	2,600	1,756
Clovis (CVN)	2,800	2,309	1,894	1,528	2,087	2,085	2,310	2,527	2,411	28	2,164	2,033	1,694	1,384	1,952
Los Alamos (LAM)	594	-	-	-	-	-	-	-	-	-	-	-	-	2,295	3,801
Silver City (SVC)	3,162	2,292	1,902	1,683	1,998	2,064	2,327	2,196	2,607	1,823	1,496	1,609	1,363	1,670	1,128
<b>Currently Without Service</b>															
Alamogordo (ALM)	2,811	1,709	1,134	1,197	330	272	119	370	215	410	369	390	88	-	-
Gallup (GUP)	3,362	2,910	674	-	-	4,006	3,684	4,185	-	-	-	-	-	-	-
Las Cruces (LRU)	3,693	-	-	-	-	36	784	-	-	-	-	-	-	-	-
Ruidoso (SRR)	-	223	130	590	-	52	130	153	278	10	-	-	-	-	-
Taos (SKX)	1,233	2,810	2,742	3,725	1,011	16	33	-	-	-	-	-	-	-	-



Source: Bureau of Transportation Statistics (2000-2002); Air Carrier Activity Information System (ACAIS) 2003-2011



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A third community added regional jet service in 2011 when United Express initiated jet service to Lea County Regional Airport. In addition, Los Alamos regained service for the first time in 13 years in 2013. By the end of 2014, small community enplanements had increased to 141,858, essentially matching the enplanement level of 2000. The percentage of New Mexico enplanements traveling from the smaller

***Air service at the smaller communities in New Mexico is affected by regional hub airports that can supply more flights, more destinations, larger aircraft, and often-times lower air fares.***

community airports had declined from 4.3 percent to an average of 1.9 percent from 2003 through 2008. With the increase since that time combined with a decline in traffic at the Sunport, the small community share had grown to 5.5 percent in 2014.

Air service at the smaller communities in New Mexico is affected by regional hub airports that can supply more flights, more destinations, larger aircraft, and often-

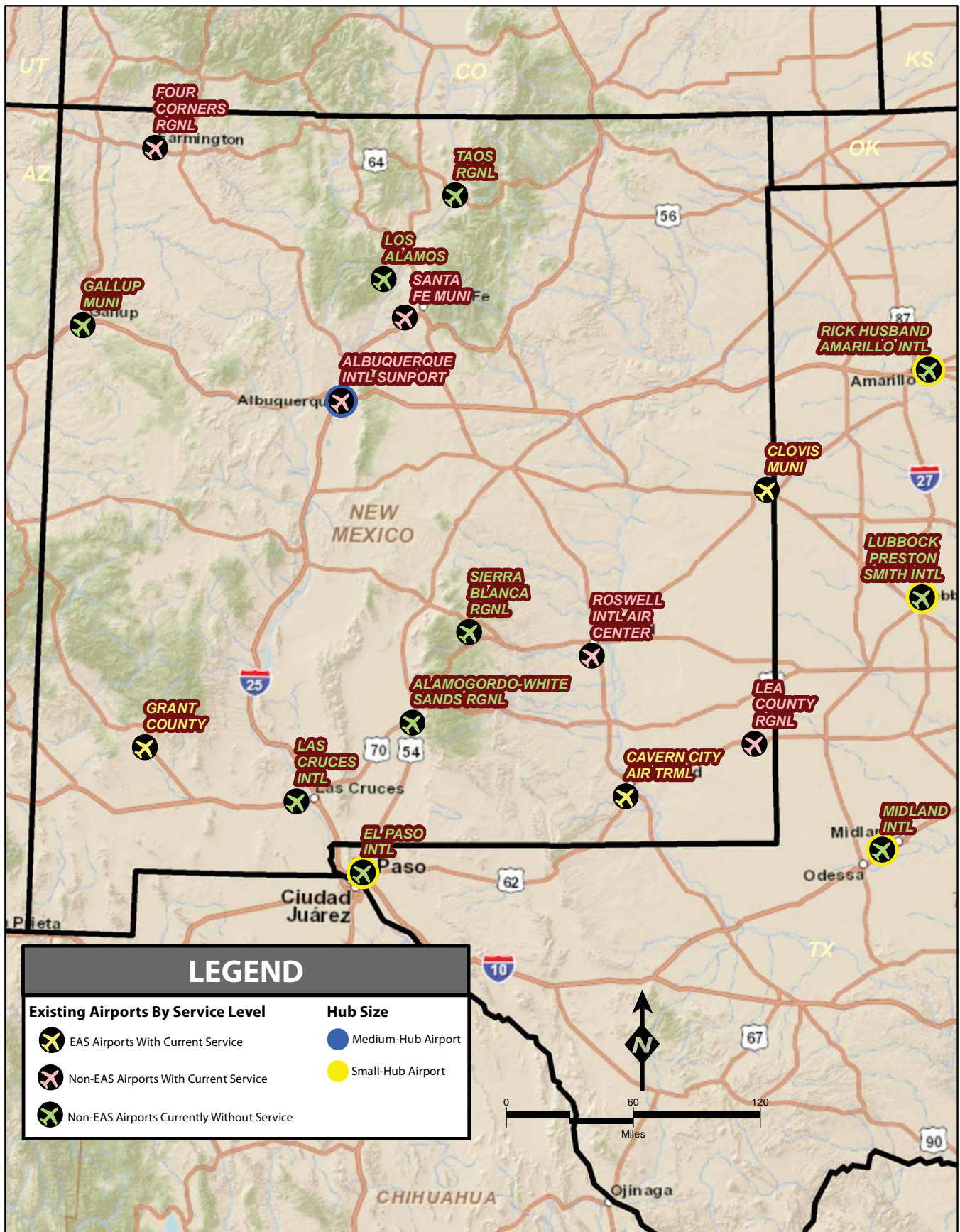
times lower air fares. **Exhibit 2J** presents the existing and former commercial service airports in relation to nearby medium and small hubs. As mentioned earlier, Albuquerque International Sunport, a medium hub airport, is the only hub airport in the state. Four small hub airports in Texas are close enough to draw air travelers from parts of New Mexico. These include El Paso International Airport to the south (1.36 million enplanements in 2013), Midland-Odessa International Airport to the southeast (507,000), Lubbock International Airport to the east (454,000), and Amarillo International Airport to northeast (371,000).

Each of these small hub airports offers service from Southwest Airlines, which has historically been associated with low-cost air fares. Each also benefitted for 35 years from the Wright Amendment, a federal law enacted in 1979 that primarily limited non-stop flights between Dallas Love Field to destinations within Texas and adjoining states including New Mexico. Additional states were added to the non-stop destinations between 1997 and 2005. The Wright Amendment was repealed in 2006, but left some restrictions in place until October 13, 2014.

The repeal of the Wright Amendment allows airlines to fly non-stop anywhere from Love Field, but with a limit on the number of gates allowed at the airport's airline terminal. The growth of Southwest Airlines over the years had effectively made airports such as the Sunport and the four Texas airports connecting hubs for flights into Love Field. The sunset of the Wright Amendment, combined with the recent recession, has resulted in a reduction in flights to Love Field, and in some cases, a decline in enplanements.

Another factor for some small communities in New Mexico has been the federal government's Essential Air Service (EAS) program. The Airline Deregulation Act of 1978 brought the prospect that airlines could terminate service to an airport without government approval, thus threatening many small communities with the loss of air service. This was addressed through EAS, which was initially authorized by Congress for a ten-year period to end in October 1988. The program has effectively been extended since that through the FAA reauthorization acts. Six communities in New Mexico have been served under EAS at one time or another. These have included Alamogordo, Carlsbad, Clovis, Gallup, Hobbs, and Silver City. Today only three (Carlsbad, Clovis, and Silver City) remain in the EAS program.







Alamogordo and Gallup lost air service, while Hobbs (Lea County Regional) has regional jet service by United Express to Houston.

The EAS program has been under scrutiny for the past several years. The U.S. General Accounting Office (GAO) has noted that while subsidies have risen, the number of EAS passengers have declined. To date, Congress has maintained the program, but with the last reauthorization in 2012, it required that a community must maintain an average of 10 passengers per service day to retain its subsidy. Alamogordo lost its EAS subsidy as a result. The program is funded through fiscal year 2015, but it will no doubt be under scrutiny again as the current reauthorization act expires. Therefore, there are no guarantees as to the future of the EAS program.

## AIRLINE ENPLANEMENT FORECASTS

Forecasts of commercial service demand were reviewed and/or prepared for the nine airports in New Mexico that had regularly scheduled airline service in 2014, as well as Alamogordo, which has been pursuing air service once more.

Where available, the forecasts of recent master planning efforts, as well as the FAA's 2015 *Terminal Area Forecasts* (TAF), were utilized in this system plan. Master plans prepared in the last four years were available for seven of the airports: Alamogordo-White Sands; Cavern City Air Terminal; Clovis Municipal, Four Corners Regional; Lea County Regional; Los Alamos; and Roswell International Air Center. Three airports do not have master plans within the last four years: Albuquerque International Sunport and Santa Fe Municipal Airport have currently just undertaken master plan updates. Grant County Airport has not undergone a new master plan since the 1990s. Forecasts of airline enplanements and operations were reviewed and are discussed below.

**Table 2E** presents the passenger enplanement forecasts for the airports with scheduled airline service. As indicated above, these projections were taken from current airport master plans or the 2015 FAA TAF. While the 2014 enplanement total is provided for each airport, 2013 was the base year for the FAA TAF. Base case as well as high and low range forecasts are presented for each airport. In general, the base case is consistent with the FAA TAF. The TAF is based upon scheduled revenue enplanements. A three percent adjustment was applied to the Albuquerque Sunport TAF to account for the high percentage of non-revenue passengers through the airport. The 2014 enplanement levels for Clovis Municipal and Los Alamos Airports are higher than the TAF projections for the planning period.

***The average annual growth rate for New Mexico enplanements with the TAF is 1.5 percent. This is below the 1.9 percent annual growth rate forecast for U.S. Domestic enplanements.***

The average annual growth rate for New Mexico enplanements with the TAF is 1.5 percent. This is below the 1.9 percent annual growth rate forecast for U.S. Domestic enplanements. Small community enplanements are projected to 1.3 percent annually under the base case scenario. Over the planning period, they would remain at slightly above 5.0 percent of the state's enplaned passengers.





**TABLE 2E**  
**Commercial Service Enplanement Forecasts**  
**New Mexico Scheduled Service Airports**

		Actual		Forecast		
City	Airport	2013	2014	2020	2025	2035
Base Case (TAF)						
Albuquerque	Albuquerque International Sunport	2,545,286	2,446,388	2,490,000	2,750,000	3,330,000
Alamogordo	Alamogordo-White Sands Regional	-	-	-	-	-
Carlsbad	Cavern City Air Terminal	2,600	1,756	2,226	2,261	2,331
Clovis	Clovis Municipal Airport	1,384	1,952	606	606	606
Farmington	Four Corners Regional Airport	14,263	5,670	10,166	10,550	11,369
Hobbs	Lea County Regional Airport	17,246	18,233	18,025	18,645	20,116
Los Alamos	Los Alamos Airport	2,295	3,801	3,636	3,636	3,636
Roswell	Roswell International Air Center	32,616	34,780	35,634	37,707	42,257
Santa Fe	Santa Fe Municipal Airport	65,845	74,551	79,269	87,090	105,122
Silver City	Grant County Airport	1,670	1,128	1,579	1,369	1,699
New Mexico Enplanements (Base Case)		2,683,205	2,588,246	2,641,141	2,912,134	3,517,136
Small Community Enplanements (Base Case)		137,919	141,858	151,141	162,134	187,136
Small Community Market Share (Base Case)		5.1%	5.5%	5.7%	5.6%	5.3%
High Range						
Albuquerque	Albuquerque International Sunport	2,545,286	2,446,388	2,739,000	3,163,000	3,830,000
Alamogordo	Alamogordo-White Sands Regional	-	-	28,200	30,100	33,900
Carlsbad	Cavern City Air Terminal	2,600	1,756	15,500	20,700	28,600
Clovis	Clovis Municipal Airport	1,384	1,952	3,400	4,800	7,900
Farmington	Four Corners Regional Airport	14,263	5,670	32,800	43,300	48,600
Hobbs	Lea County Regional Airport	17,246	18,233	23,000	28,000	39,000
Los Alamos	Los Alamos Airport	2,295	3,801	22,800	27,600	41,000
Roswell	Roswell International Air Center	32,616	34,780	44,300	50,300	65,100
Santa Fe	Santa Fe Municipal Airport	65,845	74,551	87,200	100,000	121,000
Silver City	Grant County Airport	1,670	1,128	2,200	2,500	3,200
New Mexico Enplanements (High Range)		2,683,205	2,588,246	2,998,400	3,470,300	4,218,300
Small Community Enplanements (High Range)		137,919	141,858	259,400	307,300	388,300
Small Community Market Share (High Range)		5.1%	5.5%	8.6%	8.9%	9.2%
Pessimistic (Low Range)						
Albuquerque	Albuquerque International Sunport	2,545,286	2,446,388	2,264,000	2,391,000	2,896,000
Alamogordo	Alamogordo-White Sands Regional	-	-	-	-	-
Carlsbad	Cavern City Air Terminal	2,600	1,756	-	-	-
Clovis	Clovis Municipal Airport	1,384	1,952	-	-	-
Farmington	Four Corners Regional Airport	14,263	5,670	9,000	9,200	10,000
Hobbs	Lea County Regional Airport	17,246	18,233	16,400	16,600	18,100
Los Alamos	Los Alamos Airport	2,295	3,801	-	-	-
Roswell	Roswell International Air Center	32,616	34,780	32,400	33,700	36,700
Santa Fe	Santa Fe Municipal Airport	65,845	74,551	72,100	77,800	91,400
Silver City	Grant County Airport	1,670	1,128	-	-	-
New Mexico Enplanements (Low Range)		2,683,209	2,588,246	2,394,100	2,592,500	3,051,500
Small Community Enplanements (Low Range)		137,923	141,858	130,100	137,500	155,500
Small Community Market Share (Low Range)		5.1%	5.5%	5.4%	5.3%	5.1%

Where a recent master plan is available, the high range is in line with the airport's recent Master Plan forecast. Most of the master plans have taken into account the potential for recapturing more of the local market share with improved service. This is something that has been experienced in recent years



with the initiation of regional jet service at Roswell, Santa Fe, and Lea County. All three took advantage of New Mexico's Air Service Assistance Program to assist in attracting the service. Most recently, Los Alamos Airport has initiated air service, with the use of a grant from the FAA's Small Community Air Service Development Program. Where recent master plans are not available, the high range is projected as 10 percent above the TAF in 2020 and 15 percent above in 2025 and 2035.

The annual average growth rate for the high range of New Mexico enplanements is 2.4 percent. This compares favorably to the growth rate of gross regional product for the state. By comparison, the small community enplanements are projected to grow at an annual rate of 4.9 percent in the best case scenario. In this best case scenario, the small community market share would rise to 9.2 percent of the state's enplaned passengers by 2035.

The low range is generally 10 percent below the TAF in 2020, and 15 percent below by 2035. In cases where the airport has not consistently had air service the last three years, or at EAS airports, the low range assumes the worst case loss of air service at some time over the course of the planning period. The average annual growth rate for statewide enplanements with the low range is just 1.2 percent, while the small commercial service enplanements would grow at only a 0.4 percent rate. Under this worst case scenario, only four small community airports would maintain air service, and their market share of New Mexico's enplanements would decline to 5.1 percent by 2035. **Exhibit 2K** depicts the range of enplanement forecasts for the state.

## COMMERCIAL OPERATIONS

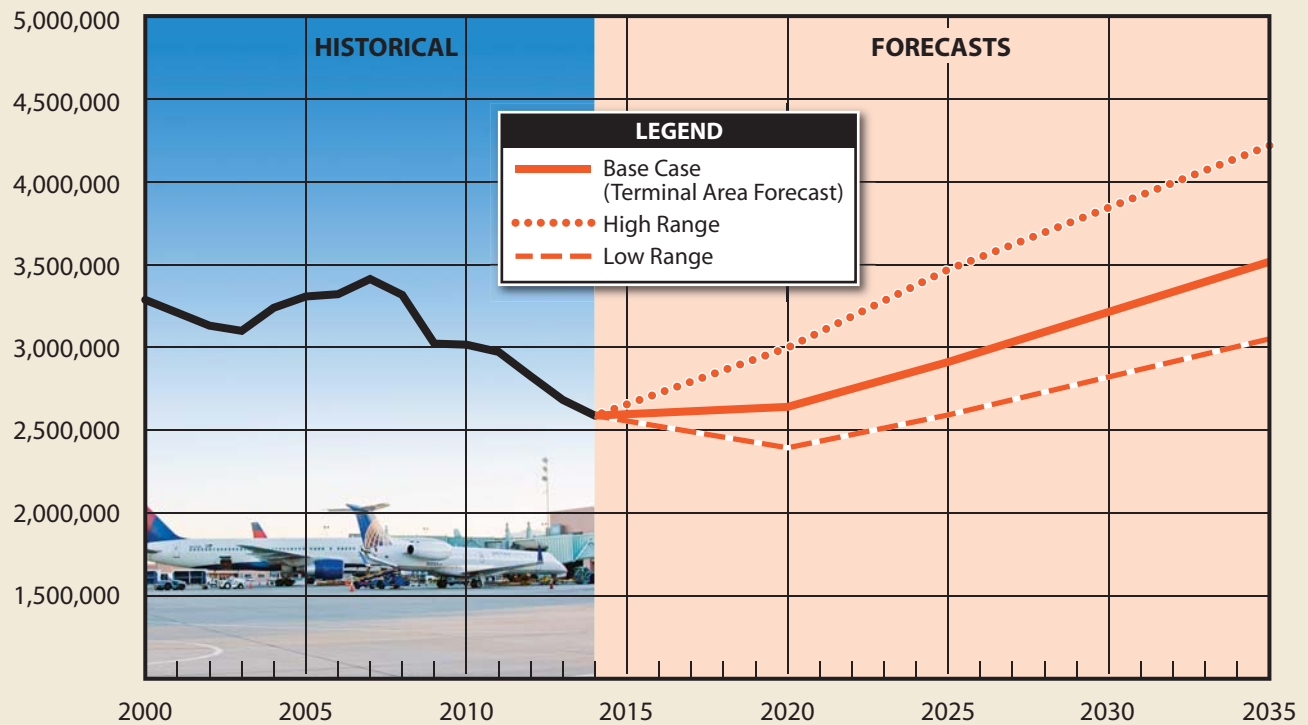
**Table 2F** presents the commercial operations forecasts for those airports served by regularly scheduled airlines. Where reasonable, these projections were adapted from the same sources as indicated for enplanements and a base case, high and low range prepared. FAA activity counts include any Part 135 aircraft as a commercial operation. This can include not only passenger airlines, but also cargo airlines and charter aircraft. It may include fractional ownership aircraft operating under 135.

The FAA further classifies commercial operations as either air carrier or air taxi. By definition, air carrier operations are by aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds carrying passengers or cargo for hire or compensation. Air taxi operations are by aircraft designed to have a maximum seating capacity of 60 seats or less or a maximum payload capacity of 18,000 pounds or less carrying passengers or cargo for hire or compensation.

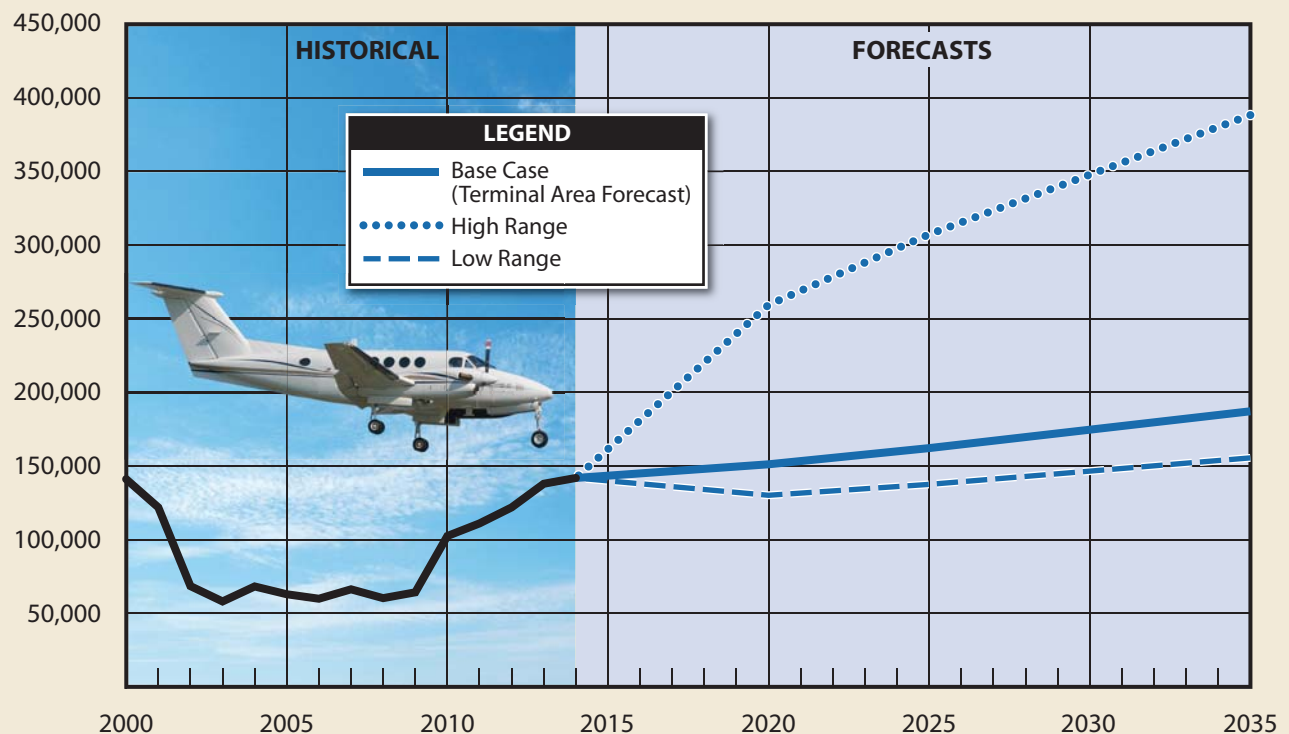




## NEW MEXICO COMMERCIAL SERVICE PASSENGER ENPLANEMENTS FORECASTS



## SMALL COMMUNITY COMMERCIAL SERVICE PASSENGER ENPLANEMENTS FORECASTS



**TABLE 2F**  
**Commercial Service Operations Forecast**  
**New Mexico Scheduled Service Airports**

			Actual		Forecast		
City	Airport	Ops Type	2013	2014	2020	2025	2035
Base Case (TAF)							
Albuquerque	Albuquerque International Sunport	AC	55,559	51,730	56,749	64,900	78,532
		AT	29,478	28,548	26,910	24,664	27,238
Alamogordo	Alamogordo-White Sands Regional	AT	975	420	1,660	1,660	1,660
Carlsbad	Cavern City Air Terminal	AT	1,696	2,144	2,972	2,972	2,972
Clovis	Clovis Municipal Airport	AT	1,303	1,700	1,282	1,282	1,282
Farmington	Four Corners Regional Airport	AT	10,682	8,730	9,642	9,832	10,216
Hobbs	Lea County Regional Airport	AT	2,343	2,358	2,398	2,444	2,524
Los Alamos	Los Alamos Airport	AT	1,274	1,750	60	60	60
Roswell	Roswell International Air Center	AC	519	518	577	577	577
		AT	6,006	6,551	6,770	6,966	7,396
Santa Fe	Santa Fe Municipal Airport	AC	2	-	-	-	-
		AT	9,659	7,997	8,699	9,194	10,267
Silver City	Grant County Airport	AT	1,165	853	1,057	1,057	1,057
New Mexico Air Carrier & Air Taxi Operations (Base Case)			120,661	113,299	118,778	125,610	143,783
Small Community Air Carrier & Air Taxi Operations (Base Case)			35,624	33,021	35,119	36,046	38,013
High Range							
Albuquerque	Albuquerque International Sunport	AC	55,559	51,730	62,862	74,484	87,865
		AT	29,478	28,548	26,941	27,549	24,782
Alamogordo	Alamogordo-White Sands Regional	AT	975	420	3,160	3,490	3,780
Carlsbad	Cavern City Air Terminal	AT	1,696	2,144	4,200	4,570	5,040
Clovis	Clovis Municipal Airport	AT	1,303	1,700	1,360	1,391	1,491
Farmington	Four Corners Regional Airport	AT	10,682	8,730	11,730	12,700	14,800
Hobbs	Lea County Regional Airport	AT	2,343	2,358	2,427	2,473	2,553
Los Alamos	Los Alamos Airport	AT	1,274	1,750	5,500	6,350	8,560
Roswell	Roswell International Air Center	AC	519	518	1,200	1,800	2,400
		AT	6,006	6,551	6,395	6,917	8,869
Santa Fe	Santa Fe Municipal Airport	AC	2	-	600	1,200	2,400
		AT	9,659	7,997	9,900	10,200	11,000
Silver City	Grant County Airport	AT	1,165	853	2,500	2,700	3,100
New Mexico Air Carrier & Air Taxi Operations (High Range)			120,661	113,299	137,575	154,424	174,240
Small Community Air Carrier & Air Taxi Operations (High Range)			35,624	33,507	47,772	52,391	61,593
Low Range							
Albuquerque	Albuquerque International Sunport	AC	55,559	51,730	48,200	52,300	62,400
		AT	29,478	28,548	26,000	26,900	28,100
Alamogordo	Alamogordo-White Sands Regional	AT	975	420	500	550	650
Carlsbad	Cavern City Air Terminal	AT	1,696	2,144	500	600	800
Clovis	Clovis Municipal Airport	AT	1,303	1,700	200	250	300
Farmington	Four Corners Regional Airport	AT	10,682	8,730	9,300	9,300	9,400
Hobbs	Lea County Regional Airport	AC	2,343	2,358	2,343	2,371	2,500
Los Alamos	Los Alamos Airport	AT	1,274	1,750	60	60	60
Roswell	Roswell International Air Center	AC	519	518	-	-	-
		AT	6,006	6,551	6,000	6,200	6,600
Santa Fe	Santa Fe Municipal Airport	AC	2	-	-	600	1,200
		AT	9,659	7,997	8,300	8,000	8,500
Silver City	Grant County Airport	AT	1,165	853	400	450	550
New Mexico Air Carrier & Air Taxi Operations (Low Range)			120,661	113,299	101,803	107,581	121,060
Small Community Air Carrier & Air Taxi Operations (Low Range)			35,624	33,021	26,703	28,381	30,560



The seating or payload capacity determines whether it is counted as air carrier or air taxi. The actual discernment of air carrier from air taxi operations, however, is sometimes less certain. For example, one airport traffic control tower may count all regional jets as air taxi, while another may include all scheduled passenger aircraft as air carrier. For the purposes of the system plan, the strict definition has been applied as much as possible. For most airports, all commercial operations have been applied to air taxi. The exceptions are the Sunport and Roswell, which have more than a few operations by air carrier aircraft, and Santa Fe, which is highly likely to serve regional jets with more than 60 seats in the future.

A concern for the future in New Mexico will be the anticipated phase-out of regional jets with less than 60 seats. These will likely ultimately be replaced with smaller turboprop aircraft, or with regional jets and/or turboprops with more than 60 seats. In the former case, the small community airports could struggle to maintain market share. In the latter case, the airports could have a more difficult time maintaining load factors in support of the service.

Airline operation levels generally do not increase at the same rate as passenger levels. As passenger levels increase, the airlines make scheduling decisions by taking into account the airport's boarding load factors, frequency of flights, and aircraft size. Increasing the load factor or introducing a larger aircraft will can accommodate increased passenger loads with the same number of flights. Typically, a combination of the three is utilized over time. Nationally, the boarding load factors are projected to increase slightly as the airlines continue to improve efficiency. In addition, the average number of seats per aircraft is also projected to increase. This results in more passengers per flight.

## **GENERAL AVIATION IN NEW MEXICO**

General aviation is defined as that portion of civil aviation which encompasses all facets of aircraft activity except commercial operations. To determine the types and sizes of facilities that should be planned to accommodate general aviation activity, certain elements of this activity are forecast. These indicators of general aviation demand are based aircraft and operations, both itinerant and local. Itinerant operations are those performed by aircraft with specific origins or destinations away from the airport. Local operations are those that operate in the local traffic pattern, within sight of the airport, or departing to or arriving from a local practice area within 20 miles of the airport.

***There are six airports with operating ATCTs in New Mexico, and only the Albuquerque International Sunport ATCT operates 24 hours.***

While based aircraft can readily be counted at virtually any airport, operations are only regularly counted at airports with an airport traffic control tower (ATCT). Even then the tower may not operate 24 hours a day. There are six airports with operating ATCTs in New Mexico, and only the Albuquerque International Sunport ATCT operates 24 hours. Operations at the remainder of the airports in the state are

estimated. Therefore, a review of the history of towered operations can provide some indication of the trends in general aviation operations in the state.





The tower counts since 2000 for general aviation operations at the six towered airports since in the state are presented in **Table 2G**. The six towered airports include:

- Albuquerque International Sunport (ABQ)
- Double Eagle II Airport (AEG)
- Four Corners Regional Airport (FMN)
- Lea County Regional Airport (HOB)
- Roswell International Jet Center (ROW)
- Santa Fe Municipal Airport (SAF)

Double Eagle II is the newest tower in the state, opening in 2009.

**TABLE 2G**  
**General Aviation Operations**  
**New Mexico Towered Airports**

	Itinerant General Aviation Operations					
	ABQ	AEG	FMN	HOB	ROW	SAF
2000	63,184	*	23,421	22,741	25,403	34,681
2001	59,637	*	27,145	15,370	16,348	31,336
2002	67,647	*	30,219	7,840	16,858	34,774
2003	59,285	*	27,181	8,676	13,861	33,354
2004	41,353	*	22,977	6,850	18,547	33,077
2005	38,953	*	22,836	5,082	16,714	31,866
2006	39,677	*	22,185	4,574	19,998	32,138
2007	40,976	*	17,887	7,405	18,632	31,634
2008	37,468	*	16,853	9,403	17,651	27,908
2009	29,864	31,461	16,555	10,327	12,020	26,060
2010	27,927	27,185	13,559	9,806	9,468	25,910
2011	26,144	27,077	15,086	6,332	8,922	24,476
2012	26,679	26,136	14,383	5,817	7,232	22,943
2013	26,422	25,140	11,757	5,622	6,498	23,184
	Local General Aviation Operations					
	ABQ	AEG	FMN	HOB	ROW	SAF
2000	11,409	*	100,286	23,976	12,877	37,764
2001	14,224	*	105,626	15,675	7,143	33,914
2002	8,819	*	110,661	4,766	12,066	42,283
2003	5,372	*	77,514	6,138	9,741	36,683
2004	3,343	*	68,537	5,224	12,800	38,973
2005	4,698	*	77,648	3,660	7,802	32,226
2006	4,620	*	72,869	3,694	7,408	32,886
2007	3,740	*	71,462	4,006	6,094	35,202
2008	3,261	*	45,367	5,240	4,396	35,390
2009	3,665	45,025	31,762	6,884	6,005	33,449
2010	4,398	37,339	10,433	3,991	4,774	36,379
2011	5,420	38,218	10,319	2,011	4,064	31,313
2012	4,444	34,294	12,029	856	4,373	30,418
2013	4,650	36,814	12,724	738	2,339	33,443
	Tower Airport GA Operations Summary					
	2009	2010	2011	2012	2013	
<b>GA Itinerant Total</b>	126,287	113,855	108,037	103,190	98,623	
<b>GA Local Total</b>	126,790	97,314	91,345	86,414	90,708	
<b>Total GA Operations</b>	253,077	211,169	199,382	189,604	189,331	
<b>Percent Local</b>	50%	46%	46%	46%	48%	

\* No Airport Traffic Control Tower

Source: FAA Operations and Performance Data



As can be seen from the table, both itinerant and local operations have declined at each towered airport since 2000. At the five airports with towers, itinerant operations have declined from 169,430 in 2000 to 79,483 in 2013, a 53 percent loss. Local operations declined from 186,312 to 53,894 over the same time period, a 71 percent loss.

At the bottom of the table is a summary of the operations for the six towered airports since 2009, the date of the previous state airport system plan. In four years, itinerant operations declined 22 percent, while local operations declined 28 percent.

In 2000, local operations comprised 52 percent of the general aviation operations at the five towered airports. By 2008, the percentage of local operations had declined to 46 percent. The next year, with the Double Eagle II ATCT operational, the local operations percentage rose to 50 percent. As in 2013, local operations at the six airports comprised 48 percent of the general aviation operations. Excluding Double Eagle II, the local ratio was 42 percent in 2013.

***The number of active pilots and aircraft ownership in the state can also provide insights into general aviation trends in the state.***

The number of active pilots and aircraft ownership in the state can also provide insights into general aviation trends in the state. **Table 2H** presents the history of both active pilots and aircraft registrations by aircraft type in the state since 2000. That year, the pilots in the state totaled 4,406. The total

increased to 5,385 in 2002, but has generally declined since that year. At the end of 2013, there were 4,562 active pilots, reflecting a 15 percent decrease from 2002.

The decline has been primarily in private, commercial, and airline transport licenses. In 2002, there were 691 student pilots compared to 888 today, a 29 percent increase. Student pilots actually peaked in 2010 at 963. Flight instructors increased from 591 in 2002 to 628 in 2013, a six percent increase. Private pilots declined 26 percent since 2002, while commercial pilots declined 23 percent. Airline transport licenses declined 16 percent over the period.

New Mexico aircraft registrations grew from 3,528 in 2000 to a peak of 4,102 in 2008. Since that time, registrations have been declining. In 2013, registrations were 3,415 or 17 percent less than 2008. Every aircraft type except helicopters has declined since 2008,

As with the general aviation fleet mix across the country, the fleet mix in New Mexico has been slowly changing with time. In 2000, single-engine piston aircraft comprised 65.1 percent of the registrations, compared to 61.4 percent in 2013. Over the same period, multi-engine piston aircraft declined from 8.6 percent to 6.3 percent; turboprop aircraft increased from 2.6 to 3.3 percent; and jet aircraft increased from 2.4 percent to 3.4 percent. Helicopters increased from 1.4 percent to 3.8 percent. Other aircraft generally includes any other aircraft registered such as balloons, dirigibles, ultralights, gliders, and experimental aircraft. The other aircraft category has increased from 20.0 percent to 21.8 percent.



Aircraft basing in the state has also declined. The 2009 New Mexico Airport System Plan used 2007 as its base year. In that year, there were 2,137 aircraft based at the system plan airports. **Table 2H** presents the current based aircraft at each airport in the system per FAA Form 5010. The based aircraft now totals 1,625, reflecting a decline of 24 percent. The following subsections present the forecasts for based aircraft and operations.

**TABLE 2H**  
**Pilot and Aircraft Registrations**  
**New Mexico**

New Mexico Pilots							
Year	Total Pilots	Students	Private	Commercial	Airline Transport	Misc	Flight Instructor
2000	4,406	787	1,788	916	772	143	549
2001	4,421	708	1,805	978	784	146	542
2002	5,385	691	2,381	1,495	815	3	591
2003	5,244	686	2,332	1,432	791	3	600
2004	5,263	719	2,341	1,423	777	3	606
2005	5,194	694	2,319	1,401	776	4	612
2006	5,069	712	2,232	1,358	751	16	626
2007	4,867	702	2,117	1,299	722	27	614
2008	4,964	685	2,168	1,328	745	38	601
2009	4,826	624	2,099	1,335	725	43	603
2010	5,053	963	2,044	1,303	703	40	608
2011	4,912	953	1,919	1,286	711	43	636
2012	4,744	917	1,852	1,224	702	49	625
2013	4,562	888	1,773	1,158	688	55	628

Source: U.S. Civil Airmen Statistics, Table 5

New Mexico Registered Aircraft							
Year	Total Aircraft	Single Piston	Multi-Piston	Turbo-Prop	Jet	Rotor	Other
2000	3,528	2,296	304	92	83	49	704
2001	3,588	2,253	273	159	116	52	735
2002	3,611	2,262	277	162	120	52	738
2003	3,754	2,230	224	324	142	58	776
2004	3,807	2,235	226	344	155	54	793
2005	3,860	2,292	226	339	155	57	791
2006	3,798	2,198	289	336	92	88	795
2007	3,988	2,235	285	390	114	90	874
2008	4,102	2,482	327	141	201	64	887
2009	4,093	2,505	318	140	159	80	891
2010	4,051	2,469	304	126	120	126	906
2011	4,032	2,471	304	123	116	138	880
2012	3,719	2,223	245	135	113	147	856
2013	3,415	2,098	215	113	115	130	744

Source: FAA Aircraft Registration Database



## BASED AIRCRAFT FORECAST

Based aircraft are defined as general aviation aircraft which are stationed at an airport on a permanent basis. For the purposes of this analysis, the historic data on based aircraft is from the *FAA Airport Master Record Form 5010*. As with the commercial service forecasts, the FAA TAF was referenced for a base case forecast. A high range forecast was developed using those from recent master plans, action plans, or ALP narrative reports where completed since 2010. If a recent forecast was not available, the high range forecast was prepared at 10 percent above the TAF for 2020 forecasts, 12 percent above for 2025, and 15 percent above for 2035. For many general aviation airports, the TAF presents a flat-line forecast. As a result, separate low range projections were not developed. The TAF does not prepare forecasts for airports not included in the National Plan of Integrated Airport Systems (NPIAS). For the five New Mexico System Airports not in the NPIAS, only one forecast was developed.

**Exhibit 2L** presents the base case forecasts of based aircraft for each system airport, and **Exhibit 2M** presents the high range forecasts. Under the base case, New Mexico based aircraft are projected to increase from 1,625 in 2013 to 2,061 by 2035 for a 1.1 percent average annual increase. The high range forecasts 2,545 based aircraft by 2035, or an average annual increase of 2.1 percent. By comparison, the 2009 System Plan projected 5,217 based aircraft by 2027. **Exhibit 2N** graphically compares the based aircraft forecasts for the state, including those from the previous state airport system plan. By comparison, the 2009 System Plan projected 5,217 based aircraft by 2027.

*Under the base case, New Mexico based aircraft are projected to increase from 1,625 in 2013 to 2,061 by 2035 for a 1.1 percent average annual increase.*

## GENERAL AVIATION OPERATIONS FORECAST

General aviation operations forecasts were prepared in a similar manner to the based aircraft projections. The historic data for each airport was derived either from the tower counts for the six airports with control towers, or from estimates included in the TAF. For non-NPIAS airports, the estimates from Form 5010 were utilized. The itinerant, local, and total general aviation operations forecasts are included on **Exhibits 2L** and **2M**.

Total New Mexico airport system operations under the base case are projected to grow from 546,472 operations in 2013 to 635,727 by 2035 for a 0.69 percent annual growth rate. The high range 2035 forecast is 787,480 operations. This equates to an annual average growth rate of 1.7 percent.

Local operations comprised 49.8 percent of the operations in 2013. This compares to the local operations ratio for the towered airports of 48 percent. Under the base case, the ratio of local operations is projected to slowly decline to 47.8 percent in 2035. By comparison, the local operations ratio of the high range forecast will decline to 43.6 percent.



City	Airport	Based Aircraft				Itinerant GA Operations				Local GA Operations				Total GA Operations				Military Operations			
		Actual	Forecast			Actual	Forecast			Actual	Forecast			Actual	Forecast			Actual	Forecast		
		2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035
Alamogordo	Alamogordo-White Sands Regional Airport	31	31	31	31	10,000	10,000	10,000	10,000	22,000	22,000	22,000	22,000	32,000	32,000	32,000	32,000	800	800	800	800
Albuquerque	Double Eagle II Airport	127	141	151	171	25,140	27,696	30,579	37,278	36,814	40,521	41,545	43,672	61,954	68,217	72,124	80,950	3,332	3,783	3,783	3,783
Albuquerque	Albuquerque International Sunport	168	192	214	264	26,422	29,001	30,844	34,900	4,650	3,983	4,008	4,058	31,072	32,984	34,852	38,958	20,806	21,825	21,825	21,825
Angel Fire	Angel Fire - Colfax County Airport	4	4	4	4	2,300	2,300	2,300	2,300	800	800	800	800	3,100	3,100	3,100	3,100	0	0	0	0
Apache Creek	Jewett Mesa Airport	0	NA	NA	NA	30	NA	NA	NA	0	NA	NA	NA	30	NA	NA	NA	0	NA	NA	NA
Artesia	Artesia Municipal Airport	27	27	27	27	7,150	7,150	7,150	7,150	4,400	4,400	4,400	4,400	11,550	11,550	11,550	11,550	0	0	0	0
Aztec	Aztec Municipal Airport	20	20	20	20	5,618	6,704	7,724	10,255	4,597	5,490	6,317	8,371	10,215	12,194	14,041	18,626	0	0	0	0
Belen	Belen-Alexander Municipal Airport	61	61	61	61	7,000	7,000	7,000	7,000	10,100	10,100	10,100	10,100	17,100	17,100	17,100	17,100	200	200	200	200
Carlsbad	Carlsbad - Cavern City Air Terminal	25	25	25	25	1,725	1,725	1,725	1,725	1,925	1,925	1,925	1,925	3,650	3,650	3,650	3,650	240	240	240	240
Carrizozo	Carrizozo Municipal Airport	9	9	9	9	1,400	1,400	1,400	1,400	1,700	1,700	1,700	1,700	3,100	3,100	3,100	3,100	12	12	12	12
Clayton	Clayton Municipal Airpark	11	11	11	11	1,800	1,800	1,800	1,800	1,500	1,500	1,500	1,500	3,300	3,300	3,300	3,300	200	200	200	200
Clovis	Clovis Municipal Airport	74	78	82	92	14,896	15,750	16,390	17,746	9,633	10,179	10,589	11,463	24,529	25,929	26,979	29,209	1,872	1,872	1,872	1,872
Conchas Dam	Conchas Lake Airport	2	2	2	2	1,000	1,000	1,000	1,000	0	0	0	0	1,000	1,000	1,000	1,000	0	0	0	0
Crownpoint	Crownpoint Airport	0	0	0	0	200	200	200	200	0	0	0	0	200	200	200	200	0	0	0	0
Deming	Deming Municipal Airport	18	18	18	18	12,000	12,000	12,000	12,000	6,570	6,570	6,570	6,570	18,570	18,570	18,570	18,570	9,125	9,125	9,125	9,125
Dulce	Dulce-Jicarilla Apache Nation Airport	0	0	0	0	700	700	700	700	0	0	0	0	700	700	700	700	0	0	0	0
Espanola	Ohkay Owingeh Airport	5	5	5	5	1,600	1,600	1,600	1,600	1,500	1,500	1,500	1,500	3,100	3,100	3,100	3,100	200	200	200	200
Estancia	Estancia Municipal Airport	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA
Farmington	Farmington Four Corners Regional Airport	120	147	169	220	11,757	11,869	12,177	12,823	12,724	13,509	14,199	15,690	24,481	25,378	26,376	28,513	1,174	1,115	1,115	1,115
Fort Sumner	Ft. Sumner Municipal Airport	5	5	5	5	100	100	100	100	50	50	50	50	150	150	150	150	0	0	0	0
Gallup	Gallup Municipal Airport	26	26	26	26	1,323	1,323	1,323	1,323	164	164	164	164	1,487	1,487	1,487	1,487	24	24	24	24
Glenwood	Glenwood-Catron County Airport	0	0	0	0	4	4	4	4	30	30	30	30	34	34	34	34	0	0	0	0
Grants	Grants-Milan Municipal Airport	14	14	14	14	2,071	2,071	2,071	2,071	2,071	2,071	2,071	2,071	4,142	4,142	4,142	4,142	200	200	200	200
Hatch	Hatch Municipal Airport	0	0	0	0	150	150	150	150	2,250	2,250	2,250	2,250	2,400	2,400	2,400	2,400	0	0	0	0
Hobbs	Lea County-Hobbs Regional Airport	34	34	34	34	5,622	5,806	6,088	6,695	738	893	913	953	6,360	6,699	7,001	7,648	190	190	190	190
Jal	Lea County-Jal Airport	2	2	2	2	2,500	2,500	2,500	2,500	500	500	500	500	3,000	3,000	3,000	3,000	0	0	0	0
Las Cruces	Las Cruces International Airport	139	140	141	141	10,000	10,000	10,000	10,000	9,300	9,300	9,300	9,300	19,300	19,300	19,300	19,300	45,396	45,396	45,396	45,396
Las Vegas	Las Vegas Municipal Airport	9	9	9	9	7,000	7,000	7,000	7,000	4,000	4,000	4,000	4,000	11,000	11,000	11,000	11,000	350	350	350	350
Lindrith	Lindrith Airpark	0	NA	NA	NA	75	NA	NA	NA	75	NA	NA	NA	150	NA	NA	NA	0	NA	NA	NA
Lordsburg	Lordsburg Municipal Airport	5	6	7	7	2,400	2,400	2,400	2,400	1,800	1,800	1,800	1,800	4,200	4,200	4,200	4,200	600	600	600	600
Los Alamos	Los Alamos County Airport	58	60	62	62	2,300	2,300	2,300	2,300	11,230	11,230	11,230	11,230	13,530	13,530	13,530	13,530	50	50	50	50
Lovington	Lea County-Zip Franklin Memorial Airport	7	7	7	7	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	2,200	2,200	2,200	2,200	0	0	0	0
Magdalena	Magdalena Airport	1	1	1	1	600	600	600	600	1,800	1,800	1,800	1,800	2,400	2,400	2,400	2,400	0	0	0	0
Moriarty	Moriarty Municipal Airport	139	139	139	139	2,000	2,000	2,000	2,000	27,365	27,365	27,365	27,365	29,365	29,365	29,365	29,365	0	0	0	0
Mountainair	Mountainair	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA	0	NA	NA	NA
Navajo Dam	Navajo Lake Airport	0	0	0	0	200	200	200	200	0	0	0	0	200	200	200	200	0	0	0	0
Portales	Portales Municipal Airport	21	21	21	21	6,516	6,628	6,692	6,852	10,590	11,240	11,730	12,799	17,106	17,868	18,422	19,651	3,000	3,000	3,000	3,000
Questa	Questa Municipal No. 2 Airport	1	1	1	1	200	200	200	200	100	100	100	100	300	300	300	300	0	0	0	0
Raton	Raton Crews Field Municipal Airport	19	19	19	19	5,524	5,688	5,806	6,046	1,206	1,242	1,266	1,306	6,730	6,930	7,072	7,352	800	800	800	800
Reserve	Reserve Catron County Airport	0	0	0	0	240	240	240	240	0	0	0	0	240	240	240	240	0	0	0	0
Roswell	Roswell International Air Center	37	38	39	39	6,498	6,887	7,166	7,762	2,339	2,815	2,870	2,980	8,837	9,702	10,036	10,742	37,713	38,423	38,423	38,423
Ruidoso	Sierra Blanca Regional Airport	38	44	48	58	5,719	6,123	6,434	7,105	2,337	2,504	2,628	2,897	8,056	8,627	9,062	10,002	130	130	130	130
Santa Fe	Santa Fe Municipal Airport	180	195	210	240	23,184	24,705	25,437	26,969	33,443	35,329	35,324	35,314	56,627	60,034	60,761	62,283	5,644	6,011	6,011	6,011
Santa Rosa	Santa Rosa Route 66 Airport	0	0	0	0	1,600	1,600	1,600	1,600	400	400	400	400	2,000	2,000	2,000	2,000	0	0	0	0
Santa Teresa	Doña Ana County Jetport at Santa Teresa	105	128	143	163	12,406	15,674	18,520	25,851	22,564	25,283	27,426	32,271	34,970	40,957	45,946	58,122	200	200	200	200
Shiprock	Shiprock Airstrip	0	0	0	0	500	500	500	500	0	0	0	0	500	500	500	500	0	0	0	0
Silver City	Grant County - Silver City Airport	18	18	18	18	1,850	1,850	1,850	1,850	2,800	2,800	2,800	2,800	4,650	4,650	4,650	4,650	600	600	600	600
Socorro	Socorro Municipal Airport	1	1	1	1	2,000	2,000	2,000	2,000	2,500	2,500	2,500	2,500	4,500	4,500	4,500	4,500	100	100	100	100
Springer	Springer Municipal Airport	0	0	0	0	20	20	20	20	0	0	0	0	20	20	20	20	10	10	10	10
Taos	Taos Regional Airport	44	49	52	52	9,830	11,607	13,065	16,540	3,071	3,626	4,086	5,177	12,901	15,233	17,151	21,717	200	200	200	200
Tatum	Tatum Airport	0	NA	NA	NA	50	NA	NA	NA	450	NA	NA	NA	500	NA	NA	NA	0	NA	NA	NA
Truth or Consequences	Truth Or Consequences Municipal Airport	34	34	34	34	10,000	10,000	10,000	10,000	4,500	4,500	4,500	4,500	14,500	14,500	14,500	14,500	1,200	1,200	1,200	1,200
Tucumcari	Tucumcari Municipal Airport	8	8	8	8	20,000	20,000	20,000	20,000	4,400	4,400	4,400	4,400	24,400	24,400	24,400	24,400	600	600	600	600
Vaughn	Vaughn Municipal Airport	0	0	0	0	0	0	0	0	56	56	56	56	56	56	56	56	0	0	0	0
Zuni Pueblo	Zuni-Black Rock Airport	0	0	0	0	10	10	10	10	0	0	0	0	10	10	10	10	0	0	0	0
New Mexico Totals		1,647	1,770	1,870	2,061	274,330	289,181	301,965	331,865	272,142	283,525	289,812	303,862	546,472	572,706	591,777	635,727	134,968	137,456	137,456	137,456





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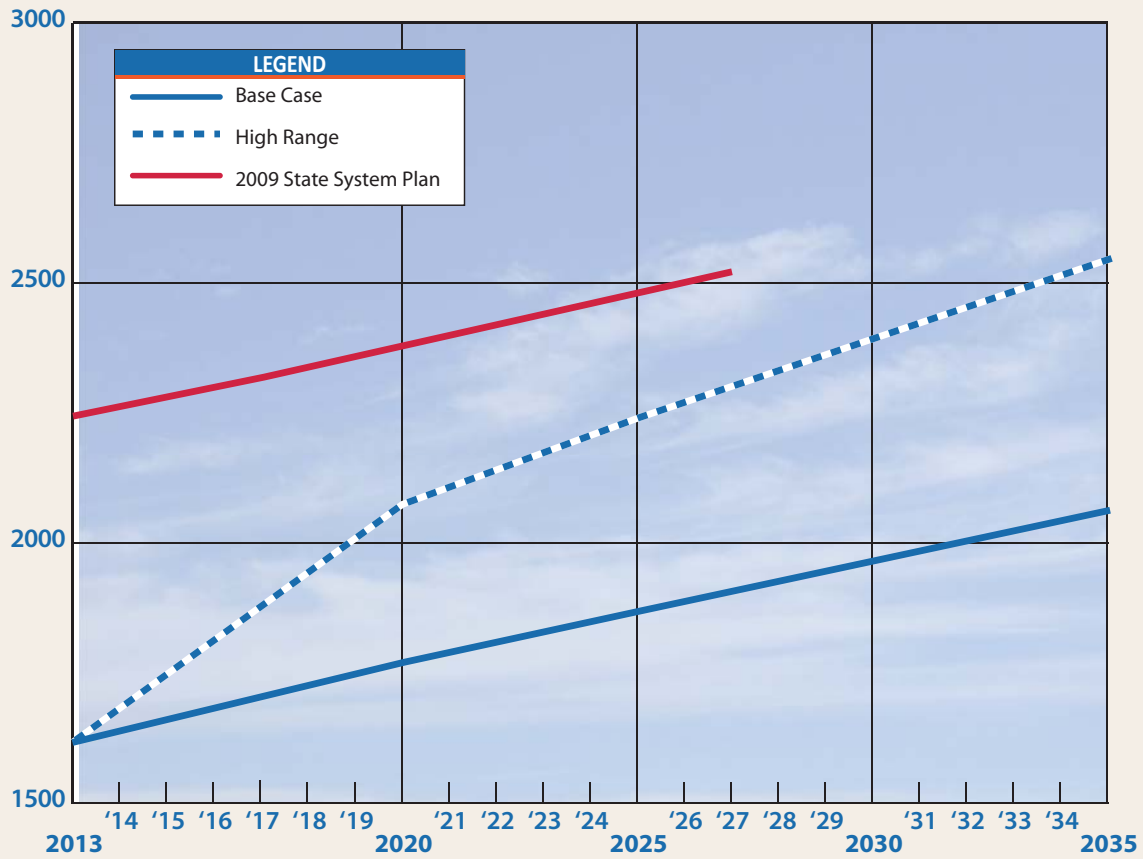
City	Airport	Based Aircraft				Itinerant GA Operations				Local GA Operations				Total GA Operations				Military Operations			
		Actual	Forecast			Actual	Forecast			Actual	Forecast			Actual	Forecast			Actual	Forecast		
		2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035	2013	2020	2025	2035
Alamogordo	Alamogordo-White Sands Regional Airport	105	98	107	129	10,000	22,800	24,700	29,600	22,000	10,300	11,200	13,500	32,000	33,100	35,900	43,100	800	800	800	800
Albuquerque	Double Eagle II Airport	121	155	169	197	25,140	30,500	34,200	42,900	36,814	44,600	46,500	50,200	61,954	75,100	80,700	93,100	3,332	3,300	3,300	3,300
Albuquerque	Albuquerque International Sunport	132	211	240	304	26,422	31,900	34,500	40,100	4,650	4,400	4,500	4,700	31,072	36,300	39,000	44,800	20,806	20,800	20,800	20,800
Angel Fire	Angel Fire - Colfax County Airport	8	4	4	5	2,300	2,500	2,600	2,600	800	900	900	900	3,100	3,400	3,500	3,500	0	0	0	0
Apache Creek	Jewett Mesa Airport	0	0	0	0	30	30	30	30	0	0	0	0	30	30	30	30	0	0	0	0
Artesia	Artesia Municipal Airport	31	30	30	31	7,150	7,900	8,000	8,200	4,400	4,800	4,900	5,100	11,550	12,700	12,900	13,300	0	0	0	0
Aztec	Aztec Municipal Airport	18	22	22	23	5,618	7,400	8,700	11,800	4,597	6,000	7,100	9,600	10,215	13,400	15,800	21,400	0	0	0	0
Belen	Belen-Alexander Municipal Airport	48	67	68	70	7,000	7,700	7,800	8,100	10,100	11,100	11,300	11,600	17,100	18,800	19,100	19,700	200	200	200	200
Carlsbad	Carlsbad - Cavern City Air Terminal	28	42	46	52	1,725	2,700	3,300	4,300	1,925	2,100	2,200	2,200	3,650	4,800	5,500	6,500	240	300	300	300
Carrizozo	Carrizozo Municipal Airport	9	10	10	10	1,400	1,500	1,600	1,600	1,700	1,900	1,900	2,000	3,100	3,400	3,500	3,600	12	20	20	20
Clayton	Clayton Municipal Airpark	12	12	12	13	1,800	2,000	2,000	2,100	1,500	1,700	1,700	1,700	3,300	3,700	3,700	3,800	200	200	200	200
Clovis	Clovis Municipal Airport	74	85	93	106	14,896	17,300	18,400	20,400	9,633	11,200	11,900	13,200	24,529	28,500	30,300	33,600	1,872	1,900	1,900	1,900
Conchas Dam	Conchas Lake Airport	2	2	2	3	1,000	1,100	1,100	1,200	0	0	0	0	1,000	1,100	1,100	1,200	0	0	0	0
Crownpoint	Crownpoint Airport	0	0	0	0	200	200	200	200	0	0	0	0	200	200	200	200	0	0	0	0
Deming	Deming Municipal Airport	19	20	20	21	12,000	13,200	13,400	13,800	6,570	7,200	7,400	7,600	18,570	20,400	20,800	21,400	9,125	9,100	9,100	9,100
Dulce	Dulce-Jicarilla Apache Nation Airport	0	2	3	5	700	700	700	700	0	50	100	100	700	750	800	800	0	0	0	0
Espanola	Ohkay Owingeh Airport	5	6	6	6	1,600	1,800	1,800	1,800	1,500	1,700	1,700	1,700	3,100	3,500	3,500	3,500	200	200	200	200
Estancia	Estancia Municipal Airport	0	0	0	0	0	10	10	10	0	10	10	10	0	20	20	20	0	0	0	0
Farmington	Farmington Four Corners Regional Airport	127	131	136	146	11,757	16,600	18,700	21,700	12,724	16,600	18,700	21,700	24,481	33,200	37,400	43,400	1,174	500	500	500
Fort Sumner	Ft. Sumner Municipal Airport	5	6	6	6	100	100	100	100	50	100	100	100	150	200	200	200	0	0	0	0
Gallup	Gallup Municipal Airport	22	29	29	30	1,323	1,500	1,500	1,500	164	200	200	200	1,487	1,700	1,700	1,700	24	30	30	30
Glenwood	Glenwood-Catron County Airport	0	0	0	0	4	10	10	10	30	30	30	30	34	40	40	40	0	0	0	0
Grants	Grants-Milan Municipal Airport	16	15	16	16	2,071	2,300	2,300	2,400	2,071	2,300	2,300	2,400	4,142	4,600	4,600	4,800	200	200	200	200
Hatch	Hatch Municipal Airport	0	0	0	0	150	200	200	200	2,250	2,500	2,500	2,600	2,400	2,700	2,700	2,800	0	0	0	0
Hobbs	Lea County-Hobbs Regional Airport	40	63	68	77	5,622	7,500	8,800	11,100	738	4,000	4,800	6,000	6,360	11,500	13,600	17,100	190	1,000	1,000	1,000
Jal	Lea County-Jal Airport	2	5	6	7	2,500	2,500	3,000	3,500	500	800	900	1,000	3,000	3,300	3,900	4,500	0	0	0	0
Las Cruces	Las Cruces International Airport	133	154	158	162	10,000	11,000	11,200	11,500	9,300	10,200	10,400	10,700	19,300	21,200	21,600	22,200	45,396	45,400	45,400	45,400
Las Vegas	Las Vegas Municipal Airport	9	10	10	10	7,000	7,700	7,800	8,100	4,000	4,400	4,500	4,600	11,000	12,100	12,300	12,700	350	350	350	350
Lindrith	Lindrith Airpark	1	1	1	1	75	100	100	100	75	100	100	100	150	200	200	200	0	0	0	0
Lordsburg	Lordsburg Municipal Airport	6	13	17	29	2,400	2,800	3,000	3,200	1,800	5,400	5,600	6,100	4,200	8,200	8,600	9,300	600	600	700	700
Los Alamos	Los Alamos County Airport	56	82	90	105	2,300	15,800	16,700	18,700	11,230	800	900	1,000	13,530	16,600	17,600	19,700	50	50	50	50
Lovington	Lea County-Zip Franklin Memorial Airport	6	9	12	16	1,100	2,300	2,800	3,800	1,100	2,300	2,800	3,800	2,200	4,600	5,600	7,600	0	0	0	0
Magdalena	Magdalena Airport	1	9	15	27	600	3,600	4,400	5,500	1,800	3,000	3,300	3,600	2,400	6,600	7,700	9,100	0	50	50	50
Moriarty	Moriarty Municipal Airport	35	153	156	160	2,000	2,200	2,200	2,300	27,365	30,100	30,600	31,500	29,365	32,300	32,800	33,800	0	0	0	0
Mountainair	Mountainair	0	0	0	0	0	0	0	0	0	10	10	10	0	10	10	10	0	0	0	0
Navajo Dam	Navajo Lake Airport	0	0	0	0	200	200	200	200	0	0	0	0	200	200	200	200	0	0	0	0
Portales	Portales Municipal Airport	27	23	24	24	6,516	7,300	7,500	7,900	10,590	12,400	13,100	14,700	17,106	19,700	20,600	22,600	3,000	3,000	3,000	3,000
Questa	Questa Municipal No. 2 Airport	0	2	2	2	200	200	200	200	100	100	100	100	300	300	300	300	0	0	0	0
Raton	Raton Crews Field Municipal Airport	19	21	21	22	5,524	6,300	6,500	7,000	1,206	1,400	1,400	1,500	6,730	7,700	7,900	8,500	800	800	800	800
Reserve	Reserve Catron County Airport	0	0	0	0	240	300	300	300	0	0	0	0	240	300	300	300	0	0	0	0
Roswell	Roswell International Air Center	34	52	56	60	6,498	12,700	14,700	17,100	2,339	6,000	6,900	8,000	8,837	18,700	21,600	25,100	37,713	42,000	48,700	56,400
Ruidoso	Sierra Blanca Regional Airport	35	48	54	67	5,719	6,700	7,200	8,200	2,337	2,800	2,900	3,200	8,056	9,500	10,100	11,400	130	100	100	100
Santa Fe	Santa Fe Municipal Airport	195	215	235	276	23,184	27,200	28,500	31,000	33,443	38,900	39,600	40,600	56,627	66,100	68,100	71,600	5,644	5,600	5,600	5,600
Santa Rosa	Santa Rosa Route 66 Airport	0	2	2	3	1,600	1,800	1,900	2,100	400	400	400	400	2,000	2,200	2,300	2,500	0	0	0	0
Santa Teresa	Doña Ana County Jetport at Santa Teresa	146	141	160	187	12,406	17,200	20,700	29,700	22,564	27,800	30,700	37,100	34,970	45,000	51,400	66,800	200	200	200	200
Shiprock	Shiprock Airstrip	0	0	0	0	500	600	600	600	0	0	0	0	500	600	600	600	0	0	0	0
Silver City	Grant County - Silver City Airport	16	20	20	21	1,850	2,000	2,100	2,100	2,800	3,100	3,100	3,200	4,650	5,100	5,200	5,300	600	600	600	600
Socorro	Socorro Municipal Airport	1	1	1	1	2,000	2,200	2,200	2,300	2,500	2,800	2,800	2,800	4,500	5,000	5,000	5,100	100	100	100	100
Springer	Springer Municipal Airport	0	0	0	0	20	20	20	20	0	0	0	0	20	20	20	20	10	10	10	10
Taos	Taos Regional Airport	40	54	58	60	9,830	12,800	14,600	19,000	3,071	4,000	4,500	5,700	12,901	16,800	19,100	24,700	200	200	200	200
Tatum	Tatum Airport	3	3	3	3	50	50	50	50	450	450	450	450	500	500	500	500	0	0	0	0
Truth or Consequences	Truth Or Consequences Municipal Airport	28	37	38	39	10,000	11,000	11,000	11,000	4,500	5,000	5,000	5,000	14,500	16,000	16,000	16,000	1,200	1,200	1,200	1,200
Tucumcari	Tucumcari Municipal Airport	10	14	14	14	20,000	22,000	22,400	23,000	4,400	2,600	2,600	2,600	24,400	24,600	25,000	25,600	600	1,500	1,600	2,000
Vaughn	Vaughn Municipal Airport	0	0	0	0	0	0	0	0	56	100	100	100	56	100	100	100	0	0	0	0
Zuni Pueblo	Zuni-Black Rock Airport	0	0	0	0	10	10	10	20	0	0	0	0	10	10	10	20	0	0	0	0
New Mexico High Range Totals		1,625	2,078	2,241	2,545	274,330	358,030	386,530	444,940	272,142	298,650	314,700	345,000	546,472	656,680	701,230	789,940	134,968	140,310	147,210	155,310



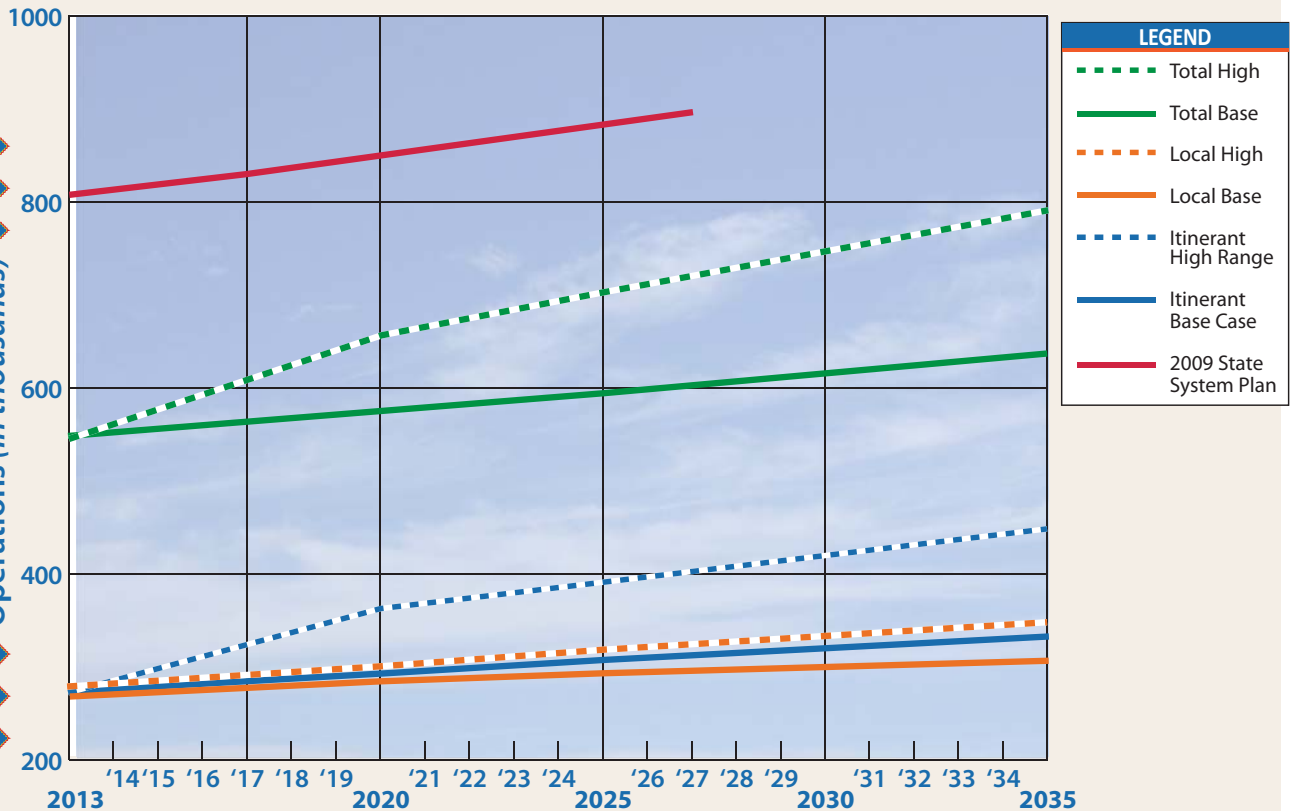
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New Mexico  
Based Aircraft



New Mexico  
Operations (in thousands)



**Exhibit 2N** compares the base case and high range general aviation operations forecasts to the 2009 System Plan forecasts.

## **MILITARY OPERATIONS FORECAST**

Military aircraft operations occur at many New Mexico airports. Albuquerque International Sunport, Deming Municipal, Las Cruces International, Santa Fe Municipal, and Roswell International Air Center have the most military operations. Other airports, however, do entertain practice and cross-country military operations. **Exhibits 2L** and **2M** include the military operations forecasts for the system airports. As with the other forecasts, the base case represents the TAF. The TAF does not project any change to military operations, which is often the case with master plan forecasts of military activity. For defense purposes, the public does not have access to information that could affect future operations unless it is announced. Military operations may change when an airport fixed base operator gets a military fueling contract, or when there is a change in military mission. As a result, the high range forecasts are the same as the base case with a few exceptions where the airport's master plan may have indicated a potential change in operations. The master plan for Roswell International Air Center was the only plan to indicate any significant change to military operations.







CHAPTER THREE

# AIRPORT ROLE ANALYSIS



## Chapter Three

# AIRPORT ROLE ANALYSIS

A statewide system plan is a reference point which records the status of the airports at that point in time. Over the intervening years until the next plan, numerous factors including fluctuating economic and air transportation industry conditions, changes in Federal Aviation Administration (FAA) airport design criteria, and availability of funding for airport projects can influence the airport system's health.

***Each airport within the New Mexico Airport System has a unique set of aviation and non-aviation characteristics, which, when compared with other airports, allows for grouping these facilities by functional role.***

Each airport within the New Mexico Airport System has a unique set of aviation and non-aviation characteristics, which, when compared with other airports, allows for grouping these facilities by functional role. Through previous system planning efforts (2003 and 2009), the State of New Mexico adopted the following six functional classifications which, for the purposes of continuity, have been maintained. In all cases except regional general aviation airports and local

general aviation airports, the definitions remain unchanged from the 2009 NMAASP. The changes in each category include measurable thresholds which allow the New Mexico Department of Transportation to review the classification process and to make adjustments between system plan updates in response to unforeseen changes at specific airports. Changes to the General Aviation (Regional, Community, and Local) definitions include specifying a goal percentage population within a 30-minute drive of the airport and a minimum threshold for based aircraft. The Regional General Aviation category definition also includes a target number of operations by jet or multi-engine aircraft.



- **Primary Commercial Service Airports:** Airports that have scheduled passenger service and more than 10,000 enplanements per year are classified both by the FAA and the NMASP as Primary Commercial Service Airports. These airports serve the highest levels of aviation activity in New Mexico, including commercial service and general aviation, and are generally located in the largest population areas of the State.
- **Non-Primary Commercial Service Airports:** Airports that have scheduled passenger service and 2,500 to 10,000 enplanements per year are classified by the FAA and the NMASP as Non-Primary Commercial Service Airports. These airports typically serve a high level of New Mexico's aviation activity, including commercial service and general aviation, and serve some of New Mexico's larger communities.
- **Limited Commercial Service Airports:** Airports that have scheduled commercial service but enplane less than 2,500 annual enplanements are classified as Limited Commercial Service for purposes of the New Mexico Airport System Plan Update (NMASTU). This category formerly required that the airport also be in the FAA's Essential Air Service (EAS) program. Stricter EAS requirements and potential for non-EAS locations to obtain air service without EAS suggest that this criterion be removed. These airports still have a commercial role in serving passengers, but also serve general aviation needs. In fact, they are classified as general aviation airports by the FAA.
- **Regional General Aviation Airports:** Regional General Aviation airports primarily serve general aviation activity, with a focus on business activity including jet and turboprop aircraft. This is measured by more than 300 annual jet or turboprop aircraft operations based on information from FAA's Traffic Flow Management System Counts (TFMSC) database. These airports support the system of Commercial Service airports and provide significant coverage to the State's population. They are also located within a 30-minute drive of more than three percent of the state's population and have more than 33 based aircraft, including at least one jet.
- **Community General Aviation Airports:** Community General Aviation airports serve a supplemental contributing role for the local economy. Community airports focus on providing aviation access for small business, recreational, and personal flying activities throughout New Mexico. These airports are located throughout the State to serve rural needs and provide another connection to the State's transportation infrastructure. These airports have between 11 and 33 based aircraft, which is consistent with FAA's *National Plan of Integrated Airport Systems* (NPIAS) designation for Local General Aviation Airports and serve between one and three percent of the state's population based on a 30-minute drive time analysis.
- **Low Activity General Aviation Airports:** Low Activity General Aviation airports play a limited role in contributing to the local economy due to the low activity levels. These airports provide emergency or remote access, primarily serving recreational and personal flying activities. Low Activity General Aviation airports within the New Mexico Airport System Plan have 10 or fewer based aircraft, which is consistent with the average for General Aviation airports in FAA's NPIAS, and



serve less than one percent of the population. This role also includes public use heliports and sea-plane bases included as part of the New Mexico Airport System.

It is important to note that the above roles, although similar, are distinct from FAA's NPIAS and General Aviation Asset classifications. As discussed in Chapter Two, the NPIAS identifies airports that are important to national transportation and includes all commercial service airports, all reliever airports, and selected general aviation airports. The NPIAS includes two types of classification structures: service level and role. The first describes the type of service an airport provides to the community, and the options include: Commercial Service – Primary, Commercial Service – Non-Primary, Reliever, and General Aviation. All airports within the NPIAS are assigned one of these classifications for the existing service level and the projected five-year service level. Additionally, in 2012 and 2014, the FAA published a document titled, *General Aviation Airports: A National Asset (ASSET 1)* and *ASSET 2: In-Depth Review of 497 Unclassified Airports*. The study categorizes airports within four groups (national, regional, local, and basic) and identifies general functions associated with each category. As of the 2015-2019 NPIAS publication, facilities serving mostly general aviation operations were assigned Asset role categories based on activity measures. Airports that do not meet the activity measures defined for the Asset categories are referred to as Unclassified. Within the NMAASP, all Commercial Service – Non-Primary, Reliever, and General Aviation airports in the NPIAS are assigned an Asset classification. It is important to note that the definitions and criteria for the NPIAS Service Level, Asset Role, and NMAASP Role do not allow for a direct correlation between the three classification systems. Additionally, airports should be evaluated individually and therefore may not meet the definitions between the two planning documents. Once categorized, a baseline set of facilities and services for each of the six planning roles described above will be established to guide future airport planning efforts.

## **COMMERCIAL SERVICE AIRPORTS**

Using information collected in Chapter One, queries were performed to categorize the airports. The first query identifies the airports as either commercial service or general aviation airports. All airports with scheduled air service in 2014 are considered commercial service airports for the purposes of this study. Passenger enplanement information was collected from the FAA's Air Carrier Activity Information System (ACAIS) for calendar year 2014.

As indicated in **Table 3A**, four airports (Albuquerque International Sunport, Santa Fe Municipal Airport, Roswell International Air Center, and Lea County Regional Airport) had more than 10,000 enplanements during the reporting period. Based on the stated threshold of 10,000 enplanements, these airports are classified as Primary Commercial Service for the purposes of the New Mexico Airport System Plan. Four Corners Regional Airport dropped below the 10,000 enplanement threshold in 2014.

The next query identifies airports with enplanement levels between 2,500 to 10,000, which includes two airports: Four Corners Regional Airport and Los Alamos Airport. These airports are classified as Non-Primary Commercial Service Airports for the purposes of the New Mexico Airport System Plan. Los Alamos Airport's enplanements increased above 2,500 in 2014, while Cavern City Air Terminal fell be-



low the threshold. It should be recognized that Los Alamos Airport qualified as a non-primary commercial service airport in 2014, but lost air service by January 2015.

The final three airports in **Table 3A** are those airports with fewer than 2,500 enplanements and are associated with communities participating in the U.S. Department of Transportation's Essential Air Service Program. Airports meeting these characteristics include: Cavern City Air Terminal, Grant County-Silver City Airport, and Clovis Municipal Airport which are categorized as Limited Commercial Service Airports for the purposes of the New Mexico Airport System Plan.

**TABLE 3A**  
**New Mexico Airport System Plan**  
**Annual Enplanements**

Associated City	Facility	ID	2014 Enplanements
Albuquerque	Albuquerque International Sunport	ABQ	2,446,388
Santa Fe	Santa Fe Municipal	SAF	74,749
Roswell	Roswell International Air Center	ROW	35,356
Hobbs	Lea County Regional	HOB	18,239
Farmington	Four Corners Regional	FMN	5,678
Los Alamos	Los Alamos Airport	LAM	3,801
Carlsbad	Cavern City Air Terminal*	CNM	1,756
Silver City	Grant County*	SVC	1,128
Clovis	Clovis Municipal*	CVN	1,952

Source: Air Carrier Activity Information System (ACAIS) (Preliminary Data, 2014, accessed August 2015)

\*U.S. Department of Transportation Essential Air Service program participant

## GENERAL AVIATION AIRPORTS

**Table 3B** includes the matrix developed based on the thresholds outlined above for each of the three general aviation roles. The use of a categorization system which relies on measurable characteristics allows New Mexico Department of Transportation Aviation Division (NMDOTAD) to reclassify airports based on potentially unforeseen changes at individual airports. The related information for all airports is discussed and presented in the following sections.

**TABLE 3B**  
**New Mexico Airport System Plan**  
**General Aviation Airport Classification Matrix**

Classification	Low Activity General Aviation	Community General Aviation	Regional General Aviation
Jet or Turboprop Operations	Less than 100	Between 100 and 300	More than 300
Based Aircraft	0-10	11-33	More than 33, including at least one jet OR more than 100 total based aircraft
Percent of New Mexico Population Covered by 30-Minute Drive Time Analysis	0-0.5	0.5-2	More than 2





## JET AND TURBOPROP OPERATIONS

**Table 3C** summarizes estimated business aviation jet and turboprop operations for airports within the New Mexico Airport System Plan for calendar year 2014. Business aviation operations do not include commercial airline, air cargo, or military operations. The data is derived from FAA's Air Traffic Airspace Lab's Traffic Flow Management System. It is an estimate only and does not represent an official traffic count.

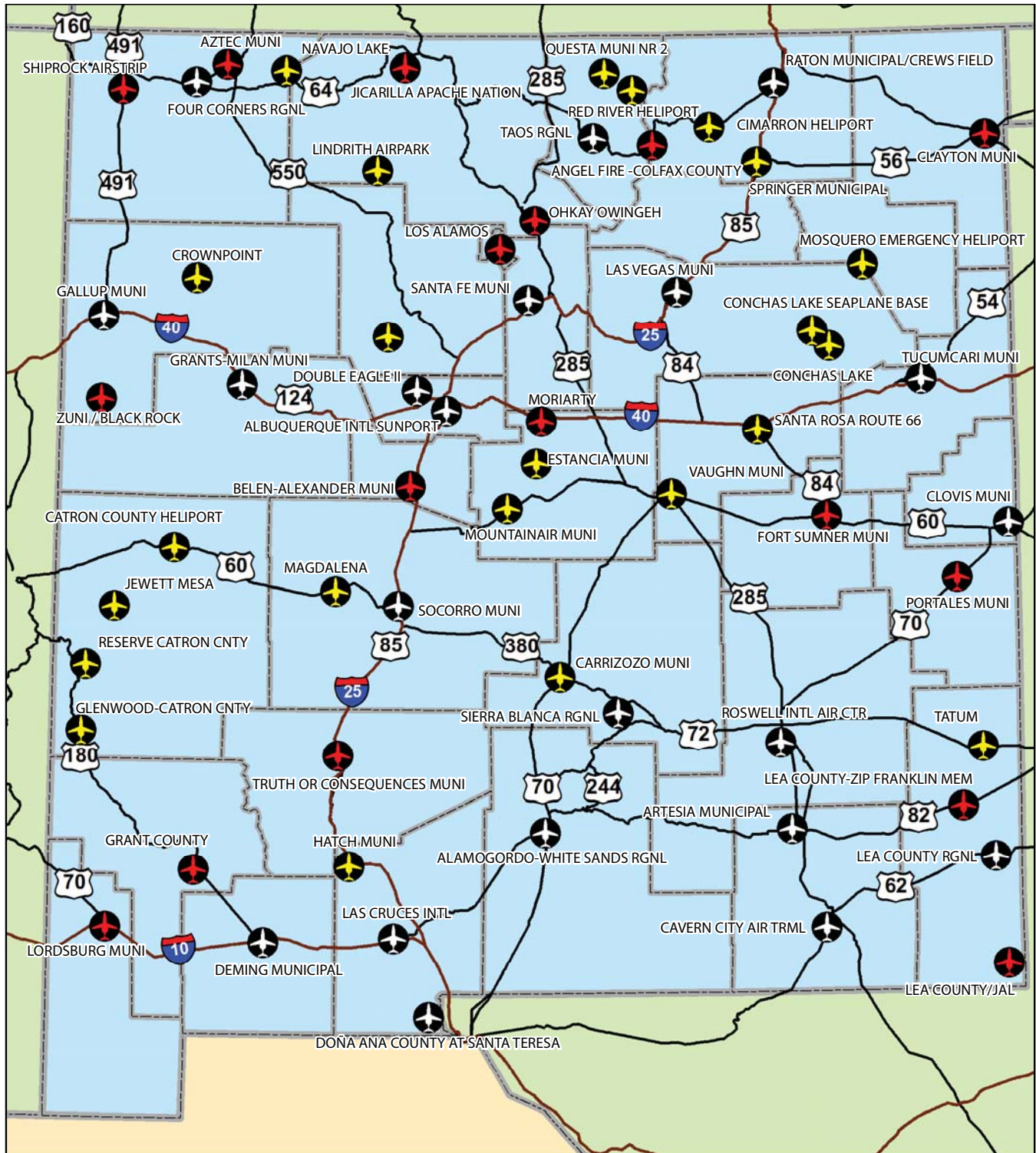
***Eighteen airports, seven of which have scheduled commercial service, had more than 300 combined jet and turboprop operations.***

As indicated in **Table 3C**, business aviation jet or turboprop operations occurred at 38 airports within the New Mexico Aviation System in 2014. Eighteen airports, seven of which have scheduled commercial service, had more than 300 combined jet and turboprop operations. Of the airports without scheduled commercial service airports, Sierra Blanca Regional Airport had the highest number of estimated jet and turboprop operations at 2,378, followed by Doña Ana County Jetport at Santa Teresa with 1,886. The remaining airports with more than 300 non-commercial jet or turboprop operations include: Artesia Municipal Airport, Clovis Municipal Airport, Double Eagle II Airport, Las Cruces International Airport, Taos Regional Airport, Raton Crews Field Municipal Airport, Deming Municipal Airport, Gallup Municipal Airport, Las Vegas Municipal Airport, and Socorro Municipal Airport. The location of airports with jet or turboprop operations is presented on **Exhibit 3A**.

**TABLE 3C**  
**New Mexico Airport System Plan**  
**Jet and Turboprop Operations**

Airport	ID	2014 Business Aviation Jet Operations	2014 Business Aviation Turboprop Operations	Total
Albuquerque International Sunport	ABQ	6,592	6,608	13,200
Santa Fe Municipal Airport	SAF	6,260	2,236	8,496
Farmington Four Corners Regional Airport	FMN	1,028	3,142	4,170
Gallup Municipal Airport	GUP	202	3,658	3,860
Carlsbad - Cavern City Air Terminal	CNM	1,400	1,664	3,064
Sierra Blanca Regional Airport	SRR	1,292	1,086	2,378
Doña Ana County Jetport at Santa Teresa	ST6	1,356	530	1,886
Las Cruces International Airport	LRU	528	1,348	1,876
Artesia Municipal Airport	ATS	788	1,040	1,828
Clovis Municipal Airport	CVN	510	1,280	1,790
Roswell International Air Center	ROW	1,092	2,448	1,766
Lea County-Hobbs Regional Airport	HOB	856	706	1,562
Double Eagle II Airport	AEG	420	724	1,144
Taos Regional Airport	SKX	624	478	1,102
Raton Crews Field Municipal Airport	RTN	370	282	652
Deming Municipal Airport	DMN	194	394	588
Las Vegas Municipal Airport	LVS	304	190	494
Grants-Milan Municipal Airport	GNT	76	332	408
Alamogordo-White Sands Airport	ALM	160	236	396





LEGEND

Non Commercial Jet and Turboprop Operations

- >100 (21)
- 1-100 (17)
- 0 (22)

Source: [www.airportiq.com](http://www.airportiq.com), Detailed General Aviation Report, Jet and Turboprop; FAA Traffic Flow Management System Counts, Coffman Associates analysis.

N

0 25 50 100 Miles



**TABLE 3C (Continued)**  
**New Mexico Airport System Plan**  
**Jet and Turboprop Operations**

Airport	ID	2014 Business Aviation Jet Operations	2014 Business Aviation Turboprop Operations	Total
Tucumcari Municipal Airport	TCC	88	176	264
Socorro Municipal Airport	ONM	4	102	106
<b>Grant County - Silver City Airport</b>	<b>SVC</b>	<b>66</b>	<b>216</b>	<b>94</b>
Angel Fire - Colfax County Airport	AXX	30	58	88
Portales Municipal Airport	PRZ	12	38	50
Clayton Municipal Airpark	CAO	12	28	40
Lea County-Jal Airport	E26	18	12	30
Truth Or Consequences Municipal Airport	TCS	14	14	28
Lordsburg Municipal Airport	LSB	10	8	18
<b>Los Alamos County Airport</b>	<b>LAM</b>	<b>0</b>	<b>18</b>	<b>18</b>
Belen-Alexander Municipal Airport	E80	8	6	14
Lea County-Zip Franklin Memorial Airport	E06	2	6	8
Ohkay Owingeh Airport	E14	0	8	8
Moriarty Municipal Airport	OE0	4	2	6
Ft. Sumner Municipal Airport	FSU	0	4	4
Zuni-Black Rock Airport	ZUN	0	4	4
Dulce-Jicarilla Apache Nation Airport	24N	2	0	2
Aztec Municipal Airport	N19	0	2	2
Shiprock Airstrip	SV5	0	2	2

Source: [www.airportiq.com](http://www.airportiq.com), Detailed General Aviation Report, Jet and Turboprop; FAA Traffic Flow Management System Counts, Coffman Associates analysis

Notes: For the purposes of this analysis, total jet operations were derived by multiplying the number of jet departures for which flight plans were filed by two.

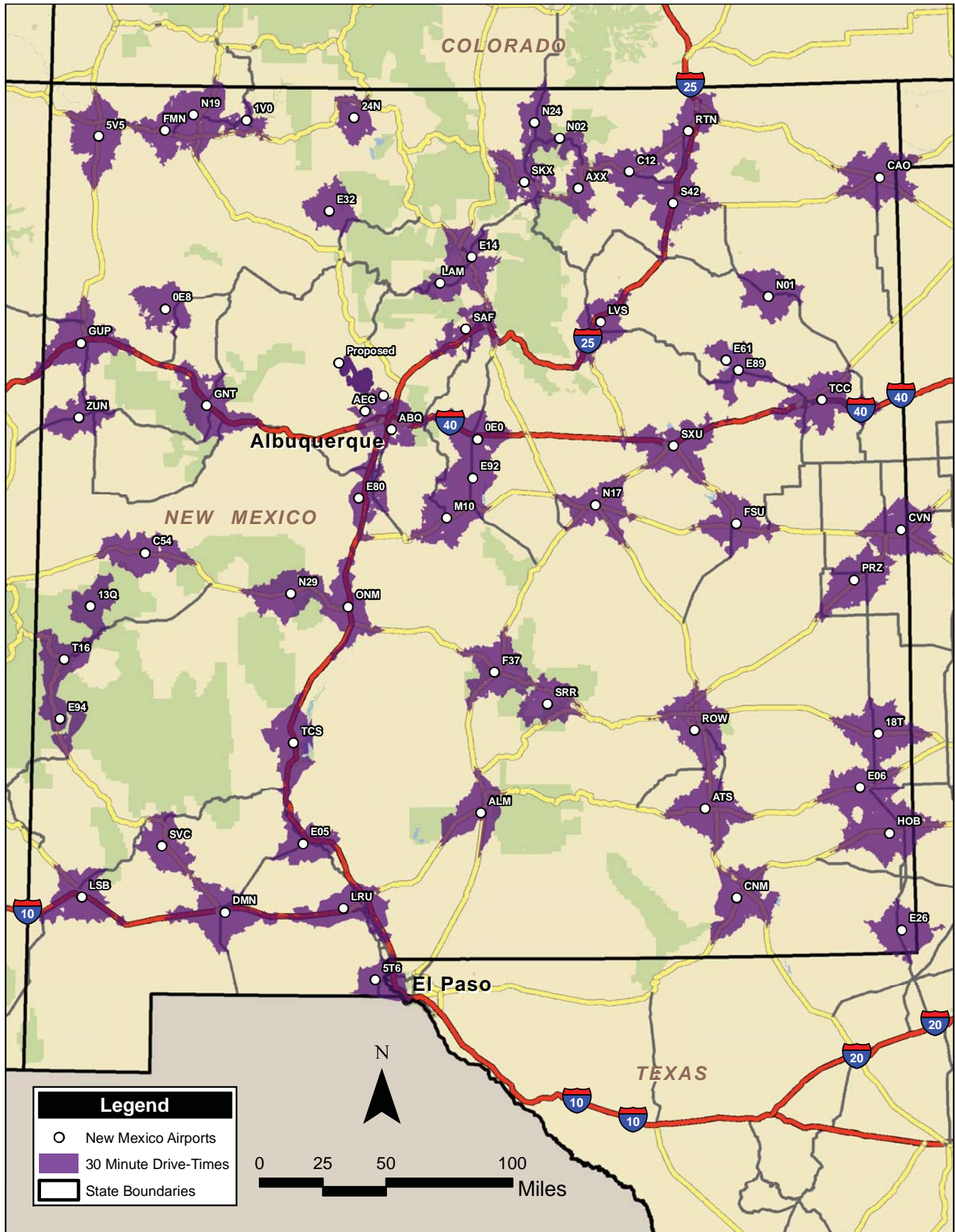
**Bold** indicates commercial service airports which are included for reference.

## DRIVE TIME

Accessibility of an airport contributes greatly to how frequently an airport is used. As with the FAA's NPIAS, the percentage of the population within a 30-minute drive time was calculated. This analysis was performed using ESRI ArcGIS Network Analyst extension. This software package uses a roadway grid, comparable to popular online mapping platforms such as Google Maps, and the airport reference point (ARP) from the airport layout plan. Through a geo-processing routine, the software determines a polygon within which the airport could be reached from 30 minutes away. Through this process, a polygon mapping layer is established for each airport, which is then intersected with a U.S. Census Block group layer containing 2010 census population estimates to calculate the population within a 30-minute drive area. The extent of the 30-minute drive time areas for all airports in the state are shown on **Exhibit 3B**. In some cases, proximate airports, such as Aztec Airport and Four Corners Regional Airport, have overlapping 30-minute drive areas. Additionally, some of the coverage areas extend outside the state of New Mexico, such as Doña Ana County Jetport at Santa Teresa.







**Table 3D** summarizes the percentage of population for all areas, including those outside of New Mexico, covered by the 30-minute drive time area for each airport. The percentage is calculated by dividing the 30-minute drive time area population by the 2010 U.S. Census Bureau statewide population of 2,059,402. As discussed above, some of the airports have overlapping coverage areas; therefore, some areas may be counted multiple times in this analysis. **Exhibit 3C** depicts the 30-minute drive time areas and Census block centroids which represent the geometric center of these areas.

As indicated in **Table 3D**, 30-minute drive time coverage ranges from a low of 0.01 percent at four rural locations to a high of 27.35 percent for Albuquerque International Sunport for existing locations.

**TABLE 3D**

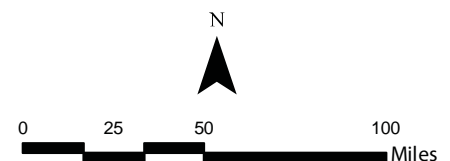
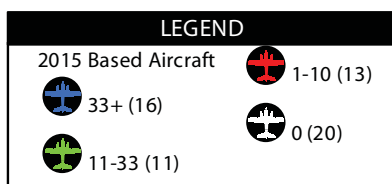
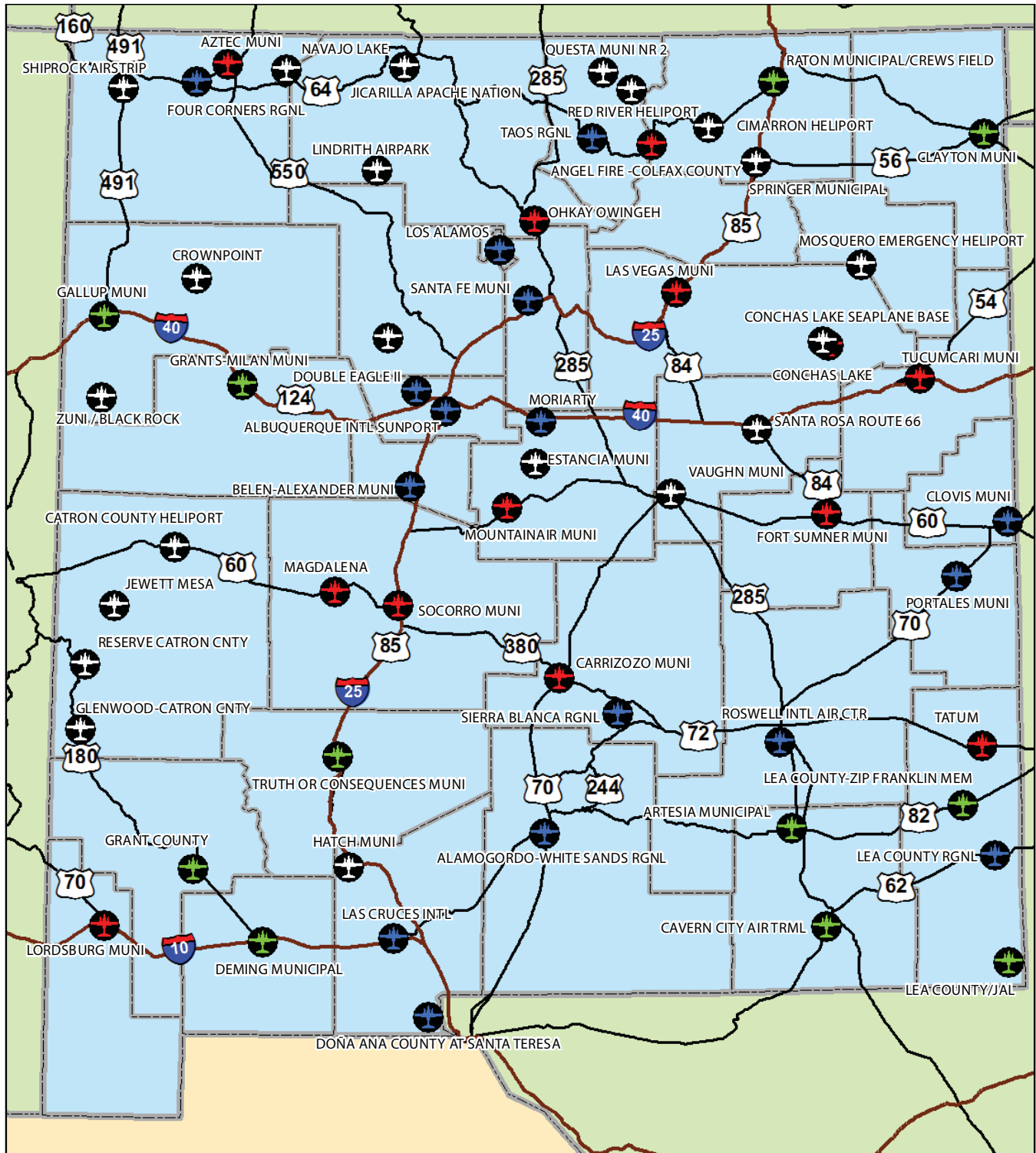
**New Mexico System Plan**

**30-Minute Drive Time Population**

Airport	ID	NM	TX	OK	CO	AZ	Total Population	Percent
Alamogordo-White Sands Airport	ALM	45,173	-	-	-	-	45,173	2.19%
Albuquerque International Sunport	ABQ	563,272	-	-	-	-	563,272	27.35%
Angel Fire - Colfax County Airport	AXX	2,573	-	-	-	-	2,573	0.12%
Artesia Municipal Airport	ATS	18,277	-	-	-	-	18,277	0.89%
Aztec Municipal Airport	N19	86,693	-	-	85	-	86,778	4.21%
Belen-Alexander Municipal Airport	E80	63,716	-	-	-	-	63,716	3.09%
Carlsbad - Cavern City Air Terminal	CNM	35,459	-	-	-	-	35,459	1.72%
Carrizozo Municipal Airport	F37	1,629	-	-	-	-	1,629	0.08%
Catron County Heliport*	C54	601	-	-	-	-	601	0.03%
Cimarron Heliport*	C12	1,274	-	-	-	-	1,274	0.06%
Clayton Municipal Airpark	CAO	3,352	591	10	-	-	3,953	0.19%
Clovis Municipal Airport	CVN	46,638	4,448	-	-	-	51,086	2.48%
Conchas Lake Airport	E89	204	-	-	-	-	204	0.01%
Conchas Lake Seaplane Base*	E61	6	-	-	-	-	204	0.01%
Crownpoint Airport	OE8	4,358	-	-	-	-	4,358	0.21%
Deming Municipal Airport	DMN	22,371	-	-	-	-	22,371	1.09%
Doña Ana County Jetport at Santa Teresa	5T6	31,585	172,503	-	-	-	204,088	9.91%
Double Eagle II Airport	AEG	313,260	-	-	-	-	313,260	15.21%
Dulce-Jicarilla Apache Nation Airport	24N	2,745	-	-	-	-	2,745	0.13%
Estancia Municipal Airport	E92	5,573	-	-	-	-	5,573	0.27%
Farmington Four Corners Regional Airport	FMN	97,004	-	-	-	-	97,004	4.71%
Ft. Sumner Municipal Airport	FSU	1,704	-	-	-	-	1,704	0.08%
Gallup Municipal Airport	GUP	37,047	-	-	-	645	37,692	1.83%
Glenwood-Catron County Airport	E94	414	-	-	-	-	414	0.02%
Grants-Milan Municipal Airport	GNT	20,033	-	-	-	-	20,033	0.97%
Hatch Municipal Airport	E05	6,896	-	-	-	-	6,896	0.33%
Jewett Mesa Airport*	13Q	274	-	-	-	-	274	0.01%
Las Cruces International Airport	LRU	141,494	-	-	-	-	141,494	6.87%
Las Vegas Municipal Airport	LVS	19,475	-	-	-	-	19,475	0.95%
Lea County Regional Airport	HOB	43,285	621	-	-	-	43,906	2.13%
Lea County-Jal Airport	E26	2,141	-	-	-	-	2,141	0.10%
Lea County-Zip Franklin Memorial Airport	E06	15,304	-	-	-	-	15,304	0.74%
Lindrith Airpark	E32	534	-	-	-	-	534	0.03%







**TABLE 3D (Continued)**  
**New Mexico System Plan**  
**30-Minute Drive Time Population**

Airport	ID	NM	TX	OK	CO	AZ	Total Population	Percent
Lordsburg Municipal Airport	LSB	3,251	-	-	-	-	3,251	0.16%
Los Alamos County Airport	LAM	26,034	-	-	-	-	26,034	1.26%
Magdalena Airport	N29	1,151	-	-	-	-	1,151	0.06%
Moriarty Municipal Airport	OE0	22,345	-	-	-	-	22,345	1.09%
Mosquero Heliport*	N01	185	-	-	-	-	185	0.01%
Mountainair	M10	2,227	-	-	-	-	2,227	0.11%
Navajo Lake Airport	1V0	929	-	-	-	-	929	0.05%
Ohkay Owingeh Airport	E14	42,502	-	-	-	-	42,502	2.06%
Portales Municipal Airport	PRZ	20,635	-	-	-	-	20,635	1.00%
Questa Municipal No. 2 Airport	N24	3,210	-	-	75	-	3,285	0.16%
Raton Crews Field Municipal Airport	RTN	8,109	-	-	2	-	8,111	0.39%
Red River Heliport*	N02	2,805	-	-	-	-	2,805	0.14%
Roswell International Air Center	ROW	61,718	-	-	-	-	61,718	3.00%
Sandoval County Airport	Proposed	587	-	-	-	-	587	0.03%
Santa Fe Municipal Airport	SAF	106,275	-	-	-	-	106,275	5.16%
Shiprock Airstrip	5V5	1,182	-	-	-	-	1,182	0.06%
Sierra Blanca Regional Airport	SRR	12,147	-	-	-	-	12,147	0.59%
Socorro Municipal Airport	ONM	12,207	-	-	-	-	12,207	0.59%
Springer Municipal Airport	S42	2,423	-	-	-	-	2,423	0.12%
Taos Regional Airport	SKX	24,323	-	-	-	-	24,323	1.18%
Tatum Airport*	18T	1,347	51	-	-	-	1,398	0.07%
Vaughn Municipal Airport	N17	580	-	-	-	-	580	0.03%
Grant County - Silver City Airport	SVC	10,340	-	-	-	-	10,340	0.50%
Santa Rosa Route 66 Airport	SXU	3,417	-	-	-	-	3,417	0.17%
Reserve Catron County Airport	T16	1,014	-	-	-	-	1,014	0.05%
Tucumcari Municipal Airport	TCC	7,535	-	-	-	-	7,535	0.37%
Truth Or Consequences Municipal Airport	TCS	10,341	-	-	-	-	10,341	0.50%
Zuni-Black Rock Airport	ZUN	8,081	-	-	-	-	8,081	0.39%

Source:

Coffman Associates Analysis

For the purposes of this analysis the population within the 30-minute drive time from all states was divided by the 2010 population for the state of New Mexico to determine the percentage population covered.

## BASED AIRCRAFT

**Table 3E** summarizes based aircraft totals for all airports within the New Mexico System Plan based on information from the FAA's National Based Aircraft Inventory Program and FAA 5010 Airport Master Records. The totals include the following civilian aircraft types: single-engine, multi-engine, jet, helicopter, glider, and ultralight aircraft. As discussed previously, the number and type of based aircraft will be used to categorize general aviation airports, specifically identifying those airports with ten or fewer,

*There are 89 based jets located at 16 different airports, most of which are located at Albuquerque International Airport (30), followed by Santa Fe Municipal (21), and Doña Ana County Jetport at Santa Teresa (16).*

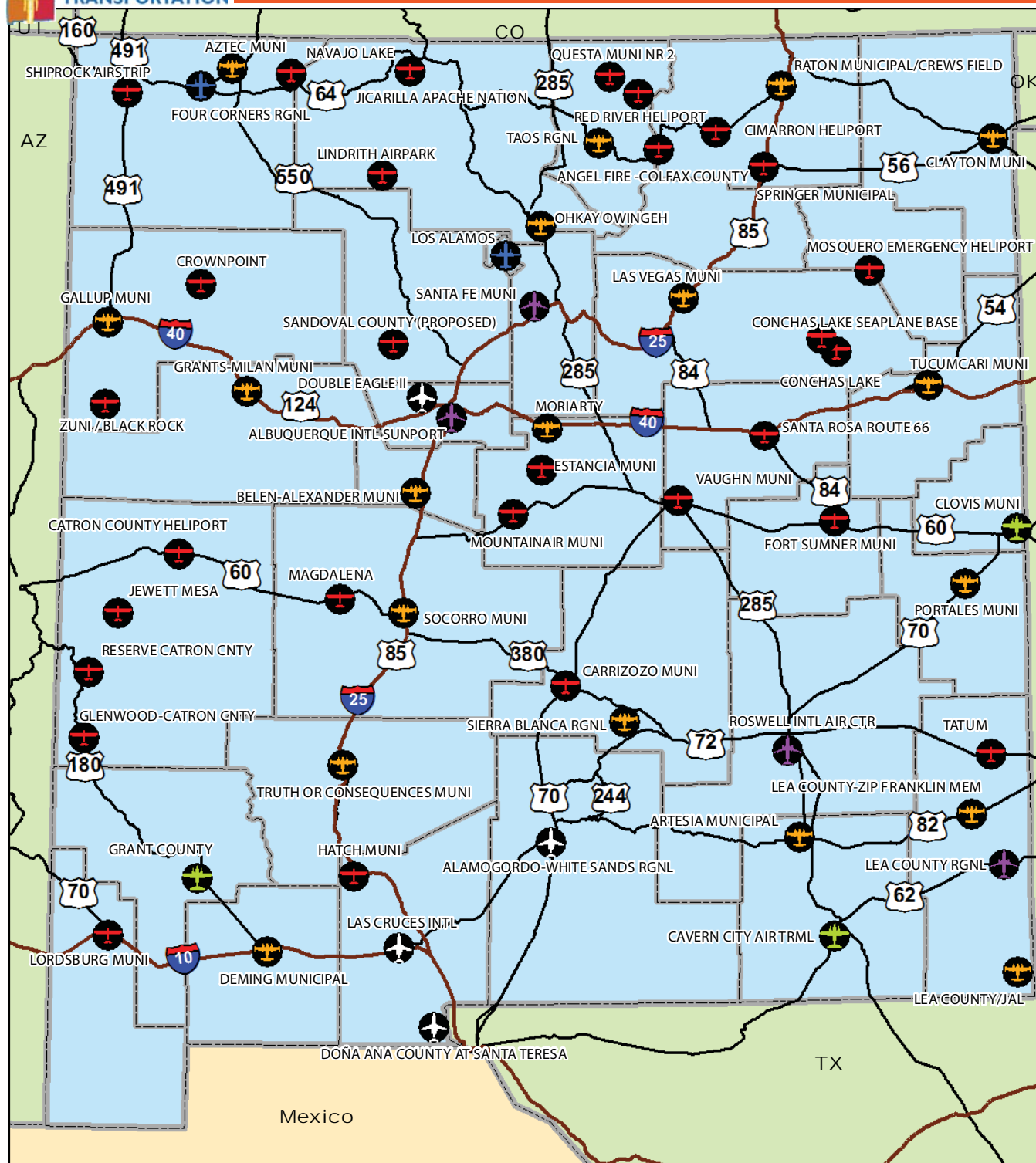


11-33, and 33 or more aircraft including at least one jet, or airports with more than 100 total based aircraft. The distribution of based aircraft is depicted on **Exhibit 3D**.







**TABLE 3E**  
**New Mexico Airport System Plan**  
**Based Aircraft**

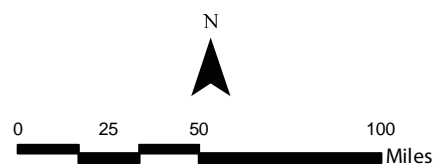
Airport	3ID	Single Engine	Multi-Engine	Jet	Heli	Glider	Military	Ultra-light	Grand Total
Alamogordo-White Sands Airport	ALM	90	8	2	0	5	0	2	107
Albuquerque International Sunport	ABQ	51	30	30	21	0	40	0	172
Angel Fire - Colfax County Airport	AXX	4	2	0	0	0	0	0	6
Artesia Municipal Airport	ATS	23	5	1	0	0	0	0	29
Aztec Municipal Airport	N19	2	0	0	0	0	0	2	4
Belen-Alexander Municipal Airport	E80	48	3	0	1	0	0	5	57
Carlsbad - Cavern City Air Terminal	CNM	18	4	1	3	0	0	0	26
Carrizozo Municipal Airport	F37	9	0	0	0	0	0	1	10
Catron County Heliport*	C54	0	0	0	0	0	0	0	0
Cimarron Heliport*	C12	0	0	0	0	0	0	0	0
Clayton Municipal Airpark	CAO	10	0	0	1	0	0	1	12
Clovis Municipal Airport	CVN	57	17	2	1	0	0	0	77
Conchas Lake Airport	E89	2	0	0	0	0	0	0	2
Conchas Lake Seaplane Base*	E61	0	0	0	0	0	0	0	0
Crownpoint Airport	OE8	0	0	0	0	0	0	0	0
Deming Municipal Airport	DMN	17	1	1	0	0	0	0	19
Dofia Ana County Jetport at Santa Teresa	5T6	108	22	16	8	0	0	0	154
Double Eagle II Airport	AEG	105	6	0	4	0	0	4	119
Dulce-Jicarilla Apache Nation Airport	24N	0	0	0	0	0	0	0	0
Estancia Municipal Airport	E92	0	0	0	0	0	0	0	0
Farmington Four Corners Regional Airport	FMN	109	12	4	1	0	0	0	126
Ft. Sumner Municipal Airport	FSU	3	2	0	0	0	0	0	5
Gallup Municipal Airport	GUP	10	7	0	1	0	0	0	18
Glenwood-Catron County Airport	E94	0	0	0	0	0	0	0	0
Grant County - Silver City Airport	SVC	14	1	0	0	0	0	0	15
Grants-Milan Municipal Airport	GNT	11	1	0	1	0	0	0	13
Hatch Municipal Airport	E05	0	0	0	0	0	0	0	0
Jewett Mesa Airport	13Q	0	0	0	0	0	0	0	0
Las Cruces International Airport	LRU	118	16	0	5	4	4	11	158
Las Vegas Municipal Airport	LVS	8	0	1	0	0	0	0	9
Lea County Regional Airport	HOB	36	4	4	1	0	0	0	45
Lea County-Jal Airport	E26	8	2	1	0	0	0	0	11
Lea County-Zip Franklin Memorial Airport	E06	12	1	0	0	0	0	0	13
Lindrith Airpark	E32	0	0	0	0	0	0	0	0
Lordsburg Municipal Airport	LSB	6	0	0	0	0	0	0	6
Los Alamos County Airport	LAM	52	1	0	0	0	0	1	54
Magdalena Airport	N29	1	0	0	0	0	0	0	1
Moriarty Municipal Airport	OE0	90	7	1	1	72	0	2	173
Mosquero Heliport*	N01	0	0	0	0	0	0	0	0
Mountainair	M10	0	0	0	0	0	0	2	2
Navajo Lake Airport	1V0	0	0	0	0	0	0	0	0
Ohkay Owingeh Airport	E14	5	0	0	0	0	0	0	5
Portales Municipal Airport	PRZ	30	2	0	2	0	0	0	34
Questa Municipal No. 2 Airport	N24	0	0	0	0	0	0	0	0
Raton Crews Field Municipal Airport	RTN	19	1	0	0	0	0	1	21





**LEGEND**

State Plan Role		Regional GA (4)
 Primary Commercial Service (4)		Community GA (19)
 Non-Primary Commercial Service (2)		Low Activity GA (29)
 Limited Commercial Service (3)		



**TABLE 3E (Continued)**  
**New Mexico Airport System Plan**  
**Based Aircraft**

Airport	3ID	Single Engine	Multi-Engine	Jet	Heli	Glider	Military	Ultra-light	Grand Total
Red River Heliport*	N02	0	0	0	0	0	0	0	0
Reserve Catron County Airport	T16	0	0	0	0	0	0	0	0
Roswell International Air Center	ROW	33	11	2	3	0	0	0	49
Sandoval County Airport	*	0	0	0	0	0	0	0	0
Santa Fe Municipal Airport	SAF	148	22	21	4	1	11	0	207
Santa Rosa Route 66 Airport	SXU	0	0	0	0	0	0	0	0
Shiprock Airstrip	5V5	0	0	0	0	0	0	0	0
Sierra Blanca Regional Airport	SRR	29	3	1	1	0	0	0	34
Socorro Municipal Airport	ONM	1	0	0	0	0	0	0	1
Springer Municipal Airport	S42	0	0	0	0	0	0	0	0
Taos Regional Airport	SKX	35	1	1	2	0	0	3	42
Tatum Airport*	18T	2	0	0	0	0	0	0	2
Truth Or Consequences Municipal Airport	TCS	25	0	0	0	0	0	5	30
Tucumcari Municipal Airport	TCC	9	0	0	0	0	0	0	9
Vaughn Municipal Airport	N17	0	0	0	0	0	0	0	0
Zuni-Black Rock Airport	ZUN	0	0	0	0	0	0	0	0
Total		1358	192	89	31	82	55	40	1877

\*Proposed Airport

Source: National Based Aircraft Inventory Program, [www.basedaircraft.com](http://www.basedaircraft.com) (General Aviation Airport single engine, multi-engine, jet, helicopter) 5010 Airport Master Record (General Aviation Airport glider, military, ultralight; Commercial Service Airport – all categories).

As indicated in the table, 21 airports have no based aircraft and 13 airports have between one and ten aircraft. Eleven airports have between 11 and 33 based aircraft. The remaining 15 airports have 33 or more based aircraft. There are 89 based jets located at 16 different airports, most of which are located at Albuquerque International Airport (30), followed by Santa Fe Municipal (21), and Doña Ana County Jetport at Santa Teresa (16). Santa Fe Municipal Airport has the highest number of based aircraft with 207, and seven other airports have more than 100 based aircraft. Airports with more than 100 based aircraft, but no jets include Double Eagle II Airport and Las Cruces International Airport.

## ROLE ASSIGNMENTS

Using the criteria described above, database queries were used to assign an updated system plan role to each of the airports. The commercial service airports are summarized in **Table 3F** and the general aviation airports are summarized in **Table 3G**. Airports not fully meeting the stated definitions for Regional General Aviation or Low Activity General Aviation airports were assigned to the Community General Aviation category.





**TABLE 3F**
**New Mexico Airport System Plan  
Commercial Service Role Assignment Matrix**

Facility	ID	2014 Enplanements	New Mexico Airport System Plan Airport Role
Albuquerque International Sunport	ABQ	2,446,388	Primary Commercial Service
Carlsbad - Cavern City Air Terminal	CNM	1,756	Limited Commercial Service
Clovis Municipal Airport	CVN	1,952	Limited Commercial Service
Farmington Four Corners Regional Airport	FMN	5,678	Non-Primary Commercial Service
Grant County - Silver City Airport	SVC	1,128	Limited Commercial Service
Lea County-Hobbs Regional Airport	HOB	18,239	Primary Commercial Service
Los Alamos County Airport	LAM	3,801	Non-Primary Commercial Service
Roswell International Air Center	ROW	35,356	Primary Commercial Service
Santa Fe Municipal Airport	SAF	74,749	Primary Commercial Service

**TABLE 3G**
**New Mexico Airport System Plan  
General Aviation Role Assignment Matrix**

Facility	ID	Jet and Turboprop Operations	Based Aircraft	Based Jet	30-Minute Drive Time Population Coverage	New Mexico Airport System Plan Airport Role
Alamogordo-White Sands Airport	ALM	396	107	2	2.19%	Regional General Aviation
Angel Fire - Colfax County Airport	AXX	88	6	0	0.12%	Low Activity General Aviation
Artesia Municipal Airport	ATS	1,828	29	1	0.89%	Community General Aviation
Aztec Municipal Airport	N19	2	4	0	4.21%	Community General Aviation
Belen-Alexander Municipal Airport	E80	14	57	0	3.09%	Community General Aviation
Carrizozo Municipal Airport	F37	0	10	0	0.08%	Low Activity General Aviation
Clayton Municipal Airpark	CAO	40	12	0	0.19%	Community General Aviation
Conchas Lake Airport	E89	0	2	0	0.01%	Low Activity General Aviation
Crownpoint Airport	OE8	0	0	0	0.21%	Low Activity General Aviation
Deming Municipal Airport	DMN	588	19	1	1.09%	Community General Aviation
Doña Ana County Jetport at Santa Teresa	5T6	1,886	154	16	9.91%	Regional General Aviation
Double Eagle II Airport	AEG	1,144	119	0	15.21%	Regional General Aviation
Dulce-Jicarilla Apache Nation Airport	24N	2	0	0	0.13%	Low Activity General Aviation
Ohkay Owingeh Airport	E14	8	5	0	2.06%	Community General Aviation



**TABLE 3G (Continued)**  
**New Mexico Airport System Plan**  
**General Aviation Role Assignment Matrix**

Facility	ID	Jet and Turboprop Operations	Based Aircraft	Based Jet	30-Minute Drive Time Population Coverage	New Mexico Airport System Plan Airport Role
Estancia Municipal Airport	E92	0	0	0	0.27%	Low Activity General Aviation
Ft. Sumner Municipal Airport	FSU	4	5	0	0.08%	Low Activity General Aviation
Gallup Municipal Airport	GUP	3,860	18	0	1.83%	Community General Aviation
Glenwood-Catron County Airport	E94	0	0	0	0.02%	Low Activity General Aviation
Grants-Milan Municipal Airport	GNT	408	13	0	0.97%	Community General Aviation
Hatch Municipal Airport	E05	0	0	0	0.33%	Low Activity General Aviation
Jewett Mesa Airport*	13Q	0	0	0	0.01%	Low Activity General Aviation
Las Cruces International Airport	LRU	1,876	158	0	6.87%	Regional General Aviation
Las Vegas Municipal Airport	LVS	494	9	1	0.95%	Community General Aviation
Lea County-Jal Airport	E26	30	11	1	0.10%	Community General Aviation
Lea County-Zip Franklin Memorial Airport	E06	8	13	0	0.74%	Community General Aviation
Lindrith Airpark	E32	0	0	0	0.03%	Low Activity General Aviation
Lordsburg Municipal Airport	LSB	18	6	0	0.16%	Low Activity General Aviation
Magdalena Airport	N29	0	1	0	0.06%	Low Activity General Aviation
Moriarty Municipal Airport	OE0	6	173	1	1.09%	Community General Aviation
Mountainair Airport	M10	0	2	0	0.11%	Low Activity General Aviation
Navajo Lake Airport	1V0	0	0	0	0.05%	Low Activity General Aviation
Portales Municipal Airport	PRZ	50	34	0	1.00%	Community General Aviation
Questa Municipal No. 2 Airport	N24	0	0	0	0.16%	Low Activity General Aviation
Raton Crews Field Municipal Airport	RTN	652	21	0	0.39%	Community General Aviation
Reserve Catron County Airport	T16	0	0	0	0.05%	Low Activity General Aviation
Santa Rosa Route 66 Airport	SXU	0	0	0	0.17%	Low Activity General Aviation
Shiprock Airstrip	5V5	2	0	0	0.06%	Low Activity General Aviation
Sierra Blanca Regional Airport	SRR	2,378	34	1	0.59%	Community General Aviation
Socorro Municipal Airport	ONM	106	1	0	0.59%	Community General Aviation



**TABLE 3G (Continued)**  
**New Mexico Airport System Plan**  
**General Aviation Role Assignment Matrix**

Facility	ID	Jet and Turboprop Operations	Based Aircraft	Based Jet	30-Minute Drive Time Population Coverage	New Mexico Airport System Plan Airport Role
Springer Municipal Airport	S42	0	0	0	0.12%	Low Activity General Aviation
Taos Regional Airport	SKX	1102	42	1	1.18%	Community General Aviation
Tatum Airport	18T	0	2	0	0.07%	Low Activity General Aviation
Truth or Consequences Municipal Airport	TCS	28	30	0	0.50%	Community General Aviation
Tucumcari Municipal Airport	TCC	264	9	0	0.37%	Community General Aviation
Vaughn Municipal Airport	N17	0	0	0	0.03%	Low Activity General Aviation
Zuni-Black Rock Airport	ZUN	4	0	0	0.39%	Low Activity General Aviation
Mosquero Heliport	N01	0	0	0	0.01%	Low Activity General Aviation
Red River Heliport	N02	0	0	0	0.14%	Low Activity General Aviation
Catron County Heliport	C54	0	0	0	0.03%	Low Activity General Aviation
Cimarron Heliport	C12	0	0	0	0.06%	Low Activity General Aviation
Conchas Lake Seaplane Base	E61	0	0	0	0.01%	Low Activity General Aviation
Sandoval County Airport	Pro-posed	0	0	0	0.03%	Low Activity General Aviation

**Table 3H** includes the previously discussed NPIAS Service Level and FAA GA Asset Service Level, as well as the Level assignment from the FAA Southwest Region's *2009-2013 General Aviation Regional Airport System Plan* (RASP). The Southwest Region RASP is similar in approach to a statewide system plan, but includes an analysis for general aviation airports located within the five states of the FAA Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas). The plan divides airports into four Levels in accordance with the number of based aircraft, using breaks at 10, 50, and 100 aircraft, and assigns goals and performance metrics for each Level. Level I airports are generally the most active, having more than 100 based aircraft, while Level IV airports have less than 10 based aircraft. It is important to note that this plan was published in 2008; therefore, the Level assignments may not reflect current based aircraft numbers for airports within the New Mexico Airport System Plan.



**TABLE 3H**  
**New Mexico Airport System Plan Role Summary**

Facility	ID	NPIAS Service Level (Current and 5-Year)	NPIAS Role	2009-2013 General Aviation Regional Airport System Plan FAA Southwest Region	New Mexico Airport System Plan Airport Role
Alamogordo-White Sands Airport	ALM	GA	Regional	II	Regional General Aviation
Albuquerque International Sunport	ABQ	P	NA	NA	Primary Commercial Service
Angel Fire - Colfax County Airport	AXX	GA	NA	IV	Low Activity General Aviation
Artesia Municipal Airport	ATS	GA	Regional	II	Community General Aviation
Aztec Municipal Airport	N19	GA	Local	IV	Community General Aviation
Belen-Alexander Municipal Airport	E80	GA	Local	II	Community General Aviation
Carlsbad - Cavern City Air Terminal	CNM	CS	Regional	II	Limited Commercial Service
Carrizozo Municipal Airport	F37	GA	Basic	III	Low Activity General Aviation
Clayton Municipal Airpark	CAO	GA	Basic	IV	Community General Aviation
Clovis Municipal Airport	CVN	GA	Regional	I	Limited Commercial Service
Conchas Lake Airport	E89	GA	Basic	IV	Low Activity General Aviation
Crownpoint Airport	OE8	GA	Basic	IV	Low Activity General Aviation
Deming Municipal Airport	DMN	GA	Local	III	Community General Aviation
Doña Ana County Jetport at Santa Teresa	5T6	GA	Regional	II	Regional General Aviation
Double Eagle II Airport	AEG	R	Regional	I	Regional General Aviation
Dulce-Jicarilla Apache Nation Airport	24N	GA	Basic	IV	Low Activity General Aviation
Ohkay Owingeh Airport	E14	GA	Basic	IV	Community General Aviation
Estancia Municipal Airport	E92	Non-NPIAS	NA	NA	Low Activity General Aviation
Farmington Four Corners Regional Airport	FMN	P	NA	NA	Non-Primary Commercial Service
Ft. Sumner Municipal Airport	FSU	GA	Basic	IV	Low Activity General Aviation
Gallup Municipal Airport	GUP	GA	Local	II	Community General Aviation
Glenwood-Catron County Airport	E94	GA	NA	IV	Low Activity General Aviation
Grant County - Silver City Airport	SVC	GA	Local	III	Limited Commercial Service
Grants-Milan Municipal Airport	GNT	GA	Basic	III	Community General Aviation
Hatch Municipal Airport	E05	GA	Basic	IV	Low Activity General Aviation
Jewett Mesa Airport	13Q	Non-NPIAS	NA	NA	Low Activity General Aviation
Las Cruces International Airport	LRU	GA	Regional	I	Regional General Aviation
Las Vegas Municipal Airport	LVS	GA	Basic	II	Community General Aviation
Lea County Regional Airport	HOB	P	Regional	II	Primary Commercial Service
Lea County-Jal Airport	E26	GA	NA	IV	Community General Aviation
Lea County-Zip Franklin Memorial Airport	E06	GA	Basic	IV	Community General Aviation
Lindrith Airpark	E32	Non-NPIAS	NA	NA	Low Activity General Aviation
Lordsburg Municipal Airport	LSB	GA	Basic	IV	Low Activity General Aviation
Los Alamos County Airport	LAM	GA	Local	II	Non-Primary Commercial Service
Magdalena Airport	N29	GA	NA	IV	Low Activity General Aviation
Moriarty Municipal Airport	OE0	GA	Local	III	Community General Aviation
Mountainair Airport	M10	Non-NPIAS	NA	NA	Low Activity General Aviation
Navajo Lake Airport	1V0	GA	NA	IV	Low Activity General Aviation
Portales Municipal Airport	PRZ	GA	Local	III	Community General Aviation
Questa Municipal No. 2 Airport	N24	GA	NA	IV	Low Activity General Aviation
Raton Crews Field Municipal Airport	RTN	GA	Local	III	Community General Aviation
Reserve Catron County Airport	T16	GA	Basic	IV	Low Activity General Aviation
Roswell International Air Center	ROW	P	NA	NA	Primary Commercial Service
Santa Fe Municipal Airport	SAF	P	NA	NA	Primary Commercial Service
Santa Rosa Route 66 Airport	SXU	GA	Basic	IV	Low Activity General Aviation
Shiprock Airstrip	5V5	GA	Basic	IV	Low Activity General Aviation
Sierra Blanca Regional Airport	SRR	GA	Regional	II	Community General Aviation
Socorro Municipal Airport	ONM	GA	Basic	IV	Community General Aviation
Springer Municipal Airport	S42	GA	Basic	IV	Low Activity General Aviation
Taos Regional Airport	SKX	GA	Local	II	Community General Aviation



**TABLE 3H (Continued)**  
**New Mexico Airport System Plan Role Summary**

Facility	ID	NPIAS Service Level (Current and 5-Year)	NPIAS Role	2009-2013 General Aviation Regional Airport System Plan FAA Southwest Region	New Mexico Airport System Plan Airport Role
Tatum Airport	18T	Non-NPIAS	NA	NA	Low Activity General Aviation
Truth Or Consequences Municipal Airport	TCS	GA	Local	III	Community General Aviation
Tucumcari Municipal Airport	TCC	GA	Basic	IV	Community General Aviation
Vaughn Municipal Airport	N17	GA	Basic	IV	Low Activity General Aviation
Zuni-Black Rock Airport	ZUN	GA	Basic	IV	Low Activity General Aviation
Mosquero Heliport	N01	Non-NPIAS	NA	NA	Low Activity General Aviation
Red River Heliport	N02	Non-NPIAS	NA	NA	Low Activity General Aviation
Catron County Heliport	C54	Non-NPIAS	NA	NA	Low Activity General Aviation
Cimarron Heliport	C12	Non-NPIAS	NA	NA	Low Activity General Aviation
Conchas Lake Seaplane Base	E61	Non-NPIAS	NA	NA	Low Activity General Aviation
Sandoval County Airport	Pro-posed	Non-NPIAS	NA	NA	Low Activity General Aviation

P – Commercial Service (Primary)

CS – Commercial Service (Non-Primary)

GA – General Aviation

R – Reliever

NA – Not Applicable

**Table 3J** summarizes the role assignments based on the previously discussed criteria and **Exhibit 3E** presents the location of each airport by its role in the system.

**TABLE 3J**  
**New Mexico System Plan**  
**Role Summary**

Role Category	Count
Primary Commercial Service	4
Non-Primary Commercial Service	2
Limited Commercial Service	3
Regional General Aviation	4
Community General Aviation	19
Low Activity General Aviation	29
Total	61

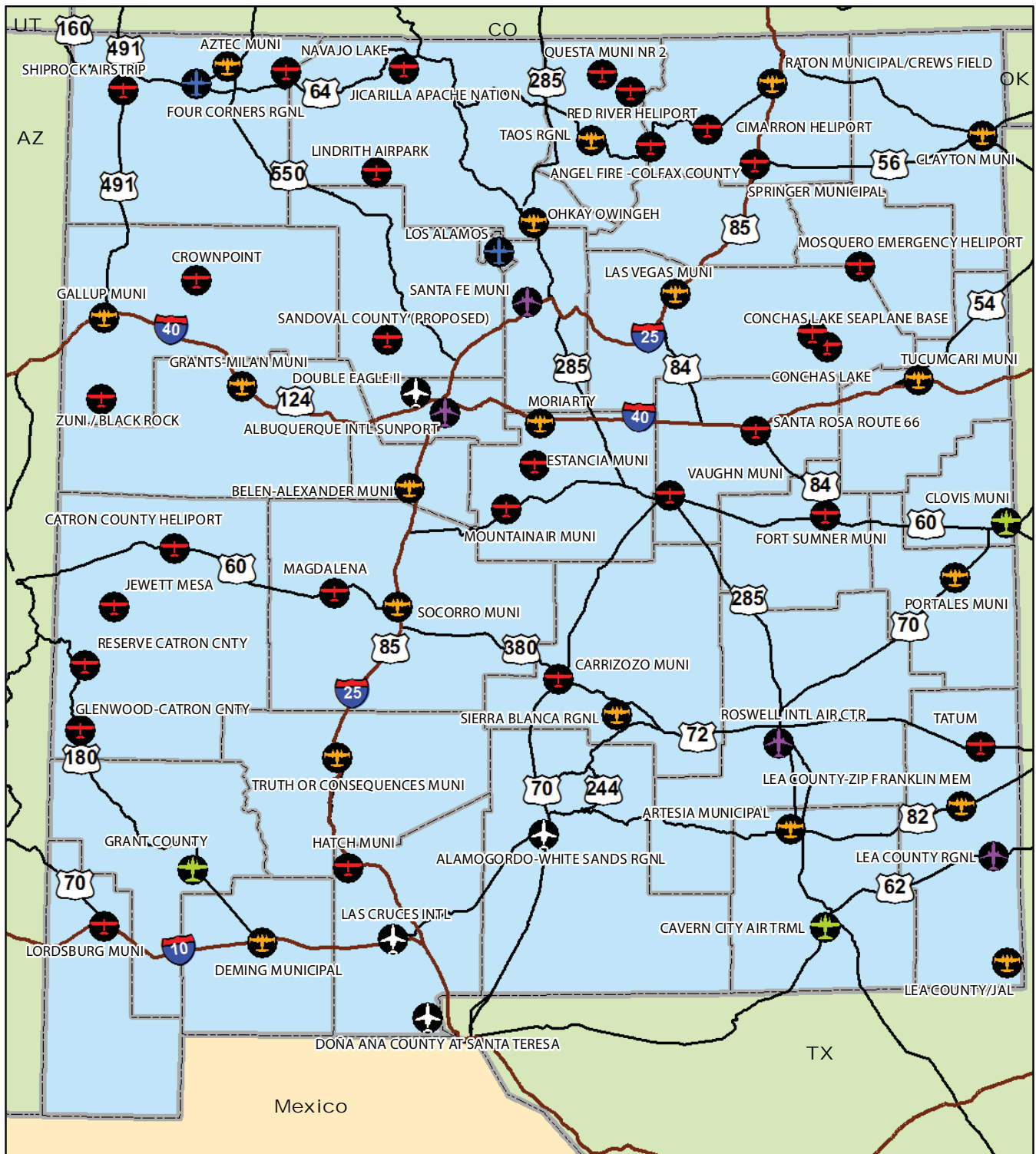
Source: Coffman Associates analysis

## **NPIAS EVALUATION**

As indicated in **Table 3H**, 11 facilities (five existing airports, one proposed airport, four heliports, and one seaplane base) within the New Mexico Airport System Plan are not included in the FAA's National Plan of Integrated Airports System. The following discussion will evaluate the potential for non-NPIAS locations to be listed in future editions of the NPIAS. Inclusion in the NPIAS is based on the minimum entry criteria for existing and proposed airports, and heliports outlined in FAA Order 5090.3C, *Field*







LEGEND

State Plan Role



Primary Commercial Service (4)



Non-Primary Commercial Service (2)



Limited Commercial Service (3)



Regional GA (4)



Community GA (19)



Low Activity GA (29)

N



0 25 50 100  
Miles



*Formulation of the National Plan of Integrated Airport Systems (NPIAS).* For existing airports, Order 5090.3C outlines two criteria for inclusion in the NPIAS:

- (1) The airport has at least 10 based aircraft, and
- (2) The airport serves a community located 30 minutes or more average ground travel time from the nearest existing or proposed NPIAS airport.

As indicated in **Table 3G**, the five existing Non-NPIAS airports (Estancia Municipal Airport, Jewett Mesa Airport, Lindrith Airpark, Mountainair Airport, and Tatum Airport) do not meet the NPIAS criterion of ten based aircraft. Additional analysis was conducted to determine if these airports meet the second criterion which considers the distance of the community served by the airport from the nearest existing or proposed NPIAS airport. Using the previously discussed 30-minute drive time analysis and the associated community for each of the non-NPIAS airports, it was determined that all five non-NPIAS airports within the NMAASP meet the second minimum entry criterion. Order 5090.3C does not provide specific guidance for seaplane bases. However, using the criteria discussed above, Conchas Lake Seaplane Base does not meet either of the minimum entry requirements.

As outlined in Order 5090.3C, one of the following criteria must be met:

- (1) There are at least four based rotorcraft, or
- (2) 800 annual itinerant operations, or
- (3) 400 annual operations by air taxi rotorcraft.

As indicated in **Table 3G**, none of the four heliports have based aircraft. Additionally, although no formal records are kept for these facilities, it was determined during the inventory process for this study that the heliport locations do not meet the itinerant or air taxi thresholds discussed above.

FAA Order 5090.3C outlines the following criteria:

- (1) It is included in an accepted state aviation system plan, and
- (2) It serves a community more than 30 minutes from the nearest existing or proposed NPIAS airport, and
- (3) It is forecast to have 10 based aircraft during the short-range planning period (within 5 years), and
- (4) There is an eligible sponsor willing to undertake the ownership and development of the airport.

Each of the items above was considered as part of the 2008 *Sandoval County Airport Feasibility Study* and it was determined that the proposed airport would be eligible for inclusion in the NPIAS. Due to the nationwide economic decline in 2008-2009, construction of the airport was not pursued further. The feasibility study was updated in 2014 and included recommendation for Sandoval County to request the proposed airport in Sandoval County be included in the NPIAS to be eligible for future FAA funding. The updated feasibility study also recommends that further study for the airport is needed.



Through the NPIAS, FAA assigns a current and five-year role for each airport. As indicated in **Table 3G**, none of the NPIAS airport roles will change between the current and five-year conditions. As indicated in Chapter One, Los Alamos Airport, which initiated scheduled commercial service flights in 2013, had enough annual enplanements in 2014 to be classified as a non-primary commercial service airport in the NPIAS. As indicated in **Table 3F**, there were 3,801 enplanements at Los Alamos Airport in 2014. As the NPIAS is published annually, this change from general aviation to non-primary commercial service should be reflected in the next published NPIAS.

## **SUMMARY**

Based on the roles assigned to airports within the system using the methodology described in this chapter, the next step in the system plan process is to evaluate the facilities and services available at each location. A baseline set of facility and service objectives, discussed in Chapter Four, has been developed for each of the commercial service and general aviation roles assigned to each airport. Airports which fully meet these objectives maximally contribute to achieving the four stated goals of the New Mexico Airport System Plan:

- Goal 1: Increase/Enhance Safety and Security
- Goal 2: Preserve/Protect Investment in Airports
- Goal 3: Accommodate Existing and Projected Aviation Demand
- Goal 4: Support Economic Growth of the Community

Airports which do not fully meet the evaluation criteria will be summarized and that information will be used to identify potential improvements within the system.





CHAPTER FOUR

# SYSTEM ANALYSIS AND RECOMMENDATIONS



## Chapter Four

# SYSTEM ANALYSIS AND RECOMMENDATIONS

### ***FACILITY AND SERVICE STANDARD EVALUATION***

The purpose of this chapter is to evaluate the system based on the goals and objectives adopted for the New Mexico Airport System. As previously discussed, the overall goals of the New Mexico Airport System Plan, as stated in Chapter One, include:

- **Goal 1: Increase/Enhance Safety and Security**
- **Goal 2: Preserve/Protect Investment in Airports**
- **Goal 3: Accommodate Existing and Projected Aviation Demand**
- **Goal 4: Support Economic Growth of the Community**

The following recommended facilities and services objectives for each of the planning roles will be evaluated in detail as part of this chapter. A valuation of the facilities in the airport system and air service trends will also be discussed.

- **Airport Reference Code** – The ARC is an airport designation that combines the Airport Approach Category (AAC) and the Airplane Design Group (ADG). The ARC is used for planning and design only and does not limit the aircraft that may be able to operate safely on the Airport.
- **Runway Length** – Desired runway length for at least one runway at the airport as determined using FAA's Airport Design Software.
- **Runway Width** – Width of runway is determined based on FAA Advisory Circular 5300-13, Airport Design, based on ARC.





- **Pavement Strength Rating** – Pavement strength rating is not the maximum weight limit; aircraft weighing more than the certified strength can only operate on the runway on an infrequent basis. Heavy aircraft operations can shorten the life span of airport pavements if they are not designed to handle these aircraft.
- **Taxiway** – Availability of a full parallel, partial, or stub taxiway to provide safe and efficient access to and from the runway.
- **Approach Capability** – This element refers to the availability of either instrument or visual approach procedures at an airport. Instrument approaches are further classified based on their precision and choices, including: precision, near-precision, and non-precision.
- **Visual Aids** – Visual aids include several different systems available to a pilot to provide immediate information to pilots in the air and on the ground.
- **Lighting** – Recommended runway and taxiway edge lighting availability.
- **Weather Reporting Facilities** - Automated weather reporting systems used for pre-flight planning and also during flight. As discussed in Chapter One, two types are available: AWOS and ASOS.
- **Wind Coverage** – Based on collected wind observations, this information is used to identify the optimal number and orientation of runways at an airport as described in FAA AC 150/5300, *Airport Design*.
- **Services** – The preferred range of services available to local and itinerant pilots. These may be provided by a combination of public and private entities.
- **Facilities** – The preferred range of facilities available to local and itinerant airport users. These may be provided by a combination of public and private entities.
- **Safety and Security** – An emergency response plan identifies the essential actions planned to ensure the safety of the airport and emergency services in the area surrounding the airport. Perimeter fences are used to protect airport operations areas from unauthorized access and are also used to exclude wildlife which can pose a threat to safe operations.

***Using information presented in the study inventory, an evaluation of each airport's existing facilities and services was conducted to determine which airports may need additional improvements or enhancements to improve the overall strength of the New Mexico Airport System.***

Based on the recommended facility and service objectives outlined above, specific criteria for each of the six airport role classifications were developed. The criteria, presented on **Exhibit 4A** for the commercial service categories and **Exhibit 4B** for the general

aviation categories, comprise baseline objectives for airports within the role. Using information presented in the study inventory, an evaluation of each airport's existing facilities and services was conducted to determine which airports may need additional improvements or enhancements to improve the overall strength of the New Mexico Airport System. The exhibits also indicate the entity which would have the lead role for ensuring compliance with each criterion. Many of the airfield and operational support criteria will be achieved through a cooperative effort between FAA, the State of New Mexico, and the Airport Sponsor, while most of the landside items, such as rental car availability, fixed



AIRPORT CRITERIA	PRIMARY COMMERCIAL SERVICE AIRPORTS	NON-PRIMARY COMMERCIAL SERVICE AIRPORTS	LIMITED COMMERCIAL SERVICE AIRPORTS
ARC	C-III or greater	C-II or greater	C-II or greater
Runway Length	75 percent of large aircraft at 90 percent useful load	75 percent of large aircraft at 90 percent useful load	75 percent of large aircraft at 60 percent useful load
Runway Width (ft)	150 or 100*	150	100
Runway Strength	SWG of 60,000 lbs.	SWG of 60,000 lbs.	SWG of 30,000 lbs.
Taxiway	Full parallel	Full parallel	Partial parallel
Instrument Approach	Precision or Near-precision (LPV)	Precision or Near-precision (LPV)	Non-precision
Visual Aids	Rotating beacon Lighted windcone/segmented circle Runway end identifier lights Visual glide slope indicator MALSR	Rotating beacon Lighted windcone/segmented circle Runway end identifier lights Visual glide slope indicator	Rotating beacon Lighted windcone/segmented circle Visual glide slope indicator
Lighting	HIRL, MITL	MIRL	MIRL
Weather Reporting Facilities	AWOS or ASOS	AWOS or ASOS	AWOS or ASOS
Wind Coverage	Primary and crosswind have 95% wind coverage	Primary and crosswind have 95% wind coverage	Primary and crosswind have 95% wind coverage
Services	Phones Restrooms Full service FBO 24/7 AvGas and Jet A Rental cars available Full service maintenance Public transportation available	Phones Restrooms Full service FBO 24/7 AvGas and Jet A Rental cars available Full service maintenance Public transportation available	Phones Restrooms Full service FBO 24/7 AvGas and Jet A Courtesy car available Full service maintenance Public transportation available
Facilities	Terminal with public restrooms, conference rooms, pilots lounge Hangar storage for 80% of based aircraft and 25% of transient Auto parking	Terminal with public restrooms, conference rooms, pilots lounge Hangar storage for 75% of based aircraft and 25% of transient Auto parking	Limited service restaurant and/or vending Hangar storage for 60% of based aircraft and 25% of transient Apron tie downs for 40% of based fleet and 50% of transient Auto parking
Safety and Security	Emergency response plan Perimeter fencing	Emergency response plan Perimeter fencing	Emergency response plan Perimeter fencing

KEY -

ASOS: Automated Surface Observation System

AWOS: Automated Weather Observation System

HIRL: Automated Surface Observation System

MIRL: Medium Intensity Runway Lighting

MITL: Medium Intensity Taxiway Lighting

SWG: Single Wheel Gear

\* Per FAA AC 5300-13A Table 3-5 Note 12: For airplanes with maximum certificated takeoff weight of 150,000 lbs or less, the standard runway width is 100 feet, the shoulder width is 20 feet, and the runway blast pad width is 140 feet.



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AIRPORT CRITERIA	REGIONAL GENERAL AVIATION AIRPORTS	COMMUNITY GENERAL AVIATION AIRPORTS	LOW ACTIVITY GENERAL AVIATION AIRPORTS
ARC	C-II or greater	B-II or greater	A-I or greater
Runway Length	75 percent of large aircraft at 60 percent useful load	Accommodate 95% of small aircraft	Accommodate 75% of small aircraft
Runway Width (ft)	100	75	60
Runway Strength	SWG of 30,000 lbs.	SWG of 12,500 - 30,000 lbs.	SWG of 12,500 lbs.
Taxiway	Partial parallel	Partial parallel	Turnarounds and/or connector taxiways
Instrument Approach	Non-precision	Non-precision	Visual
Visual Aids	Rotating beacon Lighted windcone/segmented circle Visual glide slope indicator	Rotating beacon Lighted windcone/segmented circle Visual glide slope indicator	Rotating beacon Windsock
Lighting	MIRL	MIRL	Reflectors
Weather Reporting Facilities	AWOS or ASOS	AWOS or ASOS	None
Wind Coverage	Primary and crosswind have 95% wind coverage	Primary runway has 95% wind coverage	None
Services	Phones Restrooms Full service FBO 24/7 AvGas and Jet A Courtesy car available Full service maintenance	Phones Restrooms Limited service FBO 24/7 AvGas and Jet A Courtesy car available Limited service maintenance	Phones Restrooms
Facilities	Terminal with public restrooms, pilots lounge Limited service restaurant and/or vending Hangar storage for 60% of based aircraft and 25% of transient Apron tie downs for 40% of based fleet and 50% of transient Auto parking	Terminal with public restrooms, pilots lounge Limited service restaurant and/or vending Hangar storage for 60% of based aircraft and 25% of transient Apron tie downs for 40% of based fleet and 50% of transient Emergency response plan	Pilots lounge Emergency response plan
Safety and Security	Emergency response plan Perimeter fencing		

KEY -

ASOS: Automated Surface Observation System

AWOS: Automated Weather Observation System

MIRL: Medium Intensity Runway Edge Lighting

MITL: Medium Intensity Taxiway Edge Lighting

SWG: Single Wheel Gear



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base operators, and public transportation, would be met by the airport sponsor, local municipalities, or the private sector. Following is an aggregate summary for all airports within each airport role. The system will be further evaluated using specific performance measures outlined below, which are intended to measure progress toward the overall goals of this plan as listed below.

## **SYSTEM PERFORMANCE OVERVIEW**

### **PRIMARY COMMERCIAL SERVICE AIRPORTS**

**Exhibit 4C** summarizes compliance of the Primary Commercial Service airports with the 26 evaluation criteria. As a group, these airports meet 86.5 percent of the facility and service objectives, with 16 of the criteria fully met by all four airports. As indicated on the exhibit, Albuquerque International Sunport fully meets the criteria for this category.

### **NON-PRIMARY COMMERCIAL SERVICE AIRPORTS**

As summarized in Chapter Three, two airports are classified as Non-Primary Commercial Service. **Exhibit 4C** summarizes Four Corners Regional Airport and Los Alamos Airport performance with the facility and service objectives. As noted, Four Corners Regional Airport meets 22 of the 25 facility and service objectives, or 88 percent, and Los Alamos County Airport meets 16 of the objectives, or 64 percent. Neither airport meets the runway length or strength objectives nor the hangar and storage space availability objective.

***The three airports within the Limited Commercial Service Airport group meet 83 percent of the facility and services objectives, with all three airports fully meeting 17 of the facility and service objectives.***

### **LIMITED COMMERCIAL SERVICE AIRPORTS**

The performance of Limited Commercial Service Airports is summarized on **Exhibit 4D**. The three airports within the Limited Commercial Service Airport group meet 83 per-

cent of the facility and services objectives, with all three airports fully meeting 17 of the facility and service objectives and all three airports meeting more than 80 percent of the objectives. The three objectives with the lowest performance are: 1) availability of public transportation, which is not available at any of the airports; and, 2) full service maintenance which is available at one of the airports. As noted on the exhibit, both of these objectives are typically fulfilled in cooperation with entities other than the New Mexico Department of Transportation Aviation Division. Additionally, the aircraft tie-down availability for based and transient aircraft objectives is met by one airport.

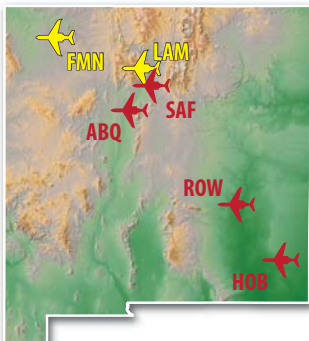




Airport Criteria	Minimum	Primary Commercial Service					Non-Primary Commercial Service		
		ABQ	HOB	ROW	SAF	Compliant	FMN	LAM	Compliant
ARC	C-III or greater	Y	N	Y	Y	3	Y	N	1
Runway Length	75% of large aircraft at 90% useful load	Y	N	Y	Y	3	N	N	0
Runway Width	150 ft or 100 ft** (150 ft non-primary)	Y	Y	Y	Y	4	Y	N	1
Runway Strength	SWL of 60,000 lbs	Y	Y	Y	N	3	N	N	0
Taxiway	Full parallel	Y	Y	Y	Y	4	Y	N	1
Instrument	Precision or near precision (LPV)	Y	Y	Y	Y	4	Y	N	1
Visual Aids	Rotating beacon	Y	Y	Y	Y	4	Y	Y	2
	Lighted wind indicator	Y	Y	Y	Y	4	Y	Y	2
	REILs	Y	N	N	Y	2	Y	Y	2
	Visual glide slope	Y	Y	Y	Y	4	Y	Y	2
	MALSR (primary airports only)	Y	Y	Y	N	3	-	-	-
Lighting	HIRL, MITL (MIRL non-primary airports)	Y	Y	Y	N	3	Y	Y	2
Weather Reporting	AWOS or ASOS	Y	Y	Y	Y	4	Y	Y	2
Wind Coverage	Primary & Crosswind at 95%	Y	Y	Y	Y	4	Y	Y	2
Services	Phones	Y	Y	Y	Y	4	Y	Y	2
	Restrooms	Y	Y	Y	Y	4	Y	Y	2
	Full service FBO	Y	Y	Y	Y	4	Y	Y	2
	24/7 Avgas and Jet A	Y	Y	Y	Y	4	Y	N	1
	Rental cars available	Y	Y	Y	Y	4	Y	Y	2
	Full service maintenance	Y	N	N	Y	2	Y	N	1
	Public transportation	Y	N	Y	N	2	Y	Y	2
Facilities	Terminal with public restrooms, conference rooms, pilots lounge	Y	Y	Y	Y	4	Y	Y	2
	Hangar and storage for 80% (75% non-primary) of based aircraft and 25% transient	Y	N	N	N	1	N	N	0
	Auto Parking	Y	Y	Y	Y	4	Y	Y	2
Safety & Security	Emergency response plan	Y	Y	Y	Y	4	Y	Y	2
	Perimeter fencing	Y	Y	Y	Y	4	Y	Y	2
Compliant		26	20	23	21	90	22	16	38

#### AIRPORT KEY:

ABQ - Albuquerque International Airport  
HOB - Lee County Regional Airport  
ROW - Roswell International Air Center Airport  
SAF - Santa Fe Municipal Airport  
FMN - Four Corners Regional Airport  
LAM - Los Alamos Airport



#### ACRONYM KEY:

ASOS - automated surface observation station  
AWOS - automated weather observation station  
FBO - fixed base operator  
HIRL - high intensity runway edge lighting  
MALSR - medium intensity approach lighting system with runway alignment indicator lights  
MIRL - medium intensity runway edge lighting  
MITL - medium intensity taxiway edge lighting  
REIL - runway end identifier lights  
SWL - runway weight bearing capacity for aircraft with single-wheel tandem type landing gear

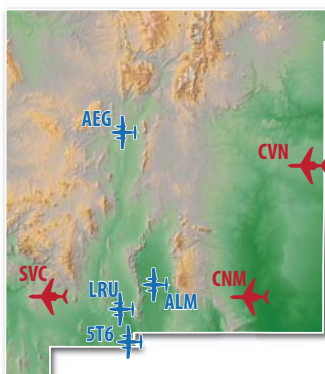
\*\* Per FAA AC 5300-13A Table 3-5 Note 12: For airplanes with maximum certified takeoff weight of 150,000 lbs or less, the standard runway width is 100 feet, the shoulder width is 20ft, and the runway blast pad width is 140 ft.



Airport Criteria	Minimum	Limited Commercial Service				Regional General Aviation				
		SVC	CVN	CNM	Compliant	ALM	AEG	LRU	ST6	Compliant
<b>ARC</b>	C-II or greater	N	Y	Y	2	N	Y	Y	N	2
<b>Runway Length</b>	75% of large aircraft at 60% useful load	Y	Y	N	2	Y	Y	Y	Y	4
<b>Runway Width</b>	100 ft	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Runway Strength</b>	SWL of 30,000 lbs	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Taxiway</b>	Partial parallel	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Instrument</b>	Non-precision	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Visual Aids</b>	Rotating beacon	Y	Y	Y	3	Y	Y	Y	Y	4
	Lighted wind indicator	Y	Y	Y	3	Y	Y	Y	Y	4
	Visual glide slope	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Lighting</b>	MIRL	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Weather Reporting</b>	AWOS or ASOS	Y	Y	Y	3	Y	Y	Y	N	3
<b>Wind Coverage</b>	Primary & Crosswind at 95%	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Services</b>	Phones	Y	Y	Y	3	Y	Y	Y	Y	4
	Restrooms	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Facilities</b>	Full service FBO (limited RGA)	Y	Y	Y	3	Y	Y	Y	Y	4
	24/7 Avgas and Jet A	Y	Y	Y	3	Y	Y	Y	Y	4
	Rental cars available (courtesy car RGA)	Y	Y	Y	3	Y	Y	Y	Y	4
	Full service maintenance	N	Y	N	1	Y	Y	Y	Y	4
	Public transportation	N	N	N	0	-	-	-	-	-
	Terminal with public restrooms, pilots lounge	Y	Y	Y	3	Y	Y	Y	Y	4
	Limited service restaurant and/or vending	Y	Y	N	2	Y	Y	Y	Y	4
	Hangar and storage for 60% of based aircraft and 25% transient	N	Y	Y	2	Y	Y	Y	Y	4
	Apron tie downs for 40% of based and 50% transient	Y	N	N	1	Y	N	N	Y	2
	Auto parking	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Safety &amp; Security</b>	Emergency response plan	Y	Y	Y	3	Y	N	Y	N	2
	Perimeter fencing	Y	Y	Y	3	Y	Y	Y	Y	4
<b>Compliant</b>		21	24	21	67	24	23	24	22	93

**AIRPORT KEY:**

- ALM** - Alamogordo-White Sands Regional Airport  
**AEG** - Double Eagle II Airport  
**LRU** - Las Cruces International Airport  
**ST6** - Doña Ana County Airport at Santa Teresa  
**SVC** - Grant County Airport  
**CVN** - Clovis Municipal Airport  
**CNM** - Cavern City Air Terminal


**ACRONYM KEY:**

- ASOS** - automated surface observation station  
**AWOS** - automated weather observation station  
**FBO** - fixed base operator  
**HIRL** - high intensity runway edge lighting  
**MALS** - medium intensity approach lighting system with runway alignment indicator lights  
**MIRL** - medium intensity runway edge lighting  
**MITL** - medium intensity taxiway edge lighting  
**REIL** - runway end identifier lights  
**SWL** - runway weight bearing capacity for aircraft with single-wheel tandem type landing gear

\*\* Per FAA AC 5300-13A Table 3-5 Note 12: For airplanes with maximum certified takeoff weight of 150,000 lbs or less, the standard runway width is 100 feet, the shoulder width is 20ft, and the runway blast pad width is 140 ft.



## REGIONAL GENERAL AVIATION AIRPORTS

As a group, the four airports within the Regional General Aviation Airport category meet 90 percent of the facility and service objectives outlined on **Exhibit 4D**, with all airports fully meeting 20 of the 25 facility and service objectives. All airports within this group meet at least 88 percent of the objectives, the highest of which are White Sands Regional Airport and Las Cruces International Airport, both meeting more than 90 percent of the objectives. The objectives with the lowest rate of compliance are: 1) availability of apron tie-downs for 40 percent of based aircraft; and, 2) 50 percent of transient aircraft and adoption of an emergency response plan.

## COMMUNITY GENERAL AVIATION AIRPORTS

The 19 airports within the Community General Aviation role meet 75 percent of the facility and service objectives as summarized on **Exhibit 4E**. Individual airport compliance within this group ranges between 32 and 100 percent, with 19 airports meeting more than 50 percent of the objectives. Within this group, two objectives are met by all airports: availability of a lighted wind indicator and presence of a rotating beacon. Four of the objectives have less than 50 percent compliance. These include having an ARC of B-II or higher and having a runway length which accommodates 95 percent of small aircraft; a limited service FBO; hangar storage for 60 percent of based aircraft and 25 percent of transient aircraft; and adoption of an emergency response plan.

## LOW ACTIVITY GENERAL AVIATION AIRPORTS

The Local General Aviation category includes 24 airports, four heliports, and one seaplane base. As the facility and service objectives for this group more generally pertain to airports, the following summary focuses on 24 airports within this group. As indicated on **Exhibit 4F**, the overall compliance for the facilities and service objectives for this category is 55.5 percent. As this group includes airports with the basic facilities needed to be recognized as an airport, full compliance is expected for the ARC and windsock objectives. Additionally, all airports within this group have at least reflective runway markers. Objectives for which there is less than 50 percent compliance include: a runway that can accommodate 75 percent of small aircraft; runway strength of at least 12,500 pounds; rotating beacon; and availability of pilot or passenger amenities such as telephones and restrooms.

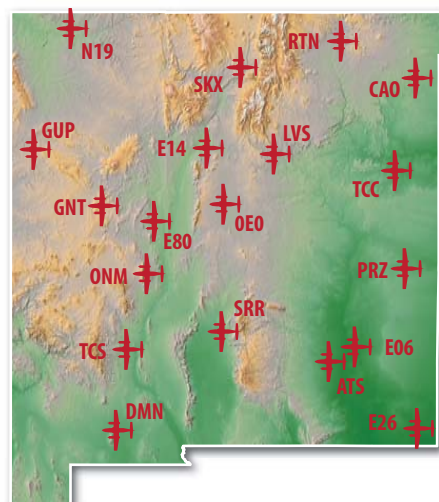
## DETAILED SYSTEM PERFORMANCE EVALUATION

Each of the following sections provides a detailed evaluation of key facility and service objectives of airports within the system. These measures were specifically selected as barometers to determine if airports are achieving the stated goals of this plan.

*These measures were specifically selected as barometers to determine if airports are achieving the stated goals of this plan.*



		Community General Aviation																			
Airport Criteria	Minimum	OEO	TCS	E26	PRZ	TCC	CAO	LVS	GNT	ONM	E14	E06	SKX	SRR	E80	DMN	GUP	ATS	RTN	N19	Compliant
ARC	B-II or greater	Y	N	N	N	N	N	Y	Y	N	N	N	Y	Y	N	Y	Y	Y	Y	N	9
Runway Length	Accommodate 95% of small aircraft	N	Y	Y	Y	Y	Y	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	N	13
Runway Width	75 ft	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	N	14
Runway Strength	SWL 12,500-30,000 lbs.	Y	Y	N	UNK	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	14
Taxiway	Partial parallel	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	17
Instrument	Non-precision	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	18
Visual Aids	Rotating beacon	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	19
	Lighted wind indicator	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	19
	Visual glide slope	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	17
Lighting	MIRL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	18
Weather Reporting	AWOS or ASOS	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	16
Wind Coverage	Primary & Crosswind at 95%	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	UNK	Y	Y	Y	17
Services	Phones	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	16
	Restrooms	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	16
	Limited service FBO	Y	N	N	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	14
	24/7 Avgas and Jet A	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	17
	Courtesy car available	Y	Y	N	N	Y	N	N	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	12
	Limited service maintenance	Y	N	N	Y	N	N	N	Y	N	N	N	N	N	Y	Y	Y	N	N	N	6
Facilities	Terminal with public restrooms, pilots lounge	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	16
	Limited service restaurant and/or vending	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	N	15
	Hangar and storage for 60% of based aircraft and 25% transient	N	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N	N	Y	N	N	N	N	7
	Apron tie downs for 40% of based and 50% transient	N	N	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	N	N	Y	N	Y	Y	11
Safety & Security	Emergency response plan	N	Y	Y	N	N	N	N	N	Y	N	N	Y	Y	Y	N	Y	Y	Y	Y	10
Compliant		18	19	12	18	18	17	19	18	19	8	16	20	21	18	21	21	19	21	8	331



#### AIRPORT KEY:

**OEO** - Moriarty Airport  
**TCS** - Truth or Consequences Municipal Airport  
**E06** - Lea County-Zip Franklin Memorial Airport  
**PRZ** - Portales Municipal Airport  
**TCC** - Tucumcari Municipal Airport  
**CAO** - Clayton Municipal Airpark  
**LVS** - Las Vegas Municipal Airport  
**GNT** - Grants-Milan Municipal Airport  
**ONM** - Socorro Municipal Airport  
**E14** - Ohkay Owingeh Airport

**E26** - Lea County Jal Airport  
**SKX** - Taos Regional Airport  
**SRR** - Sierra Blanca Regional Airport  
**E80** - Alexander Municipal Airport  
**DMN** - Deming Municipal Airport  
**GUP** - Gallup Municipal Airport  
**ATS** - Artesia Municipal Airport  
**RTN** - Raton Municipal Airport  
**N19** - Aztec Municipal Airport

#### ACRONYM KEY:

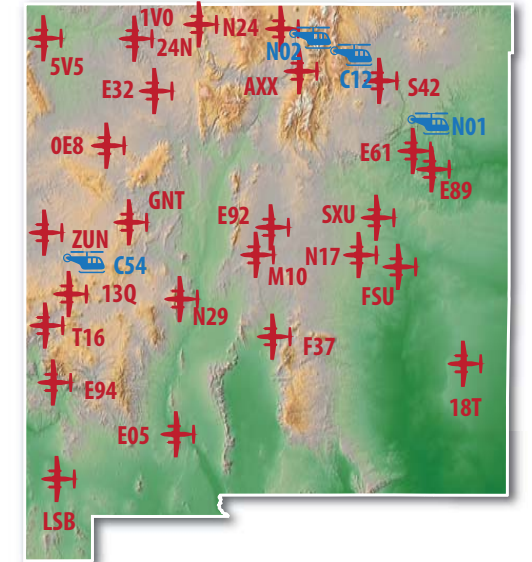
**ASOS** - automated surface observation station  
**AWOS** - automated weather observation station  
**FBO** - fixed base operator  
**MIRL** - medium intensity runway edge lighting  
**SWL** - runway weight bearing capacity for aircraft with single-wheel tandem type landing gear





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		Low Activity General Aviation Airport														
Airport Criteria	Minimum	N02	E89	OE8	E94	1VO	13Q	E32	ZUN	E61	N24	T16	C12	5V5	S42	Compliant
ARC	A-I or greater	N/A	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N/A	Y	Y	11
Runway Length	Accommodate 75% of small aircraft	N/A	Y	Y	N	Y	N	N	N	Y	N	Y	N/A	Y	N	6
Runway Width	60'	N/A	Y	Y	Y	Y	N	Y	N	Y	Y	N	N/A	Y	Y	9
Runway Strength	SWL 12,500 lbs.	N/A	Y	UNK	N	N	N	N	UNK	N	Y	Y	N/A	N	N	3
Taxiway	Turn around or Connector	N/A	Y	Y	N	Y	N	Y	Y	N	Y	Y	N/A	Y	Y	9
Instrument	Visual	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y	Y	12
Visual Aids	Rotating beacon	N/A	Y	Y	N	N	N	N	Y(OTS)	N	N	Y	N/A	N	Y	4
	Windsock	N/A	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N/A	Y	Y	11
Lighting	Reflective	N/A	Y	Y	N	Y	N	N	Y	N	Y	Y	N/A	N	Y	7
Services	Phones	N/A	N	N	N	N	N	N	N	N	N	N	N/A	N	N	0
	Restrooms	N/A	N	N	N	N	N	N	N	N	N	N	N/A	N	N	0
Facilities	Pilots Lounge	N/A	N	N	N	N	N	N	N	N	N	N	N/A	N	N	0
Safety & Security	Emergency response plan	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	9
Compliant		0	10	8	5	7	4	6	6	4	8	9	0	6	8	82



AIRPORT KEY:

- N02 - Red River Heliport  
E89 - Conchas Lake Airport  
OE8 - Crownpoint Airport  
E94 - Glenwood-Catron County Airport  
1VO - Navajo Lake Airport  
13Q - Jewett Mesa Airport  
E32 - Lindrith Airpark  
ZUN - Black Rock Airport  
E61 - Conchas Lake Seaplane Base  
N24 - Questa Municipal Airport Nr 2  
T16 - Reserve Airport  
C12 - Cimarron Heliport  
5V5 - Shiprock Airstrip  
S42 - Springer Municipal Airport  
M10 - Mountainair Municipal Airport  
18T - Tatum Airport  
C54 - Catron county Heliport  
N01 - Mosquero Emargency Services Heliport  
E92 - Estancia Municipal Airport  
N29 - Magdalena Airport  
AXX - Angel Fire Airport  
F37 - Carrizozo Municipal Airport  
FSU - Fort Sumner Municipal Airport  
LSB - Lordsburg Municipal Airport  
24N - Jicarilla Apache Nation Airport  
E05 - Hatch Municipal Airport  
SXU - Santa Rosa Route 66 Airport  
N17 - Vaughn Municipal Airport

ACRONYM KEY:

- SWL - runway weight bearing capacity for aircraft with single-wheel tandem type landing gear

		Low Activity General Aviation Airport														
Airport Criteria	Minimum	M10	18T	C54	N01	E92	N29	AXX	F37	FSU	LSB	24N	E05	SXU	N17	Compliant
ARC	A-I or greater	Y	Y	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	12
Runway Length	Accommodate 75% of small aircraft	N	N	N/A	N/A	N	N	Y	N	Y	N	Y	N	N	N	3
Runway Width	60'	N	Y	N/A	N/A	N	N	Y	Y	Y	Y	Y	Y	Y	Y	9
Runway Strength	SWL 12,500 lbs.	N	N	N/A	N/A	N	N	Y	N	Y	UNK	Y	N	UNK	Y	4
Taxiway	Turn around or Connector	Y	Y	N/A	N/A	Y	Y	Y	Y	N	Y	Y	N	Y	Y	10
Instrument	Visual	Y	Y	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	12
Visual Aids	Rotating beacon	N	Y	N/A	N/A	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	10
	Windsock	Y	Y	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	12
Lighting	Reflective	N	Y	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	10
Services	Phones	N	N	N/A	N/A	N	Y	Y	Y	N	Y	N	N	Y	N	5
	Restrooms	N	N	N/A	N/A	N	Y	Y	Y	N	Y	N	N	Y	N	5
Facilities	Pilots Lounge	N	N	N/A	N/A	N	Y	Y	Y	N	Y	N	N	Y	N	5
Safety & Security	Emergency response plan	Y	Y	N	N	N	N	Y	N	N	N	Y	N	N	N	4
Compliant		5	8	0	0	6	8	13	10	8	10	10	5	10	8	101

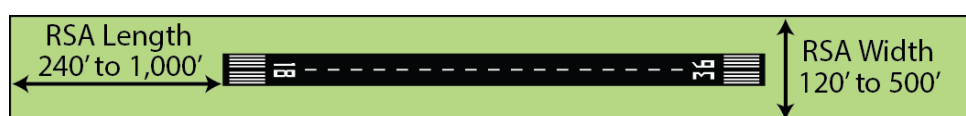


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## RUNWAY SAFETY AREAS

As defined in FAA Advisory Circular (AC) 150/5300-13A, *Airport Design*, the runway safety area (RSA) is “a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway.” The RSA is also to be free of non-frangible structures, cleared and graded and have no potentially hazardous ruts, bumps, depressions, or other surface variations. Obstacles, such as fences, roads, and trees, are not permitted within the RSA. To ensure the RSA meets FAA design standards, the airport sponsor should have sufficient property interest, preferably through fee simple ownership of the RSA.

The dimensions of the RSA prescribed in AC 150/5300-13A are based on the runway’s Aircraft Approach Category (AAC), Airplane Design Group (ADG), and visibility minimums. The RSA is rectangular in shape and the dimensions are specified from the runway and the width from the centerline. As indicated below, the length beyond the runway end ranges between 240 and 1,000 feet and the width ranges between 120 and 500 feet. In addition to these dimensions, the land within the RSA must meet specific transverse and longitudinal grade requirements.



A review of each runway within the system was conducted to determine if the RSA is compliant with FAA design criteria. The initial review was conducted using available master plan and airport layout plan (ALP). Additionally, a second tier review was conducted using aerial photography to evaluate whether changes to the RSA had occurred since the master plan or ALP was adopted. Finally, using, terrain data, a review of the longitudinal grade along the extended runway centerline was conducted to evaluate whether these requirements are met.

*Performance Measure (Goal 1): Full compliance with FAA design criteria, including RSA standards, is recommended for all airport roles.*

Status: Of the 97 runways in the system, 17 are either dirt or turf and, therefore, the RSA standards do not apply. In these cases, the entire graded or turf area constitutes the RSA and should be maintained in a similar manner as the RSA of a paved runway. Of the remaining 80 runways, 57 were determined to be fully compliant. The remaining 23 runways were determined to be non-compliant for the reasons summarized in **Table 4A**. As indicated in the table, the top two compliance issues for RSA deficiencies are airport service road encroachment and terrain.



**TABLE 4A**  
**Runway Safety Area Encroachment Summary**  
**New Mexico Airport System Plan**

Encroachment Type	Runways
Fence	1
Highway	1
Localizer	1
Multiple	4
Property	2
Road	2
Service Road	5
Terrain	5
Tree/Vegetation	2
Total	23

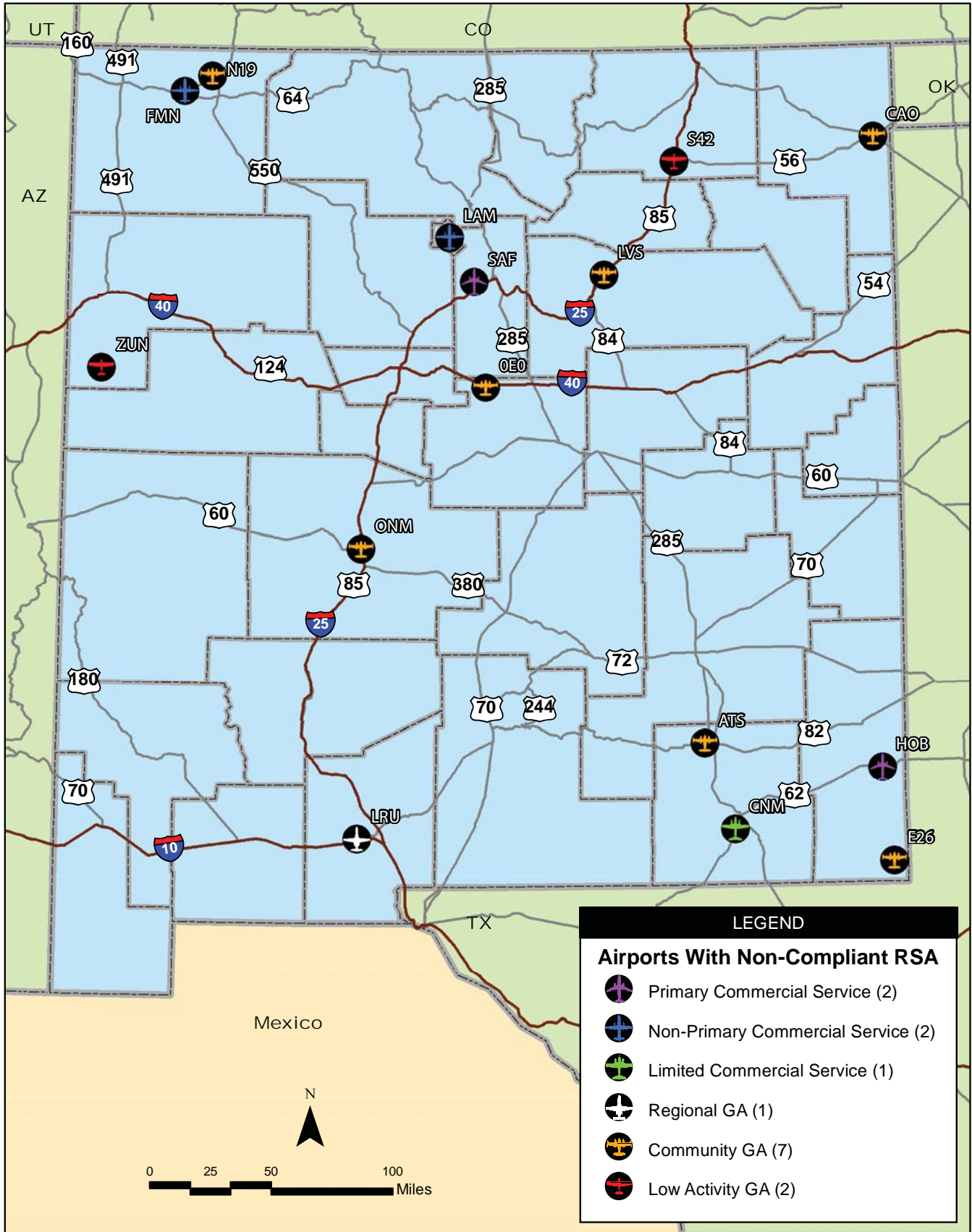
**Table 4B** summarizes the individual non-compliant RSAs and, where possible based on the master plan or ALP, includes the proposed remedy. It is important to note that FAA acknowledges that management of the RSA is a continual process and states that “airport owner and the FAA must continually analyze a non-standard RSA with respect to operational, environmental, and technological changes and revise the determination as appropriate.” Therefore, the remedy listed in the table is for informational purposes and may not reflect the ultimate action taken to resolve the issue. **Exhibit 4G** depicts the location of airports with non-compliant RSAs.

**TABLE 4B**  
**Runway Safety Area Summary**  
**New Mexico Airport System Plan**

Airport	ID	Role	Rwy	Runway End and Encroachment	Remedy
Artesia Municipal Airport	ATS	Community General Aviation	03/21	21 – Highway	TBD
Artesia Municipal Airport	ATS	Community General Aviation	12/30	30 – Road	TBD
Aztec Municipal Airport	N19	Community General Aviation	04/22	04 – Terrain	TBD
Aztec Municipal Airport	N19	Community General Aviation	08/26	08, 26 – Terrain	Declared Distances
Cavern City Air Terminal	CNM	Limited Commercial Service	03/21	21 – Localizer	Relocate localizer
Clayton Municipal Airpark	CAO	Community General Aviation	02/20	02 – Property ownership	Declared Distances
Farmington Four Corners Regional Airport	FMN	Non-Primary Commercial Service	05/23	23 – Terrain	Declared Distances
Farmington Four Corners Regional Airport	FMN	Non-Primary Commercial Service	07/25	07, 25 – Terrain	Declared Distances
Lea County Regional Airport	HOB	Primary Commercial Service	03/21	21 - Drainage; Service road	Relocation Planned







**TABLE 4B (Continued)**  
**Runway Safety Area Summary**  
**New Mexico Airport System Plan**

Airport	ID	Role	Rwy	Runway End and Encroachment	Remedy
Lea County Regional Airport	HOB	Primary Commercial Service	17/35	17- Service Road, highway	Declared Distances
Jal – Lea County Airport	E26	Community General Aviation	09/27	09, 27 – Property ownership	Acq. Planned
Las Cruces International Airport	LRU	Regional General Aviation	04/22	22 – Service Road	TBD
Las Cruces International Airport	LRU	Regional General Aviation	08/26	26 – Service Road	TBD
Las Cruces International Airport	LRU	Regional General Aviation	12/30	30 – Service Road	TBD
Las Vegas Municipal Airport	LVS	Community General Aviation	02/20	20 – Service Road	TBD
Los Alamos County Airport	LAM	Non-Primary Commercial Service	09/27	09 – Blast fence; 27 - Road	TBD, Declared Distances
Moriarty Municipal Airport	0EO	Community General Aviation	08/26	26 – Vegetation	TBD
Santa Fe Municipal Airport	SAF	Primary Commercial Service	02/20	02 – Service Road	TBD
Santa Fe Municipal Airport	SAF	Primary Commercial Service	15/33	33 – Fencing/grading	Relocate fence, grade to standard
Socorro Municipal Airport	ONM	Community General Aviation	06/24	6/24, tree on south side of runway approximately 1,970 feet from approach end of Runway 24	Remove tree
Socorro Municipal Airport	ONM	Community General Aviation	15/33	15,33 – Terrain	TBD
Springer Municipal Airport	S42	Low Activity General Aviation	01/19	19 – Fence	TBD
Zuni – Black Rock Airport	ZUN	Low Activity General Aviation	06/24	06 -Vegetation; 24 – Fence and road	TBD

## PERIMETER FENCING

Perimeter fencing enhances safety and security at airports. Additionally, depending on the design, a perimeter fence can also provide the benefit of excluding wildlife that may pose a threat to safe airfield operations. Although not required for security purposes, chain link fencing is the most commonly used method for securing the perimeter of an airport. For safety and security purposes, fencing enables the airport to con-

***All Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports within the system have perimeter fencing.***



trol and screen persons attempting to access the airport to prevent inadvertent or intentional unauthorized entry.

*Performance Measure (Goal 1): Perimeter fencing is a facility objective for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, and Regional General Aviation Airports.*

Status: All Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports within the system have perimeter fencing. Based on full compliance with this measure, perimeter fences at these facilities should be maintained and replaced as needed.

## **VISUAL GLIDE SLOPE INDICATORS**

As discussed in Chapter One, visual glide slope approach systems use a standardized series of lights to provide visual guidance to pilots landing at an airport. Within the system, there are three types of visual glide slope indicators: visual approach slope indicator (VASI) precision approach path indicator (PAPI) and pulsating visual approach slope indicator (PLASI). Visual glide slope indicators are runway-end specific, and of the 194 runway ends (97 runways), 94 are equipped with a visual glide slope indicator. This includes: 36 VASIs, 38 PAPIs, and 20 PLASIs.

*Performance Measure (Goal 1): Availability of a visual glide slope indicator on at least one runway end is facility objective for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.*

Status: All Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation Airports meet this objective. Two of the 19 Community General Aviation Airports do not meet this objective and a visual glide slope indicator should be considered to serve at least one runway end at the following airports. The runway end should be determined during the master planning process for the airport.

- Ohkay Owingeh Airport
- Moriarty Municipal Airport

## **RUNWAY WIND COVERAGE**

The direction of a take-off or landing can be affected by the speed and direction of the wind at an airport. For the operational safety and efficiency of an airport, it is desirable for the principal runway of an airport's runway system to be oriented as closely as possible to the direction of the prevailing wind. This reduces the impact of crosswind components during landing or takeoff.



FAA AC 150/5300-13, *Airport Design*, recommends additional runway orientations when the primary runway orientation provides less than 95 percent wind coverage (in certain crosswind components) for any aircraft forecast to use the airport on a regular basis. To determine wind coverage, FAA prefers a historical record of wind observations from the previous 10 years, but use of a shorter timeframe may be requested by the airport sponsor and approved by FAA on a case-by-case basis. Wind information is included as part of the ALP as a wind rose, which is a diagram of wind conditions and also a summary table which notes the calculated wind coverage. For the purposes of this study, information was not available for two Community General Aviation airports: Gallup Municipal Airport and Belen-Alexander Municipal Airport.

***Based on the most recent airport layout plans, all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, and Regional General Aviation airports meet the runway wind coverage performance measure.***

*Performance Measure (Goal 1): 95% Wind Coverage for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.*

Status: Based on the most recent airport layout plans, all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, and Regional General Aviation airports meet the runway wind coverage performance measure. Regarding the Community General Aviation Airports, 17 meet this performance objective. Additional analysis is needed for the remaining two: Gallup Municipal Airport and Belen-Alexander Municipal Airport.

## **SECURITY PLAN**

Recognizing the importance of security at airports, the Transportation Security Administration, in coordination with the stakeholders from the aviation industry, developed two guidance documents for security enhancements at airports:

- Recommended Security Guidelines for Airport Planning, Design and Construction (May 2011)
- Security Guidelines for General Aviation Airports (May 2004)

Preparation and adoption of a security plan, tailored to the specific characteristics of an airport, serves multiple purposes, including identification of law enforcement points of contact; addresses airfield access procedures and outlines specific contingency plans. The plan also describes procedures for reporting suspicious behavior.

*Performance Measure (Goal 1): Adoption of a Security Plan based on TSA guidance for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service airports within the system.*



Status: Based on information collected during the inventory phase, all Primary and Non-Primary Commercial Service airports within the system have adopted a security plan. Among the Limited Commercial Service airports, none have adopted a security plan. Therefore, security plans should be prepared for Cavern City Air Terminal, Clovis Municipal Airport, and Grant County-Silver City Airport.

While not included as part of the security plan performance measure, preparation of a security plan for general aviation airports should also be considered. TSA acknowledges that general aviation is not a specific threat to national security. However, the TSA does believe that general aviation may be vulnerable to misuse by terrorists as security is enhanced in the commercial portions of aviation and at other transportation links.

Within the Security Guidelines for General Aviation Airports, TSA defines a series of airport characteristics that potentially affect an airport's security posture. These include:

1. **Airport Location** – An airport's proximity to areas with over 100,000 residents or sensitive sites can affect its security posture. Greater security emphasis should be given to airports within 30 miles of mass population centers (areas with over 100,000 residents) or sensitive areas such as military installations, nuclear and chemical plants, centers of government, national monuments, and/or international ports.
2. **Based Aircraft** – A smaller number of based aircraft increases the likelihood that illegal activities will be identified more quickly. Airports with based aircraft over 12,500 pounds warrant greater security.
3. **Runways** – Airports with longer paved runways are able to serve larger aircraft. Shorter runways are less attractive as they cannot accommodate the larger aircraft which have more potential for damage.
4. **Operations** – The number and type of operations should be considered in the security assessment.

## EMERGENCY RESPONSE PLAN

FAA Advisory Circular 150/5200-31C, *Airport Emergency Plan*, provides guidance for the development and implementation of an airport emergency plan. This document is used to identify the "essential emergency related and deliberate actions" to be undertaken by the airport to ensure the safety of airport users and those within the community where the airport is located. The plans detail specific scenarios, such as aircraft accidents or natural disasters, and outlines detailed response procedures and protocols for each. For airports with Part 139 certification, an Emergency Response Plan, prepared in accordance with AC 150/5200-31C, is required.

*Performance Measure (Goal 1): Adoption of an Emergency Response Plan for all airports within the New Mexico Airport System.*

Status: Among the 60 existing airports within the system, 32 airports have adopted emergency response plans. This includes full compliance among the Primary Commercial Service, Non-Primary





Commercial Service and Limited Commercial Service airports. The following bullets summarize adoption of emergency response plans within the three general aviation categories:

- Regional General Aviation – 2 airports, or 50 percent, have adopted an emergency response plan
- Community General Aviation – 9 airports, or 47 percent, have adopted an emergency response plan
- Low Activity General Aviation – 13 airports, or 45 percent, have adopted an emergency response plan

**Table 4C** summarizes those airports which should prepare and adopt an emergency response plan.

**TABLE 4C**  
**Airports Without an Emergency Response Plan**  
**New Mexico Airport System Plan**

Airport	Role
Doña Ana County Jetport at Santa Teresa	Regional General Aviation
Double Eagle II Airport	Regional General Aviation
Clayton Municipal Airpark	Community General Aviation
Deming Municipal Airport	Community General Aviation
Grants –Milan Municipal Airport	Community General Aviation
Las Vegas Municipal Airport	Community General Aviation
Lea County-Jal Airport	Community General Aviation
Moriarty Municipal Airport	Community General Aviation
Ohkay Owingeh Airport	Community General Aviation
Portales Municipal Airport	Community General Aviation
Raton Crews Field Municipal Airport	Community General Aviation
Tucumcari Municipal Airport	Community General Aviation
Carrizozo Municipal Airport	Low Activity General Aviation
Catron County Heliport	Low Activity General Aviation
Cimarron Heliport	Low Activity General Aviation
Crownpoint Airport	Low Activity General Aviation
Estancia Municipal Airport	Low Activity General Aviation
Ft. Sumner Municipal Airport	Low Activity General Aviation
Hatch Municipal Airport	Low Activity General Aviation
Lordsburg Municipal Airport	Low Activity General Aviation
Magdalena Airport	Low Activity General Aviation
Mosquero Heliport	Low Activity General Aviation
Navajo Lake Airport	Low Activity General Aviation
Red River Heliport	Low Activity General Aviation
Santa Rosa Route 66 Airport	Low Activity General Aviation
Shiprock Airstrip	Low Activity General Aviation
Vaughn Municipal Airport	Low Activity General Aviation



## CURRENT AIRPORT PLANS

Airport planning is a continuous process which enables airports to identify long range facility needs based on projected levels of demand for aircraft activity. Maintaining a current airport plan through periodic preparation of a master plan or other planning study enables airport sponsors to: identify improvements which will enhance airport capacity to the maximum extent; establish a schedule of development priorities and a program for the improvements; prioritize airport capital improvement program; maintain compliance with current FAA design standards; and produce current and accurate airport base maps and Airport Layout Plans.

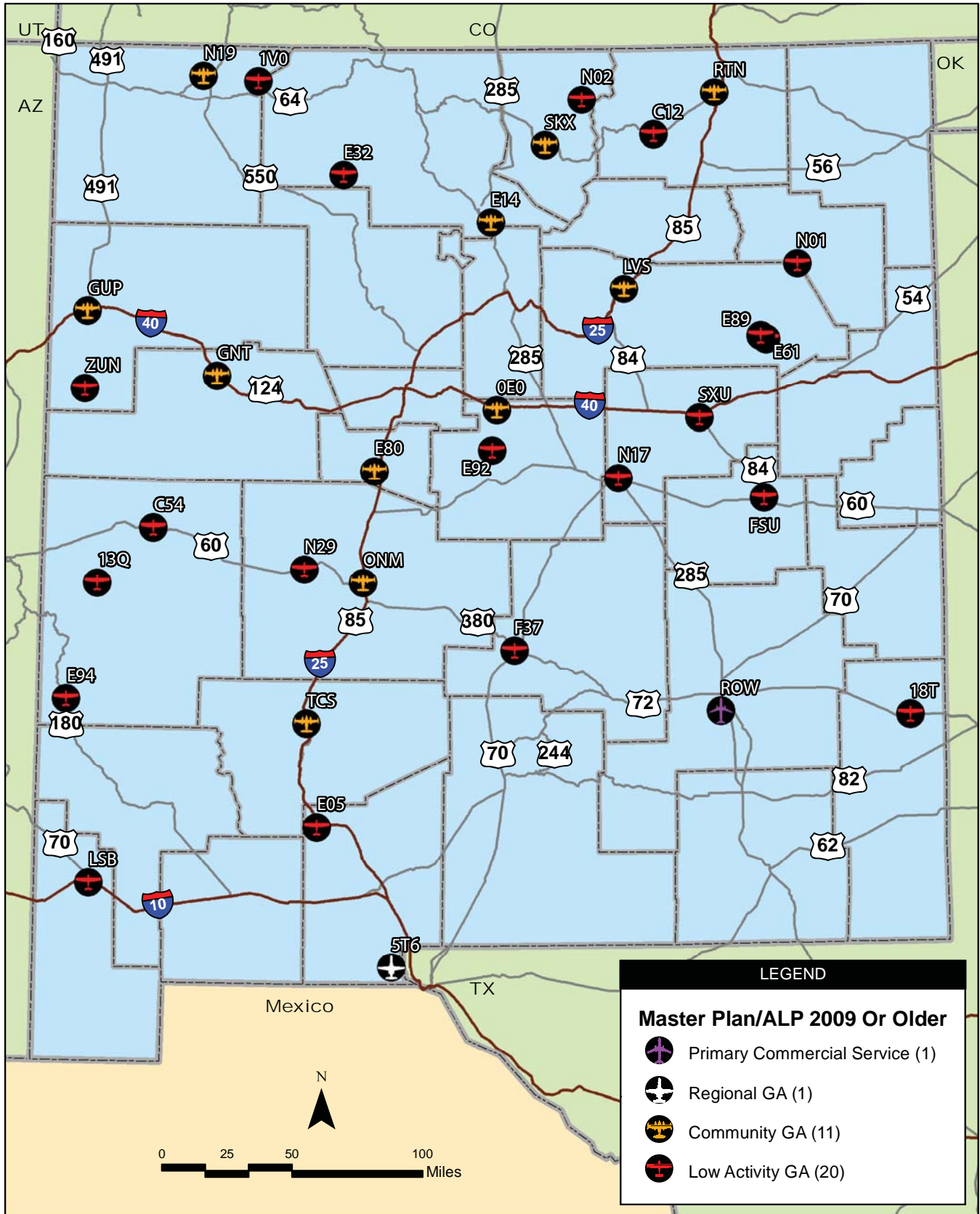
*Performance Measure (Goal 2): All facilities within the system should have a current ALP and planning study (master plan, ALP narrative report, action plan, or local system plan) that is not more than five years old.*

Based on the information presented in Table 1D, the airports listed in **Table 4D** do not currently meet this performance measure for airport planning. In total, 32 of the 60 existing facilities have a planning document or airport layout plan that is more than five years old; the location of these facilities is depicted on **Exhibit 4H**. This includes one Primary Commercial Service airport, 11 Community General Aviation airports, and 20 Low Activity General Aviation airports.

**TABLE 4D**  
**Master Plan and Airport Layout Plan Update Summary**  
**New Mexico Airport System Plan**

Airport	ID	Plan Type	Year	ALP Year	Role
Aztec Municipal Airport	N19	Action Plan	2008	2008	Community General Aviation
Belen-Alexander Municipal Airport	E80	Action Plan	2005	2007	Community General Aviation
Carrizozo Municipal Airport	F37	Action Plan	2009	2009	Low Activity General Aviation
Catron County Heliport	C54	-	-	-	Low Activity General Aviation
Cimarron Heliport	C12	-	-	-	Low Activity General Aviation
Conchas Lake Seaplane Base	E61	-	-	-	Low Activity General Aviation
Conchas Lake State Park	E89	Action Plan	2000	2001	Low Activity General Aviation
Estancia Municipal Airport	E92	Action Plan	2004	2004	Low Activity General Aviation
Ft. Sumner Municipal Airport	FSU	-	-	-	Low Activity General Aviation
Gallup Municipal Airport	GUP	-	-	2007	Community General Aviation
Glenwood-Catron County Airport	E94	Master Plan	2005	2004	Low Activity General Aviation
Grants-Milan Municipal Airport	GNT	Action Plan	2007	2007	Community General Aviation
Hatch Municipal Airport	E05	Action Plan	2004	1998	Low Activity General Aviation
Jewett Mesa Airport	13Q	-	-	-	Low Activity General Aviation
Las Vegas Municipal Airport	LVS	Action Plan	2007	2006	Community General Aviation
Lindrith Airpark	E32	-	-	-	Low Activity General Aviation
Lordsburg Municipal Airport	LSB	Action Plan	2010	2003	Low Activity General Aviation
Magdalena Airport	N29	Master Plan	2010	2009	Low Activity General Aviation
Moriarty Municipal Airport	OE0	Action Plan	2008	2007	Community General Aviation
Mosquero Heliport	N01	-	-	-	Low Activity General Aviation
Navajo State Park Airport	1V0	Action Plan	-	2002	Low Activity General Aviation
Ohkay Owingeh Airport	E14	ALP Update	2011	2007	Community General Aviation
Raton Crews Field Municipal Airport	RTN	Action Plan	2005	2002	Community General Aviation





**TABLE 4D (Continued)**  
**Master Plan and Airport Layout Plan Update Summary**  
**New Mexico Airport System Plan**

Airport	ID	Plan Type	Year	ALP Year	Role
Red River Heliport	N02	-	-	-	Low Activity General Aviation
Roswell International Air Center	ROW	Master Plan	2012	2003	Primary Commercial Service
Santa Rosa Route 66 Airport	SXU	Action Plan	2011	2003	Low Activity General Aviation
Socorro Municipal Airport	ONM	Action Plan	2010	2001	Community General Aviation
Taos Regional Airport	SKX	-	-	2003	Community General Aviation
Tatum Airport	18T	-	-	-	Low Activity General Aviation
Truth Or Consequences Municipal Airport	TCS	Action Plan	2008	2007	Community General Aviation
Vaughn Municipal Airport	N17	-	-	2006	Low Activity General Aviation
Zuni-Black Rock Airport	ZUN	-	-	-	Low Activity General Aviation

## PAVEMENT CONDITION

As previously discussed, the New Mexico Department of Transportation Aviation Division (NMDOTAD) conducted a pavement condition assessment at the 48 airports in the system with paved surfaces in 2014. As part of the assessment, a pavement condition index range (PCI) was stated for all studied airport pavements, including 76 paved runways. As part of the NMDOTAD's ongoing pavement maintenance program every three years, with approximately one third of airport pavements in the state inspected annually. The following classifications are also provided to describe the condition of the pavement.

- Good (PCI 85-100)
- Satisfactory (PCI 70-85)
- Fair (PCI 55-70)
- Poor (PCI 40-55)
- Very Poor (PCI 25-40)
- Serious (PCI 0-25)

*Performance Measure (Goal 2): All paved runways within the system should have a minimum PCI of 70.*

Status: System-wide, 39 of the 76 paved runways for which PCI data is available meet the performance measure. The remaining 37 runways do not meet this performance measure. **Table 4E** lists the PCI for all runways within the system and summarizes the number of runways by classification. As indicated in the table, there are 22 runways classified as fair (PCI 55-70), 8 classified as poor (PCI 40-55), 3 classified as very poor (PCI 25-40), and 4 classified as serious (PCI 0-25).



**TABLE 4E**  
**Pavement Condition Summary**  
**New Mexico Airport System Plan**

Airport	ID	Runway	PCI
Aztec Municipal Airport	N19	4-22	0-25
Doña Ana County Jetport at Santa Teresa	5T6	10-28	0-25
Lea County-Jal Airport	E26	9-27	0-25
Zuni-Black Rock Airport	ZUN	6-24	0-25
Gallup Municipal Airport	GUP	6-24	25-40
Lea County-Hobbs Regional Airport	HOB	12-30	25-40
Shiprock Airstrip	5V5	2-20	25-40
Artesia Municipal Airport	ATS	12-30	40-55
Artesia Municipal Airport	ATS	3-21 (outer)	40-55
Cavern City Air Terminal	CNM	14L-32R (keel)	40-55
Clayton Municipal Airpark	CAO	2-20	40-55
Deming Municipal Airport	DMN	8-26	40-55
Grants-Milan Municipal Airport	GNT	13-31	40-55
Reserve Catron County Airport	T16	6-24	40-55
Tucumcari Municipal Airport	TCC	3-21	40-55
Alamogordo-White Sands Regional Airport	ALM	3-21	55-70
Artesia Municipal Airport	ATS	3-21 (keel)	55-70
Belen-Alexander Municipal Airport	E80	3-21	55-70
Cavern City Air Terminal	CNM	14R-32L	55-70
Cavern City Air Terminal	CNM	8-26	55-70
Cavern City Air Terminal	CNM	14L-32R (edge)	55-70
Clovis Municipal Airport	CVN	12-30	55-70
Conchas Lake State Park	E89	9-27	55-70
Farmington Four Corners Regional Airport	FMN	7-25	55-70
Ft. Sumner Municipal Airport	FSU	8-26	55-70
Ft. Sumner Municipal Airport	FSU	3-21	55-70
Grant County - Silver City Airport	SVC	8-26	55-70
Las Cruces International Airport	LRU	4-22	55-70
Lea County-Jal Airport	E26	1-19	55-70
Portales Municipal Airport	PRZ	1-19	55-70
Portales Municipal Airport	PRZ	8-26	55-70
Santa Fe Municipal Airport	SAF	15-33	55-70
Sierra Blanca Regional Airport	SRR	6-24	55-70
Sierra Blanca Regional Airport	SRR	12-30	55-70
Socorro Municipal Airport	ONM	15-33	55-70
Socorro Municipal Airport	ONM	6-24	55-70
Tatum Airport	18T	12-30	55-70
Carrizozo Municipal Airport	F37	6-24	70-85
Clayton Municipal Airpark	CAO	12-30	70-85
Deming Municipal Airport	DMN	4-22	70-85
Dulce-Jicarilla Apache Nation Airport	24N	17-35	70-85
Farmington Four Corners Regional Airport	FMN	5-23	70-85
Las Cruces International Airport	LRU	8-26	70-85





**TABLE 4E (Continued)**  
**Pavement Condition Summary**  
**New Mexico Airport System Plan**

Airport	ID	Runway	PCI
Lea County Regional Airport	HOB	3-21	70-85
Lea County-Zip Franklin Memorial Airport	E06	3-21	70-85
Lea County-Zip Franklin Memorial Airport	E06	12-30	70-85
Lordsburg Municipal Airport	LSB	12-30	70-85
Navajo Lake Airport	1V0	6-24	70-85
Ohkay Owingeh Airport	E14	16-34	70-85
Questa Municipal No. 2 Airport	N24	17-35	70-85
Roswell International Air Center	ROW	3-21	70-85
Roswell International Air Center	ROW	17-35	70-85
Santa Rosa Route 66 Airport	SXU	1-19	70-85
Springer Municipal Airport	S42	1-19	70-85
Taos Regional Airport	SKX	4-22	70-85
Truth Or Consequences Municipal Airport	TCS	13-31	70-85
Angel Fire – Colfax County Airport	AXX	17-35	85-100
Aztec Municipal Airport	N19	8-26	85-100
Cavern City Air Terminal	CNM	3-21	85-100
Clovis Municipal Airport	CVN	4-22	85-100
Double Eagle II Airport	AEG	4-22	85-100
Double Eagle II Airport	AEG	17-35	85-100
Hatch Municipal Airport	E05	11-29	85-100
Las Cruces International Airport	LRU	12-30	85-100
Las Vegas Municipal Airport	LVS	14-32	85-100
Las Vegas Municipal Airport	LVS	2-20	85-100
Los Alamos County Airport	LAM	9-27	85-100
Moriarty Municipal Airport	0E0	8-26	85-100
Moriarty Municipal Airport	0E0	18-36	85-100
Raton Crews Field Municipal Airport	RTN	2-20	85-100
Raton Crews Field Municipal Airport	RTN	7-25	85-100
Santa Fe Municipal Airport	SAF	2-20	85-100
Santa Fe Municipal Airport	SAF	10-28	85-100
Santa Rosa Route 66 Airport	SXU	8-26	85-100
Tucumcari Municipal Airport	TCC	8-26	85-100
Vaughn Municipal Airport	N17	9-27	85-100
<b>SUMMARY</b>			
<b>PCI Condition</b>	<b>Runway Count</b>		
Good (PCI 85-100)	20		
Satisfactory (PCI 70-85)	19		
Fair (PCI 55-70)	22		
Poor (PCI 40-55)	8		
Very Poor (PCI 25-40)	3		
Serious (PCI 0-25)	4		

Source: Airport Pavement Management System (APMS), New Mexico Department of Transportation Aviation Division (NMDOTAD), 2014.



It is important to note that pavement deteriorates over time and these conditions may change without regular maintenance. Based on FAA guidance, when using a pavement condition index (PCI) based pavement maintenance program, a pavement survey is performed, as set forth in ASTM D5340, Standard Test Method for Airport Pavement Condition Index Surveys, and the frequency of pavement inspections by PCI Survey is three years. The location of airports with one or more runways below 70 PCI is shown on **Exhibit 4J**. For the 37 runways below the 70 PCI threshold, major rehabilitation/reconstruction is recommended. Above this threshold, preventive maintenance techniques, such as crack seal or surface seal is recommended.

The distribution of PCI among system role categories is summarized in **Table 4F**. As indicated in the table, although a majority of paved runways exceed PCI 70, the number of runways in need of rehabilitation exceeds those in satisfactory condition for the following roles: Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation.

**TABLE 4F**  
**PCI Summary by Airport Role**  
**New Mexico Airport System Plan**

	PCI 0-70	PCI 70-100
Primary Commercial Service	2	5
Non-Primary Commercial Service	1	2
Limited Commercial Service	5	2
Regional General Aviation	3	4
Community General Aviation	18	15
Low Activity General Aviation	8	11
Total	37	39

Source: Airport Pavement Management System (APMS), New Mexico Department of Transportation Aviation Division (NMDOTAD), 2014.

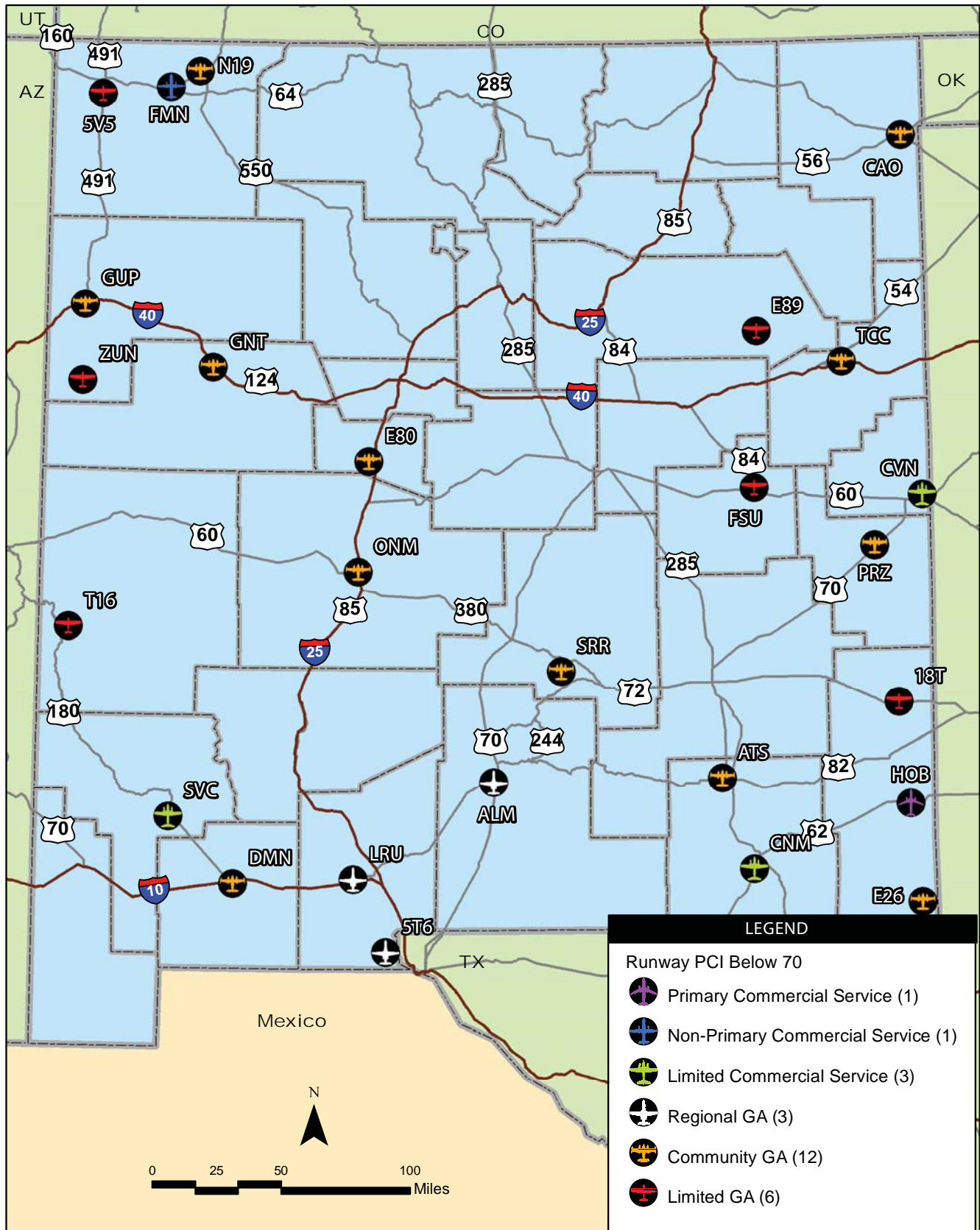
## LAND USE COMPATIBILITY

Publicly owned airports which receive federal funds for construction, planning, and development projects are bound by, and must comply with, federal obligations which are attached to the grant documentation. One obligation, referred to as Grant Assurance 21, relates to an airport sponsor's obligation for hazard removal and mitigation to address potential obstructions to the airspace around the airport. Grant Assurance 21 states that the airport sponsor will:

"It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft."

The most common approach to complying with this grant assurance is through adoption of airport compatibility zoning. This may be in the form of an airport-related noise ordinance, height and hazard zoning, or a combination of both, depending on the nature of the operations at an airport.





## AIRPORT NOISE

Airport noise-related zoning ordinances are typically based on an airport's noise exposure contours, which are developed using FAA's aircraft noise modeling software, the Airport Environmental Design Tool (AEDT). Noise zoning ordinances specify compatible land uses within the noise contour ranges outlined on an associated map. It is important to note that noise zoning ordinances based on existing or forecast contours may eventually become outdated due to changes at the airport, such as the type or number of aircraft operating at an airport or changes to the airfield, such as a runway extension.

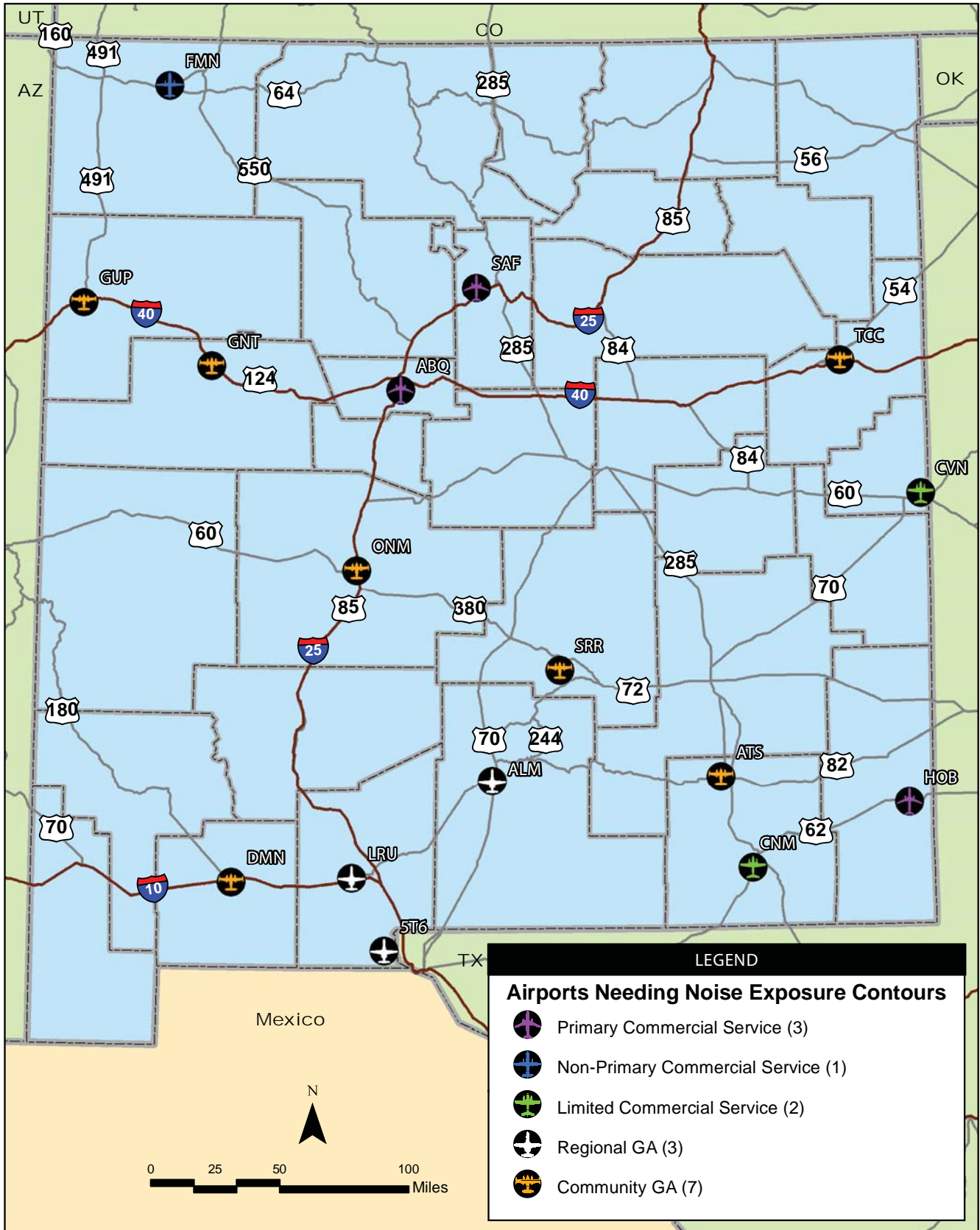
Noise contours are frequently calculated during the airport master planning process, environmental assessment, or during preparation of a 14 CFR Part 150 (Part 150) Noise Compatibility Study. A Part 150 study is a voluntary process which results in the preparation of two official documents for participating airports: Noise Exposure Maps (NEM) and Noise Compatibility Program (NCP). The NEM document is the baseline analysis for the noise conditions at the airport and includes existing and forecast noise exposure contours. The NCP is the second phase of a complete Part 150 study that provides an analysis of alternatives to reduce or eliminate airport noise impacts identified in the NEM and concludes with a plan to effectively mitigate noise impacts. To date, three airports within the NMAASP have conducted all or part of a Part 150 study: Albuquerque International Sunport (NEM 1991, NCP 1992); Four Corners Regional Airport (NEM and NCP 2002); and Santa Fe Municipal Airport (NEM 2008). At this time, there are no Part 150 noise compatibility planning grants programmed within the NMAASP; however, this does not preclude communities from adopting airport noise-related zoning ordinances.

AEDT is designed to predict the aircraft noise condition at a given geographic location and accounts for variables, such as airfield elevation, temperature, flight paths, and operational fleet mix. Noise exposure contours produced by the AEDT generally increase in size for airports with higher operations counts, but are also influenced by the type of aircraft operating at an airport, particularly turbo jet and turboprop aircraft which tend to be louder than piston aircraft. Noise compatibility issues typically arise when the noise exposure contour extends off airport property and encompasses noise-sensitive land uses, such as residences, places of worship, or schools.

To determine the geographic extent of noise exposure, it is recommended that noise exposure contours be prepared during master planning efforts at airports experiencing a combination of 100 or more business jet or turboprop operations annually. **Table 4G** presents the airports which exceed this threshold based on the airport role analysis presented in Chapter Three. As indicated in the table, and shown on **Exhibit 4K**, 21 airports, seven of which are classified with scheduled commercial service, had more than 100 combined jet and turboprop operations. Noise exposure contours developed as part of master planning efforts for these airports should be used to guide the development of zoning ordinances based on noise-exposure contours, particularly if the 65 DNL noise contour extends off airport property. There is not a specific performance measure for adoption of noise-related zoning ordinances. These should be adopted on a case-by-case basis depending on the extent of the noise exposure contours and consultation with local communities adjacent to the airport. It is important to note that many airports are bordered by multiple jurisdictions with land use planning authority and it is, therefore, important to coordinate with each of these entities.









**TABLE 4G**  
**Airports Where Noise Exposure Contours May be Recommended for Compatibility Planning**  
**New Mexico Airport System Plan**

Airport	ID	Role	2014 Business Aviation Jet Operations	2014 Business Aviation Turboprop Operations	Total
Albuquerque International Sunport	ABQ	Primary Commercial Service	6,592	6,608	13,200
Santa Fe Municipal Airport	SAF	Primary Commercial Service	6,260	2,236	8,496
Farmington Four Corners Regional Airport	FMN	Non-Primary Commercial Service	1,028	3,142	4,170
Gallup Municipal Airport	GUP	Community General Aviation	202	3,658	3,860
Carlsbad - Cavern City Air Terminal	CNM	Limited Commercial Service	1,400	1,664	3,064
Sierra Blanca Regional Airport	SRR	Community General Aviation	1,292	1,086	2,378
Doña Ana County Jetport at Santa Teresa	ST6	Regional General Aviation	1,356	530	1,886
Las Cruces International Airport	LRU	Regional General Aviation	528	1,348	1,876
Artesia Municipal Airport	ATS	Community General Aviation	788	1,040	1,828
Clovis Municipal Airport	CVN	Limited Commercial Service	510	1,280	1,790
Roswell International Air Center	ROW	Primary Commercial Service	1,092	2,448	1,766
Lea County-Hobbs Regional Airport	HOB	Primary Commercial Service	856	706	1,562
Double Eagle II Airport	AEG	Regional General Aviation	420	724	1,144
Taos Regional Airport	SKX	Community General Aviation	624	478	1,102
Raton Crews Field Municipal Airport	RTN	Community General Aviation	370	282	652
Deming Municipal Airport	DMN	Community General Aviation	194	394	588
Las Vegas Municipal Airport	LVS	Community General Aviation	304	190	494
Grants-Milan Municipal Airport	GNT	Community General Aviation	76	332	408
Alamogordo-White Sands Airport	ALM	Regional General Aviation	160	236	396
Tucumcari Municipal Airport	TCC	Community General Aviation	88	176	264
Socorro Municipal Airport	ONM	Community General Aviation	4	102	106

## HEIGHT/HAZARD ZONING

Height restriction zoning is implemented by communities near airports as a preventative measure to limit and mitigate manmade or natural obstructions. 14 CFR Part 77 defines imaginary surfaces surrounding an airport that should not be penetrated by structures, such as buildings or natural objects, such as trees. It should be recognized that numerous airports across the state have some degree of obstructions to their airspace and natural obstructions require continual mitigation as they continue to grow. According to FAA guidelines, airspace in the vicinity of an airport should be clear and free of obstructions which can be hazardous to aircraft. While some obstructions, such as terrain, cannot be



physically removed, they can be lighted, and as future airport improvements are considered, surrounding obstructions should be addressed.

As a condition of Grant Assurance 21, all airports with potential obstructions to navigable airspace should conduct a Part 77 Airspace Obstruction Analysis. This is typically performed during preparation or updated on an airport layout plan. 14 CFR Part 77.13 specifies that the following modifications or construction would penetrate an approach surface:

- Any construction or alteration exceeding 200 feet above ground level
- Any construction or alteration:
  - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway with at least one runway more than 3,200 feet;
  - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet;
  - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- Any highway, railroad, or other traverse way whose prescribed adjusted height would exceed that above noted standards;
- When requested by the FAA; or
- Any construction or alteration located on a public use airport or heliport regardless of height or location

Adoption of a height and hazard zoning ordinance will enable airport sponsoring communities to comply with this assurance by delineating the area within which an obstruction analysis of future development is necessary. Based on a review of local zoning ordinances of the sponsoring communities within the NMAASP, it was determined that several height and hazard zones have been adopted; however, not all communities have adopted an ordinance. **Table 4H**, summarizes those airports for which height and hazard zoning has not been adopted. As indicated in the table, 20 airports do not have height and hazard zoning adopted in the surrounding communities.

As each airport has unique obstruction issues, there is no statewide goal established for height and hazard zoning. However, for those communities seeking to adopt this type of zoning ordinance, FAA provides a sample zoning ordinance in FAA AC 150/5190-4A, *A Model Zoning Ordinance to Limit Height of Objects Around Airports*.



**TABLE 4H**  
**Height and Hazard Zoning Needed**  
**New Mexico Airport System Plan**

Airport	Role
Carrizozo Municipal Airport	Low Activity General Aviation
Conchas Lake Airport	Low Activity General Aviation
Dulce-Jicarilla Apache Nation Airport	Low Activity General Aviation
Ft. Sumner Municipal Airport	Low Activity General Aviation
Glenwood-Catron County Airport	Low Activity General Aviation
Hatch Municipal Airport	Low Activity General Aviation
Lea County-Jal Airport	Community General Aviation
Lea County-Zip Franklin Memorial Airport	Community General Aviation
Los Alamos Airport	Non-Primary Commercial Service
Navajo Lake Airport	Low Activity General Aviation
Ohkay Owingeh Airport	Community General Aviation
Questa Municipal No. 2 Airport	Low Activity General Aviation
Raton Crews Field Airport	Community General Aviation
Reserve Catron County Airport	Low Activity General Aviation
Santa Rosa Route 66 Airport	Low Activity General Aviation
Springer Municipal Airport	Low Activity General Aviation
Taos Regional Airport	Community General Aviation
Truth or Consequences Municipal Airport	Community General Aviation
Tucumcari Municipal Airport	Community General Aviation
Vaughn Municipal Airport	Low Activity General Aviation
Zuni-Black Rock Airport	Low Activity General Aviation

## RUNWAY LENGTH

FAA Advisory Circular (AC) 150/5235-4B, *Runway Length Requirements for Airport Design*, provides guidance to calculate recommended runway lengths for civil airports. Runway length requirements are based upon five primary elements: airport elevation, the mean maximum daily temperature of the hottest month, runway gradient, critical aircraft type expected to use the runway, and aircraft loading (weight). Aircraft performance declines as elevation, temperature, and runway gradient factors increase. Therefore, these factors increase runway length requirements.

*Performance Measure (Goal 3): Within each of the system categories should have at least one runway long enough to accommodate aircraft at the specified useful load:*

- *Primary Commercial Service – 75 percent of large airplanes at 90 percent useful load*
- *Non-Primary Commercial Service – 75 percent of large airplanes at 90 percent useful load*
- *Limited Commercial Service – 75 percent of large airplanes at 60 percent useful load*
- *Regional General Aviation – 75 percent of large airplanes at 60 percent useful load*
- *Community General Aviation – 95 percent of small airplanes*
- *Low Activity General Aviation – 75 percent of small airplanes*



Status: Runway length requirements were calculated as part of the 2009 New Mexico Airport System Plan and, at that time, 24 of the airports within the system did not meet the runway length objective. Since that time, two runway extension projects were undertaken (Raton-Crews Field Airport and Los Alamos Airport), which has increased the number of airports meeting this objective. However, three airports not included in the 2009 New Mexico Airport System Plan (Jewett Mesa Airport, Mountainair Municipal Airport, and Tatum Airport) were evaluated as part of this study and it was determined that none of those airports meet this objective.

***Within the Regional General Aviation category, all of the airports meet the runway length objective.***

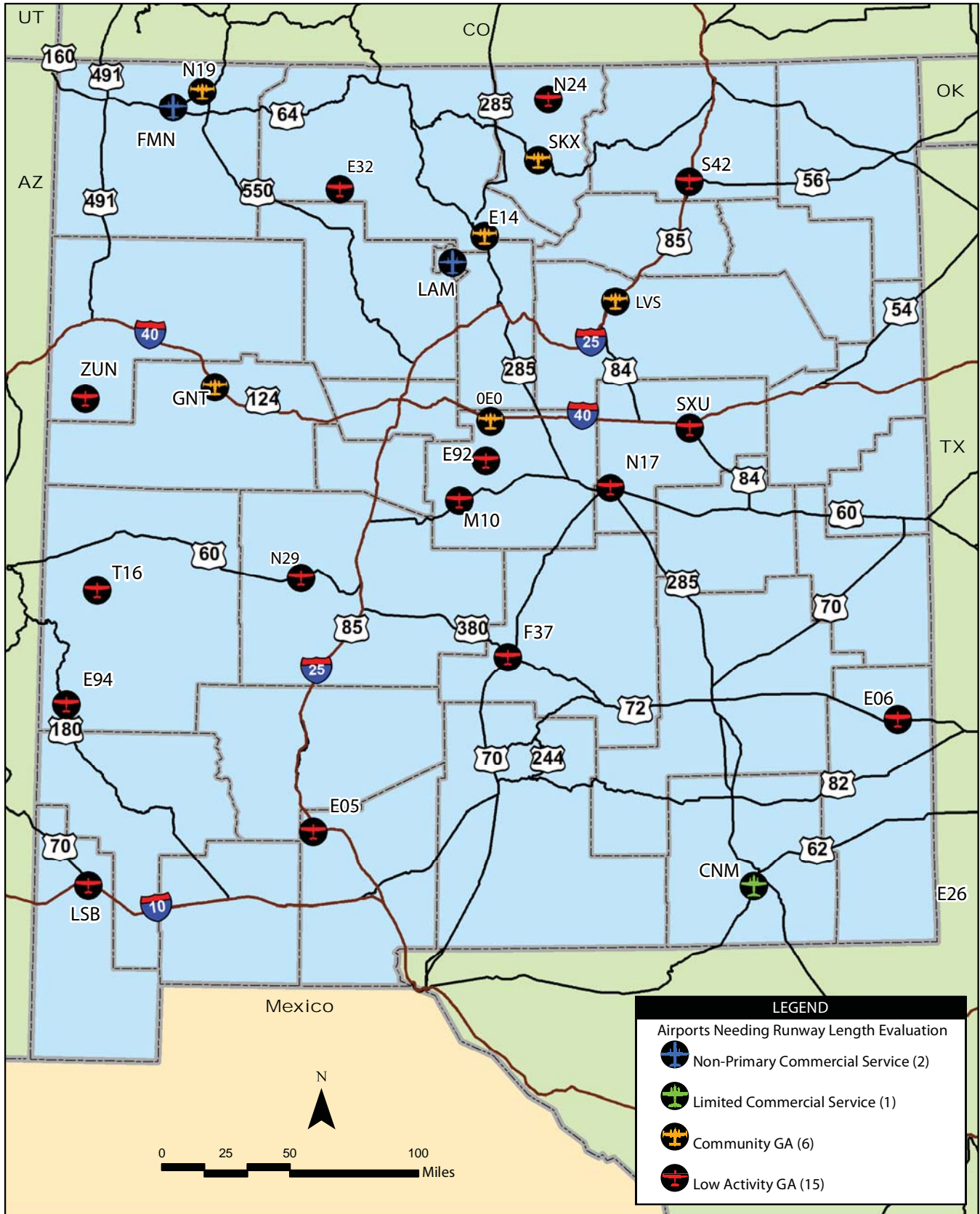
**Table 4J** summarizes the airports determined to need additional runway length based on FAA methodology outlined in FAA AC 150/5235-4B. Based on this information, all airports within the Primary Commercial Service category meet this objective. Four Cor-

ners Regional Airport in the Non-Primary Commercial Service category does not meet the objective. Two of the three airports, or 67 percent, meet the objective for the Limited Commercial Service category. Within the Regional General Aviation category, all of the airports meet the runway length objective. Thirteen of the 19 Community General Aviation Airports meet the objective, which equates to 68 percent of the airports in this group. Within the Low Activity General Aviation category, 9 of the 24 airports meet this objective. The location of all airports that could potentially need additional runway length is shown on **Exhibit 4L**.

**TABLE 4J**  
**Additional Runway Length Evaluation Recommended**  
**New Mexico Airport System Plan**

Airport	Role
Aztec Municipal Airport	Community General Aviation
Carrizozo Municipal Airport	Low Activity General Aviation
Cavern City Air Terminal	Limited Commercial Service
Estancia Municipal Airport	Low Activity General Aviation
Four Corners Regional Airport	Non-Primary Commercial Service
Glenwood-Catron County Airport	Low Activity General Aviation
Grants-Milan Municipal Airport	Community General Aviation
Hatch Municipal Airport	Low Activity General Aviation
Jewett Mesa Airport	Low Activity General Aviation
Las Vegas Municipal Airport	Community General Aviation
Lindrith Airpark	Low Activity General Aviation
Lordsburg Municipal Airport	Low Activity General Aviation
Los Alamos County Airport	Non-Primary Commercial Service
Magdalena Airport	Low Activity General Aviation
Moriarty Municipal Airport	Community General Aviation
Mountainair Municipal Airport	Low Activity General Aviation
Ohkay Owingeh Airport	Community General Aviation
Questa Municipal No. 2 Airport	Low Activity General Aviation
Santa Rosa Route 66 Airport	Low Activity General Aviation
Springer Municipal Airport	Low Activity General Aviation
Taos Regional Airport	Community General Aviation
Tatum Airport	Low Activity General Aviation
Vaughn Municipal Airport	Low Activity General Aviation
Zuni-Black Rock Airport	Low Activity General Aviation







It is important to note that further runway length analysis and coordination with FAA would be needed prior to initiating a runway extension project at the airports identified with this evaluation. Runway length design at all commercial service and regional general aviation airports should be based upon the requirements of the design aircraft. Additionally, site constraints, such as terrain, property ownership, or existing communities, may limit the ability of an airport to pursue a runway extension. A full analysis to evaluate required length and feasibility for a runway extension is undertaken as part of an airport master plan.

## RUNWAY WIDTH

The FAA design standard for runway width is dependent on the airplane design group and the approach visibility minimums with the rationale that aircraft with greater wingspans require wider runways.

*Performance Measure (Goal 3): It is recommended that all airports within the system have at least one runway that meets the specified width summarized below:*

- Primary Commercial Service (100 ft.)
- Non-Primary Commercial Service (100 ft.)
- Limited Commercial Service (75 ft.)
- Regional General Aviation (75 ft.)
- Community General Aviation (75 ft.)
- Low Activity General Aviation (60 ft.)

Status: All airports within the Primary Commercial Service, Non-Primary Commercial Service, and Limited Commercial Service categories fully comply with this performance measure. Within the Regional General Aviation category, nine of the 12 airports (75 percent) meet the objective. For the Community General Aviation airports, 14 of the 19 airports, or 74 percent of the airports, comply with this objective. Eighteen of the 24 Low Activity General Aviation Airports meet the runway width objective, which is 62 percent of the airports within this category. **Table 4K** summarizes the airports, by role, which does not meet the runway width objective.

**TABLE 4K**  
**Additional Runway Width Recommended**  
**New Mexico Airport System Plan**

Airport	Role
Los Alamos County Airport	Non-Primary Commercial Service
Belen-Alexander Municipal Airport	Community General Aviation
Clayton Municipal Airpark	Community General Aviation
Aztec Municipal Airport	Community General Aviation
Estancia Municipal Airport	Low Activity General Aviation
Hatch Municipal Airport	Community General Aviation



**TABLE 4K (Continued)**  
**Additional Runway Width Recommended**  
**New Mexico Airport System Plan**

Airport	Role
Jewett Mesa Airport	Low Activity General Aviation
Lea County-Jal Airport	Community General Aviation
Magdalena Airport	Low Activity General Aviation
Mountainair Municipal Airport	Low Activity General Aviation
Portales Municipal Airport	Community General Aviation
Reserve Catron County Airport	Low Activity General Aviation
Zuni-Black Rock Airport	Low Activity General Aviation

## INSTRUMENT APPROACH PROCEDURES

As discussed in Chapter One within the NMAASP, there are 120 Instrument Approach Procedures. Instrument Approach Procedures define a series of predetermined maneuvers established by the FAA, using electronic navigational aids that assist pilots in locating and landing at an airport, especially during instrument flight conditions. The procedures are categorized as either precision or non-precision approaches. Precision instrument approaches provide vertical descent information and course guidance information to the pilot. Non-precision approaches only provide course guidance to the pilot, with one exception. The relatively new GPS localizer performance with vertical guidance (LPV) approaches are currently categorized by the FAA as a non-precision approach even though it provides vertical guidance. It is important to note that development of an Instrument Approach Procedure must be developed in close coordination with the FAA's Flight Procedures Office which ensures that the procedure complies with adopted standards regarding obstacle clearance and weather minimums.

*Performance Measure (Goal 3): Availability of an Instrument Approach Procedure is a facility objective for Primary Commercial Service (Precision or Near Precision [LPV]), Non-Primary Commercial Service (Precision or Near Precision [LPV]), Limited Commercial Service (Non-Precision), Regional General Aviation Airports (Non-Precision), Community General Aviation Airports (Non-Precision).*

Thirty airports within the system have at least one published instrument approach procedure, and many airports have more than one published instrument approach procedure. All airports within the Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, and Regional General Aviation categories meet this objective. Within the Community General Aviation category, 15 of the 19 airports meet this objective. **Table 4L** summarizes the airports which do not currently meet this objective.

***Thirty airports within the system have at least one published instrument approach procedure, and many airports have more than one published instrument approach procedure.***



**TABLE 4L**  
**Instrument Approach Procedures Recommended**  
**New Mexico Airport System Plan**

Airport	Role
Aztec Municipal Airport	Community General Aviation
Ohkay Owingeh Airport	Community General Aviation
Lea County-Jal Airport	Community General Aviation
Moriarty Municipal Airport	Community General Aviation

## AUTOMATED WEATHER REPORTING

Two general types of systems can be located at airports to provide a continuous source of weather information: automated weather observing system (AWOS) and automated surface observing system (ASOS). The AWOS are generally installed at airports by FAA and maintained by the airport sponsor, while ASOS are cooperatively operated by the FAA, United States Weather Service, and Department of Defense and are not exclusively located at airports. As discussed in Chapter One, 30 airports in the system have automated weather reporting, including 18 AWOS and 12 ASOS.

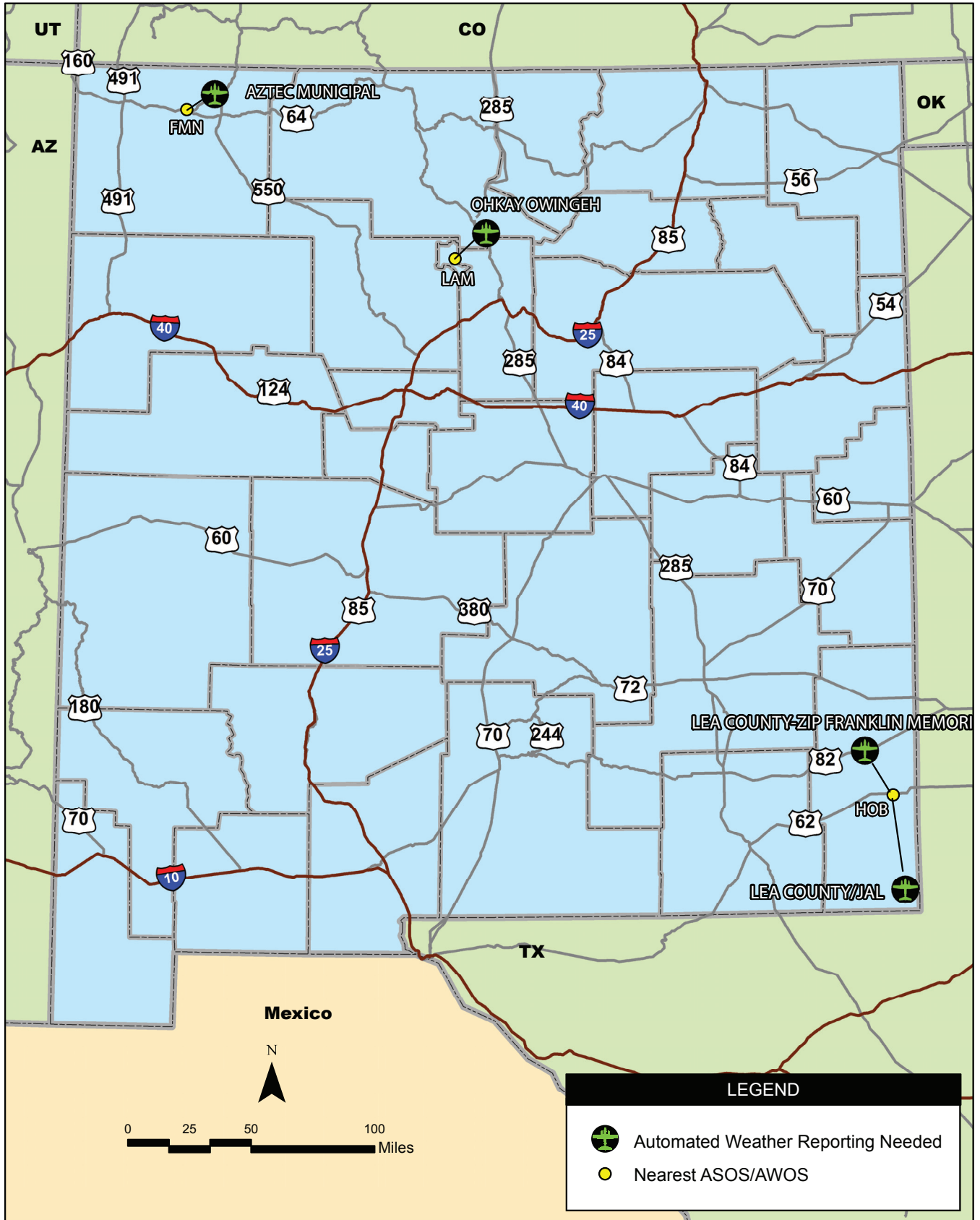
*Performance Measure (Goal 3): Availability of a ASOS/AWOS for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.*

**All Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service Airports have automated weather reporting systems.**

Status: All Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service Airports have automated weather reporting systems. Additionally, all four of the Regional General Aviation airports are equipped with automated weather

reporting. Within the Community General Aviation category, 4 of the 19 airports do not have weather reporting. **Table 4M** summarizes the airports without an automated weather reporting system. The table also includes the distance from the airports recommended for automated weather reporting and the distance to the nearest airport with this capability. It should be noted, however, that even though an airport may be near another airport with weather reporting capability, weather conditions can vary greatly between locations. The locations of airports which do not currently have automated weather reporting are depicted on **Exhibit 4M**. For reference, the closest airport with automated weather reporting is also shown on the exhibit.





**TABLE 4M**  
**Automated Weather Reporting System Needed**  
**New Mexico Airport System Plan**

Airport	Role	Distance (NM) to Closest Airport with ASOS/AWOS (Airport)
Aztec Municipal Airport	Community General Aviation	11 (FMN)
Ohkay Owingeh Airport	Community General Aviation	14 (LAM)
Lea County-Jal Airport	Community General Aviation	34 (HOB)
Lea County-Zip Franklin Memorial Airport	Community General Aviation	19 (HOB)

## **SUPPORT ECONOMIC GROWTH OF THE COMMUNITY**

Economic benefits (revenues, employment, and income) are created when economic activity takes place both on and off airports. A full economic benefit analysis for the airports within Appendix A (forthcoming) of this report. Specific revenue-generating activities at airports include fuel sales, rental cars, fixed base operators, and industrial parks managed by or adjacent to airports.

### **24/7 FUEL AVAILABILITY**

Availability of aviation fuel increases the likelihood that users will operate at an airport. As discussed in Chapter One, 34 of the 60 existing facilities in the New Mexico Airport System, have fuel available; however, not all of these airports have fuel available 24 hours a day, seven days a week. In recent years, self-service fueling options have become increasingly popular due to lower costs associated with staffing a fueling facility. Additionally, self-service options can be considered more convenient as they can extend the availability of an airport to certain users.

*Performance Measure (Goal 4): The minimum objective for Primary Commercial Service, Non Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports is the availability of both aviation gasoline and jet fuel on a 24-hours-a-day, seven-days-a-week basis, either through self-service or on-call.*

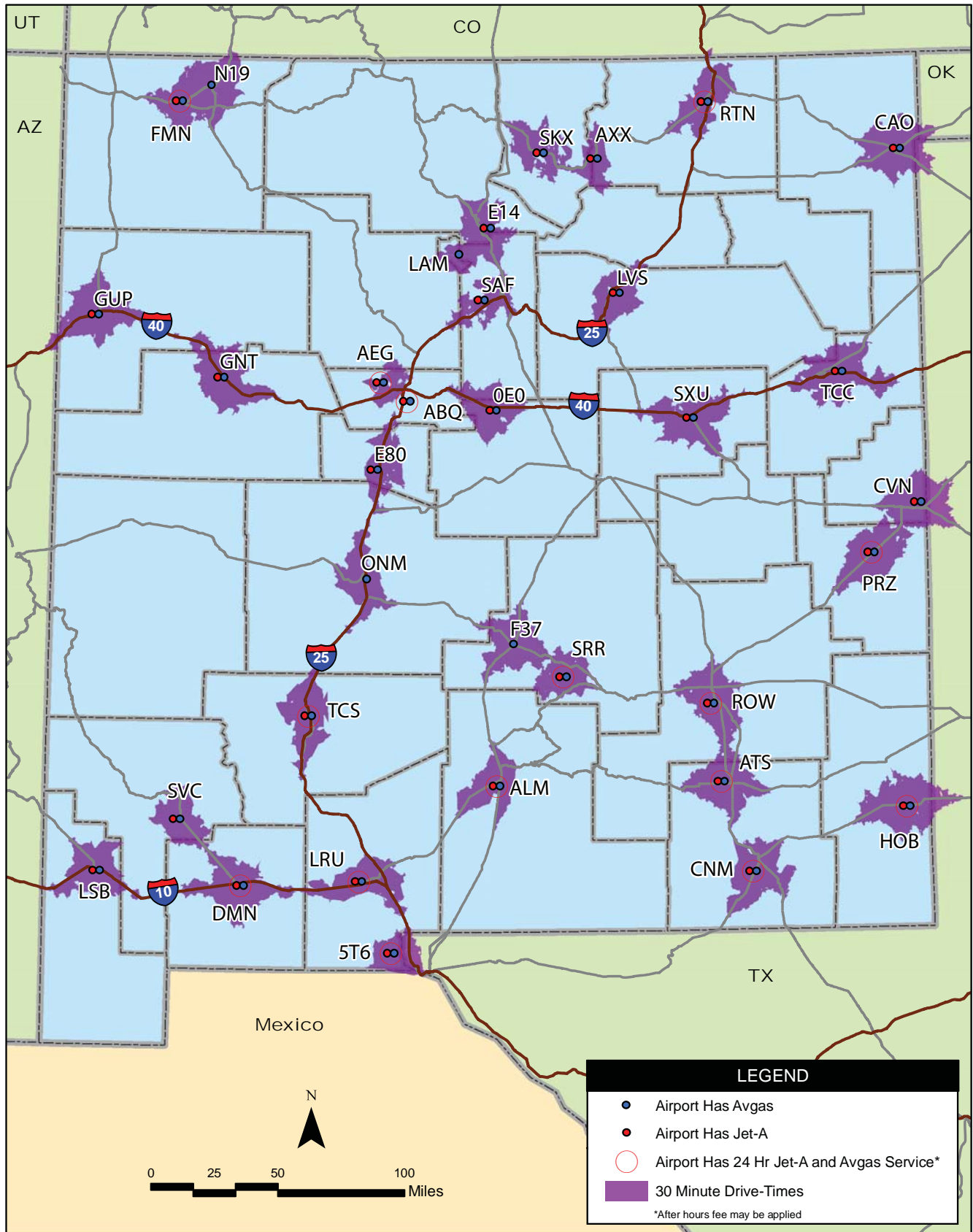
Status: Based on information gathered during the inventory, all airports in the Primary Commercial Service, Limited Commercial Service, and Regional General Aviation categories meet this objective.

### **JET FUEL AVAILABILITY**

Availability of jet fuel enables airports to attract a wider range of aircraft and airport users, including corporate, charter, and emergency responders using turbojet or turboprop aircraft. System-wide, 30 airports have jet fuel available, the location of which is shown on **Exhibit 4N**, including all of the commercial service airports.







*Performance Measure (Goal 4): Regional General Aviation and Community General Aviation Airport should have jet fuel available.*

Status: **Table 4N** summarizes those airports where availability of jet fuel should be added. Currently, all Regional General Aviation airports within the system have jet fuel available. Within the Community General Aviation category, 4 of the 19 airports do not have jet fuel available. As previously discussed, all airports within the Primary Commercial Service and Limited Commercial Service categories have jet fuel available.

**TABLE 4N**  
**Airports Needing Jet Fuel Service**  
**New Mexico Airport System Plan**

Airport	Role
Lea County-Zip Franklin Memorial Airport	Community General Aviation
Socorro Municipal Airport	Community General Aviation
Aztec Municipal Airport	Community General Aviation
Lea County-Jal Airport	Community General Aviation

## GROUND TRANSPORTATION COVERAGE

Availability of ground transportation is essential for persons traveling by air. At commercial service airports, the typical options for ground transportation include rental cars or public transportation. Additionally, some airports make available a courtesy car, which is generally provided free of charge to airport users to transport themselves within the community.

*Performance Measure (Goal 4): Primary Commercial Service, Non-Primary Commercial Service and Limited Commercial Service airports should have rental car services available. At Regional General Aviation and Community General Aviation airports, a courtesy car should be available.*

Status: Presently, all airports with commercial service have rental car service availability; therefore, these airports fully comply with this performance measure. Within the Regional General Aviation category, all airports have a courtesy car available to airport users. For Community General Aviation airports, 11 of the 19 airports, or 58 percent, have a courtesy car available. **Table 4P** summarizes the airports that do not have a courtesy car. In some cases, such as Truth or Consequences Municipal Airport, the courtesy car was provided for use at the airport by a local business.



**TABLE 4P**  
**Airports Needing Courtesy Car Service**  
**New Mexico Airport System Plan**

Airport	Role
Clayton Municipal Airpark	Community General Aviation
Aztec Municipal Airport	Community General Aviation
Grants-Milan Municipal Airport	Community General Aviation
Las Vegas Municipal Airport	Community General Aviation
Lea County-Jal Airport	Community General Aviation
Lea County-Zip Franklin Memorial Airport	Community General Aviation
Portales Municipal Airport	Community General Aviation
Ohkay Owingeh Airport	Community General Aviation

As previously discussed, public transportation options are limited at the commercial service airports within the NMAASP. Currently, only two airports, Albuquerque International Sunport and Four Corners Regional Airport, have public transportation routes which provide connection to the airport. The Albuquerque International Sunport bus service follows a regular schedule and the Four Corners Regional Airport service is available on-call. Availability of public transportation is not a specific performance measure of the NMAASP.

## FIXED BASE OPERATOR

Airport fixed base operators (FBOs) are typically private enterprises, that provide a variety of services, including aircraft parking and hangar storage, flight training, and aircraft repair and maintenance. For the purposes of this study, FBOs are grouped into two categories: Full Service and Limited Service. Full Service FBOs provide fuel and at least one of the following services: location based services, technical services, flight operations, or aircraft sales. Limited Service FBOs are those which provide fuel.

*Performance Measure (Goal 4): A full service FBO is recommended for Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports. Limited service FBOs are recommended for Community General Aviation airports.*

Status: As indicated in **Table 4Q**, six airports; five Community General Aviation airports, do not meet the recommended FBO service objective. As previously mentioned, operation of an FBO is typically conducted by a private entity.



**TABLE 4Q**  
**Airports Without Fixed Base Operator**  
**New Mexico Airport System Plan**

Airport	Role
Aztec Municipal Airport	Community General Aviation
Lea County-Zip Franklin Memorial Airport	Community General Aviation
Ohkay Owingeh Airport	Community General Aviation
Socorro Municipal Airport	Community General Aviation
Truth Or Consequences Municipal Airport	Community General Aviation

## INDUSTRIAL/BUSINESS PARK

Industrial or business park development at or near airports benefit from investments made in the airport and they also increase economic benefits to the community. This type of development is typically considered compatible with airport operations, unless it produces significant smoke or glare, which can interfere with safe airport operations. Because of the significant land needs and other infrastructure required to support development of industrial or business park development, no specific performance measure will be established for this type of feature. However, information regarding existing industrial and business parks is provided for reference.

As depicted on **Exhibit 4P**, 17 airports within the NMAASP have industrial or business park development on or adjacent to airport property. Distribution among the airport roles includes:

***Seventeen airports within the NMAASP have industrial or business park development on or adjacent to airport property.***

- Primary Commercial Service – 3
- Limited commercial Service – 2
- Regional General Aviation – 3
- Community General Aviation – 6
- Low Activity General Aviation – 3

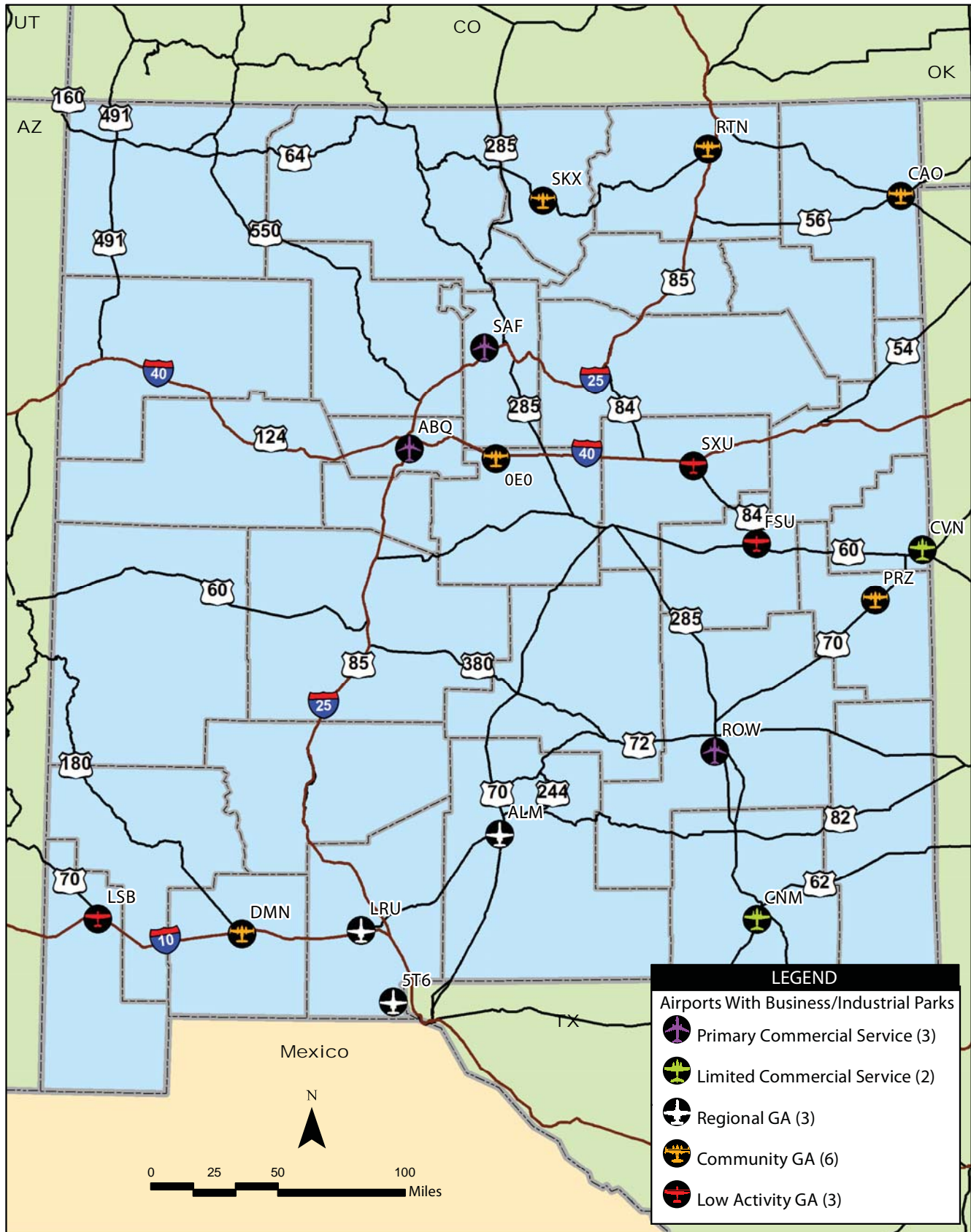
In some cases, such as Cavern City Air Terminal, the industrial development is privately owned. Industrial or business park development that is owned and operated at the airport is also subject to FAA Grant Assurance 25, which states that revenues generated by the airport and any local taxes on aviation fuel established will be expended for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner.

## ADDITIONAL SYSTEM CONSIDERATIONS

In addition to the overall performance of the New Mexico Airport System, airports with the ability to serve fixed wing emergency medical service activities, business jets, very light jets, and firefighting op-









erations will be identified in the following sections. These airports will be identified based on the criteria discussed below which represent the typical facility needs to support these operations.

## **SUPPORT EMERGENCY MEDICAL SERVICE ACTIVITIES**

Fixed wing emergency medical service is a much needed component of the New Mexico Airport System as it connects remote areas of the state to medical services only available in larger communities. Medical emergency aircraft, or air ambulances, transport modern medical equipment and professional medical staff in order to care for all types of emergencies en route to a hospital, reducing response time.

It should be noted that some emergency medical service operations are conducted with helicopters. Although preferable, a helipad is not necessary, particularly in emergency situations, to accommodate these operations. However, as previously discussed, four helipads were built by the New Mexico Department of Transportation Aviation Division to expand emergency medical response coverage within New Mexico.

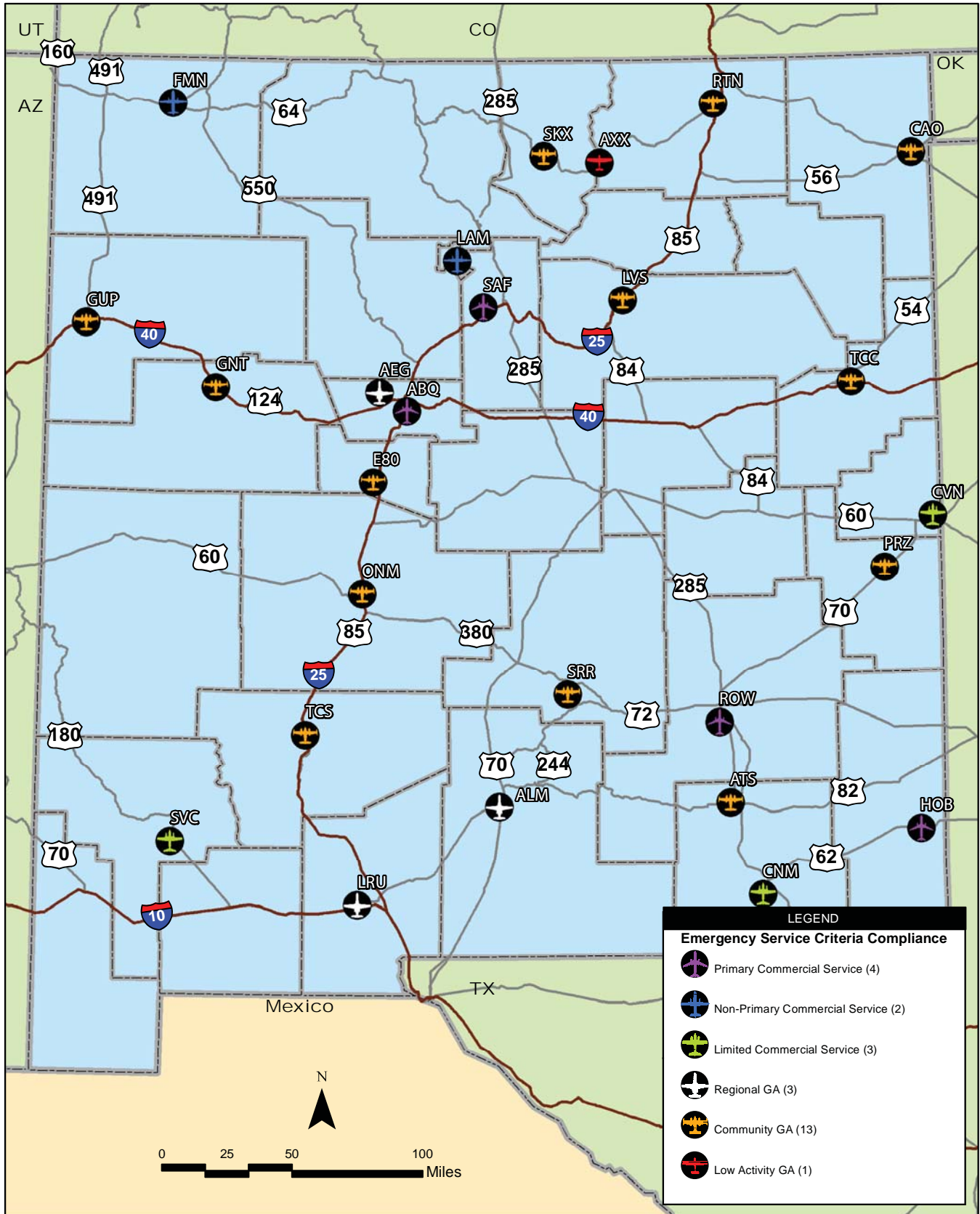
In comparison to fixed wing emergency operations, helicopters generally have a shorter range. For example, a Eurocopter AS350, has a range of approximately 500 miles, while a Beech King Air turboprop aircraft has a range of approximately 2,000 miles. Both of these aircraft are commonly used as emergency response aircraft.

The following criteria were identified in the 2009 NMAASP as optimal for these types of operations, although they are not required in order for the operators to utilize airports for these purposes. The criteria are intended to accommodate an aircraft, such as Beech King Air 200.

- Paved runway with length to accommodate 75 percent of small aircraft (small planes with less than 10 passenger seats)
- Runway lighting (MIRL) at a minimum
- Pavement condition exceeds PCI of 70
- On-site weather reporting
- Instrument Approach

**Table 4R** lists the airports within the system that can accommodate emergency operations based on the criteria listed above. Airports which can support emergency medical service activities based on the criteria listed above are shown on **Exhibit 4Q**.





**TABLE 4R**  
**Airports Supporting Fixed Wing Emergency Medical Service Activities**  
**New Mexico Airport System Plan**

Airport	Role
Alamogordo-White Sands Regional Airport	Regional General Aviation
Albuquerque International Sunport	Primary Commercial Service
Angel Fire Airport	Low Activity General Aviation
Artesia Municipal Airport	Community General Aviation
Belen Alexander Municipal Airport	Community General Aviation
Cavern City Air Terminal	Limited Commercial Service
Clayton Municipal Airpark	Community General Aviation
Clovis Municipal Airport	Limited Commercial Service
Double Eagle II Airport	Regional General Aviation
Four Corners Regional Airport	Non-Primary Commercial Service
Gallup Municipal Airport	Community General Aviation
Grant County-Silver City Airport	Limited Commercial Service
Grants-Milan Municipal Airport	Community General Aviation
Las Cruces International Airport	Regional General Aviation
Las Vegas Municipal Airport	Community General Aviation
Lea County Regional Airport	Primary Commercial Service
Los Alamos Airport	Non-Primary Commercial Service
Portales Municipal Airport	Community General Aviation
Raton Municipal Airport	Community General Aviation
Roswell International Air Center	Primary Commercial Service
Santa Fe Municipal Airport	Primary Commercial Service
Sierra Blanca Regional Airport	Community General Aviation
Socorro Municipal Airport	Community General Aviation
Taos Regional Airport	Community General Aviation
Truth or Consequences Municipal Airport	Community General Aviation
Tucumcari Municipal Airport	Community General Aviation

## SUPPORT FOR BUSINESS AVIATION

Business aviation provides travelers a convenient and cost-effective transport option by enabling direct access to communities not served by commercial service airlines. Business aviation is conducted with a variety of aircraft types, including business jets, turboprops and piston-driven airplanes. Fixed wing business aircraft include piston-powered propeller-driven airplanes and turbine-powered turboprops and turbojets, including the relatively new very light jets. According to the FAA's, *Aerospace Forecast Fiscal Years 2015-2035*, deliveries of business jet aircraft have showed recovery following declines associated with the 2008-2009 economic recession. As a result of increased in business jet aircraft, overall business jet operations have also increased steadily since 2009, which had the lowest total domestic operations (2,929,476) in the past ten years. In 2014, the total business jet operations were 3,527,038 according to the June 2015 FAA Business Jet Report.



A segment of the business jet category includes the very light jet (VLJ). In comparison to typical business jets, VLJs have lower acquisition and operating costs, which was anticipated to have the potential to revolutionize the business jet market, particularly by being able to sustain a true on-demand air-taxi service. While initial forecasts called for over 400 aircraft to be delivered each year, events such as the 2008-2009 economic recession, have led the FAA to temper more recent forecasts. Overall, VLJs represent a small portion of business jet operations. Based on FAA's June 2015 Business Jet report, very light jets (Eclipse EA50 and Cessna Mustang C510) account for 3.35 percent of annual domestic business jet operations.

To effectively accommodate business aviation, airports within the system need to have adequate facilities and services for aircraft and passengers. The following criteria will be used to determine which airports can effectively accommodate business aviation operations.

- Paved runway with length to accommodate 95 percent of small aircraft
- Instrument Approach
- Availability of jet fuel
- Ground transportation
- Terminal

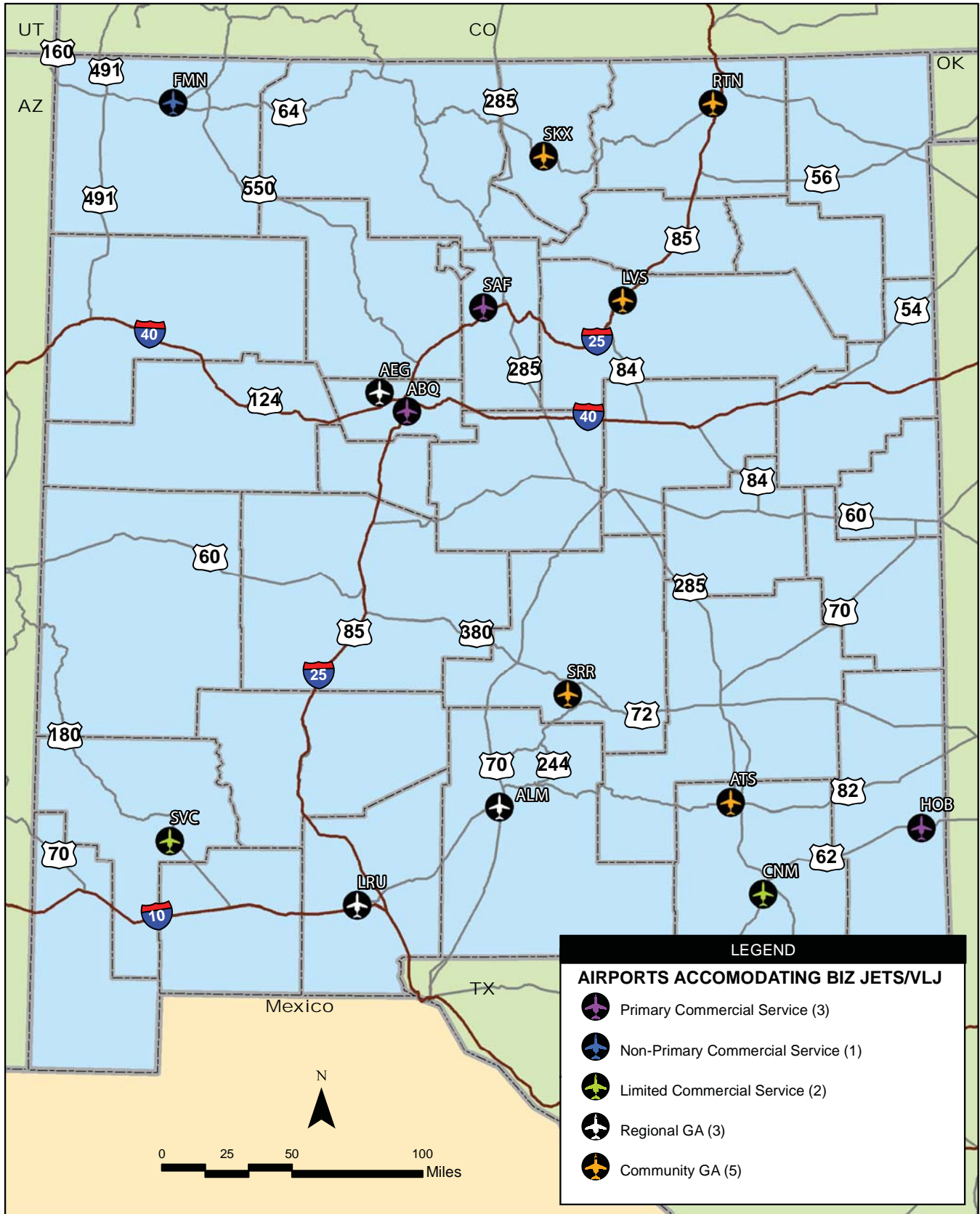
**Exhibit 4R** depicts the location of airports capable of accommodating business aviation based on the criteria above. **Table 4S** summarizes the airports by role. Using the drive time calculations discussed in Chapter Three, 63.6 percent of the population within the state is within the 30-minute drive area of these 14 airports.

**TABLE 4S**  
**Airports Supporting Business Aviation**  
**New Mexico Airport System Plan**

Airport	Role
Alamogordo-White Sands Regional Airport	Regional General Aviation
Albuquerque International Sunport	Primary Commercial Service
Artesia Municipal Airport	Community General Aviation
Cavern City Air Terminal	Limited Commercial Service
Double Eagle II Airport	Regional General Aviation
Four Corners Regional Airport	Non-Primary Commercial Service
Grant County-Silver City Airport	Limited Commercial Service
Las Cruces International Airport	Regional General Aviation
Las Vegas Municipal Airport	Community General Aviation
Lea County Regional Airport	Primary Commercial Service
Raton Crews Field Airport	Community General Aviation
Santa Fe Municipal Airport	Primary Commercial Service
Sierra Blanca Regional Airport	Community General Aviation
Taos Regional Airport	Community General Aviation









## **FIREFIGHTING SUPPORT**

Due to the arid climate and large amounts of national forest land within the state forest, range fires are common occurrences in the State of New Mexico. As many of these areas are inaccessible by surface-based firefighting equipment, aerial firefighting is essential to responding to these natural disasters. As discussed in the 2009 NMASP, 34 airports reported as providing support for firefighting operations.

No specific performance measure has been adopted for aerial firefighting operations. However, based on information available from the U.S. Forest Service, which manages wildland aerial firefighting efforts, the key criteria for selecting an airfield is access to an adequate and sustained supply of aviation fuel. Additionally, as outlined in the U.S. Forest Service's Flight Operations Handbook 5709.16, additional consideration should be given to area congestion; adequate staging; parking areas for large aircraft; crash and rescue equipment and timely availability; and loading and unloading capabilities for cargo and/or passengers. Availability of fuel at airports within the system was discussed previously.

A U.S. Forest Service Airtanker Base and Helibase are located at Grant County-Silver City Airport. Aircraft which may be deployed from Grand County-Silver City Airport include the following multi-engine air tankers: Lockheed P-2V, Bae-146, and Convair 580, along with a variety of single-engine air tankers and helicopters. Additionally, a U.S. Forest Service Airtanker Base is located at Alamogordo-White Sands Regional Airport. Similar aircraft operate from this airport as well.

## **OUTSIDE INFLUENCES**

The ability of the NMASP to meet future needs will be affected by several outside influences, including projected changes in the state's economy. The following sections provide an overview of projected changes in population (**Table 4T**), employment (**Table 4U**), personal income (**Table 4V**), and gross regional product (**Table 4W**). Based on information collected in Chapter Two, the ten counties with the highest projected growth in these areas are identified, along with the airports within those counties. The purpose of this overview is to determine what counties in the state and which airports may experience increased aviation demand as a result of projected growth in the next twenty years.



**TABLE 4T**  
**Forecast Population Growth By County**  
**New Mexico Airport System Plan**

County	Forecast Population Annual Average Growth Rate (2010-2035)	Airports
San Juan	2.47	Four Corners Regional Airport, Aztec Municipal Airport, Navajo Lake Airport, Shiprock Airstrip
Lea	1.84	Lea County Regional, Lea County-Zip Franklin Memorial, Lea-County-Jal Airport, Tatum Airport
Bernalillo	1.36	Albuquerque International Airport, Double Eagle II Airport
Doña Ana	1.24	Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport
Valencia	1.18	Belen Alexander Municipal Airport
Roosevelt	1.17	Portales Municipal Airport
Luna	1.15	Deming Municipal Airport
San Miguel	1.05	Las Vegas Municipal Airport, Conchas Lake Airport, Conchas Lake Seaplane Base, Mosquero Emergency Services Heliport
Union	0.96	Clayton Municipal Airpark
Santa Fe	0.94	Santa Fe Municipal

**TABLE 4U**  
**Forecast Employment Growth By County**  
**New Mexico Airport System Plan**

County	Forecast Employment Annual Average Growth Rate (2010-2035)	Airports
Sandoval	2.61%	Sandoval County Airport (Proposed)
Lea	2.06%	Lea County Regional, Lea County-Zip Franklin Memorial, Lea-County-Jal Airport, Tatum Airport
Doña Ana	1.85%	Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport
Catron	1.75%	Catron County Heliport, Jewett Mesa Airport, Reserve Catron County Airport, Glenwood Catron County Airport
Eddy	1.69%	Artesia Municipal Airport, Cavern City Air Terminal
De Baca	1.64%	Fort Sumner Municipal Airport
Sierra	1.64%	Truth or Consequences Municipal Airport
Santa Fe	1.60%	Santa Fe Municipal Airport
Harding	1.48%	None
San Juan	1.48%	Four Corners Regional Airport, Aztec Municipal Airport, Navajo Lake Airport, Shiprock Airstrip



**TABLE 4V**  
**Forecast Per Capita Personal Income Growth By County**  
**New Mexico Airport System Plan**

County	Forecast Per Capita Income Growth (2010-2035)	Airports
De Baca	2.96%	Fort Sumner Municipal Airport
Hidalgo	2.27%	Lordsburg Municipal Airport
Los Alamos	2.27%	Los Alamos Airport
Grant	1.96%	Grant County-Silver City Airport
Sierra	1.95%	Truth or Consequences Municipal Airport
Harding	1.90%	None
Catron	1.89%	Catron County Heliport, Jewett Mesa Airport, Reserve Catron County Airport, Glenwood Catron County Airport
Socorro	1.86%	Socorro Airport, Magdalena Airport
Union	1.83%	Clayton Municipal Airpark
Mora	1.79%	None

**TABLE 4W**  
**Forecast Gross Regional Product Growth By County**  
**New Mexico Airport System Plan**

County	Forecast Gross Regional Product Annual Average Growth Rate (2010-2035)	Airports
Sandoval	3.18%	Sandoval County Airport (Proposed)
Los Alamos	3.01%	Los Alamos Airport
Doña Ana	2.70%	Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport
Socorro	2.68%	Socorro Airport, Magdalena Airport
Sierra	2.63%	Truth or Consequences Municipal Airport
Bernalillo	2.59%	Albuquerque International Airport, Double Eagle II Airport
Chaves	2.56%	Roswell International Air Center
Luna	2.56%	Deming Municipal Airport
Hidalgo	2.52%	Lordsburg Municipal Airport
Santa Fe	2.48%	Santa Fe Municipal Airport

***Known as the “Land of Enchantment,” New Mexico experienced 32.2 million visits during calendar year 2013.***

### Visitor Spending

In addition to the economic factors presented above, visitor and second home spending are also indicators of economic activity with-

in the state. A key component of the economic outlook in New Mexico is tourism. Known as the “Land of Enchantment,” New Mexico experienced 32.2 million visits during calendar year 2013. In addition to



many local festivals and attractions, the state is home to many federal and state parks, and nine ski resorts. Based on the 2014 National Park Visitor Spending Effects report from the National Park Service, which manages 13 units within the state, more than 1.6 million people visited these sites and contributed \$88.8 million visitor spending in calendar year 2014. Additionally, the Ski New Mexico, which promotes Alpine and Nordic skiing within the state, economic impact of ski visits in New Mexico during 2014-2015 ski season was \$507.6 million. Ski New Mexico's records indicated that 65 percent of skier visits are from outside the State of New Mexico.

The ten counties with the highest visitor spending, based on New Mexico Tourism Department information, are identified in **Table 4X** and based on 2011 data. It should be noted that the New Mexico Tourism Department is currently updating this information.

**TABLE 4X**  
**Visitor Spending By County**  
**New Mexico Airport System Plan**

County	2011 Visitor Spending (\$ millions)	Airports
Bernalillo	1,842.70	Albuquerque International Airport, Double Eagle II Airport
Santa Fe	691.7	Santa Fe Municipal Airport
Doña Ana	323.7	Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport
San Juan	249.4	Four Corners Regional Airport, Aztec Municipal Airport, Navajo Lake Airport, Shiprock Airstrip
Taos	210.9	Taos Regional Airport, Questa Municipal No. 2 Airport, Red River Heliport
Sandoval	206	Sandoval County Airport (Proposed)
Otero	194	Alamogordo-White Sands Regional Airport
McKinley	189.6	Crownpoint Airport, Gallup Municipal Airport, Zuni-Black Rock Airport
Lincoln	173.7	Carrizozo Municipal Airport, Sierra Blanca Regional Airport
Eddy	165.3	Artesia Municipal Airport, Cavern City Air Terminal

Source: The Economic Impact of Tourism in New Mexico, 2011 Analysis. New Mexico Department of Tourism.

## Retirement or Second Home

A component of the New Mexico Department of Tourism's visitor spending totals is money spent on retirement or second homes. According to *The Economic Impact of Tourism in New Mexico*, there are more than 50,000 seasonal homes used for recreation within the state, the use of which contributes to approximately 10 percent of visitor spending. The five counties with the largest component of second home spending are: Lincoln, Santa Fe, Taos, Otero, and Bernalillo. As indicated within the tables of this section, nine NMAASP airports are located within these counties.



## OUTSIDE INFLUENCE SUMMARY

Based on the county rankings presented in the tables above for forecast growth in population, employment, personal income, and gross regional product, along with visitor spending, **Table 4Y** summarizes the frequency for each county that ranked in the top ten for each of the five metrics. As indicated in the table, 26 of the 33 counties within the state appeared at least once in the top ten rankings for these metrics. Two counties, Doña Ana and Santa Fe, occurred most frequently, appearing in the top ten rankings for four of the five metrics. These two counties are served by four airports: Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport, and Santa Fe Municipal Airport.

**TABLE 4Y**  
**Outside Influence Ranking Summary**  
**New Mexico Airport System Plan**

County	Count	Airports
Doña Ana	4	Doña Ana County Jetport at Santa Theresa, Las Cruces International Airport, Hatch Municipal Airport
Santa Fe	4	Santa Fe Municipal
Bernalillo	3	Albuquerque International Airport, Double Eagle II Airport
San Juan	3	Four Corners Regional Airport, Aztec Municipal Airport, Navajo Lake Airport, Shiprock Airstrip
Sandoval	3	Sandoval County Airport (Proposed)
Sierra	3	Truth or Consequences Municipal Airport
Catron	2	Catron County Heliport, Jewett Mesa Airport, Reserve Catron County Airport, Glenwood Catron County Airport
De Baca	2	Fort Sumner Municipal Airport
Eddy	2	Artesia Municipal Airport, Cavern City Air Terminal
Harding	2	None
Hidalgo	2	Lordsburg Municipal Airport
Lea	2	Lea County Regional, Lea County-Zip Franklin Memorial, Lea County-Jal Airport, Tatum Airport
Los Alamos	2	Los Alamos Airport
Luna	2	Deming Municipal Airport
Socorro	2	Socorro Airport, Magdalena Airport
Union	2	Clayton Municipal Airpark
Chaves	1	Roswell International Air Center
Grant	1	Grant County-Silver City Airport
Lincoln	1	Carrizozo Municipal Airport, Sierra Blanca Regional Airport
McKinley	1	Crownpoint Airport, Gallup Municipal Airport, Zuni-Black Rock Airport
Mora	1	None
Otero	1	Alamogordo-White Sands Regional Airport
Roosevelt	1	Portales Municipal Airport
San Miguel	1	Las Vegas Municipal Airport, Conchas Lake Airport, Conchas Lake Seaplane Base, Mosquero Emergency Services Heliport
Taos	1	Taos Regional Airport, Questa Municipal No. 2 Airport, Red River Heliport
Valencia	1	Belen Alexander Municipal Airport





## SURFACE TRANSPORTATION IMPROVEMENTS

Similar to the NMAASP, roadways within the state must be continually maintained to enhance ground transportation routes. A review of the current New Mexico Transportation Department's active projects was conducted to determine if any of the proposed improvements will affect surface transportation access routes near NMAASP airports. The projects are summarized in **Table 4Z**. Three projects of note will directly affect long range surface transportation connections to NMAASP airports. These include the I-25/Rio Bravo interchange reconstruction, southwest of Albuquerque International Sunport, the evaluation of alternatives to improve travel on New Mexico Highway 136, which provides access to Doña Ana County Jetport at Santa Teresa, and the New Mexico 599 and Jaguar Road interchange. As noted in the table, the I-25/Rio Bravo interchange project is currently underway with anticipated completion by the winter of 2016. The purpose of this project is to modernize the interchange to handle projected traffic volumes and transportation demands which will enhance accessibility to Albuquerque International Sunport. The I-25/Rio Bravo interchange is also located south of the BNSF Albuquerque Intermodal facility. This improvement will also enhance accessibility from Interstate 25 to the intermodal facility, located less than two miles west of the airport.

**TABLE 4Z**  
**Surface Transportation Improvements**  
**New Mexico Airport System Plan**

District	Roadway	Description	Start Date	End Date
1	I-25	Reconstruction of Missouri Avenue Bridge in Las Cruces, NM - Phase II	March 2015	July 2015
1	New Mexico Highway 90	Hudson Street replacement project in Silver City, NM	Unknown	June 2015
1	New Mexico Highway 136	Evaluation of alternatives which could improve travel and to accommodate future demand on New Mexico Highway 136 which provides access to Doña Ana County Jetport at Santa Teresa	Unknown	December 2015
2	New Mexico Highway 209	Bridge replacement project north of Clovis, NM	December 2014	Unknown
2	New Mexico 380	Pavement rehabilitation between Roswell and Caprock, NM	December 2014	Unknown
2	U.S. Highway 54	Reconstruction of highway between Corona and Carrizozo, NM	March 2014	Unknown
3	I-25	Auxiliary lane addition and noise barrier wall construction	Spring 2015	Fall 2015
3	I-40	Pavement rehabilitation on ramps and pavement reconstruction on I-40 between the Rio Grande and Coors Blvd.	Spring 2015	Fall 2015
3	I-25	Rio Bravo interchange reconstruction, southwest of Albuquerque International Sunport	Spring 2015	Winter 2016
4	I-25	South interchange reconstruction in Raton, NM	September 2014	Unknown
5	I-25	Interstate 25 bridge replacement project east of Santa Fe Municipal Airport	April 2013	Summer 2015
5	I-25	Construction of a diverging diamond interchange at Cerrillos Road, east of Santa Fe Municipal Airport	Summer 2015	Winter 2016
5	New Mexico 599 and Jaguar Rd.	New diamond interchange with access to Santa Fe Municipal Airport	2014	Fall 2015
6	New Mexico Highway 12	Bridge construction east of Reserve Airport in Reserve, NM	Unknown	Unknown
6	I-40	Ramp reconstruction at New Mexico Highway 118 and I-40 west of Gallup Municipal Airport	Unknown	Unknown

Source: NMDOT Road Construction and Study Projects, <http://dot.state.nm.us/en/Projects.html>, accessed June 2015.



Significant increases in travel on Highway 136, as a result of the opening of Union Pacific Railroad's Santa Teresa Intermodal Terminal in May 2014, necessitated consideration of alternatives to improve the corridor to accommodate anticipated travel demands on this route. The 2,200-acre intermodal facility is classified as an inland port, the first in the State of New Mexico, and was built to manage and distribute shipments throughout the southwestern United States. This site, located approximately three miles northwest of Doña Ana County Jetport at Santa Teresa, also includes one of Union Pacific's largest fueling facilities for locomotives. Improvements to New Mexico Highway 136 will enhance connectivity between Doña Ana County Jetport at Santa Teresa and the community it serves.

The New Mexico 599 and Jaguar Road interchange provides a new access route to Santa Fe Municipal Airport.

## **AIRPORT ACCESSIBILITY ANALYSIS**

The ability of the airport system to serve the statewide population can be measured by the accessibility of the airports in the system. Building on the analysis conducted in Chapter Three, which considers the percentage of the population within a 30-minute drive time, additional drive-time calculations were performed. Using the methodology described in Chapter Three, four drive time summaries were calculated:

### **General Aviation**

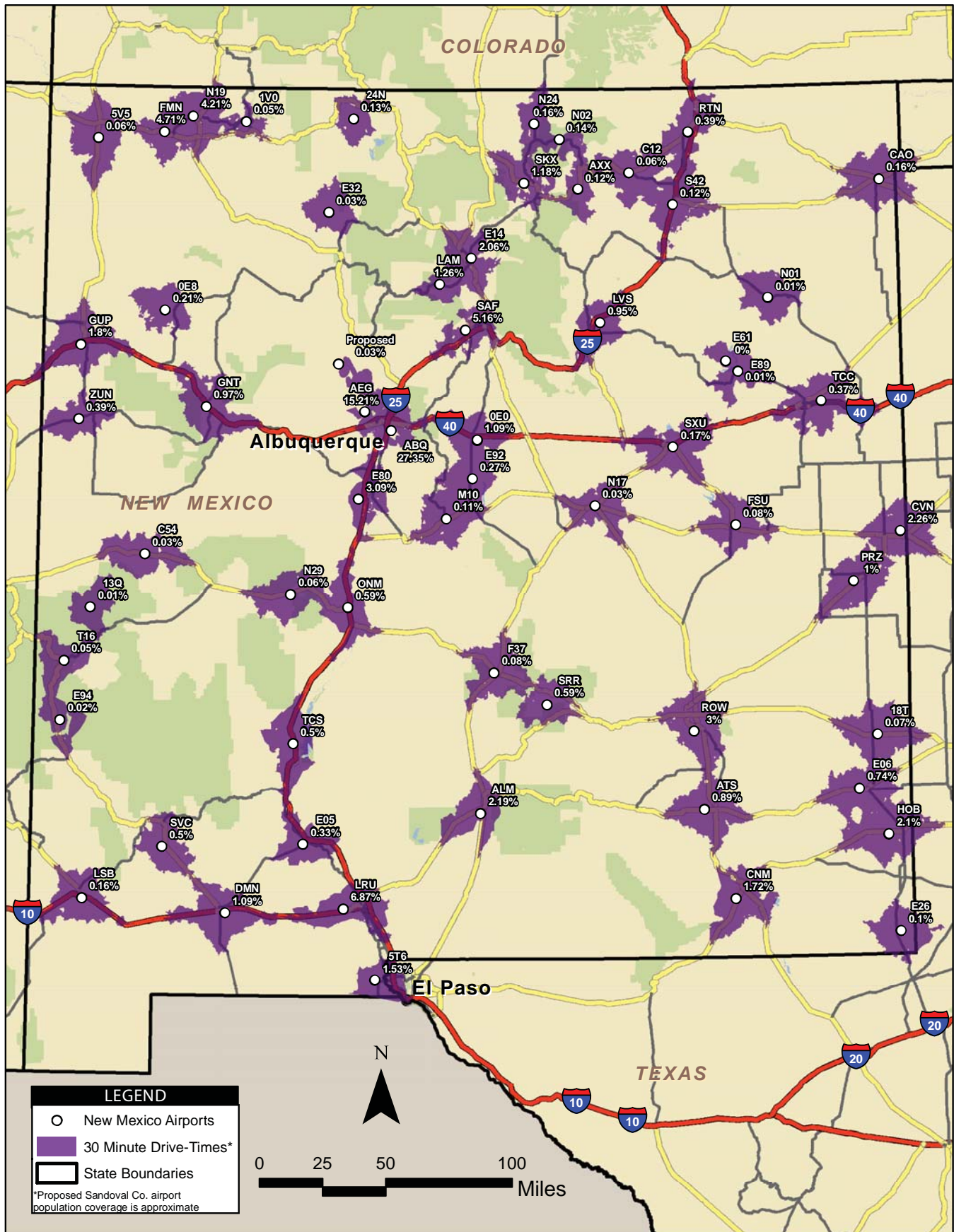
*Population within a 30-minute drive of an airport* – This analysis considers the 30-minute drive time area of all airports within the system. The 30-minute threshold is assumed to be the upper threshold for an individual's willingness to travel to access a general aviation airport for recreational or business use. The coverage of the 30-minute drive time areas is presented on **Exhibit 4S**. In contrast to the individual airport analysis conducted in Chapter Three, which includes areas overlapped by multiple air-

***There are 1,807,005 New Mexico residents living within a half hour of an airport, or 88 percent of the state population.***

ports, this calculation counts the population of each Block Group if it is included within any of the 30-minute drive time areas. Using this approach, there are 1,807,005 New Mexico residents living within a half hour of an airport, or 88 percent of the state popula-

tion. Regarding land area coverage, the 30-minute drive time area covers 21,198 square miles within the State of New Mexico. Therefore, the remaining 12 percent of the population is located within the balance of the state, which constitutes 100,445 square miles.





## Commercial Service

As previously discussed, nine airports within New Mexico provide commercial passenger service at the time this study was prepared. Within this group of airports, a variety of aircraft, including propeller, turboprop, and turbojet aircraft, are used to transport passengers to a range of destinations. A total of 25 airports were accessible from these nine airports on nonstop flights. These locations are shown on **Exhibit 4T**. Air travelers are generally more willing to travel a greater distance to access airports with greater flight and destination options.

## NPIAS Airports

As discussed in Chapter Three, 50 airports within the NMAASP are included within FAA's National Plan of Integrated Airport Systems (NPIAS). The coverage of the 30-minute drive time areas for these airports is depicted on **Exhibit 4U**. Using the same methodology described above, there are 1,519,632 New Mexico residents living within a half hour of a NPIAS airport, or 73.4 percent of the state's population. Additionally, **Exhibit 4U** presents the location of registered aircraft located outside the 30-minute drive time areas. Based on FAA records, 674 aircraft, or 20.4 percent, are registered to owners outside a 30-minute drive area.

*Population within a 60-minute drive of airports with propeller or turboprop commercial service* – Five airports: Los Alamos Airport, Clovis Municipal Airport, Four Corners Regional Airport, Cavern City Air Terminal, and Grant County – Silver City Airport, have commercial service with propeller or turboprop aircraft. Six destinations are available from these four airports by nonstop flights and are summarized in **Table 4AA**. A 60-minute drive time was used to approximate travelers' willingness to travel for propeller or turboprop commercial service flights. There are 441,803 New Mexico residents that live within 60 minutes of these five airports, or 21.45 percent of the state's population. The 60-minute drive time from these airports is depicted on **Exhibit 4V**.

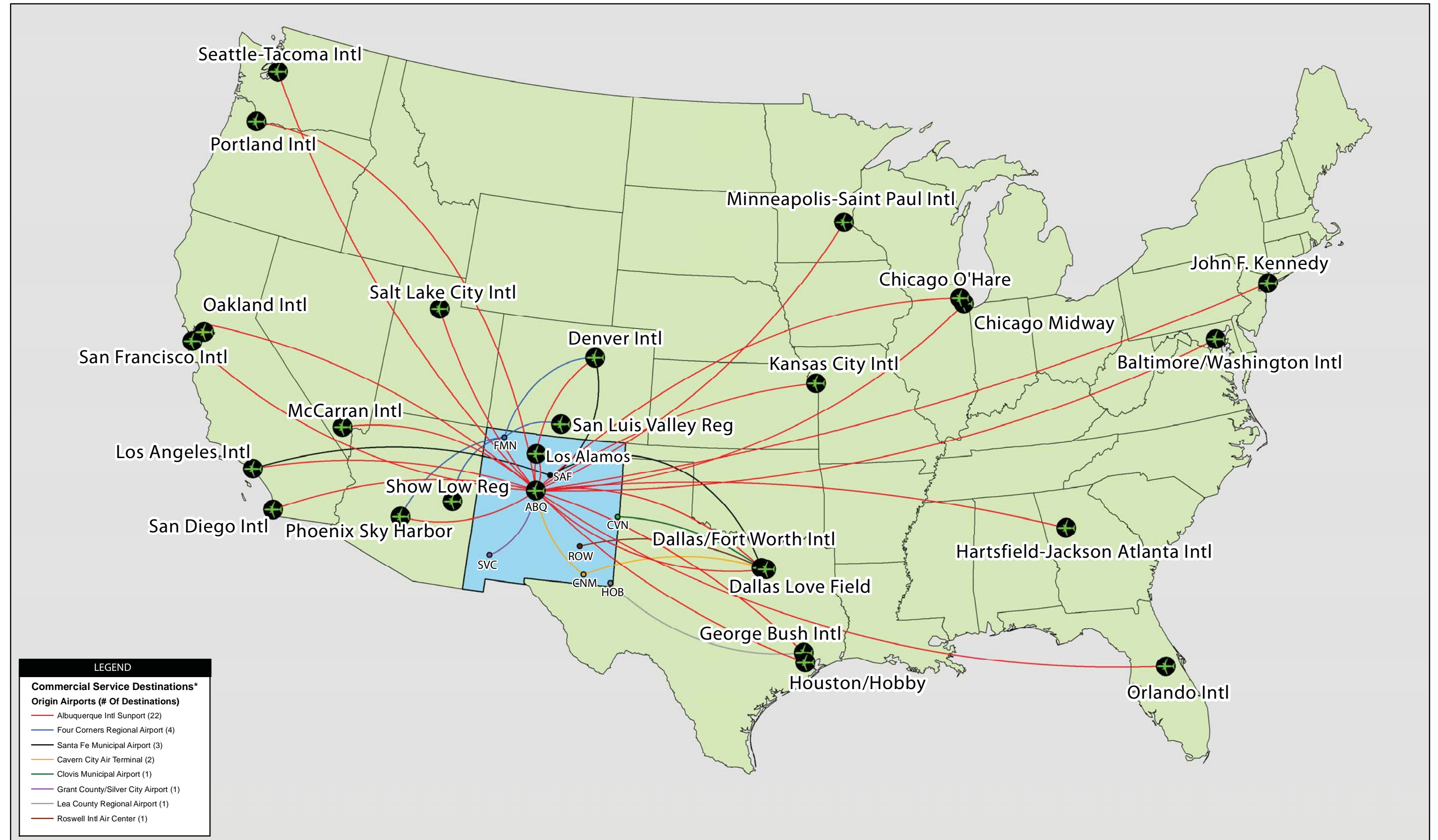
**TABLE 4AA**  
**Destinations Served with Nonstop Flights Using Propeller or Turboprop Aircraft**

Origin	Destination
Four Corners Regional Airport (Farmington, NM)	Denver International Airport
Four Corners Regional Airport (Farmington, NM)	San Luis Valley Airport (Alamosa, CO)
Four Corners Regional Airport (Farmington, NM)	Phoenix Sky Harbor International Airport
Four Corners Regional Airport (Farmington, NM)	Show Low Regional Airport (Show Low, AZ)
Los Alamos Airport*	Albuquerque International Sunport
Grant County - Silver City Airport	Albuquerque International Sunport
Cavern City Air Terminal (Carlsbad, NM)	Albuquerque International Sunport
Cavern City Air Terminal (Carlsbad, NM)	Dallas/Fort Worth International Airport
Clovis Municipal Airport	Dallas/Fort Worth International Airport

\* Service suspended in January 2015.





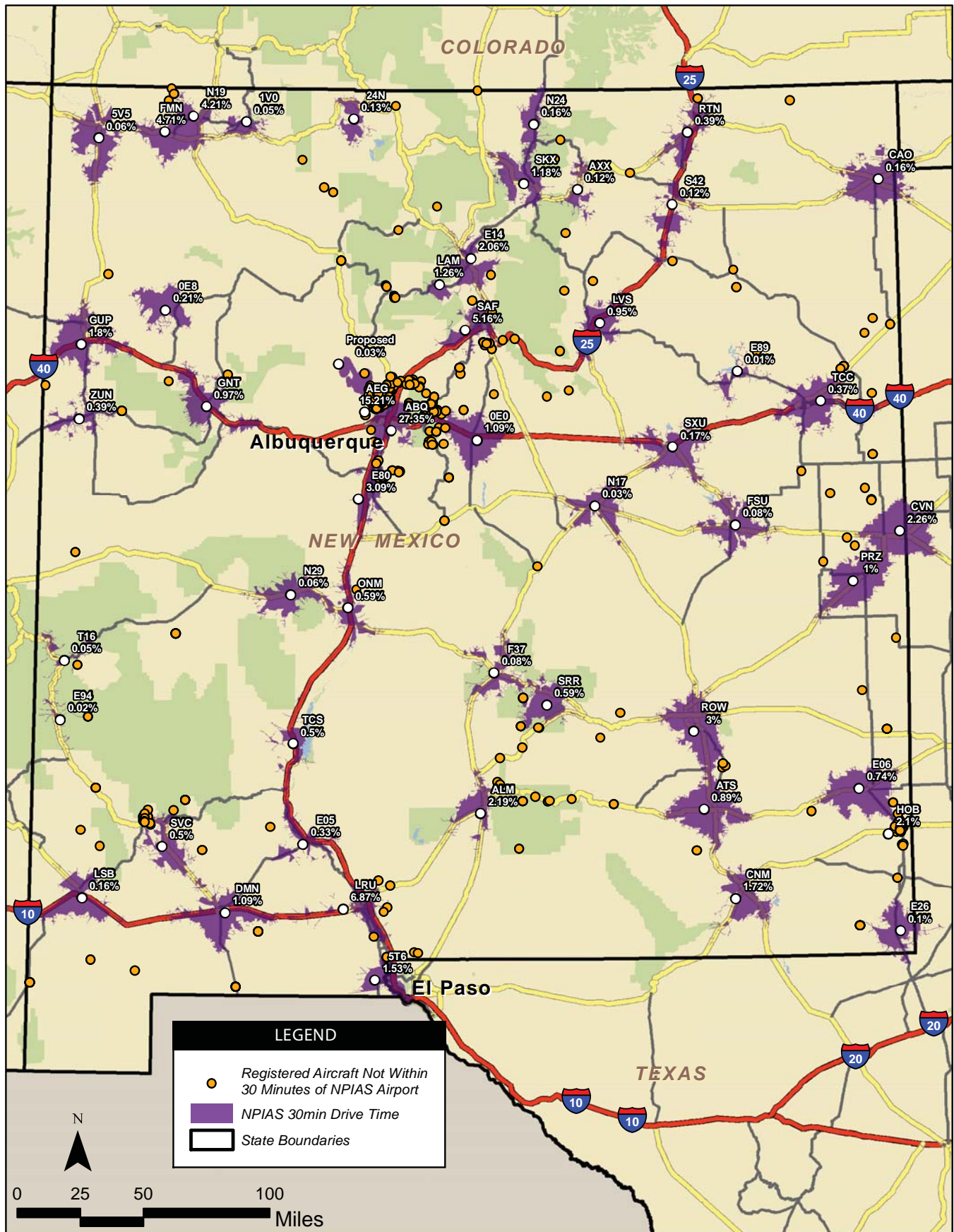


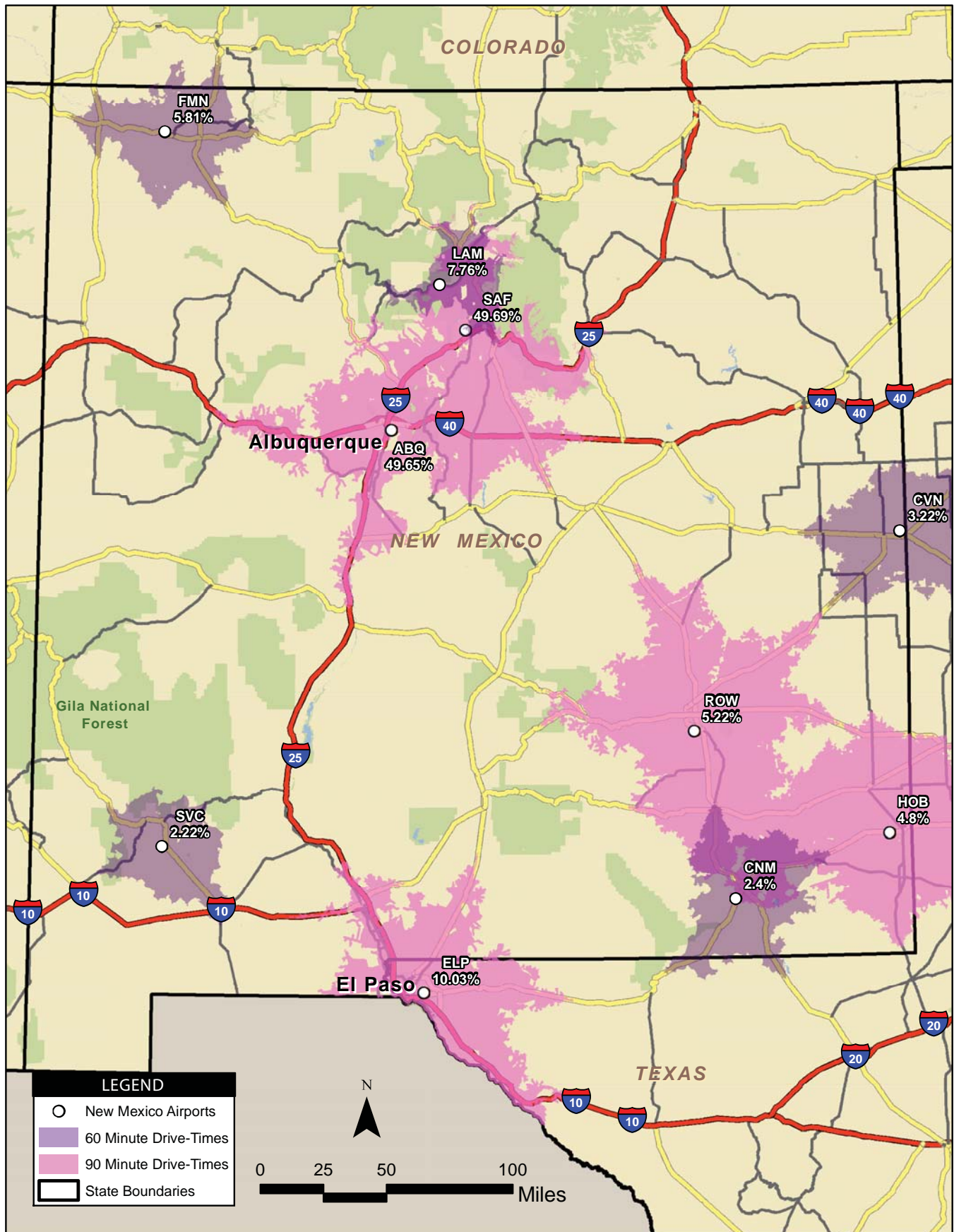
\*Destinations as of: July 1, 2015





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*Population within a 90-minute drive of airports with turbojet commercial service (excluding ABQ).* For the 90-minute drive time analysis, the four airports with turbojet passenger service were considered. These include Santa Fe Municipal Airport, Roswell International Air Center, and Lea County Regional Airport. Due to the higher number of flight options and enplanements, Albuquerque International Sunport was considered under the following analysis. As indicated in **Table 4AB**, these three airports provide nonstop flights to four destinations. The 90-minute drive time from these airports is also depicted on **Exhibit 4V**. There are 1,225,551 New Mexico residents living within 90 minutes of these four airports, or 59.51% of the state population.

**TABLE 4AB**  
**Destinations Served with Nonstop Flights Using Turbojet Aircraft (excluding ABQ)**

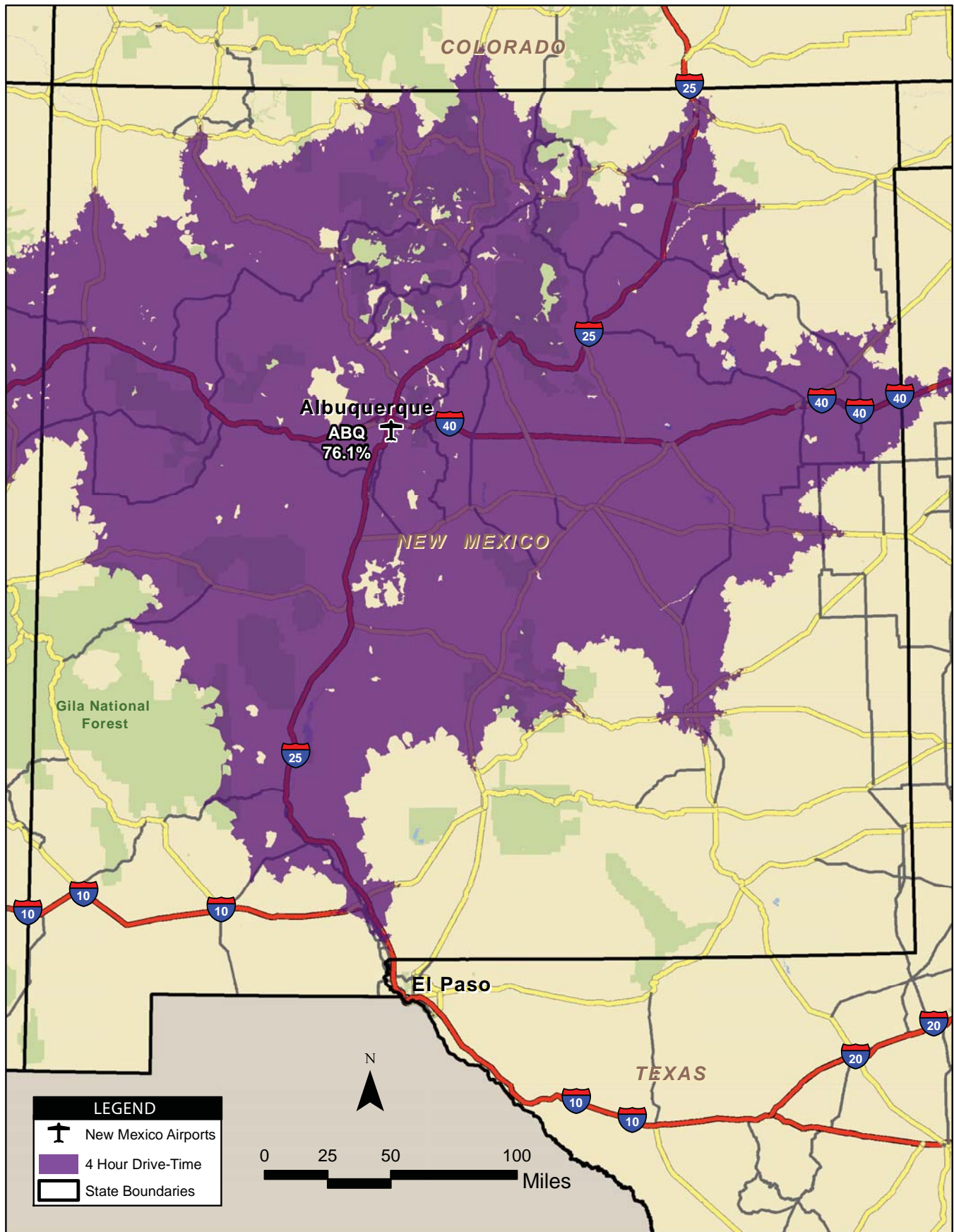
Origin	Destination
Santa Fe Municipal Airport	Denver International Airport
	Dallas/Fort Worth International Airport
	Los Angeles International Airport
Roswell International Air Center	Dallas/Fort Worth International Airport
Lea County Regional Airport	George Bush Intercontinental Airport

*Population within a four-hour drive of Albuquerque International Sunport.* Given the flight availability and destination options accessible from Albuquerque, a four-hour drive time was considered for this analysis. As indicated in **Table 4AC**, 22 destinations are served by nonstop flights from Albuquerque International Sunport. These flights are conducted using both turboprop and turbojet aircraft. There are 1,567,284 New Mexico residents living within four hours of the Albuquerque International Sunport, or 76.1% of the state's population. The coverage of the four-hour drive area is depicted on **Exhibit 4W**.

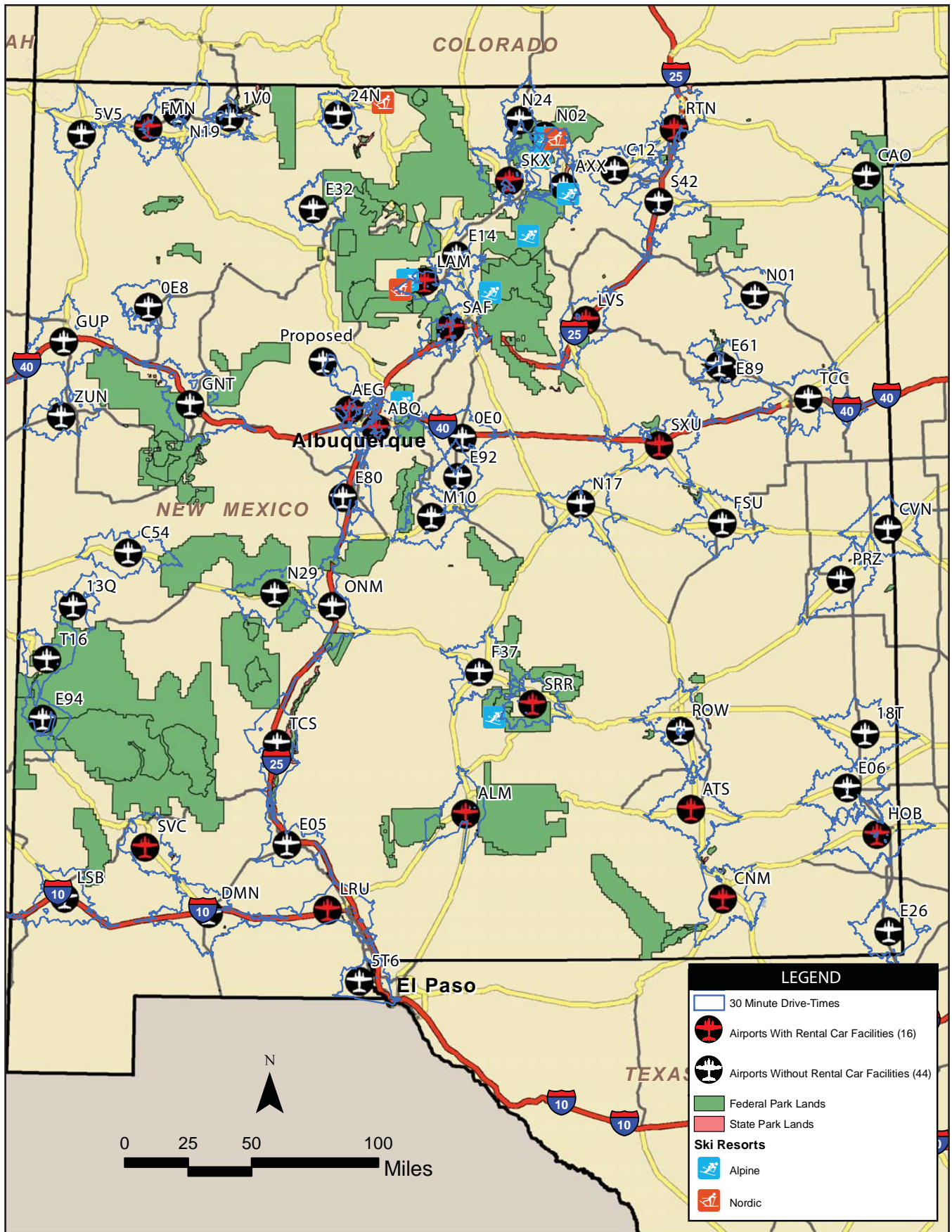
It is also important to note that the location of El Paso International Airport in El Paso, Texas has an influence on traveler's choice. With 11 destinations and turboprop and turbojet service, residents of New Mexico may choose to fly from this airport. Expanding the analysis to include El Paso, the previously discussed 60-minute and 90-minute drive times were combined with a 90-minute drive time for Albuquerque International Sunport and El Paso International Airport. These combined areas encompass 1,740,354 New Mexico residents, or 84.51% of the state population.

*Access to Recreational Areas.* As previously discussed, the State of New Mexico is home to many recreational areas, such as state and national parks and ski areas. To evaluate access to these facilities from system airports, the location of airports with rental car availability and the 30-minute drive times developed in Chapter Three are also plotted on **Exhibit 4X**. As indicated on the exhibit, several of the state's tourist destinations are accessible from NMAASP airports. This information is provided for informational purposes and there is no specific performance measure adopted for visitor accessibility; however, these facilities can be enhanced through the availability of rental cars at NMAASP airports.









**TABLE 4AC**  
**Destinations Served with Nonstop Flights Using Turbojet Aircraft (excluding ABQ)**  
**New Mexico Airport System Plan**

Origin	Destination
Albuquerque International Sunport	Hartsfield–Jackson Atlanta International Airport
	Baltimore–Washington International Airport
	Dallas Love Field
	Denver International Airport
	Dallas Fort Worth International Airport
	George Bush Intercontinental Airport
	William P. Hobby Airport (Houston, TX)
	John F. Kennedy International Airport
	McCarran International Airport (Las Vegas, NV)
	Los Angeles International Airport
	Kansas City International Airport
	Orlando International Airport
	Chicago Midway International Airport
	Minneapolis–Saint Paul International Airport
	Oakland International Airport
	O’Hare International Airport
	Portland International Airport
	Phoenix Sky Harbor International Airport
	San Diego International Airport
	Seattle–Tacoma International Airport
	San Francisco International Airport
	Salt Lake City International Airport

## **AIRPORT SYSTEM VALUATION**

A valuation of each New Mexico Airport was developed based on the following criteria: *New Mexico Airport CIP Update FY 2007-2012 Airport Valuation Analysis*, *New Mexico Airport System Plan Update 2009*, and the *New Mexico Capital Improvement Projects for current construction and asset costs*.

### ***New Mexico Airport CIP Update FY 2007-2012 Airport Valuation Analysis***

The *New Mexico Airport System Plan Update 2009* includes estimates of the value of the 60 New Mexico system airports based on 2005 dollar values. Airports were estimated using the following data:

- Aerial photos of airports
- NM Airport 2003-2007 CIP data
- NM Airport CIP FY 2007-2012
- NM Aviation Aeronautical Chart
- Airport-related construction cost estimates from other states (for comparison), and
- FAA 5010 forms



In addition to the tools used above, an airport size adjustment was applied to each airport to help account for the level of infrastructure that could not be analyzed. A calculation was developed based on each airport's Airport Reference Code (ARC) as identified in the 2012 New Mexico Airport System Plan. **Table 4AD** summarizes the ARC adjustment.

**TABLE 4AD**  
**Airport Reference Code Valuation Adjustment**  
**New Mexico Airport System Plan**

Aircraft Category	Approach Speed	Typical Aircraft	ARC Adjustment
A	<91 Knots	Cessna 172	Aggregate Value X 0%
B	91-120 Knots	Cessna Citation III	Aggregate Value X 5%
C	121-140 Knots	CRJ, Lear 25	Aggregate Value X 10%
D	141-165 Knots	Gulfstream IV, Boeing 747	Aggregate Value X 15%
E	>165 Knots	SR71, Space Shuttle, F4	N/A

Source: FAA AC 150/5300-13 & WSA

**Table 4AE** was used to attain the aggregate value of the airport before the ARC adjustment was applied, thus resulting in the 2005 airport valuations.

**TABLE 4AE**  
**Cost Estimates**  
**New Mexico Airport System Plan**

Cost Criteria	Estimated Cost
Runway Cost/Sq. Foot – Asphalt Surface	\$5.29
Runway Cost/Sq. Foot – Concrete Surface	\$6.08
Runway Cost/Sq. Foot – Dirt/Gravel Surface	\$3.00
Parallel Taxiway Cost/Linear Foot	\$264.50
MIRL/LIRL (Runway Lighting) Cost Per Linear Foot	\$53.00
Aircraft Apron Cost/Sq. Foot	\$2.65
T-Hangar Per Storage Unit	\$15,000.00
Conventional Hangar (Single 60' X 60') Unit	\$293,000.00
ATCT	\$1,100,000.00
Land Cost/Acre – Primary Commercial Service	\$21,000.00
Land Cost/Acre – Non Primary CS & GA Reliever	\$14,000.00
Land Cost/Acre – GA Gateway	\$6,000.00
Land Cost/Acre – GA Key	\$1,200.00
ASOS/AWOS - Cost Per Unit	\$100,000.00
Passenger Terminal Building – Commercial Service	\$500,000.00
GA Terminal Building	\$200,000.00
Fuel Farm	\$250,000.00
NAVAIDs ILS/MALSR	\$2,000,000.00
NAVAIDs VOR, NDB, DME, or GPS	\$150,000.00
VASIs, PAPIs	\$100,000.00
Rotating Beacon	\$40,000.00
ARFF (Fire Fighting) Equipment	\$200,000.00
ARFF Building	\$150,000.00
Maintenance Building	\$100,000.00
Mowers/Trucks	\$35,000.00

Source: 2009 New Mexico Airport System Plan



## New Mexico Airport System Plan Update 2009

The 2009 valuation of New Mexico Airports used the 2005 valuation (determined above) and adjusted the valuation for inflation and infrastructure improvements between 2005 and 2008.

### New Mexico Airport System Plan Update

A two percent Inflation rate was applied to the valuation from the year 2008 to 2015. The two percent inflation rate was used following the average Consumer Price Index (CPI) from 2008 to 2014. **Table AF** shows the CPI Values associated with the following years.

Given the inflated valuation, the New Mexico CIP was then reviewed from the years 2009 to 2015 to make note of infrastructure changes and any assets acquired within that time period. Those associated costs were then added to the valuation.

**TABLE 4AF**

#### Consumer Price Index Summary New Mexico Airport System Plan

Year	CPI Increase/Decrease
2008	3.8%
2009	-0.4%
2010	1.6%
2011	3.2%
2012	2.1%
2013	1.5%
2014	1.6%
AVERAGE	1.91% ≈ 2%

Source: All Urban Consumers, U.S. City Average

Lastly, all private infrastructure developments, such as T-Hangars and Conventional Hangars, were accounted for using satellite imagery and communication with airport managers. Construction costs for new hangars were estimated using the **Table 4AG**. Those construction costs were also added to the valuation.

**TABLE 4AG**  
Airport Valuation Summary  
New Mexico Airport System Plan

Airport	3ID	2008 Valuation	Infl. Factor, %/yr.	2009-2015 Construction Money	2015 Valuation
Alamogordo-White Sands Airport	ALM	\$42,156,000	2	\$4,507,674	\$52,931,667
Albuquerque International Sunport	ABQ	\$15,561,000	2	\$120,984,339	\$ 138,859,037
Angel Fire - Colfax County Airport	AXX	\$9,591,000	2	\$3,859,453	\$14,876,497
Artesia Municipal Airport	ATS	\$24,119,000	2	\$933,201	\$28,638,351
Aztec Municipal Airport	N19	\$5,244,000	2	\$2,293,695	\$8,317,403
Belen-Alexander Municipal Airport	E80	\$8,887,000	2	\$6,485,870	\$16,694,240
Carlsbad - Cavern City Air Terminal	CNM	\$50,900,000	2	\$4,746,927	\$63,215,027
Carrizozo Municipal Airport	F37	\$6,985,000	2	\$1,300,121	\$9,323,690
Clayton Municipal Airpark	CAO	\$12,218,000	2	\$2,561,252	\$16,595,893
Clovis Municipal Airport	CVN	\$31,310,000	2	\$8,852,529	\$44,817,877
Conchas Lake Airport	E89	\$3,021,000	2	\$505,010	\$3,975,189
Crownpoint Airport	OE8	\$2,411,000	2		\$2,769,481





**TABLE 4AG (Continued)**  
**Airport Valuation Summary**  
**New Mexico Airport System Plan**

Airport	3ID	2008 Valuation	Infl. Factor, %/yr.	2009-2015 Construction Money	2015 Valuation
Deming Municipal Airport	DMN	\$39,984,000	2	\$2,749,273	\$48,678,321
Dofia Ana County Jetport at Santa Teresa	5T6	\$58,651,000	2	\$4,787,383	\$72,158,946
Double Eagle II Airport	AEG	\$85,339,000	2		\$98,027,686
Dulce-Jicarilla Apache Nation Airport	24N	\$6,668,000	2	\$4,519,251	\$12,178,687
Ohkay Owingeh Airport	E14	\$2,144,000	2	\$850,215	\$3,312,997
Estancia Municipal Airport	E92	\$2,851,000	2	\$42,600	\$3,317,503
Farmington Four Corners Regional Airport	FMN	\$40,434,000	2	\$10,916,645	\$57,362,601
Ft. Sumner Municipal Airport	FSU	\$16,884,000	2	\$1,612,864	\$21,007,273
Gallup Municipal Airport	GUP	\$14,182,000	2	\$3,337,379	\$19,628,039
Glenwood-Catron County Airport	E94	\$2,017,000	2		\$2,316,899
Grant County - Silver City Airport	SVC	\$25,623,000	2	\$1,849,947	\$31,282,720
Grants-Milan Municipal Airport	GNT	\$9,141,000	2	\$1,286,225	\$11,786,361
Hatch Municipal Airport	E05	\$3,488,000	2	\$1,356,414	\$5,363,030
Jewett Mesa Airport*	13Q	-	-	\$-	\$ -
Las Cruces International Airport	LRU	\$66,472,000	2	\$11,726,428	\$88,081,862
Las Vegas Municipal Airport	LVS	\$17,015,000	2	\$3,287,789	\$22,832,676
Lea County-Hobbs Regional Airport	HOB	\$61,071,000	2	\$9,282,728	\$79,434,110
Lea County-Jal Airport	E26	\$7,869,000	2	\$293,000	\$9,332,008
Lea County-Zip Franklin Memorial Airport	E06	\$14,819,000	2	\$227,669	\$17,250,042
Lindrith Airpark	E32	-	-	\$-	\$ -
Lordsburg Municipal Airport	LSB	\$11,369,000	2	\$1,084,302	\$14,143,709
Los Alamos County Airport	LAM	\$9,484,000	2	\$6,701,791	\$17,595,926
Magdalena Airport	N29	\$2,820,000	2	\$293,000	\$3,532,294
Moriarty Municipal Airport	OE0	\$7,625,000	2	\$24,617,729	\$33,376,457
Mountainair	M10	\$ -	2	\$767,218	\$767,218
Navajo Lake Airport	1V0	\$2,732,000	2	\$455,000	\$3,593,209
Portales Municipal Airport	PRZ	\$9,891,000	2	\$1,632,672	\$12,994,322
Questa Municipal No. 2 Airport	N24	\$4,362,000	2	\$569,145	\$5,579,712
Raton Crews Field Municipal Airport	RTN	\$20,128,000	2	\$9,498,639	\$32,619,384
Reserve Catron County Airport	T16	\$2,915,000	2	\$550,000	\$3,898,419
Roswell International Air Center	ROW	\$ 742,528,000	2	\$16,181,001	\$ 869,112,272
Santa Fe Municipal Airport	SAF	\$92,910,000	2	\$24,261,491	\$ 130,985,876





**TABLE 4AG (Continued)**  
**Airport Valuation Summary**  
**New Mexico Airport System Plan**

Airport	3ID	2008 Valuation	Infl. Factor, %/yr.	2009-2015 Construction Money	2015 Valuation
Santa Rosa Route 66 Airport	SXU	\$9,955,000	2	\$3,594,528	\$15,029,694
Shiprock Airstrip	SV5	\$2,755,000	2	\$-	\$3,164,629
Sierra Blanca Regional Airport	SRR	\$28,222,000	2	\$4,615,180	\$37,033,387
Socorro Municipal Airport	ONM	\$14,112,000	2	\$1,042,666	\$17,252,918
Springer Municipal Airport	S42	\$2,388,000	2	\$1,007,795	\$3,750,856
Taos Regional Airport	SKX	\$8,955,000	2	\$12,160,522	\$22,447,002
Tatum Airport*	18T	-	-	\$-	\$ -
Truth Or Consequences Municipal Airport	TCS	\$16,374,000	2	\$1,442,362	\$20,250,941
Tucumcari Municipal Airport	TCC	\$18,019,000	2	\$1,787,415	\$22,485,582
Vaughn Municipal Airport	N17	\$1,956,000	2	\$530,514	\$2,777,343
Zuni-Black Rock Airport	ZUN	\$ -	2	\$3,672,508	\$3,672,508
Mosquero Heliport*	N01	-	-	\$-	\$ -
Red River Heliport*	N02	-	-	\$-	\$ -
Catron County Heliport*	C54	-	-	\$-	\$ -
Cimarron Heliport*	C12	-	-	\$-	\$ -
Conchas Lake Seaplane Base*	E61	-	-	\$-	\$ -
Sandoval County Airport	Pro- posed	-	-	\$-	\$ -

The combination of the two percent inflation, New Mexico CIP improvements from 2009 to 2015, and private development improvements between the years 2009 and 2015 yields the 2015 airport valuation.

## **AIR SERVICE TRENDS**

Air service trends were discussed to a certain extent earlier in the Forecasts Chapter. As mentioned in that chapter, there are three distinct trends in the commercial air service industry that are shaping its future.

- Airline consolidation and restructuring
- Capacity discipline
- Proliferation of ancillary revenues

## **CONSOLIDATION AND RESTRUCTURING**

Consolidation and restructuring has been a part of the airline industry almost since its beginnings. In the early years of the airline industry in the United States, transcontinental air mail was a large part of the airlines business. In fact, many airports were developed for the primary reason of serving as mail



or refueling stops. During the Great Depression, the Postmaster General worked to consolidate 30 smaller airlines into four: United, American, Eastern, and TWA.

A few managed to remain independent, along with some additional start-ups, including familiar names such as Western Air Express, Delta, Northwest, Continental, and Braniff. In 1944, the Civil Aeronautics Board (CAB) established local service airlines; however, most all of those airlines have been subsumed over time. One exception has been Southwest Airlines, which started in the late 1960s as an intrastate airline in Texas as a way to avoid federal regulation.

Since deregulation became law in 1979, the United States airline industry has seen a variety of airline start-ups, bankruptcies, acquisitions, and mergers. Deregulation also allowed Southwest Airlines to extend its low fare service outside the state of Texas. This reality concerned groups affiliated with the relatively new Dallas-Ft. Worth International Airport and led to Congress enacting the *Wright Amendment of 1979*, designed to limit interstate flights from Love Field to bordering states. In New Mexico, Albuquerque was added to the Southwest network with flights to Dallas Love Field in 1982.

One of the advantages to deregulation for the passenger was competition across routes. While some of the smaller markets lost flights, the more lucrative markets experienced extreme competition that resulted in increased service and lower fares, as individual airlines attempted to gain footholds in various markets. At the same time the cost of labor, fuel, and aircraft continued to rise. The load factors prior to deregulation could no longer support a profitable airline, leading to bankruptcies, acquisitions, and mergers.

The legacy carriers developed hub-and-spoke systems with strategic fortress hubs at airports as a means to gain efficiencies in serving markets, as well as to feed into more profitable international flights. Southwest Airlines' model was primarily domestic and based more upon non-stop service. Still, the airline developed several hubs and mini-hubs. Albuquerque was a mini-hub of sorts, taking advantage of the *Wright Amendment of 1979* to connect flights from outlying states to flights into and out of Dallas Love Field.

Through all the start-ups, bankruptcies, acquisitions, and mergers, the U.S. airline industry has gone full circle and is back to four major airlines: United, American, Delta, and the former discount carrier Southwest. There are other airlines, such as JetBlue, Frontier, Allegiant, and Spirit that still operate primarily as discount carriers. The airlines have restructured including updated business models and are now seeing profits they had seldom seen since deregulation. This has been, in large part, due to a new capacity discipline they have practiced.

## **CAPACITY DISCIPLINE**

Taking advantage of globalization, major airlines have been focused on international growth. Even Southwest Airlines, through its acquisition of AirTran, has entered the international market.



Domestically, the focus since even before the 2008 recession has been on capacity discipline to help right their financials. By supplying fewer seats, the airlines have been able to increase passenger yields and profitability. Airlines are no longer looking for markets that will just breakeven; rather, they look to serve markets that can provide the highest per passenger yields. Even the discount carriers are highly sensitive to load factors and have been known to terminate service if the market does not maintain a high load factor.

Similarly, if an airline believes it can successfully serve additional markets from a single airport, it may choose to let those potential passengers drive rather than establish service in their market.

The major carriers have been phasing-out the use of small turboprops and regional jets, replacing 50-seat and smaller with 70-seat and larger aircraft. As a result, manufacturers are no longer delivering commercial aircraft in the 10- to 59-seat range.

While the aircraft commonly used for small community air service are no longer being manufactured, their retirement in the fleet is being hastened by the Commuter Safety Initiative where Congress placed 10- to 30-seat aircraft under the same standards as the larger aircraft. This requires pilots to have 1,500 hours for an Airport Transport Pilot (ATP) rating and imposes additional rest time for the pilots. Not only has this created a shortage of qualified pilots, but also the need for more pilots for commuter airlines to maintain the same schedule.

For air service, this has only widened the gap, making 10- to 59-seat aircraft not only financially, but logistically, infeasible. Most 19-seat aircraft still operating on scheduled commercial routes are in Essential Air Service markets where subsidies are available. Airlines using aircraft with nine seats or less are filling in the gaps at many smaller airports that do not end up losing service altogether.

## **ANCILLARY REVENUES**

While airlines have traditionally charged additional fees for oversized bags, over the past decade they have found sources of additional revenues in ancillary fees for everything from checking a bag to premium seating to priority boarding. Perks for frequent flyers have become revenue producers for the airlines. Ultra-discount carriers started the trend by keeping basic fares low and charging the little extras that had always previously been seen as part of the ticket cost. The major airlines joined in on the trend and have made billions from additional fees.

The additional fees are not considered part of the air fare, so they can make what appear to be lower fare yields deceiving. The additional fees are also not subject to the passenger ticket tax that supports the federal Airport Improvement Program (AIP). Not only airlines have systematically and successfully added fees not subject to the ticket tax, but they have lobbied Congress in opposition to any increase in passenger facility charges (PFCs) designed to support capital improvements at commercial service airports.



The advantage is that the basic fares may remain lower, and passengers can individually choose which additional services or perks they are willing to pay for. Unless Congress would step in to regulate the fees, it is likely that this trend will continue into the future. One possibility could be for Congress to eventually subject the ancillary fees to the ticket tax.

## **SUMMARY AND CONCLUSIONS**

The three trends with airlines are all leading to a more profitable industry, albeit at higher costs and perhaps less convenience for the consumer. Load factors that have risen significantly since the turn of the century will still see lesser increases before leveling off, meaning flights will remain full on a regular basis or risk being discontinued.

Eventually, small communities could be faced with generating enough passenger revenue for either aircraft with more than 60 seats, or aircraft with less than 10 seats, or simply be left with no service. To attract and/or maintain service, many small community commercial service airports will continue to need to utilize subsidies. The follow section discusses small community air service and the success of funding programs at the federal and state levels.

## ***SMALL COMMUNITY AIR SERVICE FUNDING PROGRAMS***

As evidenced in the previous section, public policy has long played a key role in shaping the ways air service has been delivered in the United States, as well as in New Mexico. From the Postmaster General working to consolidate airlines in the 1930s until deregulation of the airlines went into effect in 1979, air service in many small community market areas was virtually assured. The Deregulation Act opened up all domestic routes to free market competition. This also meant that carriers could terminate service to communities without government approval. To address this concern, Congress established the Essential Air Service (EAS) program. While initially authorized for 10 years, EAS has managed to survive since with a variety of extensions and amendments.

Still, very few EAS communities have been able to grow their air service so that it can be sustained without federal subsidy. In 2002, Congress established the Small Community Air Service Development (SCASD) Program. Administered through the Department of Transportation, the program provides temporary grant-in-aid assistance to small communities with the intent of achieving sustainable air service to avoid ongoing federal subsidies. Additionally, it was a goal of the program to generate creativity in air service development proposals that might be implemented in other similar markets. The program has regularly been included in airport improvement funding legislation, which is scheduled to run out in September 2015 unless extended by Congress.

Besides the federal programs, a number of states, New Mexico included, have provided assistance for air service development at airports within their borders. This section examines both the state and federal programs.



## **ESSENTIAL AIR SERVICE**

The federal EAS program pays a subsidy to a carrier to ensure that a specified level of service is provided to a community. Each community is provided air carrier service from their airport to an airport that is designated as large or medium hub airport. The U.S. DOT is responsible for determining a number of specific criteria related to the minimum level of service to be provided (routing, frequency, types of aircraft, and intermediate stops). Through an airline selection process using a bidding system, the DOT is required to consider service reliability; contractual arrangements with a major carrier at the hub airport; interline arrangements with a major carrier at the hub airport; and community views. The airline is selected by the DOT with the community's input, generally for a two-year contract.

The EAS program currently has an alternate pilot program that allows the DOT to designate funds to the community airport sponsor rather than an airline; if not, acceptable bids are received. The sponsor can submit a proposal for recruiting air service not otherwise meeting EAS guidelines, such as less-than-daily service, flights to various destinations at different times of the week or year, air taxi service, or ground transportation. This allows the community to recruit air service that would not otherwise meet EAS guidelines, such as less-than-daily service, flights to differing destinations at different times of the year or week, air taxi service, or even ground transportation. There are currently two communities with approved alternative EAS.

Legislation now limits eligibility to those communities that were in the program during federal fiscal 2011. Those communities had to be at least 70 miles from the closest large or medium hub airport, and could not require a subsidy of more than \$200 per passenger, unless they were at least 210 driving miles from the nearest large or medium hub airport. In addition, the DOT is required to discontinue service to any EAS airport that is receiving a subsidy of more than \$1,000 per passenger regardless of distance from the hub airport. Since fiscal year 2014, the community also must average at least 10 enplanements per day unless it is more than 175 miles from the nearest large or medium hub airport.

In 2012, Alamogordo was one of the communities to lose EAS eligibility because it exceeded the \$1,000 per passenger cap. In 2014, Athens, Georgia lost EAS eligibility for not averaging at least 10 daily passengers in fiscal year 2013. In 2015, Kingman, Arizona lost EAS eligibility as it, too, exceeded the \$1,000 passenger cap.

The \$200 per passenger subsidy cap for airports within 210 miles of a large or medium hub has been a part of EAS legislation since 1990, and a number of communities have lost eligibility as a result since that time. In 2012, Congress added a provision that allows waivers only in limited circumstances. After it provided the public notice and opportunity for comment, the DOT will begin stricter enforcement of the \$200 per passenger subsidy cap in 2016. It will be based upon passengers carried during the 2015 federal fiscal year.

Currently there are 112 EAS communities in the contiguous 48 states, 60 of which are within 210 miles of a large or medium hub airport. All three EAS communities in New Mexico are outside the 210-mile criteria, so are not subject to the enforcement of the \$200 subsidy cap.





The DOT conducted a status update of the 60 communities, comparing 2014 passenger enplanements to their respective current EAS contract subsidy. A total of 32 communities had exceeded the \$200 cap for 2014. While the highest subsidy ratio was \$700 per passenger, 20 communities were exceeding the cap by more than 50 percent.

Essential Air Service seems to undergo intense scrutiny with every Congressional renewal of the airport improvement program. Yet it has survived for more than a quarter of a century since its initial sunset date. Since the last authorization in 2011, the annual appropriations for EAS have risen from \$200 million in 2010 to \$261 million in 2015. So in spite of threats to close the program, Congress has, and is expected to continue to, maintain EAS at least through the next airport improvement authorization.

A number of options have been proposed that are designed to promote efficiencies in the EAS program:

- Allow carriers more flexibility in type of aircraft and service.
- Award long-term EAS agreements, incorporate financial incentives, or allow agreements to be renegotiated.
- Consolidate EAS flights at a single regional airport.
- Focus EAS assistance on the most remote communities.
- Cap EAS program eligibility as of a certain date.

These options may be beneficial in certain circumstances, but not for all communities or parts of the country.

Being more flexible in the type of aircraft and service could have advantages for many airports moving forward. DOT has already adjusted requirements on the 19-seat minimum after Congress increased the hours required for an ATP rating for pilots to operate the aircraft. Nearly half (55) of the EAS communities in the contiguous 48 states are now served by aircraft with less than 10 seats.

At the other end of the spectrum, 31 EAS communities are now served by 50-seat regional jets. Twelve are within 210 miles of a large or medium hub airport and are, therefore, subject to the \$200 per passenger subsidy cap. Only two of the 12 communities exceeded the cap in 2014. The other 10 averaged a subsidy of just \$55 per passenger.

### **SMALL COMMUNITY AIR SERVICE DEVELOPMENT PROGRAM (SCASD)**

As mentioned earlier, the SCASD Program is intended to provide temporary financial assistance with the objective of achieving sustainable air service. Unlike EAS, the funds are paid to the airport sponsor rather than directly to the airline providing service. The SCASD has more flexibility for creativity in plans to develop sustainable air service. The criteria for eligibility are: 1) a small hub airport or smaller that also has insufficient air service or unreasonably high fares; and 2) an airport that presents charac-



teristics, such as geographic diversity or unique circumstances that demonstrate the need for and feasibility of the program.

SCASD is authorized up to 40 grants per year with no more than four of those to the same state. Priority is given to locations where:

- Average air fares are higher than the average fare for all communities;
- Participation in a portion of the cost from local, non-airport revenue sources;
- Establishment of a public-private partnership to facilitate air service to the public;
- Improved service that will bring material benefits of scheduled air transportation to a broad section of the traveling public whose access would otherwise be limited;
- The assistance will be used in a timely manner; and/or
- Multiple communities cooperate to consolidate air service at one regional airport.

***From 2002 through 2014, the SCASD program has provided 359 airport grants, totaling \$164,553,632. There have been a total of eight grants to New Mexico airports totaling \$4,872,000.***

From 2002 through 2014, the SCASD program has provided 359 airport grants, totaling \$164,553,632. There have been a total of eight grants to New Mexico airports totaling \$4,872,000. The most recent were \$272,000 to Los Alamos in 2012 and \$450,000 to Roswell in 2014. The other six grants were be-

tween 2002 and 2007. Only two of the recipients, Farmington and Roswell, still have scheduled air service. Noteworthy, however, is that Roswell previously used a \$400,000 SCASD grant in 2007 to attract the regional jet service that has quadrupled its passengers since. The Los Alamos grant resulted in the return of air service to the community for the first time since 2000. Unfortunately, that service was suspended in early 2015 for contractual reasons, but is scheduled to resume in September 2015. SCASD grants awarded to airports in New Mexico are summarized in **Table 4AH**.

**TABLE 4AH**  
**Air Service Grant History**

Fiscal Year	Airport/Community	Type	State	Sponsor	FAA/DOT	Total
2002	Lea County Regional Airport	ASAP	\$190,000	\$200,000		\$390,000
2002	Taos/Ruidoso	SCASD			\$500,000	\$500,000
2003	Taos Consortium	SCASD			\$1,400,000	\$1,400,000
2003	Taos Municipal Airport	ASAP	\$200,000	\$200,000		\$400,000
2004	Farmington	SCASD			\$650,000	\$650,000
2004	Gallup Municipal Airport	ASAP	\$200,000	\$200,000	\$466,667	\$866,667
2005	Gallup Municipal Airport	ASAP	\$200,000	\$200,000		\$400,000
2005	Las Cruces International Airport	ASAP	\$200,000	200,000		\$400,000
2005	Ruidoso, NM	SCASD			\$600,000	\$600,000
2005	Taos Municipal Airport	ASAP	\$200,000	\$200,000		\$400,000
2006	Gallup, NM	SCASD			\$600,000	\$600,000



**TABLE 4AH (Continued)**  
**Air Service Grant History**

Fiscal Year	Airport/Community	Type	State	Sponsor	FAA/DOT	Total
2006	Roswell International Air Center	ASAP	\$200,000	\$200,000		\$400,000
2007	Gallup Municipal Airport	ASAP	\$200,000	\$200,000		\$400,000
2007	Roswell International Air Center	ASAP	\$200,000	\$200,000		\$400,000
2007	Roswell, NM	SCASD			\$400,000	\$400,000
2009	Taos Municipal Air-port	ASAP	\$100,000	\$100,000		\$200,000
2010	Roswell International Air Center	ASAP	\$200,000			\$200,000
2011	Lea County Regional Airport	ASAP	\$200,000	\$200,000		\$400,000
2012	Los Alamos, NM	SCASD			\$272,000	\$272,000
2014	Lea County Regional Airport	ASAP	\$75,000	\$75,000		\$150,000
2014	Los Alamos Airport	ASAP	\$25,000	\$25,000		\$50,000
2014	Los Alamos Airport	ASAP	\$35,000	\$35,000		\$70,000
2014	Roswell International Air Center	ASAP	\$200,000	\$200,000		\$400,000
2014	Roswell, NM	SCASD			\$450,000	\$450,000
2015	Lea County Regional Airport	ASAP	\$35,000	\$35,000		\$70,000
2015	Santa Fe Municipal Airport	ASAP	\$200,000	\$200,000		\$400,000

Source: NMDOTAD, Air Service Assistance Program (ASAP); U.S. Department of Transportation, Small Community Air Service Development Program (SCASDP) Grant Selection Archive

As with EAS, concerns have been raised regarding the effectiveness of the SCASD program. Most of the grants have failed to achieve their objectives; however, some types have been more successful than others. Grants focused on the start of new service, rather than expansion of existing service, have been more successful. Rising fuel costs over most of the life of the SCASD program, combined with the 2008 recession, may also have had an effect on the success of the more recent grants.

## **STATE AIR SERVICE PROGRAMS**

Over the years, a number of state governments have provided financial assistance to airports for attracting or maintaining air service, including New Mexico. This subsection discusses some of the more recent programs from around the United States.



## New Mexico

In 1998, the New Mexico Municipal League and the New Mexico Airport Managers Association spearheaded an effort to develop a program to provide funding for new air service to small communities. In February 1999, the New Mexico Legislature appropriated \$250,000 in annual funding for the Air Service Assistance Program (ASAP).

The purpose of this program is to address the air service inadequacies in many of the state's secondary markets. Under this program, an eligible recipient that provides airline service from one or more non-hub airports to a small or large hub airport can receive a grant of up to \$200,000 per year. Additional stipulations for grant awards include the following:

- Eligible recipients must provide a minimum 50 percent match in order to receive a grant.
- Eligible recipients need to procure airline services through a competitive sealed proposal process, in accordance with New Mexico procurement code.

The rule was recompiled in 2002, when 0.046 percent of the gross receipts tax was appropriated by the legislature annually through 2007. That year, the ASAP was extended through June 2012 at which time

***Since its inception, the New Mexico ASAP has awarded \$2.86 million dollars through 18 grants administered by the NMDOTAD.***

the funding expired. The following year, the New Mexico Legislature reinstated the 0.046 percent appropriation associated with the ASAP and the program resumed in fiscal year 2014. The current program is set to expire in 2017.

Since its inception, the New Mexico ASAP has awarded \$2.86 million dollars through 18 grants administered by the NMDOTAD. **Table 4AH** presents historical grant totals and their associated projects. Any ASAP funds that are not used in the current fiscal year stay in the aviation fund to be used for the air service program.

## Wyoming Air Service Enhancement Program

The Wyoming State Legislature enacted the Wyoming Air Service Enhancement Program (ASEP) in 2003. While funding levels have changed over time, the legislature approved \$6.4 million in funds for 2015 and 2016. This is \$500,000 higher than approved in the last two-year budget. The program has provided as little as \$10,000 for equipment purchases to over \$1.0 million for revenue guarantees. Most grants include a local matching share that may vary based upon the proposal request.

The program is handled by the Wyoming Aeronautics Commission, which reviews then approves or denies air service applications. It also enters into the agreements to provide financial assistance. The Aeronautics Commission establishes the benchmarks for determining the success of the enhancement,



and establishes and maintains the Wyoming Air Service Account. The Aeronautics Commission's priorities for proposal selection are:

- Keeping the level of markets served today;
- Have a reasonable chance for success;
- Level of local support;
- Airlines performance history and partnership
- Marketing

The Aeronautics Division has a full time Manager and Analyst dedicated to the Air Service Enhancement Program. They analyze passenger bookings, fares, reliability, schedules, and fuel data. The Aeronautics Division's goals of the ASEP are:

- Reduce Leakage;
- Competitive Fares;
- Reliability of Service; and
- Favorable Schedules.

A high altitude state with low population, Wyoming has 10 commercial service airports. In 2013, nine of the airports were primary non-hubs, with Worland Municipal the only non-primary. Three communities (Cody, Laramie, and Worland) are in the Essential Air Service Program in 2015, compared to five when the Air Service Enhancement Program began. Over the first five years of the ASEP, each of the 10 airports in the state increased in enplanement levels, as total enplanements in the state grew by 45 percent from 361,000 to over 524,000. The 2008 recession, airline bankruptcies, and consolidation, along with rising fuel prices, slowed down the growth over the next five years to just two percent for 534,000 passengers.

The pilot shortage more recently created by the Commuter Safety Initiative has had a major impact on the state's four airports served by 19-seat aircraft in the past year. In fact, three (Laramie Regional, Riverton Regional, and Cheyenne Regional) could lose primary airport status because their passenger enplanements fell below 10,000 enplanements in 2014. Worland Municipal, the state's lone non-primary airport, fell below the minimum 2,500 enplanements needed to maintain FAA classification as a commercial service airport. As an EAS airport, it also technically fell below the 10 passenger per day cap to retain its subsidy, although consideration may be given to the airline failing to fulfill its contract.

None of the other three airports have EAS and Cheyenne Regional lost its air service in March 2015 due to the pilot shortage. Ironically, the regional airline that pulled out, Great Lakes Airlines, is headquartered in Cheyenne. Cheyenne Regional Airport is currently pursuing new air service with the assistance of a \$500,000 ASEP grant.





### **Kansas Affordable Airfares Program**

The Kansas Affordable Airfares Program (KAAP) had its beginnings in 2001 with the City of Wichita working to entice a low fare airline to its airport where air fares were 23 percent above the national average. They provided a revenue guarantee to AirTran to initiate service to Wichita Mid-Continent Airport. The KAAP is a continuation of that initial program and is managed by the Regional Economic Area Partnership (REAP), which is a consortium of city and county governments. While AirTran provided low fare competition for eastern flights, in 2007 Frontier was provided guarantees to provide service to Denver for western low fare competition. Decade-long average air fares dropped by 33 percent, and by 2012, average air fares at Wichita were at the national average. Wichita's enplanements grew from 527,062 in 2001 to 780,756 in 2008. Recovering from a post-recession decline, enplanements were 757,695 in 2014.

KAAP and its predecessor paid out \$52.9 million in guarantees to AirTran and Frontier between 2002 and 2012. In 2012, Garden City received \$333,333 to contract with American Eagle for regional jet service, the first such grant to provide service at another Kansas airport besides Wichita. Garden City enplanements grew from 11,690 in 2011 to 26,428 in 2014 after with regional jet service.

The KAAP was funded with \$5.0 million annually from the State Highway Fund until 2013. At that time, the funding source was shifted to the State Economic Development Initiative Fund. In dealing with a state budget shortfall for 2016, the Governor has recommended the funding be decreased by one million dollars and once again come from the Highway Fund.

### **Virginia Air Service Development and Enhancement Program**

The Air Service Development and Enhancement Program provides funding to assist Virginia airport sponsors attract new air service and maintain or improve existing air service. Funding requests are reviewed and approved by the Virginia Department of Aviation.

Projects or items eligible for funding include air service studies, consulting services, airline visits and presentations, air service data subscriptions, market research services, and flight information display systems. Marketing and advertising for new or improved air service is eligible for the first calendar year of service. Cash incentives, however, are not eligible. Neither is planning, engineering, nor construction of capital improvements.

State participation is capped at \$20,000 annually per airport. The program will pay half of the cost of eligible items and projects, except for medium hub airports, for which it will pay one-third.



## Iowa Air Service Development Program

The Iowa Department of Transportation - Office of Aviation administers the State Aviation Grant Program, which includes the Iowa Air Service Development Program designed to maintain and enhance commercial air service at the state's eight commercial service airports. Funding is targeted to attract and retain air service based upon the needs and circumstances of the airport and the community it serves. Funding comes from the state aviation revenues and allocations, and project selection is approved by the Iowa Transportation Commission.

There are two types of grants under the Air Service Development Program: Sustainment and Enhancement.

**Sustainment grants** are intended to sustain and/or enhance service in markets through ongoing marketing and education programs. The eligible airports can apply on an annual basis but grants are subject to the availability of funds. The maximum grant is \$28,000 and requires a 20 percent local matching share.

**Enhancement grants** provide assistance when opportunities arise that require financial incentives or market entry support. The goal is to increase service options and competitiveness for the state's commercial service markets. This can be accomplished through any combination of new routes, a new carrier into the market, increasing seat capacity, or increased flight frequency.

Applications can be made at any time during the year, or basically as the opportunity presents itself. The maximum amount of the grant cannot be more than 40 percent of the available funding. While not specifically set, a significant local match is expected.

Five of the eight commercial service airports in the state have service subsidized by EAS. Two of the EAS markets, Waterloo and Sioux City, have regional jet service. Two others, Ft. Dodge and Mason City, were served by the 19-seat turboprops until Great Lakes Airlines suspended service for most of 2014 due to the pilot shortage. They are now served by the same airline serving Burlington and operating nine-seat aircraft.

## Michigan Air Service Program

One of the longest standing state air service funding programs is the Michigan Air Service Program. Established in 1987 to address the loss and decline of air service at several Michigan airports, the program first sought to stabilize and expand service by promoting the increased use of the local airports. In 1992, the program was refocused on aviation projects that encouraged and supported economic growth. In 1994, air cargo airports lacking scheduled passenger service were added to the program.

Under its current structure, the Michigan Air Service Program considers funding projects in three different categories.



- 1) **Capital Improvement and Equipment** - This category's purpose is to improve airport facilities for passenger acceptance, cargo handling, and airport operations to support air service and economic development. The focus is on facility enhancement projects that are not eligible or are low priority for federal funding, such as interior terminal modifications; security equipment; flight information centers; defibrillators; ticketing areas, ADA accessibility; and cargo handling equipment/facilities.

State funding under this category is available at a 90 percent match for airports with less than 100,000 annual enplaned passengers, and a 50 percent match for airports over 100,000 enplanements annually. Grants are limited to \$80,000.

- 2) **Carrier Recruitment and Retention** - This category is for establishing, maintaining, or increasing service levels at Michigan airports. Funding is available to airports with less than 100,000 annual passenger enplanements. There are no pre-set cost limits, and elements that can be funded under this category include:

- *Feasibility Studies* – Up to 70 percent matching funds for feasibility studies and business plans to recruit a carrier or expand existing service.
- *Risk Sharing* – Funding to minimize the carrier risk on certain routes where both a feasibility study and community interest supports the service. Funding would be available for up to three years and used only to establish and stabilize service. Funding would be available at 80 percent for the first year and 50 percent for the last year. If a third year is involved, the middle year would be funded at a 70 percent match.
- *Incentives* – Inducements to recruit or preserve service may include assistance for the waiver of landing fees, baggage handling equipment, and other equipment and operations needs required by the airport. Costs would be shared with up to an 80 percent match.

- 3) **Airport Awareness** – This category is intended to increase the public awareness of the local airport and its passenger and cargo services. The focus is concentrated on increased educational activities for public awareness and media relations. This category would provide a 90 percent match up to \$25,000 over a 12-month period for airports with less than 100,000 annual passenger enplanements.

There are 19 airports in Michigan that have commercial air service. Seven of them have over 100,000 annual enplanements. Of the remaining dozen, nine of them are Essential Air Service Airports, including five on the remote Upper Peninsula.



## ***SUMMARY***

As indicated in the discussion above, many facilities within the New Mexico Airport System currently meet the objectives outlined within each role. For airports currently meeting the objectives, the corresponding facilities and services should be maintained. Airports needing improvements in facilities and services have also been identified. With this information and the summary of outside economic influences presented in this chapter, a detailed capital improvement program will be developed to guide future improvements to maintain and enhance the New Mexico Airport System.





CHAPTER FIVE

# ECONOMIC IMPACT OF THE NEW MEXICO AIRPORT SYSTEM





## Chapter Five

# ECONOMIC IMPACT OF THE NEW MEXICO AIRPORT SYSTEM

The New Mexico Airport System encompasses a multi-faceted gateway that welcomes commerce and visitors and provides access for outward travel across the state and to national and intercontinental destinations. The airports of New Mexico create significant benefits that extend beyond the aviation community to impact economic growth and development as well as the quality of life of residents. The availability of air transport is invariably listed by business executives as a key criterion for business location and expansion. Airports contribute to public safety by supporting police operations, firefighting teams and border security. Private aviation firms provide medical transport and assist businesses with mapping, aerial photography and transport to reach customers around the state.

Airline travelers from across the nation or around the globe come to New Mexico to visit friends and relatives, conduct business, attend conferences, or vacation in the midst of world class scenery and recreation, while outbound New Mexico residents can travel to major metropolitan airports in the U.S. or connect to international flights. General aviation flyers enjoy the benefits of on-demand flight schedules to destinations within the state or any of the nearly 3,000 general aviation airports that provide access to large and small communities across the country.

Although qualitative advantages created by the airport system are important, they are also challenging to measure. In studying the economic impacts of airports and aviation, regional analysts have emphasized indicators of economic activity that can be quantified:

- **Employment** is the number of jobs supported by economic activity created by the presence of the airports in the system.



- **Payroll** includes employee compensation (the dollar value of payments received by workers as wages and benefits) and proprietor's income of business owners.
- **Output** is the value of the production of a private firm or public agency. For a private firm, output is typically equal to the annual value of gross sales at producer prices (before addition of further margins or transportation costs), although producer prices include sales or excise taxes. Gross sales are equal to gross revenues that accrue to the producer, and in turn these are equal to spending or expenditures from the perspective of the buyer. For government units, the agency budget is used as the value of output.

This methodology was standardized in the publication by the Federal Aviation Administration, *Estimating the Regional Economic Significance of Airports*, Washington DC, 1992, and has been closely followed in recent years by public and private sector analysts. Consistent with the FAA methodology, this study views the New Mexico Airport System as a source of measurable economic impacts that benefit the New Mexico economy and the residents of the state in numerous ways. The approach is described in greater detail below.

## **DEFINITIONS AND METHODOLOGY**

There are two sources of economic impacts created by the New Mexico Airport System:

- **On-airport activity** by private aviation related firms and government agencies located on system airports is one source of output, jobs and worker payrolls. Included in on-airport economic impacts are capital improvement projects which provide for growth and enhance air safety. Since capital spending can fluctuate from year to year as projects begin or end, variation in capital improvement spending was smoothed by averaging annual outlays over the post-recession period through 2014.
- **Off-airport spending** by visitors that arrive via airliner or general aviation aircraft is a second source of economic impacts. In 2014, there were 1.3 million visitor enplanements at New Mexico commercial service airports and an additional 77,519 arrivals of transient general aviation aircraft carrying visitors. This visitor spending created jobs, income and revenues in the hospitality sector of the economy.

## **DIRECT, SECONDARY AND TOTAL ECONOMIC IMPACTS**

Economic activity (such as purchase of fuel by the pilot of a transient aircraft) creates an initial economic impact when the purchase is made. The spending by the pilot provides revenue to the Fixed Base Operator, a portion of which is retained as profit, and the remainder is used for payments to suppliers or to pay salaries to workers (who then spend their wages in their home communities). As payments are received by suppliers or spent by workers, the initial direct spending from the fuel purchase recirculates in



the economy in a series of successive transactions known as multiplier or secondary impacts. These combined direct impacts and secondary impacts summed together provide a measure of total economic impacts. These terms are explained more fully below.

- **Direct impacts** measure the initial output, employment, and payroll when businesses and agencies on system airports generate sales and revenues, hire workers, and make payments to employees. Off-airport direct impacts result when visitors that arrive by air spend for goods and services including lodging, restaurants, auto rental, retail items or recreational activity.
- **Secondary impacts** (known as multiplier effects or “ripple effects”) are created when the initial spending on system airports or by visitors circulates and recycles through the economy. The secondary impacts measure the magnitude of successive rounds of re-spending in the broader regional economy.
- **Total economic impacts** are the combined sum of direct and secondary impacts created both on and off the airport. The on-airport direct impacts are tabulated by obtaining data on revenues received by airport employers, the number of workers, and compensation paid. Air visitor direct spending impact are based on surveys of passengers. These initial direct impact figures are the “inputs” to the input-output model to estimate secondary impacts. The sum of the direct plus secondary impacts provides a measure of total economic impacts.

In turn, there are two components that make up secondary impacts.

- **Indirect impacts** include activity by suppliers and vendors who sell to airport or hospitality businesses, along with the jobs created and incomes paid to workers by these suppliers. For example, businesses on system airports purchase services such as insurance and hard goods such as tools or office furniture from off-airport providers. The revenues to suppliers and jobs supported as well as wages paid are indirect impacts.
- **Induced impacts** measure the consumer spending of workers who produced both the direct or indirect goods and services. For example, when an aircraft technician’s salary is spent for consumer goods such as groceries or medical services, this contributes to additional employment and income in the general economy for providers of these goods and services.

Economic impact studies rely on multiplier factors from input-output models to estimate the impact of secondary spending on output, earnings and employment to determine indirect and induced impacts. The indirect and induced spending coefficients used for this study were from the IMPLAN input-output model based on New Mexico state and county data from the U. S. Bureau of Economic Analysis. This model is frequently used for studying the economic contribution of airports and aviation across the nation.



To estimate economic impacts for individual New Mexico system airports, separate IMPLAN models for each county were constructed. Thus, the statewide impacts of on-airport activity and off-airport visitor spending reported in summary tables are the summation of the individual airports. For simplicity, state airport system studies often use one set of statewide multipliers. However, multipliers differ from airport to airport because initial economic impacts recirculate to a greater extent in larger counties and have a lesser effect in smaller counties (due to “leakages” of spending). While the current approach involved estimation of over 50 separate IMPLAN models, the trade-offs in terms of accuracy for any given airport were deemed worthwhile.

## **SUMMARY OF FINDINGS**

Including impacts from on-airport economic activity, commercial service and general aviation visitor spending, and all multiplier effects, New Mexico System Airports contributed total annual economic impacts as shown in **Exhibit 5A**.

The New Mexico Airport System economic impacts are based on data reflecting economic activity for 2014. Direct on-airport employment was 4,981 jobs in private aviation-related or construction firms and government units. Payroll for on-airport workers was \$301.9 million. The direct output created by on-airport tenants, public agencies, and capital improvement project spending was \$903.1 million. The average on-airport wage statewide was \$60,600, above the statewide 2014 average of \$53,900.

Visitors who travel to New Mexico via scheduled air carrier aircraft are defined as commercial service visitors. There were 1.3 million commercial service visitor enplanements at New Mexico Commercial service airports in 2014. Direct employment supported by commercial service visitor spending was 6,843 jobs in the New Mexico hospitality industry, including lodging, food services, retail, ground transport, and recreation. Payroll was \$167.3 million. Commercial service visitors to New Mexico stayed a total of 5.4 million visitor days in 2014, spending an average of \$112 per person per day. Direct commercial service visitor spending statewide was \$602.9 million.

Visitors who travel to New Mexico airports via transient general aviation aircraft are defined as general aviation visitors. There were 268,820 general aviation visitor who arrived at New Mexico airports in 2014. Direct employment related to general aviation visitors was 769 jobs, with payroll of \$20.2 million. General aviation visitors who stayed at their destination an average of 2.1 days. Direct general aviation visitor spending was \$60.7 million.

The derivation of total economic impacts from the initial direct impacts of on-airport, commercial service, and general aviation activity is set out in **Table 5A**.





# ECONOMIC IMPACT SUMMARY

## PRIMARY/DIRECT IMPACTS

### On Airport

Businesses and agencies on system airports generate sales and revenues, hire workers, and pay employees



### Off Airport

Air visitor spending including: lodging, restaurants, car rental, retail items, and entertainment



## + SECONDARY IMPACTS

### Indirect Impacts

Activity by suppliers and vendors who sell to airport businesses, along with jobs created and incomes paid to workers by these suppliers.

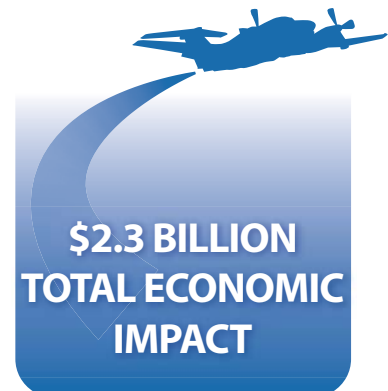


### Induced Impacts

Consumer spending of workers who produced direct or indirect benefits.



## = TOTAL ECONOMIC IMPACTS





**TABLE 5A**  
**Direct, Secondary and Total Economic Impacts**  
**New Mexico Airport System**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4,981	\$301,886,000	\$903,062,000
Commercial Service Visitors	6,843	167,339,000	602,906,000
General Aviation Visitors	769	20,164,000	60,728,000
<b>Direct Impact</b>	<b>12,593</b>	<b>489,389,000</b>	<b>1,566,696,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3,409	132,194,000	402,446,000
Commercial Service Visitors	2,350	94,291,000	313,665,000
General Aviation Visitors	221	7,482,000	25,444,000
<b>Secondary Impact</b>	<b>5,980</b>	<b>233,967,000</b>	<b>741,555,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8,390	434,080,000	1,305,508,000
Commercial Service Visitors	9,193	261,630,000	916,571,000
General Aviation Visitors	990	27,646,000	86,172,000
<b>Total Impact</b>	<b>18,573</b>	<b>\$723,356,000</b>	<b>\$2,308,251,000</b>

The combined direct impacts were 12,593 direct jobs created on and off system airports, with payroll of \$489.4 million and direct output of \$1.6 billion. On-airport activity accounted for 58 percent of the direct system impact. The secondary or multiplier employment impact was 5,980 indicating that each 1,000 direct jobs created by the New Mexico Airport System supported an additional 475 secondary jobs across the general economy in industries from health care to real estate to retailing. The secondary payroll impact was \$234 million and secondary output generated by system activity was \$741.6 million. Every \$1,000,000 of direct output created by the system supported additional output of \$473,000 in the New Mexico economy.

The total economic impact of the New Mexico Airport System was 18,573 jobs with payroll of \$723.4 million and output of \$2.3 billion. The following sections provide detailed information about direct, secondary and total economic impacts from on-airport activity and visitor spending at New Mexico System Airports and statewide. Direct, secondary and total economic impacts by source for each individual airport are summarized in Appendix A.

## **ON-AIRPORT ECONOMIC IMPACTS**

The on-airport sources of direct economic impacts include employment, payroll and output for public agencies and private firms located on-site and within airport property lines. Local, state and federal governmental units that may be found on-site include the airport administration, Air Traffic Control Tower,



Federal Aviation Administration (FAA) offices, airport security including Transportation Security Administration (TSA) and local or state police, Air Rescue and Fire Fighting (ARFF) or municipal fire stations, local or state police helicopter and fixed wing flying squads, forest fire response teams, drug enforcement units, and Immigration and Customs Enforcement. This listing is not all-inclusive and varies by size and location of airports in New Mexico.

Private on-airport tenants include Fixed Base Operators (FBO) and other firms providing fueling, maintenance, inspection and repair services, aircraft sales and charter, flight instruction, avionics, and aircraft storage, as well as commercial airlines and related passenger services such as baggage handling, auto rental, retailing, parking management, and food services. Private firms provide a range of aviation-dependent services including medivac and air rescue, agricultural spraying, air cargo and express parcel transport, and aerial photography and mapping. Other on-airport tenants include flying clubs, Civil Air Patrol units, and Commemorative Air Force groups.

In addition to the above, airports require capital improvement services from private construction, design and technical firms to build and maintain structures, ramps and runways to provide for growth in aviation activity and ensure safety standards are met. These projects contribute jobs, payroll and additional output for the regional economy.

## **DATA COLLECTION**

Information about activity located on New Mexico airports was obtained through a number of means, including municipal and airport web sites, published directories, and FAA records. Each airport in New Mexico was contacted through a direct visit, e mail or phone calls to managers, administrators and officials. Respondents were asked about tenants on the airport and in many instances tenants were contacted directly by phone or e mail. While the emphasis of the data collection was on aviation related activity, some managers and administrators held to the philosophy that without the airport certain non-aviation tenants would not have located within the area. Therefore, for a few airports, the availability of airport land, buildings and transportation access stimulated on-airport non-aviation employment that was included in the tally of on-airport activity measures because it was directly related to the presence of the airport. Statewide, these non-aviation jobs accounted for less than 5 percent of on-airport employment.

## **ALBUQUERQUE INTERNATIONAL SUNPORT**

The Albuquerque International Sunport (ABQ) is the busiest airport in the state, whether measured by annual operations (more than 135,000) or passenger enplanements (over 2.4 million in 2014). Accordingly, the Sunport accounts for a large proportion of the on-airport employment, payroll and output created by the New Mexico Airport System. The economic impacts of Albuquerque International Sunport were analyzed and reported in a recent study of the Albuquerque Airport System (combining ABQ and Double Eagle II airports) produced by the Bureau of Business and Economic Research, University of New



Mexico, published in August, 2013. The University of New Mexico study (*Economic Impacts of Albuquerque Airport System on the New Mexico Economy*) was based on fiscal year 2012 data.

The study was commissioned by the City of Albuquerque Aviation Department and was comprehensive in scope and methodologically detailed in approach, following procedures recommended by the FAA and found in national studies of similar major urban airports. The University of New Mexico researchers used the IMPLAN input-output model in their analysis, the same model used in the current study and the dominant model used in national airport impact analysis. Through interviews and surveys of the many and diverse employers located on the airport, as well as passengers in the terminal area, the University of New Mexico BBER report established a reliable baseline for estimating the impact of Albuquerque International Sunport for the current study of the New Mexico Airport System. Therefore, the on-airport employment and activity information collected for ABQ in 2012 was updated to 2014 and separate interviews and surveys were not undertaken.

Between 2012 and 2014, passenger enplanements at Albuquerque International Sunport decreased from 2,835,744 to 2,446,388, a decline of 13.7 percent. According to the U. S. Bureau of Labor Statistics (*Quarterly Census of Employment and Wages*, 2014), during this same period government agency on-airport employment in Bernalillo County decreased and aviation-related employment also declined. To account for the decline in airline commercial service passenger activity between 2012 and 2014, an adjustment index was developed based on various categories of aviation employment and the change in the City budget for the airport. The budget figures were obtained from published records of the Aviation Department of the City of Albuquerque. The estimated 2012 – 2014 index change was a decrease of 6.6 percent, or approximately one half the decline in enplanements. Applying this adjustment factor, employment at Albuquerque International Sunport in 2014 was estimated as 2,914 workers. Payroll and output estimates for 2014 for on-airport activity at Albuquerque International Airport were calculated following the same methodology.

After removal of the contribution of Double Eagle II Airport and applying the adjustments noted above, the direct on-airport economic impacts of Albuquerque International Sunport (including capital improvement projects and all figures in 2014 dollars) derived from the University of New Mexico BBER study were:

- 2,975 Jobs
- \$192.6 million Payroll
- \$612.4 million Output

## **ON-AIRPORT EMPLOYMENT IMPACTS**

There were 4,981 workers on New Mexico Airport System airports in calendar year 2014 (**Table 5B**). This figure is the direct on-airport employment impact and includes private aviation-related employers (3,224), public sector workers in government offices and agencies (1,269), and construction employment for capital-improvement projects (488). Three out of every four jobs at New Mexico airports are in the private sector. The employment count follows the Bureau of Labor Statistics methodology of tallying the number of workers without distinction between full time and part time workers. The reported numbers



represent head counts rather than full time equivalent positions. At some smaller airports, the administration of the airport is the responsibility of a manager who also has other local government duties and responsibilities. In this situation, the airport administrator would still count as one worker on the airport.

**TABLE 5B**  
**On-Airport Employment**  
**New Mexico Airports**

Facility	Direct Employment <sup>1</sup>	Secondary Employment	Total Employment
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	2,975	2,524	5,499
Santa Fe Municipal	148	96	244
Roswell International Air Center	748	219	967
Lea County Regional	44	17	61
Four Corners Regional	103	62	165
Los Alamos Airport	15	8	23
Cavern City Air Terminal	75	43	118
Grant County	19	7	26
Clovis Municipal	58	22	80
<b>Subtotal</b>	<b>4,176</b>	<b>2,911</b>	<b>7,087</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	46	16	62
Angel Fire - Colfax County Airport	6	4	10
Artesia Municipal Airport	6	4	10
Aztec Municipal Airport	9	10	19
Belen-Alexander Municipal Airport	58	23	81
Carrizozo Municipal Airport	4	4	8
Clayton Municipal Airpark	4	3	7
Conchas Lake Airport	12	5	17
Crownpoint Airport	3	2	5
Deming Municipal Airport	17	9	26
Doña Ana County Jetport at Santa Teresa	54	38	92
Double Eagle II Airport	97	81	178
Dulce-Jicarilla Apache Nation Airport	3	2	5
Ohkay Owingeh Airport	7	4	11
Estancia Municipal Airport	3	2	5
Ft. Sumner Municipal Airport	3	3	6
Gallup Municipal Airport	92	32	124
Glenwood-Catron County Airport	1	1	2
Grants-Milan Municipal Airport	1	1	2
Hatch Municipal Airport	2	2	4
Jewett Mesa Airport			
Las Cruces International Airport	94	53	147
Las Vegas Municipal Airport	7	2	9
Lea County-Jal Airport	1	1	2
Lea County-Zip Franklin Memorial Airport	1	1	2
Lindrith Airpark	2	1	3
Lordsburg Municipal Airport	3	1	4
Magdalena Airport	2	1	3



**TABLE 5B (Continued)**  
**On-Airport Employment**  
**New Mexico Airports**

Facility	Direct Employment <sup>1</sup>	Secondary Employment	Total Employment
<b>General Aviation Airports - Continued</b>			
Moriarty Municipal Airport	137	22	159
Mountainair Airport	4	3	7
Navajo Lake Airport	1	1	2
Portales Municipal Airport	10	4	14
Questa Municipal No. 2 Airport	4	4	8
Raton Crews Field Municipal Airport	16	10	26
Reserve Catron County Airport	1	1	2
Santa Rosa Route 66 Airport	11	6	17
Shiprock Airstrip	3	1	4
Sierra Blanca Regional Airport	16	19	35
Socorro Municipal Airport	4	1	5
Springer Municipal Airport	2	2	4
Taos Regional Airport	28	20	48
Tatum Airport	1	1	2
Truth Or Consequences Municipal Airport	5	3	8
Tucumcari Municipal Airport	5	3	8
Vaughn Municipal Airport	4	2	6
Zuni-Black Rock Airport	6	2	8
<b>Subtotal</b>	<b>796</b>	<b>411</b>	<b>1,207</b>
<b>TOTAL</b>	<b>4,981</b>	<b>3,409</b>	<b>8,390</b>

**Note:** <sup>1</sup> Direct employment includes private aviation-related employers, public sector workers in government office and agencies, and construction employment for airport capital improvement projects based on projects in calendar year 2014.

The 2,975 jobs at Albuquerque International Sunport accounted for 60 percent of the statewide total of 4,981 on-airport aviation jobs. The remaining eight commercial service airports contributed 1,210 additional jobs, while general aviation airports accounted for 796 on-airport jobs.

Statewide secondary employment resulting from on-airport activity was 3,409 additional jobs created in 2014. As explained in the section on impact methodology, secondary employment effects come from two sources. Suppliers to on-airport private firms and public agencies make purchases and hire employees to support production of goods and services for airport customers. This effect is known as the indirect impact. Simultaneously, employees of airport firms and agencies and employees of their suppliers are also consumers who spend incomes in their home communities. This spending by aviation-related workers creates additional jobs in the sectors serving consumers, known as induced employment.

Of the 3,409 secondary jobs created by airport operations, 1,643 were indirect jobs adding to the number of workers in supplier industries to airport operations, such as finance and insurance, business services, transportation and warehousing, information and communication, and government agencies. There were 1,766 additional jobs induced by employee household spending across a broad spectrum of consumer industries including health care, food service, retail trade, and personal services.





At smaller airports, with two or three on-site aviation workers, the secondary employment created may be only one or two additional jobs. At larger airports, secondary employment may be quite substantial. For Albuquerque International Sunport, there were 2,524 secondary jobs due to the presence of the airport.

The total employment impact of day-to-day on-airport activity is the sum of the direct jobs on New Mexico airports plus the secondary employment. The total employment impact was 8,390 New Mexico jobs created and supported by airport operations in 2014. Total employment created by commercial service airports accounted for 7,183 jobs, and of these Albuquerque International Sunport was responsible for 5,499.

## ON-AIRPORT PAYROLL IMPACTS

Direct payroll received by the 4,981 workers on New Mexico Airport System airports in calendar year 2014 was \$301.9 million (**Table 5C**). The calculated average overall wage from these statewide figures is \$60,600 in 2014 dollars. According to the U. S. Bureau of Economic Analysis, the average wage across all industries for New Mexico workers in 2014 was \$53,900, some ten percent lower. Compensation for aviation workers at Albuquerque International Sunport was \$192.6 million, or 64 percent of the statewide direct on-airport payroll. The average on-airport wage for Albuquerque International Sunport was \$64,700.

**TABLE 5C**  
**On-Airport Payroll**  
**New Mexico Airports**

Facility	Direct Payroll	Secondary Payroll	Total Payroll
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$192,578,000	\$99,460,000	\$292,038,000
Santa Fe Municipal	\$9,563,000	\$4,417,000	\$13,980,000
Roswell International Air Center	\$34,507,000	\$7,444,000	\$41,951,000
Lea County Regional	\$2,847,000	\$757,000	\$3,604,000
Four Corners Regional	\$6,442,000	\$2,562,000	\$9,004,000
Los Alamos Airport	\$852,000	\$340,000	\$1,192,000
Cavern City Air Terminal	\$6,742,000	\$1,956,000	\$8,698,000
Grant County	\$1,136,000	\$222,000	\$1,358,000
Clovis Municipal	\$2,472,000	\$782,000	\$3,254,000
<b>Subtotal</b>	<b>\$257,139,000</b>	<b>\$117,940,000</b>	<b>\$375,079,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$2,030,000	\$553,000	\$2,583,000
Angel Fire - Colfax County Airport	\$211,000	\$239,000	\$450,000
Artesia Municipal Airport	\$353,000	\$183,000	\$536,000
Aztec Municipal Airport	\$553,000	\$453,000	\$1,006,000
Belen-Alexander Municipal Airport	\$2,609,000	\$716,000	\$3,325,000
Carrizozo Municipal Airport	\$333,000	\$133,000	\$466,000
Clayton Municipal Airpark	\$153,000	\$58,000	\$211,000
Conchas Lake Airport	\$1,137,000	\$162,000	\$1,299,000
Crownpoint Airport	\$182,000	\$66,000	\$248,000
Deming Municipal Airport	\$1,876,000	\$303,000	\$2,179,000



**TABLE 5C (Continued)**  
**On-Airport Payroll**  
**New Mexico Airports**

Facility	Direct Payroll	Secondary Payroll	Total Payroll
<b>General Aviation Airports - Continued</b>			
Doña Ana County Jetport at Santa Teresa	\$4,961,000	\$1,385,000	\$6,346,000
Double Eagle II Airport	\$5,628,000	\$3,497,000	\$9,125,000
Dulce-Jicarilla Apache Nation Airport	\$117,000	\$56,000	\$173,000
Ohkay Owingeh Airport	\$246,000	\$116,000	\$362,000
Estancia Municipal Airport	\$148,000	\$76,000	\$224,000
Ft. Sumner Municipal Airport	\$156,000	\$38,000	\$194,000
Gallup Municipal Airport	\$3,577,000	\$929,000	\$4,506,000
Glenwood-Catron County Airport	\$62,000	\$14,000	\$76,000
Grants-Milan Municipal Airport	\$68,000	\$23,000	\$91,000
Hatch Municipal Airport	\$126,000	\$79,000	\$205,000
Jewett Mesa Airport			
Las Cruces International Airport	\$7,922,000	\$1,836,000	\$9,758,000
Las Vegas Municipal Airport	\$204,000	\$76,000	\$280,000
Lea County-Jal Airport	\$96,000	\$72,000	\$168,000
Lea County-Zip Franklin Memorial Airport	\$107,000	\$75,000	\$182,000
Lindrith Airpark	\$84,000	\$46,000	\$130,000
Lordsburg Municipal Airport	\$74,000	\$22,000	\$96,000
Magdalena Airport	\$125,000	\$37,000	\$162,000
Moriarty Municipal Airport	\$5,768,000	\$568,000	\$6,336,000
Mountainair Airport	\$175,000	\$82,000	\$257,000
Navajo Lake Airport	\$3,000	\$1,000	\$4,000
Portales Municipal Airport	\$445,000	\$122,000	\$567,000
Questa Municipal No. 2 Airport	\$188,000	\$124,000	\$312,000
Raton Crews Field Municipal Airport	\$646,000	\$311,000	\$957,000
Reserve Catron County Airport	\$4,000	\$1,000	\$5,000
Santa Rosa Route 66 Airport	\$533,000	\$144,000	\$677,000
Shiprock Airstrip	\$121,000	\$34,000	\$155,000
Sierra Blanca Regional Airport	\$1,165,000	\$650,000	\$1,815,000
Socorro Municipal Airport	\$109,000	\$31,000	\$140,000
Springer Municipal Airport	\$109,000	\$55,000	\$164,000
Taos Regional Airport	\$1,427,000	\$593,000	\$2,020,000
Tatum Airport	\$11,000	\$3,000	\$14,000
Truth Or Consequences Municipal Airport	\$251,000	\$88,000	\$339,000
Tucumcari Municipal Airport	\$216,000	\$96,000	\$312,000
Vaughn Municipal Airport	\$190,000	\$55,000	\$245,000
Zuni-Black Rock Airport	\$248,000	\$53,000	\$301,000
<b>Subtotal</b>	<b>\$44,747,000</b>	<b>\$14,254,000</b>	<b>\$59,001,000</b>
<b>TOTAL</b>	<b>\$301,886,000</b>	<b>\$132,194,000</b>	<b>\$434,080,000</b>

Statewide secondary payroll of \$132.2 million was received by workers in the 3,409 secondary jobs created in the regional economy by on-airport activity. The average compensation for these workers was \$38,800, somewhat lower than the New Mexico average and well below the average wage for airport employees. The differential is explained by the type of occupations on-airport and in the general econ-



omy. The on-airport workers are often skilled, qualified or certified in a technical or professional occupation. In addition, the on-airport payroll figures include compensation to construction workers. Secondary payrolls are received by workers in the general economy and include a range of occupations, from professional to minimum wage service part-time positions. Food service, for example, is an important source of secondary jobs. The New Mexico average compensation for food service workers in 2014 was \$20,450, according to data from the U. S. Bureau of Economic Analysis.

The total payroll impact of on-airport activity is the sum of the direct and secondary payrolls received by the 8,390 New Mexico workers whose jobs were supported directly or indirectly by operations at the state's airports in 2014. Total payrolls were \$434.1 million, consisting of direct payrolls to on-airport workers of \$301.9 million and secondary payrolls across the general economy of \$132.2 million. Commercial service airports accounted for \$375.1 million of total New Mexico payrolls due to on-airport activity. General Aviation airports were responsible for supporting statewide payrolls of \$59 million.

## ON-AIRPORT OUTPUT IMPACTS

On-airport direct output produced at New Mexico airports was \$903.1 million in 2014 (**Table 5D**). This figure represents sales of goods and services by private firms on the airport such as fuel, maintenance, parts, and repairs, charters and air taxi, flight training, medical transport, air cargo, and aircraft storage. Also included are on-site concessions such as auto rental, retail, and food services. For government agencies, the value of output is estimated by costs of labor plus the remaining non-labor portion of the administrative budget. Public sector activities include not only airport administration and air traffic control, but also such services as public safety, firefighting, FAA and TSA.

**TABLE 5D**

**On-Airport Output  
New Mexico Airports**

Facility	Direct Output	Secondary Output	Total Output
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$612,446,000	\$292,580,000	\$905,026,000
Santa Fe Municipal	\$22,579,000	\$12,394,000	\$34,973,000
Roswell International Air Center	\$59,300,000	\$25,481,000	\$84,781,000
Lea County Regional	\$7,919,000	\$2,456,000	\$10,375,000
Four Corners Regional	\$19,694,000	\$8,068,000	\$27,762,000
Los Alamos Airport	\$5,659,000	\$1,088,000	\$6,747,000
Cavern City Air Terminal	\$41,127,000	\$6,455,000	\$47,582,000
Grant County	\$3,125,000	\$878,000	\$4,003,000
Clovis Municipal	\$6,497,000	\$2,907,000	\$9,404,000
<b>Subtotal</b>	<b>\$778,346,000</b>	<b>\$352,307,000</b>	<b>\$1,130,653,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$7,162,000	\$2,220,000	\$9,382,000
Angel Fire - Colfax County Airport	\$875,000	\$836,000	\$1,711,000
Artesia Municipal Airport	\$1,016,000	\$568,000	\$1,584,000
Aztec Municipal Airport	\$2,157,000	\$1,386,000	\$3,543,000



**TABLE 5D (Continued)**

**On-Airport Output**

**New Mexico Airports**

Facility	Direct Output	Secondary Output	Total Output
<b>General Aviation Airports - Continued</b>			
Belen-Alexander Municipal Airport	\$7,818,000	\$2,587,000	\$10,405,000
Carrizozo Municipal Airport	\$776,000	\$487,000	\$1,263,000
Clayton Municipal Airpark	\$738,000	\$306,000	\$1,044,000
Conchas Lake Airport	\$3,027,000	\$592,000	\$3,619,000
Crownpoint Airport	\$788,000	\$265,000	\$1,053,000
Deming Municipal Airport	\$4,221,000	\$1,030,000	\$5,251,000
Doña Ana County Jetport at Santa Teresa	\$11,068,000	\$4,281,000	\$15,349,000
Double Eagle II Airport	\$15,216,000	\$10,335,000	\$25,551,000
Dulce-Jicarilla Apache Nation Airport	\$637,000	\$241,000	\$878,000
Ohkay Owingeh Airport	\$1,329,000	\$499,000	\$1,828,000
Estancia Municipal Airport	\$753,000	\$328,000	\$1,081,000
Ft. Sumner Municipal Airport	\$702,000	\$260,000	\$962,000
Gallup Municipal Airport	\$10,364,000	\$3,700,000	\$14,064,000
Glenwood-Catron County Airport	\$264,000	\$84,000	\$348,000
Grants-Milan Municipal Airport	\$308,000	\$79,000	\$387,000
Hatch Municipal Airport	\$451,000	\$248,000	\$699,000
Jewett Mesa Airport			
Las Cruces International Airport	\$20,514,000	\$5,892,000	\$26,406,000
Las Vegas Municipal Airport	\$812,000	\$285,000	\$1,097,000
Lea County-Jal Airport	\$308,000	\$212,000	\$520,000
Lea County-Zip Franklin Memorial Airport	\$333,000	\$223,000	\$556,000
Lindrith Airpark	\$487,000	\$196,000	\$683,000
Lordsburg Municipal Airport	\$499,000	\$107,000	\$606,000
Magdalena Airport	\$539,000	\$154,000	\$693,000
Moriarty Municipal Airport	\$9,330,000	\$2,855,000	\$12,185,000
Mountainair Airport	\$853,000	\$351,000	\$1,204,000
Navajo Lake Airport	\$9,000	\$4,000	\$13,000
Portales Municipal Airport	\$2,145,000	\$469,000	\$2,614,000
Questa Municipal No. 2 Airport	\$813,000	\$509,000	\$1,322,000
Raton Crews Field Municipal Airport	\$2,500,000	\$1,178,000	\$3,678,000
Reserve Catron County Airport	\$20,000	\$4,000	\$24,000
Santa Rosa Route 66 Airport	\$2,386,000	\$738,000	\$3,124,000
Shiprock Airstrip	\$525,000	\$107,000	\$632,000
Sierra Blanca Regional Airport	\$3,727,000	\$2,500,000	\$6,227,000
Socorro Municipal Airport	\$503,000	\$127,000	\$630,000
Springer Municipal Airport	\$428,000	\$215,000	\$643,000
Taos Regional Airport	\$4,586,000	\$2,364,000	\$6,950,000
Tatum Airport	\$25,000	\$11,000	\$36,000
Truth Or Consequences Municipal Airport	\$924,000	\$380,000	\$1,304,000
Tucumcari Municipal Airport	\$920,000	\$370,000	\$1,290,000
Vaughn Municipal Airport	\$877,000	\$277,000	\$1,154,000
Zuni-Black Rock Airport	\$983,000	\$279,000	\$1,262,000
Subtotal	\$124,716,000	\$50,139,000	\$174,855,000
TOTAL	\$903,062,000	\$402,446,000	\$1,305,508,000



Output also includes the value of capital improvement projects. Runway improvements, fencing, drainage projects, and building construction are all examples of capital improvements that improve safety and provide for growth. Typically, such projects are undertaken by outside contractors, creating jobs and payroll for private sector workers on the airport.

Major capital improvement projects that begin at a particular point in time can extend over more than one year. In order to smooth out the annual variation in capital improvement spending, the reported outlays were averaged over the six-year post recession period from FY2010 – FY2015 (encompassing funding received beginning in the second half of calendar year 2009 and extending through calendar year 2014). Capital improvement spending (output) figures were obtained from the New Mexico Department of Transportation Aviation Division (NMDOTAD) and included funding from state, sponsor and FAA grants. The six-year annual average capital improvement project spending was \$32.7 million.

The direct on-airport output of Albuquerque International Sunport was \$612.4 million, or 67 percent of all statewide direct on-airport output. Recapping the contribution of Albuquerque International Sunport, activity at ABQ accounted for 60 percent of statewide on-airport employment, 64 percent of on-airport payroll, and 67 percent of on-airport output. These figures indicate that output per worker is greater at ABQ compared to the average airport in the state, and associated wages at ABQ tend to be greater as well. Output per worker for the 2,975 employees on Albuquerque International Sunport was \$206,000 in 2014. The output per worker for all other airports was \$145,000, indicating the benefits of returns to scale to larger airports such as ABQ.

Secondary output due to on-airport activity of New Mexico airports was \$402.5 million. This output was created when airport firms purchased goods and services from suppliers (the indirect effect) and when airport and supplier employees spent their payrolls in their home communities (the induced effect). As before, Albuquerque International Sunport again accounted for a major portion of secondary output, at \$292.6 million or 72 percent of statewide secondary output.

The total economic impact (including direct plus secondary or multiplier effects) of on-airport output on the New Mexico economy was \$1.3 billion in 2014, composed of \$1.13 billion of output due to commercial service airports and \$174.8 million from general aviation airports. Among commercial service airports, Albuquerque International Sunport had the greatest total output impact, at \$905 million.

## **ON-AIRPORT IMPACT SUMMARY**

In summary, the total statewide economic impact of on-airport economic activity on employment, payrolls and output included 8,390 total jobs created, \$434.1 million payroll distributed to workers, and \$1.3 billion in total output (**Table 5E**). The rows of the table illustrate how initial direct impacts are multiplied within the regional economy served by the respective airports to create additional or secondary jobs, incomes and output in the overall economy.





**TABLE 5E**  
**Total Statewide Economic Impact of On-Airport Activity**  
**New Mexico Airports**

Economic Impacts	Employment	Payroll	Output
Direct Economic Impact	4,981	\$301,886,000	\$903,062,000
Secondary Economic Impact	3,409	\$132,194,000	\$402,406,000
<i>Indirect Impact</i>	<i>1,643</i>	<i>\$73,006,000</i>	<i>\$233,289,000</i>
<i>Induced Impact</i>	<i>1,766</i>	<i>\$59,188,000</i>	<i>\$169,157,000</i>
<b>Total Economic Impact</b>	<b>8,390</b>	<b>\$434,080,000</b>	<b>\$1,305,508,000</b>

Comparison of total impact figures with the initial direct impacts yields the multiplier values for each component. For example, the 4,981 direct on-airport jobs within the New Mexico Airport System support total employment of 8,390, a multiple of 1.68. The economic interpretation is that, on average, each 100 on-airport jobs support an additional 68 jobs in the general economy. Similarly, each one million dollars of payroll distributed to on-airport workers supports \$438,000 of additional or secondary payrolls.

Every million dollars of output created on-site at New Mexico airports leads to additional output in the general economy of \$445,000. The total output for a given airport relative to the magnitude of direct output created on that airport depends in part on “leakages” as spending recycles. In larger population areas with commercial centers, suppliers may be located nearby and consumers may do more of their spending locally due to a wider range of options. Thus, the ratio of total output to direct output for Albuquerque International Sunport in Bernalillo County is 1.48 (\$905 million total output vs. \$612 direct output) but the same ratio for Silver City Airport in Grant County is smaller, at 1.29 (\$4.0 million total output in the regional economy generated by \$3.1 million of direct output on-airport).

## COMMERCIAL SERVICE VISITOR ECONOMIC IMPACTS

Visitors travel to New Mexico for diverse purposes, including sightseeing, business and personal reasons. Some come to see the natural wonders of the state or to vacation in a resort area. Others come to meet business clients, attend conventions, or as customers of New Mexico firms and suppliers. Some arrive looking for employment, while other visitors are corporate recruiters seeking to hire new graduates from one of the state’s universities. And many others come to the state to visit friends and relatives, renewing and strengthening relationships by personal contact.

One common characteristic among travelers to New Mexico is that, while away from home, they make expenditures on a daily basis, creating employment, incomes and revenues for workers, businesses and governments of the New Mexico communities and counties visited. According to a recent study on *The Economic Impact of Tourism in New Mexico* (Tourism Economics, August 2015), direct visitor spending in New Mexico was \$6.1 billion in 2014, supporting over 66,000 direct jobs in a range of industries serving travelers, including lodging, retail, food and beverage services, and recreation and entertainment.

Studies by Longwoods International (cited in the *2015 Annual Report* of the New Mexico Tourism Department) find that out-of-state visitors accounted for 84 percent of tourism spending. In effect, this spending



represents an export of services accompanied by an injection of outside dollars that build wealth and support jobs. When secondary impacts of indirect and induced spending are included, New Mexico visitors generated a total of \$8.5 billion in statewide revenues (output) in 2014. Moreover, visitor spending sustained 89,000 jobs (including secondary effects), or 8.2 percent of total wage and salary employment in the state, according to the Tourism Economics impact study.

The comparable figures for those visitors that arrived in New Mexico via commercial service air carriers are set out in the relevant sections and tables below. Direct spending (output) was \$602.9 million in 2014, creating 6,843 direct jobs. Including secondary effects, the total impact of commercial service visitor activity was \$916.6 million of output and 9,193 total jobs with payrolls of \$261.6 million.

The statewide tourism direct spending of \$6.1 billion by all visitors is based on expenditures by 33.3 million travelers, including those arriving by all modes (ground and air). Spending per trip for all visitors is calculated as \$6.1 billion/33.3 million = \$183 (rounded). As explained below, commercial service air visitor spending is found to be significantly greater, at \$471 per trip. This differential between the general visitor population spending and air traveler spending is well recognized in the tourism industry and is one reason why the New Mexico Tourism Department has identified a key objective to “grow the fly market” (see *2015 Annual Report*, pages 12 and 28).

## **METHODOLOGY AND DATA ANALYSIS**

Calculation of spending by commercial service visitors to New Mexico is dependent on several key variables, including

- Number of commercial service passenger enplanements
- Percentage and number of passengers that are visitors
- Length of stay (days) and spending per person per day and per trip
- Spending by category (lodging, food service, transportation, retail, recreation)

Analysis of passenger statistics from the Federal Aviation Administration shows 2,589,229 enplanements at New Mexico Commercial service airports in 2014, with Albuquerque International Sunport accounting for 95 percent of these (**Table 5F**). To calculate the percentage of visitors, the Origination and Destination data base of the Bureau of Transportation Statistics (U.S. Department of Transportation) was used to analyze passenger ticketing information at each commercial service airport. The highest visitor percentage (67 percent) was recorded at Santa Fe. The overall percentage of visitor enplanements at New Mexico commercial service airports in 2014 was 49 percent, yielding 1,281,343 visitor trips. The direct spending by commercial service visitors in 2014 was \$602.9 million (derived below in **Table 5F**) and average spending per visitor per trip was \$471 (from \$602.9 million spending divided by 1,281,343 trips = \$471).



**TABLE 5F**  
**Commercial Service Visitor Activity**  
**New Mexico Airports**

Facility	Enplanements	Percent Visitors	Number of Visitors	Visitor Spending
Albuquerque International Sunport	2,446,388	49	1,198,730	\$565,801,000
Santa Fe Municipal	74,749	67	50,082	\$23,638,000
Roswell International Air Center	35,536	49	17,413	\$7,129,000
Lea County Regional	18,239	43	7,843	\$3,211,000
Four Corners Regional	5,678	57	3,236	\$1,557,000
Los Alamos Airport	3,801	44	1,672	\$702,000
Cavern City Air Terminal	1,758	47	826	\$339,000
Grant County	1,128	50	564	\$130,000
Clovis Municipal	1,952	50	976	\$399,000
<b>TOTAL</b>	<b>2,589,229</b>	<b>49</b>	<b>1,281,343</b>	<b>\$602,906,000</b>

Sources: FAA enplanements for CY 2014 reported September, 2015; U. S. DOT Origin & Destination data

Estimates of length of stay by commercial service visitors were obtained from two sources. Travel patterns of visitors to Albuquerque International Sunport were compiled and reported in the economic impact study prepared by the University of New Mexico (*Economic Impacts of Albuquerque Airport System on the New Mexico Economy*), published in 2013 and based on 2012 data. For that analysis, the research team interviewed more than 2,000 visitors, obtaining information on purpose of travel, length of stay, and spending by category. The average length of stay (4.2 days) found in the University of New Mexico study was adapted for the current analysis to apply to Albuquerque International Sunport visitors, since the large sample size and consistency of the approach suggested the findings should be reliable and likely stable over time.

Length of stay estimates for visitors using the remaining commercial service airports in the state were based on proprietary data obtained from Longwoods International especially for this study. Longwoods International provided information on air visitor spending and length of stay for each region of the state. For each airport, multiplication of number of visitors and length of stay provided the number of visitor days associated with each airport (**Table 5G**). Statewide, the average length of stay for air visitors was 4.2 days, yielding a total of 5,374,109 visitor days for 2014.

**TABLE 5G**  
**Commercial Service Visitor Days**  
**New Mexico Airports**

Facility	Region	Number of Visitors	Length of Stay (Days)	Visitor Days
Albuquerque International Sunport		1,198,730	4.2	5,034,667
Santa Fe Municipal	Santa Fe	50,082	4.0	200,327
Roswell International Air Center	Southeast	17,413	4.6	80,098
Lea County Regional	Southeast	7,843	4.6	36,077
Four Corners Regional	Northwest	3,236	2.9	9,386
Los Alamos Airport	North Central	1,672	2.0	3,345
Cavern City Air Terminal	Southeast	826	4.6	3,801
Grant County	Southwest	564	3.4	1,918
Clovis Municipal	Southeast	976	4.6	4,490
<b>TOTAL</b>		<b>1,281,343</b>	<b>4.2</b>	<b>5,374,109</b>

Sources: FAA Enplanements CY 2014; FAA Origination & Destination database; University of New Mexico BBER; New Mexico Air Visitor Survey, Longwoods International; New Mexico Tourism Department



Estimates of spending per day were obtained from the University of New Mexico study (updated to 2014 dollars) for Albuquerque International Sunport visitors, and from Longwoods International for the respective regions (**Table 5H**). The largest daily spending as reported by Longwoods International was \$166 per day in the Northwest region where Farmington Four Corners Regional Airport is located. Air visitor spending per day was smallest (\$68) in the Southwest region, served by Grant County Silver City Airport. Overall, spending per day by New Mexico commercial service visitors was \$112, due to the strong influence of Albuquerque International Sunport. Multiplication of spending per day by the number of visitor days yields direct commercial service visitor spending of \$602.9 million.

**TABLE 5H**  
**Commercial Service Visitor Spending**  
**New Mexico Airports**

Facility	Region	Visitor Days	Spending Per Day	Visitor Spending
Albuquerque International Sunport		5,034,667	\$112	\$565,801,000
Santa Fe Municipal	Santa Fe	200,327	\$118	\$23,638,000
Roswell International Air Center	Southeast	80,098	\$89	\$7,129,000
Lea County Regional	Southeast	36,077	\$89	\$3,211,000
Four Corners Regional	Northwest	9,386	\$166	\$1,557,000
Los Alamos Airport	North Central	7,024	\$100	\$702,000
Cavern City Air Terminal	Southeast	3,801	\$89	\$339,000
Grant County	Southwest	1,918	\$68	\$130,000
Clovis Municipal	Southeast	4,490	\$89	\$399,000
<b>TOTAL</b>		<b>5,377,788</b>	<b>\$112</b>	<b>\$602,906,000</b>

Sources: FAA Enplanements CY 2014; FAA Origination & Destination database; University of New Mexico BBER; New Mexico Air Visitor Survey, Longwoods International; New Mexico Tourism Department

Both the University of New Mexico impact study for ABQ and the Longwoods International data set for regions provided expenditure estimates by category. This is of importance because employment per million dollars of spending varies by industry. Further, the secondary effects differ as well. Food service has higher employment per million dollars of spending than auto rental, for example. Retail spending has smaller indirect and induced effects because wages tend to be lower and goods sold at retail are often produced elsewhere. The visitor spending categories, summing to statewide outlays of \$602.9 million, included the following:

- **Lodging.** Overnight visitors often have expenditures for hotels, but not all visitors will have paid lodging. Some will stay with friends or relatives and a portion will stay in second homes. Typically, business travelers have a higher percentage of hotel accommodations. Both the University of New Mexico study and the Longwoods International regional reports adjust the data to account for individuals with no expenditures for accommodations. In this respect, the current study differs from other approaches that assume all visitors stay overnight in paid lodging. That assumption leads to overly high estimates for lodging revenues (output) from visitor spending. The statewide direct outlay for lodging by air visitors was \$220.1 million, and averaged \$172 per person per trip.



- **Food Service.** Visitors purchase food and beverages from a variety of sources, including up-scale and casual restaurants, quick service drive-through facilities or at their hotels. Those staying with friends and relatives still may have expenses for restaurants for a portion of their trip. Food purchased from grocery stores is not included in this category, but is in retail spending. The statewide direct spending by air visitors for food and beverages was \$130.8 million, averaging \$102 per person per trip.
- **Transportation.** This category applies only to spending for ground transportation, such as auto rental, taxis or van service. Some studies (including *The Economic Impact of Tourism in New Mexico* by Tourism Economics) include visitor outlays for air transportation as a component of transportation spending, but in the current study those expenditures made in New Mexico are already accounted for in the on-airport revenues of air service providers. The statewide direct spending by air visitors for ground transportation was \$71.7 million and averaged \$56 per person per trip.
- **Retail.** The retail category includes goods and miscellaneous services such as haircuts or medical treatments. Goods typically involve gasoline for rental cars, grocery store food and snacks, souvenirs and mementos, art work, and purchases at shopping centers or malls. It should be noted that many products sold are produced elsewhere, so a given level of retail spending typically will support a lower level of employment compared to other categories. The 2014 statewide direct spending for retail goods and service by air visitors was \$139.2 million, second largest behind expenditures for lodging. Retail spending averaged \$109 per person per trip.
- **Recreation/Entertainment.** Visitor spending in New Mexico varies from outdoor activities such as golf, skiing, hunting and fishing to admissions to sporting and cultural events and museums. Direct spending statewide for this category was \$41.1 million and averaged \$32 per person per trip.

## COMMERCIAL SERVICE VISITOR EMPLOYMENT IMPACTS

Tallies of commercial service visitor spending by category were analyzed within the IMPLAN models built for the counties where each airport is located. The model has been developed to apply ratios and coefficients reflecting input-output relationships between direct spending and the resulting employment and payroll required to deliver the final goods and services (output) purchased by consumers. Based on direct spending by category by airport visitors, the IMPLAN model produced employment and payroll estimates unique to the county of location of each commercial service airport, along with secondary and total impacts for jobs, payrolls and revenues (output).

Statewide, there were 6,843 direct tourism sector private jobs created by commercial air visitor spending in 2014 (**Table 5J**). This figure includes employment in the combined visitor spending categories of lodging, food service, transportation, retail and recreation. There were 11.4 direct jobs created per one million dollars of commercial service visitor expenditures. This ratio is essentially similar to the ratio for all tourism employment as reported in the Tourism Economics study. The lodging, food service, transportation, retail and recreation components in that study accounted for \$5,276.0 million spending and direct employment in those same industries was 60,533, a ratio of 11.5 jobs per million dollars of spending. The





conclusion is that efforts to increase visitor spending will have a systematic, predictable and favorable effect on state employment, but the impact of air visitors will be greater, since air visitors spend more per trip than visitors traveling by other modes.

**TABLE 5J**  
**Commercial Service Visitor Employment**  
**New Mexico Airports**

Facility	Direct Employment	Secondary Employment	Total Employment
Albuquerque International Sunport	6,465	2,233	8,698
Santa Fe Municipal	261	88	349
Roswell International Air Center	52	11	63
Lea County Regional	34	8	42
Four Corners Regional	18	5	23
Los Alamos Airport	4	1	5
Cavern City Air Terminal	3	1	4
Grant County	1	1	2
Clovis Municipal	5	2	7
<b>TOTAL</b>	<b>6,843</b>	<b>2,350</b>	<b>9,193</b>

Albuquerque International Sunport accounted for 6,465 jobs, or 95 percent of the statewide direct tourism jobs related to commercial service visitors. This is consistent with the estimate of the large share of spending by air visitors arriving at ABQ (94%). The remaining eight commercial service airports contributed 308 additional direct visitor-related jobs. Santa Fe commercial service visitors accounted for 261 jobs, while Roswell International Air Center visitors supported 52 visitor related jobs.

Statewide secondary employment resulting from commercial service visitor activity was 2,350 additional jobs created in 2014. These are jobs in the general economy, not necessarily related to visitor services, and range from health care to government to real estate. The total employment impact (sum of direct and secondary jobs) was 9,193 jobs supported statewide.

## COMMERCIAL SERVICE VISITOR PAYROLL IMPACTS

Direct payroll received by the 6,843 tourism sector workers in calendar year 2014 was \$167.3 million (**Table 5K**). The calculated average overall wage from these statewide figures is \$24,450 in 2014 dollars. This is less than one half the 2014 average wage across all industries for New Mexico workers in 2014 of \$53,900. This difference is because many tourism jobs are entry level and part time, and often the educational and technical requirements for employment are low while compensation is pegged to the minimum wage. For comparison, the employment and payroll figures for the Tourism Economics study for New Mexico indicate a somewhat lower average tourism industry wage of \$22,450 (\$1.5 billion payroll divided by 66,809 workers).

The 2,350 secondary jobs created were accompanied by payroll of \$94.3 million, yielding an average compensation figure just over \$40,000. Total payroll created by commercial service visitor spending was



\$261.6 million. This figure is 1.56 times the direct payroll for tourism employees of \$167.3 million, indicating that every million dollars of payroll received by tourism workers ultimately recycles to create an additional \$560,000 of payroll for other workers in the general economy.

**TABLE 5K**  
**Commercial Service Visitor Payroll**  
**New Mexico Airports**

Facility	Direct Payroll	Secondary Payroll	Total Payroll
Albuquerque International Sunport	\$155,786,000	\$89,616,000	\$245,402,000
Santa Fe Municipal	\$8,463,000	\$3,708,000	\$12,171,000
Roswell International Air Center	\$1,463,000	\$357,000	\$1,819,000
Lea County Regional	\$893,000	\$335,000	\$1,228,000
Four Corners Regional	\$407,000	\$174,000	\$581,000
Los Alamos Airport	\$120,000	\$19,000	\$139,000
Cavern City Air Terminal	\$62,000	\$33,000	\$95,000
Grant County	\$36,000	\$11,000	\$47,000
Clovis Municipal	\$109,000	\$38,000	\$147,000
<b>TOTAL</b>	<b>\$167,339,000</b>	<b>\$94,291,000</b>	<b>\$261,629,000</b>

## COMMERCIAL SERVICE VISITOR OUTPUT IMPACTS

The direct output produced by commercial service visitors arriving at New Mexico airports is identical to the tourism sector spending of \$602.9 million set out in previous tables. Spending denotes the consumer side of the exchange process while revenue or output is the label attached by firms on the producer side to the same transactions.

Providing goods and services for air visitors requires inputs from suppliers, so there are secondary impacts in the economy related to the direct or initial visitor spending. In addition, workers that produce tourism services and workers for suppliers spend their payroll in their home communities. These two actions produced a secondary impact of commercial service spending that added \$313.7 million to the state spending stream in 2014 (**Table 5L**).

**TABLE 5L**  
**Commercial Service Visitor Output**  
**New Mexico Airports**

Facility	Direct Output	Secondary Output	Total Output
Albuquerque International Sunport	\$565,801,000	\$297,895,000	\$863,696,000
Santa Fe Municipal	\$23,638,000	\$11,383,000	\$35,021,000
Roswell International Air Center	\$7,129,000	\$2,290,000	\$9,419,000
Lea County Regional	\$3,211,000	\$1,149,000	\$4,360,000
Four Corners Regional	\$1,557,000	\$590,000	\$2,147,000
Los Alamos Airport	\$702,000	\$61,000	\$763,000
Cavern City Air Terminal	\$339,000	\$113,000	\$452,000
Grant County	\$130,000	\$43,000	\$173,000
Clovis Municipal	\$399,000	\$141,000	\$540,000
<b>TOTAL</b>	<b>\$602,906,000</b>	<b>\$313,665,000</b>	<b>\$916,571,000</b>



Total output is the sum of direct and secondary output, \$916.6 million. The contribution of Albuquerque International Sunport visitors to total output of \$863.7 million accounted for a dominant 94 percent of New Mexico commercial service visitor impact for 2014. This output impact is consistent with the distribution of enplanements at New Mexico commercial service airports: ABQ accounted for 94 percent of enplanements in 2014 as well.

## COMMERCIAL SERVICE VISITOR IMPACT SUMMARY

In summary, the total statewide economic impact of commercial service visitor activity on employment, payrolls and output included 9,193 total jobs created, \$261.6 million total payroll distributed to workers, and \$916.6 million in total output (**Table 5M**).

**TABLE 5M**  
**Total Statewide Economic Impact of Commercial Service Visitors**  
**New Mexico Airports**

Economic Impacts	Employment	Payroll	Output
Direct Economic Impact	6,843	\$167,339,000	\$602,906,000
Secondary Economic Impact	2,350	\$94,291,000	\$313,665,000
<i>Indirect Impact</i>	<i>1,111</i>	<i>\$44,585,000</i>	<i>\$148,316,000</i>
<i>Induced Impact</i>	<i>1,239</i>	<i>\$49,706,000</i>	<i>\$165,349,000</i>
<b>Total Economic Impact</b>	<b>9,193</b>	<b>\$261,630,000</b>	<b>\$916,571,000</b>

Recapping the findings on commercial service visitors, the analysis for 2014 shows:

- Every million dollars of direct commercial service visitor spending supports 11.4 direct tourism jobs in the New Mexico economy.
- One hundred additional direct tourism jobs from commercial service visitor spending support an additional 34 jobs distributed across all industries.
- One million dollars of commercial service visitor spending stimulates an additional \$520,000 of spending (output) in the state.
- Every million dollars of wages paid to tourism industry workers recycles in the economy, creating additional payrolls of \$563,000 for New Mexico workers.

## GENERAL AVIATION VISITOR ECONOMIC IMPACTS

Visitors travel on general aviation aircraft to New Mexico airports for the same purposes as those arriving by commercial service flights - as vacationers, to visit friends and relatives, and for business. Although general aviation travel is sometimes viewed as a luxury mode of transport, the efficiencies and flexibility of schedule made possible by general aviation are highly desirable, especially to corporate travelers.



Business aviation travel on private aircraft reduces costs and increases effectiveness in individual firms. Annual studies by the National Business Aviation Association show that those firms with business aircraft outperform those without aircraft with earnings 230 percent higher and average revenue growth 22 percent greater. Among Business Week's "50 Most Innovative Companies," 95 percent of the S&P 500 companies listed were users of business aircraft (*National Business Aviation Association Fact Book*, 2014).

## **METHODOLOGY AND DATA ANALYSIS**

Most New Mexico airports do not have air traffic control towers, so arrival and departure activity counts for general aviation aircraft must be estimated. Moreover, while the FAA maintains statistics on passengers using commercial service flights, there is no corresponding database on the number of general aviation passengers arriving at New Mexico airports.

Calculation of the number of visitors, length of stay and spending patterns for general aviation visitors required several steps, including:

- Estimating the number of transient general aviation aircraft arriving at each airport
- Determining the numbers of passengers per transient aircraft
- Combining numbers of passengers with length of stay to calculate visitor days
- Applying spending per day figures to number of visitor days to obtain direct visitor spending

Estimates prepared by Coffman Associates for the number of itinerant general aviation aircraft arrivals were drawn from Chapter Two of this report (Exhibit 2L) for each airport in the New Mexico system. Itinerant operations are defined by the FAA as operations performed by an aircraft, either IFR, SVFR, or VFR, that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area. However, itinerant operations may be performed by either based aircraft or transient (visiting) aircraft. A precise count of transient aircraft can only be obtained through tail numbers from flight records, but while the FAA maintains flight records for IFR (instrument flight rules) flights, VFR (visual flight rules) flights are not recorded at non-towered airports by the FAA. Therefore, transient arrivals as a percentage of all itinerant arrivals must be estimated.

The method typically used for estimating transient aircraft and passengers relies on certain airport and regional characteristics. Larger population and commercial centers or resort areas are expected to have a greater proportion of transient flights. An airport located in an area that lacks amenities or economic features that would attract transient flights would have a lower percentage of transient arrivals. Business jets that accommodate a greater number of passengers require adequate airport infrastructure such as runway length and FBO services. The New Mexico Aviation Department has adopted six functional classifications for grouping system facilities by functional role and these classifications were used as the basis for estimation of transient aircraft. The classifications are as follows (for complete details see Chapters 3 and 4 of this report):



- **Primary Commercial Service Airports (PCS):** Airports that have scheduled passenger service and more than 10,000 enplanements per year. These airports serve the highest levels of aviation activity in New Mexico, including commercial service and general aviation, and are generally located in the largest population areas of the State. For these airports, transient flights were assumed to account for 60 percent of itinerant arrivals and the average for passengers (including crew for larger aircraft) was set at 4.
- **Non-Primary Commercial Service Airports (Non PCS):** Airports that have scheduled passenger service and 2,500 to 10,000 enplanements per year and serve some of New Mexico's larger communities. For these airports, transient flights were assumed to account for 50 percent of itinerant arrivals and the average for passengers (including crew for larger aircraft) was set at 3.
- **Limited Commercial Service Airports (Limited CS):** Airports that have scheduled commercial service but have fewer than 2,500 annual enplanements. For these airports, transient flights were assumed to account for 40 percent of itinerant arrivals and the average for passengers (including crew for larger aircraft) was set at 2.5.
- **Regional General Aviation Airports (RGA):** Regional General Aviation airports primarily serve general aviation activity, with a focus on business activity including jet and turboprop aircraft as measured by more than 300 annual jet or turboprop aircraft operations. For these airports, transient flights were assumed to account for 60 percent of itinerant arrivals and the average for passengers (including crew for larger aircraft) was set at 4.
- **Community General Aviation Airports (CGA):** Community General Aviation airports focus on providing aviation access for small business, recreational, and personal flying activities throughout New Mexico and have between 11 and 33 based aircraft. For these airports, transient flights were assumed to account for 50 percent of itinerant arrivals and the average for was set at 3.
- **Low Activity General Aviation Airports (Low GA):** Low Activity General Aviation airports provide emergency or remote access, primarily serving recreational and personal flying activities, and have 10 or fewer based aircraft. For these airports, transient flights were assumed to account for 33 percent of itinerant arrivals and the average for passengers was set at 1.5.

In addition, transient flights at two airports serving resort areas (Angel Fire and Sierra Blanca) were assumed to account for 75 percent of itinerant arrivals with average passengers and crew of 6.

The transient aircraft percentages were applied to itinerant arrival estimates for all New Mexico airports (**Table 5N**). Estimated transient arrivals were greatest (8,564) at Albuquerque International Sunport, a Primary Commercial Service airport with 60 percent transient proportion and the greatest number of itinerant arrivals as well. ABQ was followed by Double Eagle II, with 7,542 transient aircraft arrivals. Airports in commercial service categories accounted for 26,816 transient aircraft arrivals and averaged 56 percent transient. Combined general aviation airports accounted for 50,703 transient aircraft arrivals, summing to a total of 77,519 transient or visiting aircraft at New Mexico airports.





**TABLE 5N**  
**General Aviation Visitor Activity**  
**New Mexico Airports**

Facility	Activity Class	Itinerant Arrivals <sup>1</sup>	Percent Transient <sup>2</sup>	Transient GA Aircraft <sup>3</sup>
<b>Commercial Service Airports</b>				
Albuquerque International Sunport	PCS	14,274	60	8,564
Santa Fe Municipal	PCS	11,259	60	6,755
Roswell International Air Center	PCS	3,762	60	2,257
Lea County Regional	PCS	2,618	60	1,571
Four Corners Regional	Non PCS	5,547	50	2,774
Los Alamos Airport	Non PCS	1,150	50	575
Cavern City Air Terminal	Limited CS	863	40	345
Grant County	Limited CS	1,000	40	400
Clovis Municipal	Limited CS	7,448	40	3,575
<b>Subtotal</b>		<b>47,921</b>	<b>56</b>	<b>26,816</b>
<b>General Aviation Airports</b>				
Alamogordo-White Sands Airport	RGA	5,000	60	3,000
Angel Fire - Colfax County Airport	Resort	1,500	75	1,125
Artesia Municipal Airport	CGA	3,575	50	1,788
Aztec Municipal Airport	CGA	2,809	50	1,405
Belen-Alexander Municipal Airport	CGA	3,500	50	1,750
Carrizozo Municipal Airport	Low GA	700	33	231
Clayton Municipal Airpark	CGA	900	50	450
Conchas Lake Airport	Low GA	500	33	165
Crownpoint Airport	Low GA	100	33	33
Deming Municipal Airport	CGA	6,000	50	3,000
Doña Ana County Jetport at Santa Teresa	RGA	6,720	60	4,032
Double Eagle II Airport	RGA	12,570	60	7,542
Dulce-Jicarilla Apache Nation Airport	Low GA	350	33	116
Ohkay Owingeh Airport	CGA	800	50	400
Estancia Municipal Airport	Low GA	*		
Ft. Sumner Municipal Airport	Low GA	50	33	17
Gallup Municipal Airport	CGA	662	50	331
Glenwood-Catron County Airport	Low GA	2	33	1
Grants-Milan Municipal Airport	CGA	1,036	50	518
Hatch Municipal Airport	Low GA	75	33	25
Jewett Mesa Airport	Low GA	15	33	5
Las Cruces International Airport	RGA	4,978	60	2,987
Las Vegas Municipal Airport	CGA	3,500	50	1,750
Lea County-Jal Airport	CGA	1,250	50	625
Lea County-Zip Franklin Memorial Airport	CGA	550	50	275
Lindrith Airpark	Low GA	38	33	13
Lordsburg Municipal Airport	Low GA	1,200	33	396
Magdalena Airport	Low GA	300	33	99
Moriarty Municipal Airport	CGA	1,000	50	500
Mountainair Airport	Low GA	*		



**TABLE 5N (Continued)**  
**General Aviation Visitor Activity**  
**New Mexico Airports**

Facility	Activity Class	Itinerant Arrivals <sup>1</sup>	Percent Transient <sup>2</sup>	Transient GA Aircraft <sup>3</sup>
<b>General Aviation Airports - Continued</b>				
Navajo Lake Airport	Low GA	100	33	33
Portales Municipal Airport	CGA	3,258	50	1,629
Questa Municipal No. 2 Airport	Low GA	100	33	33
Raton Crews Field Municipal Airport	CGA	2,761	50	1,381
Reserve Catron County Airport	Low GA	120	33	40
Santa Rosa Route 66 Airport	Low GA	800	33	264
Shiprock Airstrip	Low GA	250	33	83
Sierra Blanca Regional Airport	Resort	3,949	75	2,962
Socorro Municipal Airport	CGA	1,000	50	500
Springer Municipal Airport	Low GA	10	33	3
Taos Regional Airport	CGA	4,915	75	3,686
Tatum Airport	Low GA	25	33	8
Truth Or Consequences Municipal Airport	CGA	5,000	50	2,500
Tucumcari Municipal Airport	CGA	10,000	50	5,000
Vaughn Municipal Airport	Low GA	*		
Zuni-Black Rock Airport	Low GA	5	33	2
<b>Subtotal</b>		<b>91,973</b>	<b>55</b>	<b>50,703</b>
<b>TOTAL</b>		<b>139,894</b>	<b>55</b>	<b>77,519</b>

\* Denotes no reliable estimate available

Notes: <sup>1</sup> The FAA defines itinerant operations as those that arrive from outside the traffic pattern or depart the airport traffic pattern. Itinerant operations by airport were estimated and reported in Chapter 2 of the New Mexico Aviation System Plan document (see Exhibit 2L). Itinerant operations must be estimated for those airport without an airport traffic control tower. Six New Mexico airports have towers. Only the Albuquerque International Sunport tower operates 24 hours per day. Sources for itinerant operations estimates included tower counts for the six airports with control towers and figures reported on Form 5010 from the remaining airports. Itinerant arrivals are equal to 50 percent of estimated itinerant operations.

<sup>2</sup> Itinerant arrivals include arrivals from outside the traffic pattern both by based aircraft and aircraft based at some other airport. Itinerant arrivals by non-based aircraft are transient arrivals. The percent transient arrivals by airport was estimated using an airport classification tiered approach consistent with the method used in the New Mexico System Plan Update 2009. As a conservative measure for the current study, 60 percent transient was adopted for Primary Commercial Service Airports. Percent transient estimates for other airport classifications were set relative to the 60 percent for Primary Commercial Service Airports, the largest in the system.

<sup>3</sup> The number of arriving transient general aviation aircraft by airport was calculated by multiplying the number of itinerant arrivals by the estimated percent transient for that airport's classification.

The number of visitor days accounted for by travelers arriving by general aviation aircraft at each airport was calculated in a two-step process. First, arrival numbers for transient aircraft were multiplied by passengers per aircraft to derive an estimate of the number of arriving visitors (286,820). Second, the number of visitors was multiplied by the length of stay to obtain estimates by airport of the number of visitor days (**Table 5P**). The length of stay figures for each airport are the New Mexico regional air visitor length of stay figures from Longwoods International, reduced by 50 percent. The length of stay was reduced to



recognize that general aviation trips are more flexible than commercial service trips, with on-demand departure times, and more often are only one day in duration. The number of general aviation visitor days estimated for 2014 was 618,704. There were 3.7 average passengers per aircraft and an average stay of 2.1 days statewide.

**TABLE 5P**  
**General Aviation Visitor Days**  
**New Mexico Airports**

Facility	Transient GA Aircraft	PAX/ Aircraft	LOS (Days)	GA Visitor Days
<b>Commercial Service Airports</b>				
Albuquerque International Sunport	8,564	4.0	2.1	71,938
Santa Fe Municipal	6,755	4.0	2.1	56,742
Roswell International Air Center	2,257	4.0	2.3	20,764
Lea County Regional	1,571	4.0	2.3	14,453
Four Corners Regional	2,774	3.0	1.5	12,483
Los Alamos Airport	575	3.0	2.1	3,623
Cavern City Air Terminal	345	2.5	2.3	1,985
Grant County	400	2.5	2.3	2,300
Clovis Municipal	3,575	2.5	2.3	20,557
<b>Subtotal</b>	<b>26,816</b>	<b>3.6</b>	<b>2.1</b>	<b>204,845</b>
<b>General Aviation Airports</b>				
Alamogordo-White Sands Airport	3,000	4.0	2.3	27,600
Angel Fire - Colfax County Airport	1,125	6.0	3.0	20,250
Artesia Municipal Airport	1,788	3.0	2.3	12,337
Aztec Municipal Airport	1,405	3.0	1.5	6,323
Belen-Alexander Municipal Airport	1,750	3.0	2.1	11,025
Carrizozo Municipal Airport	231	1.5	2.3	798
Clayton Municipal Airpark	450	3.0	1.6	2,160
Conchas Lake Airport	165	1.5	1.6	397
Crownpoint Airport	33	1.5	1.5	75
Deming Municipal Airport	3,000	3.0	1.7	15,300
Doña Ana County Jetport at Santa Teresa	4,032	4.0	1.7	27,418
Double Eagle II Airport	7,542	4.0	2.1	63,353
Dulce-Jicarilla Apache Nation Airport	116	1.5	2.1	365
Ohkay Owingeh Airport	400	3.0	2.1	2,520
Estancia Municipal Airport	*			
Ft. Sumner Municipal Airport	17	1.5	2.3	60
Gallup Municipal Airport	331	3.0	1.5	1,490
Glenwood-Catron County Airport	1	1.5	1.7	3
Grants-Milan Municipal Airport	518	3.0	1.5	2,331
Hatch Municipal Airport	25	1.5	1.7	65
Jewett Mesa Airport	5	1.5	1.7	14
Las Cruces International Airport	2,987	4.0	1.9	22,701
Las Vegas Municipal Airport	1,750	3.0	1.6	8,400
Lea County-Jal Airport	625	3.0	2.3	4,313
Lea County-Zip Franklin Memorial Airport	275	3.0	2.3	1,898
Lindrith Airpark	13	1.5	1.0	20



**TABLE 5P (Continued)**  
**General Aviation Visitor Days**  
**New Mexico Airports**

Facility	Transient GA Aircraft	PAX/ Aircraft	LOS (Days)	GA Visitor Days
<b>General Aviation Airports - Continued</b>				
Lordsburg Municipal Airport	396	1.5	1.7	1,010
Magdalena Airport	99	3.0	1.7	505
Moriarty Municipal Airport	500	3.0	2.1	3,150
Mountainair Airport	*			
Navajo Lake Airport	33	1.5	1.5	75
Portales Municipal Airport	1,629	3.0	2.3	11,240
Questa Municipal No. 2 Airport	33	1.5	2.1	105
Raton Crews Field Municipal Airport	1,381	3.0	1.6	6,629
Reserve Catron County Airport	40	1.5	1.7	102
Santa Rosa Route 66 Airport	264	1.5	1.6	634
Shiprock Airstrip	83	1.5	1.5	188
Sierra Blanca Regional Airport	2,962	6.0	3.0	53,316
Socorro Municipal Airport	500	3.0	1.7	2,550
Springer Municipal Airport	3	1.5	1.6	8
Taos Regional Airport	3,686	6.0	3.0	66,348
Tatum Airport	8	1.5	2.3	28
Truth Or Consequences Municipal Airport	2,500	3.0	1.7	12,750
Tucumcari Municipal Airport	5,000	3.0	1.6	24,000
Vaughn Municipal Airport	*			
Zuni-Black Rock Airport	2	1.5	1.5	5
<b>Subtotal</b>	<b>50,703</b>	<b>3.7</b>	<b>2.2</b>	<b>413,859</b>
<b>TOTAL</b>	<b>77,519</b>	<b>3.7</b>	<b>2.1</b>	<b>618,704</b>

\* Denotes no reliable estimate available

Visitor days were multiplied by spending per day figures to calculate estimates of general aviation visitor spending by airport (**Table 5Q**). Spending per day by general aviation visitors at commercial service airports was assumed to be the same as for commercial airline visitors at those airports, with two exceptions, Albuquerque International Sunport and Santa Fe Municipal Airport. Figures on spending per day by commercial service visitors at the Sunport (shown above in Table 5G) were developed by the University of New Mexico research team in their extensive study of the economic impact of the Albuquerque Airport System. Most of those passengers surveyed originated their travel a considerable distance from New Mexico and selected ABQ as a destination airport because airlines offered direct flights or efficient connections from their home airport to ABQ. Many travelers may have gone on to various destinations in New Mexico other than the Albuquerque metropolitan area. A great benefit of general aviation is that visitors can go directly to the city and airport that is their ultimate destination. Therefore, it is reasonable to assume that transient general aviation passengers arriving at ABQ intended specifically to visit the Albuquerque area. Similar reasoning applies to Santa Fe general aviation visitors.



**TABLE 5Q**  
**General Aviation Direct Visitor Spending**  
**New Mexico Airports**

Facility	Region	GA Visitor Days	Spending Per Day	GA Visitor Spending
<b>Commercial Service Airports</b>				
Albuquerque International Sunport	Central	71,938	\$105	\$7,553,000
Santa Fe Municipal	North Central	56,742	\$100	\$5,674,000
Roswell International Air Center	Southeast	20,764	\$89	\$1,848,000
Lea County Regional	Southeast	14,453	\$89	\$1,286,000
Four Corners Regional	Northwest	12,483	\$166	\$2,072,000
Los Alamos Airport	North Central	3,623	\$100	\$362,000
Cavern City Air Terminal	Southeast	1,985	\$89	\$177,000
Grant County	Southwest	2,300	\$68	\$156,000
Clovis Municipal	Southeast	20,557	\$89	\$1,830,000
<b>Subtotal</b>		<b>204,845</b>	<b>\$102</b>	<b>\$20,958,000</b>
<b>General Aviation Airports</b>				
Alamogordo-White Sands Airport	Southeast	27,600	\$89	\$2,456,000
Angel Fire - Colfax County Airport	North Central	20,250	\$100	\$2,025,000
Artesia Municipal Airport	Southeast	12,337	\$89	\$1,098,000
Aztec Municipal Airport	Northwest	6,323	\$166	\$1,050,000
Belen-Alexander Municipal Airport	Central	11,025	\$105	\$1,158,000
Carrizozo Municipal Airport	Southeast	798	\$89	\$71,000
Clayton Municipal Airpark	Northeast	2,160	\$128	\$276,000
Conchas Lake Airport	Northeast	397	\$128	\$51,000
Crownpoint Airport	Northwest	75	\$166	\$12,000
Deming Municipal Airport	Southwest	15,300	\$68	\$1,040,000
Doña Ana County Jetport at Santa Teresa	Southwest	27,418	\$68	\$1,864,000
Double Eagle II Airport	Central	63,353	\$105	\$6,652,000
Dulce-Jicarilla Apache Nation Airport	North Central	365	\$100	\$37,000
Ohkay Owingeh Airport	North Central	2,520	\$100	\$252,000
Estancia Municipal Airport	Central			*
Ft. Sumner Municipal Airport	Southeast	60	\$89	\$5,000
Gallup Municipal Airport	Northwest	1,490	\$166	\$247,000
Glenwood-Catron County Airport	Southwest	3		*
Grants-Milan Municipal Airport	Northwest	2,331	\$166	\$387,000
Hatch Municipal Airport	Southwest	65		*
Jewett Mesa Airport	Southwest	14		*
Las Cruces International Airport	Southwest	22,701	\$68	\$1,544,000
Las Vegas Municipal Airport	Northeast	8,400	\$128	\$1,075,000
Lea County-Jal Airport	Southeast	4,313	\$89	\$384,000
Lea County-Zip Franklin Memorial Airport	Southeast	1,898	\$89	\$169,000
Lindrith Airpark	North Central	20		*
Lordsburg Municipal Airport	Southwest	1,010	\$68	\$69,000
Magdalena Airport	Southwest	505	\$68	\$34,000
Moriarty Municipal Airport	Central	3,150	\$105	\$331,000
Mountainair Airport	Central			*





**TABLE 5Q (Continued)**  
**General Aviation Direct Visitor Spending**  
**New Mexico Airports**

Facility	Region	GA Visitor Days	Spending Per Day	GA Visitor Spending
<b>General Aviation Airports</b>				
Navajo Lake Airport	Northwest	75	\$166	\$12,000
Portales Municipal Airport	Southeast	11,240	\$89	\$1,000,000
Questa Municipal No. 2 Airport	North Central	105	\$100	\$11,000
Raton Crews Field Municipal Airport	Northeast	6,629	\$128	\$849,000
Reserve Catron County Airport	Southwest	102	\$68	\$7,000
Santa Rosa Route 66 Airport	Northeast	634	\$128	\$81,000
Shiprock Airstrip	Northwest	188	\$166	\$31,000
Sierra Blanca Regional Airport	Southeast	53,316	\$89	\$4,745,000
Socorro Municipal Airport	Southwest	2,550	\$68	\$173,000
Springer Municipal Airport	Northeast	8		*
Taos Regional Airport	North Central	66,348	\$100	\$6,635,000
Tatum Airport	Southeast	28		*
Truth Or Consequences Municipal Airport	Southwest	12,750	\$68	\$867,000
Tucumcari Municipal Airport	Northeast	24,000	\$128	\$3,072,000
Vaughn Municipal Airport	Northeast			*
Zuni-Black Rock Airport	Northwest	5		*
<b>Subtotal</b>		<b>413,859</b>	<b>\$96</b>	<b>\$39,770,000</b>
<b>TOTAL</b>		<b>618,704</b>	<b>\$98</b>	<b>\$60,728,000</b>

\* Denotes no reliable estimate available

The Longwoods International air visitor data base for New Mexico includes separate survey values for air visitors to the Albuquerque and Santa Fe areas, so these values were used as the estimates of spending per day. Sunport commercial service visitor spending per day was \$112 and the corresponding Santa Fe value was \$118. General aviation visitor spending per day, drawing from the Longwoods International data, was \$105 per person per day for the Sunport and \$100 for Santa Fe visitors.

To recap, spending estimates include outlays for lodging, food and beverages, ground transportation, retail and recreation. The spending figures incorporate variation in spending across travel parties and are averages that recognize that some persons may stay with friends or relatives and have lower lodging and food expenses, or that some visitors may have more extensive shopping or recreation agendas than others and spend more on those categories. For general aviation visitors, average spending per person per day was \$98 and direct general aviation air visitor spending was \$60.7 million in 2014.

## GENERAL AVIATION VISITOR EMPLOYMENT IMPACTS

There were 769 direct tourism sector private jobs created by general aviation visitor spending across the New Mexico Airport System in 2014 (**Table 5R**). This figure includes employment in the combined visitor



spending categories of lodging, food service, transportation, retail and recreation. Albuquerque International Sunport accounted for 95 visitor jobs, or 12 percent of the statewide direct jobs related to general aviation visitors. Double Eagle II accounted for 82 visitor jobs.

**TABLE 5R**  
**General Aviation Visitor Employment**  
**New Mexico Airports**

Facility	Direct Employment	Secondary Employment	Total Employment
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	95	32	127
Santa Fe Municipal	65	22	87
Roswell International Air Center	30	6	36
Lea County Regional	12	5	17
Four Corners Regional	13	5	18
Los Alamos Airport	4	1	5
Cavern City Air Terminal	2	1	3
Grant County	2	1	3
Clovis Municipal	22	5	27
<b>Subtotal</b>	<b>245</b>	<b>78</b>	<b>323</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	29	7	36
Angel Fire - Colfax County Airport	28	7	35
Artesia Municipal Airport	15	4	19
Aztec Municipal Airport	12	3	15
Belen-Alexander Municipal Airport	14	3	17
Carrizozo Municipal Airport	1	1	2
Clayton Municipal Airpark	4	1	5
Conchas Lake Airport	1	1	2
Crownpoint Airport	*		
Deming Municipal Airport	19	4	23
Doña Ana County Jetport at Santa Teresa	36	7	43
Double Eagle II Airport	82	28	110
Dulce-Jicarilla Apache Nation Airport	1	0	1
Ohkay Owingeh Airport	3	1	4
Estancia Municipal Airport	*		
Ft. Sumner Municipal Airport	1	0	1
Gallup Municipal Airport	2	1	3
Glenwood-Catron County Airport	*		
Grants-Milan Municipal Airport	5	2	7
Hatch Municipal Airport	*		
Jewett Mesa Airport	*		
Las Cruces International Airport	30	6	36
Las Vegas Municipal Airport	15	3	18
Lea County-Jal Airport	4	3	7
Lea County-Zip Franklin Memorial Airport	2	1	3
Lindrith Airpark	*		



**TABLE 5R (Continued)**  
**General Aviation Visitor Employment**  
**New Mexico Airports**

Facility	Direct Employment	Secondary Employment	Total Employment
<b>General Aviation Airports - Continued</b>			
Lordsburg Municipal Airport	1	1	2
Magdalena Airport	1	0	1
Moriarty Municipal Airport	3	1	4
Mountainair Airport	*		
Navajo Lake Airport	1	0	1
Portales Municipal Airport	26	4	30
Questa Municipal No. 2 Airport	1	0	1
Raton Crews Field Municipal Airport	11	3	14
Reserve Catron County Airport	1	0	1
Santa Rosa Route 66 Airport	1	1	2
Shiprock Airstrip	1	0	1
Sierra Blanca Regional Airport	45	16	61
Socorro Municipal Airport	2	1	3
Springer Municipal Airport	*		
Taos Regional Airport	77	23	100
Tatum Airport	*		
Truth Or Consequences Municipal Airport	11	2	13
Tucumcari Municipal Airport	38	8	46
Vaughn Municipal Airport	*		
Zuni-Black Rock Airport	*		
<b>Subtotal</b>	<b>524</b>	<b>143</b>	<b>667</b>
<b>TOTAL</b>	<b>769</b>	<b>221</b>	<b>990</b>

\* Denotes no reliable estimate available

Of the 769 general aviation visitor jobs created, commercial service airports accounted for 245 jobs (32 percent) and general aviation airports accounted for 524 jobs (68 percent). This distribution is consistent with the distribution of transient general aviation aircraft arrivals of 35 percent for commercial service airports and 65 percent for general aviation airports.

Statewide secondary employment resulting from general aviation visitor activity was 221 additional jobs created in 2014. These are jobs in the general economy, not necessarily related to visitor services, range from health care to government to real estate and other industries. The total employment impact (sum of direct and secondary jobs) was 990 jobs supported statewide.

## GENERAL AVIATION VISITOR PAYROLL IMPACTS

Direct payroll received by the 769 tourism sector workers in calendar year 2014 was \$20.1 million (**Table 5S**). The largest payroll disbursements for general aviation visitor jobs related to transient arrivals were related to visitors to Albuquerque International Sunport (\$2,260,000), followed by Santa Fe Municipal



Airport (\$2,070,000). Commercial service airports accounted for \$6.4 million of statewide general aviation tourism payrolls (32 percent) and the remainder (\$13.7 million or 68 percent) originated from general aviation activity at airports throughout the various regions of New Mexico.

**TABLE 5S**  
**General Aviation Visitor Payroll**  
**New Mexico Airports**

Facility	Direct Payroll	Secondary Payroll	Total Payroll
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$2,260,000	\$1,289,000	\$3,549,000
Santa Fe Municipal	\$2,070,000	\$908,000	\$2,978,000
Roswell International Air Center	\$730,000	\$233,000	\$963,000
Lea County Regional	\$353,000	\$133,000	\$486,000
Four Corners Regional	\$303,000	\$191,000	\$494,000
Los Alamos Airport	\$130,000	\$20,000	\$150,000
Cavern City Air Terminal	\$50,000	\$20,000	\$70,000
Grant County	\$46,000	\$14,000	\$60,000
Clovis Municipal	\$544,000	\$180,000	\$724,000
<b>Subtotal</b>	<b>\$6,486,000</b>	<b>\$2,988,000</b>	<b>\$9,474,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$711,000	\$191,000	\$903,000
Angel Fire - Colfax County Airport	\$729,000	\$176,000	\$905,000
Artesia Municipal Airport	\$355,000	\$127,000	\$482,000
Aztec Municipal Airport	\$273,000	\$117,000	\$390,000
Belen-Alexander Municipal Airport	\$317,000	\$75,000	\$392,000
Carrizozo Municipal Airport	\$23,000	\$7,000	\$30,000
Clayton Municipal Airpark	\$87,000	\$19,000	\$107,000
Conchas Lake Airport	\$10,000	\$3,000	\$13,000
Crownpoint Airport	\$1,500		\$1,500
Deming Municipal Airport	\$482,000	\$185,000	\$667,000
Doña Ana County Jetport at Santa Teresa	\$986,000	\$259,000	\$1,245,000
Double Eagle II Airport	\$1,962,000	\$1,116,000	\$3,078,000
Dulce-Jicarilla Apache Nation Airport	\$13,000	\$2,000	\$15,000
Ohkay Owingeh Airport	\$95,000	\$19,000	\$114,000
Estancia Municipal Airport	*		
Ft. Sumner Municipal Airport	\$2,500		\$2,500
Gallup Municipal Airport	\$56,000	\$18,000	\$74,000
Glenwood-Catron County Airport	*		
Grants-Milan Municipal Airport	\$117,000	\$29,000	\$146,000
Hatch Municipal Airport	*		
Jewett Mesa Airport	*		
Las Cruces International Airport	\$816,000	\$214,000	\$1,030,000
Las Vegas Municipal Airport	\$320,000	\$119,000	\$439,000
Lea County-Jal Airport	\$107,000	\$41,000	\$148,000
Lea County-Zip Franklin Memorial Airport	\$48,000	\$19,000	\$67,000
Lindrith Airpark	*		
Lordsburg Municipal Airport	\$24,000	\$4,000	\$28,000
Magdalena Airport	\$17,000	\$3,000	\$20,000



**TABLE 5S (Continued)**  
**General Aviation Visitor Payroll**  
**New Mexico Airports**

Facility	Direct Payroll	Secondary Payroll	Total Payroll
<b>General Aviation Airports - Continued</b>			
Moriarty Municipal Airport	\$75,000	\$14,000	\$89,000
Mountainair Airport	*		
Navajo Lake Airport	*		
Portales Municipal Airport	\$515,000	\$90,000	\$604,000
Questa Municipal No. 2 Airport	\$4,000	\$2,000	\$7,000
Raton Crews Field Municipal Airport	\$293,000	\$70,000	\$363,000
Reserve Catron County Airport	\$2,000	\$0	\$2,000
Santa Rosa Route 66 Airport	\$21,000	\$3,000	\$24,000
Shiprock Airstrip	\$7,000	\$3,000	\$10,000
Sierra Blanca Regional Airport	\$1,316,000	\$500,000	\$1,816,000
Socorro Municipal Airport	\$60,000	\$12,000	\$72,000
Springer Municipal Airport	*		
Taos Regional Airport	\$2,392,000	\$739,000	\$3,131,000
Tatum Airport	*		
Truth Or Consequences Municipal Airport	\$313,000	\$60,000	\$373,000
Tucumcari Municipal Airport	\$1,130,000	\$256,000	\$1,386,000
Vaughn Municipal Airport	*		
Zuni-Black Rock Airport	*		
<b>Subtotal</b>	<b>\$13,678,000</b>	<b>\$4,494,000</b>	<b>\$18,172,000</b>
<b>TOTAL</b>	<b>\$20,164,000</b>	<b>\$7,482,000</b>	<b>\$27,646,000</b>

\* Denotes no reliable estimate available

There were eleven general aviation airports where employment and payroll related to transient aircraft passengers could not be reliably estimated from the IMPLAN model. This is because itinerant activity was minimal or not measured, employment was less than one half a person-worker per year, or annual payroll estimates were very small (less than \$1,000). Airports in this category included

- Crownpoint Airport
- Estancia Municipal Airport
- Glenwood-Catron County Airport
- Hatch Municipal Airport
- Jewett Mesa Airport
- Lindrith Airpark
- Mountainair Airport
- Springer Municipal Airport
- Tatum Airport
- Vaughn Municipal Airport
- Zuni-Black Rock Airport

As supplier employees and tourism workers spent the direct payroll received as compensation, this spending recycled within the area and created secondary payroll income in the general economy. The 221 secondary jobs generated additional payroll payments of \$7.5 million to workers. Total payroll created by commercial service visitor spending was the sum of direct and secondary payroll, \$27.6 million.





## GENERAL AVIATION VISITOR OUTPUT IMPACTS

Direct output (spending) produced by general aviation visitors arriving at New Mexico airports was \$60.7 million in 2014. Secondary output was \$25.4 million and total output was \$86.1 million (Table 5T).

**TABLE 5T**  
**General Aviation Visitor Output**  
**New Mexico Airports**

Facility	Direct Output	Secondary Output	Total Output
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$7,553,000	\$4,451,000	\$12,004,000
Santa Fe Municipal	\$5,674,000	\$2,556,000	\$8,230,000
Roswell International Air Center	\$1,848,000	\$813,000	\$2,661,000
Lea County Regional	\$1,286,000	\$331,000	\$1,617,000
Four Corners Regional	\$2,072,000	\$658,000	\$2,730,000
Los Alamos Airport	\$362,000	\$65,000	\$427,000
Cavern City Air Terminal	\$177,000	\$55,000	\$232,000
Grant County	\$156,000	\$41,000	\$197,000
Clovis Municipal	\$1,830,000	\$670,000	\$2,500,000
<b>Subtotal</b>	<b>\$20,958,000</b>	<b>\$9,640,000</b>	<b>\$30,598,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$2,456,000	\$818,000	\$3,274,000
Angel Fire - Colfax County Airport	\$2,025,000	\$767,000	\$2,792,000
Artesia Municipal Airport	\$1,098,000	\$437,000	\$1,535,000
Aztec Municipal Airport	\$1,050,000	\$397,000	\$1,447,000
Belen-Alexander Municipal Airport	\$1,158,000	\$313,000	\$1,471,000
Carrizozo Municipal Airport	\$71,000	\$32,000	\$103,000
Clayton Municipal Airpark	\$276,000	\$82,000	\$358,000
Conchas Lake Airport	\$51,000	\$14,000	\$65,000
Crownpoint Airport	\$12,000	\$3,000	\$15,000
Deming Municipal Airport	\$1,040,000	\$639,000	\$1,679,000
Doña Ana County Jetport at Santa Teresa	\$1,864,000	\$852,000	\$2,716,000
Double Eagle II Airport	\$6,652,000	\$3,094,000	\$9,746,000
Dulce-Jicarilla Apache Nation Airport	\$37,000	\$13,000	\$50,000
Ohkay Owingeh Airport	\$252,000	\$82,000	\$334,000
Estancia Municipal Airport	*		
Ft. Sumner Municipal Airport	\$5,000	\$3,000	\$8,000
Gallup Municipal Airport	\$247,000	\$55,000	\$302,000
Glenwood-Catron County Airport	\$0	\$0	\$0
Grants-Milan Municipal Airport	\$387,000	\$107,000	\$494,000
Hatch Municipal Airport	*		
Jewett Mesa Airport	*		
Las Cruces International Airport	\$1,544,000	\$704,000	\$2,248,000
Las Vegas Municipal Airport	\$1,075,000	\$314,000	\$1,389,000
Lea County-Jal Airport	\$384,000	\$130,000	\$514,000



**TABLE 5T (Continued)**  
**General Aviation Visitor Output**  
**New Mexico Airports**

Facility	Direct Output	Secondary Output	Total Output
<b>General Aviation Airports - Continued</b>			
Lea County-Zip Franklin Memorial Airport	\$169,000	\$50,000	\$219,000
Lindrith Airpark	*		
Lordsburg Municipal Airport	\$69,000	\$14,000	\$83,000
Magdalena Airport	\$34,000	\$10,000	\$44,000
Moriarty Municipal Airport	\$331,000	\$68,000	\$399,000
Mountainair Airport	*		
Navajo Lake Airport	\$12,000	\$3,000	\$15,000
Portales Municipal Airport	\$1,000,000	\$403,000	\$1,403,000
Questa Municipal No. 2 Airport	\$11,000	\$4,000	\$15,000
Raton Crews Field Municipal Airport	\$849,000	\$280,000	\$1,129,000
Reserve Catron County Airport	\$7,000	\$2,000	\$9,000
Santa Rosa Route 66 Airport	\$81,000	\$21,000	\$102,000
Shiprock Airstrip	\$31,000	\$12,000	\$43,000
Sierra Blanca Regional Airport	\$4,745,000	\$1,946,000	\$6,691,000
Socorro Municipal Airport	\$173,000	\$44,000	\$217,000
Springer Municipal Airport	*		
Taos Regional Airport	\$6,635,000	\$2,824,000	\$9,459,000
Tatum Airport	*		
Truth Or Consequences Municipal Airport	\$867,000	\$277,000	\$1,144,000
Tucumcari Municipal Airport	\$3,072,000	\$989,000	\$4,061,000
Vaughn Municipal Airport	*		
Zuni-Black Rock Airport	*		
<b>Subtotal</b>	<b>\$39,770,000</b>	<b>\$15,804,000</b>	<b>\$55,574,000</b>
<b>TOTAL</b>	<b>\$60,728,000</b>	<b>\$25,444,000</b>	<b>\$86,172,000</b>

\* Denotes no reliable estimate available

General Aviation visitor total output was much more widely distributed across the state than commercial service visitor output. The contribution of Albuquerque International Sunport to total general aviation visitor output was the largest of any New Mexico airport (\$12 million) but was only 14 percent of the statewide total, compared to 94 percent of total commercial service visitor output impact.

The general aviation visitor \$60,728,000 direct spending distribution by region was

- Central Region: \$15,694,000
- Southeast Region: \$15,069,000
- North Central Region: \$14,996,000
- Southwest Region: \$5,754,000
- Northeast Region: \$5,404,000
- Northwest Region: \$3,811,000



The \$86,171,000 total output regional distribution was slightly different.

- Central Region: \$23,620,000
- North Central Region: \$21,307,000
- Southeast: \$20,757,000
- Southwest Region: \$8,337,000
- Northeast Region: \$7,104,000
- Northwest Region: \$5,046,000

The Southeast region accounted for somewhat greater direct visitor spending, but total output (including secondary or multiplier effects) was greater in the North Central region, changing the ranking for these two regions. The magnitude of total output compared to direct output is related to the size of the IMPLAN multiplier (which in turn is derived by industry multiplier for each region).

The overall multiplier for general aviation visitor spending was  $\$86,171,000 / \$60,728,000 = 1.42$  and the North Central region multiplier also was 1.42, indicating that each one million dollars of general aviation visitor spending recycled within the local economy to create final total output of \$1,420,000. The similar figure for the Southeast Region was 1.38. Smaller multipliers are usually due to increased “leakages” as more goods and service are purchased outside the area, reducing the recirculation of the initial direct spending. The largest multiplier was in the Central Region (1.51) and the smallest was in the Northeast Region (1.31):

- Central Region multiplier: 1.51
- Southwest Region multiplier: 1.45
- North Central Region multiplier: 1.42
- Southeast Region multiplier: 1.38
- Northwest Region multiplier: 1.32
- Northeast Region multiplier: 1.31

The multipliers for total output from direct general aviation visitor spending indicate that dollar for dollar, visitor expenditures in the Central region (Albuquerque International Sunport, Double Eagle II, Belen-Alexander Municipal, and smaller airports including Estancia and Moriarty Municipal) have a greater total impact on the economy than spending related to airports in other regions of New Mexico.

## **GENERAL AVIATION VISITOR IMPACT SUMMARY**

As the fifth largest state in the nation, New Mexico relies on general aviation airports as an important component of state infrastructure, supporting a flexible, time-saving mode of transport for business and personal travelers. On-airport activity within the state generated total output of \$1.3 billion. Visitors arriving at New Mexico airports added to the value created by the state’s airports when they made direct expenditures of \$60.7 million for lodging, food, ground transportation, retail, and recreation, ultimately leading to total general aviation visitor output of \$86.2 million.



Total general aviation visitor output is the final measure of activity in a process that begins with itinerant aircraft arrivals and creates increases in employment, payroll output spread across industries and regions of New Mexico. There were 139,894 itinerant general aviation arrivals in 2014, and an estimated 55 per cent were transient aircraft carrying visitors to the airport service area. Visitors had an average length of stay of 2.1 days and average daily spending of \$98. The number of visitor days was 618,704. The resulting direct spending of \$60,728,000 created 769 direct jobs with payroll of \$20.2 million (**Table 5U**). Secondary output of \$25,444,000 was created as the initial direct spending recirculated in the New Mexico economy, finally yielding a general aviation visitor total output impact of \$86,172,000, with 990 jobs and payroll of \$27,646,000.

**TABLE 5U**  
**Total Statewide Economic Impact of General Aviation Visitors**  
**New Mexico Airports**

Economic Impacts	Employment	Payroll	Output
Direct Economic Impact	769	\$20,164,000	\$60,728,000
Secondary Economic Impact	221	\$7,482,000	\$25,444,000
<i>Indirect Impact</i>	<i>107</i>	<i>\$3,669,000</i>	<i>\$13,137,000</i>
<i>Induced Impact</i>	<i>114</i>	<i>\$3,813,000</i>	<i>\$12,307,000</i>
<b>Total Economic Impact</b>	<b>990</b>	<b>\$27,646,000</b>	<b>\$86,172,000</b>

## NEW MEXICO AIRPORT SYSTEM TAX REVENUES

The airports that make up the New Mexico Airport System support the state economy by providing jobs, payrolls and output in the form of safe and efficient transportation for goods and passengers. The airport system accounted for 18,573 total jobs in 2014, with income to workers of \$723.4 million and output (revenue flows) of \$2.3 billion. While benefits of the system are enjoyed by New Mexico citizens, workers and private businesses, the airport system also creates tax revenues for city, county and state governments. According to the U.S. Census Bureau and New Mexico Taxation and Revenue Department, total tax collections for the state in 2014 were \$5.8 billion. The two largest components were the gross receipts tax (\$2.1 billion) and individual income taxes (\$1.3 billion). Together, these two taxes account for well over one half (59%) of all state tax collections each year. Other sources of revenue are the severance tax (at \$1.0 billion, the third largest contributor to state revenue), the corporate income tax and various additional taxes and fees. The analysis below will focus on the contribution of the New Mexico Airport System city, county and state gross receipts tax and individual income tax revenues.

New Mexico aviation activity adds significantly to the two major components of the New Mexico revenue base (**Table 5V**). Revenues from the gross receipts tax were \$77.0 million and revenues from the individual income taxes paid by airport employees and workers in the visitor (hospitality and leisure) sector summed to \$12.7 million. These tax revenues were estimated for direct economic activity and do not include secondary tax collections as spending recirculated through the economy. The combined gross receipts and income tax collections associated with New Mexico aviation activity were estimated to be \$89.6 million in 2014.



**TABLE 5V**  
**Income and Gross Receipts Tax Revenues**  
**New Mexico Airport System**

Revenue Source	Commercial Service Airports \$	General Aviation Airports	Total Tax Revenues
<b>New Mexico Gross Receipts Tax</b>			
Visitor Spending	\$34,328,000	\$2,398,000	\$36,726,000
On Airport Output	\$27,795,000	\$3,035,000	\$30,830,000
Airport Employees	\$5,168,000	\$909,000	\$6,077,000
Visitor Sector Employees	\$3,091,000	\$239,000	\$3,330,000
<b>Gross Receipts Tax Revenues</b>	<b>\$70,382,000</b>	<b>\$6,581,000</b>	<b>\$76,963,000</b>
<b>New Mexico Income Tax</b>			
Airport Employees	\$8,098,000	\$1,336,000	\$9,434,000
Visitor Sector Employees	\$2,896,000	\$259,000	\$3,245,000
<b>Income Tax Revenues</b>	<b>\$11,084,000</b>	<b>\$1,595,000</b>	<b>\$12,679,000,000</b>
<b>Total Tax Revenues</b>	<b>\$81,466,000</b>	<b>\$8,176,000</b>	<b>\$89,642,000</b>

## VISITOR SPENDING GROSS RECEIPT TAXES

Gross receipts are the payments received for selling or leasing property and performing services in New Mexico. The tax is different from the sales taxes in many other states, because the New Mexico tax is broad based in its application, including services. The gross receipts tax rate combines the 5.125% state rate with additional taxes levied by counties and cities. The gross receipts tax varied by locality from 5.125% to 8.125% in 2014.

When visitors travel to New Mexico by air, they spend for lodging, food, retail goods and services, entertainment, and transportation. All of these categories are subject to the gross receipts tax in varying amounts. For example, according to data supplied by the New Mexico Taxation and Revenue Department, 93% of outlays for lodging and food services are taxable. Only 53% of retail sales are taxable, but 65% of spending for entertainment and recreation is taxable.

To calculate the gross receipts taxes paid by visitors, commercial service and general aviation spending categories were analyzed to determine the taxable amount spent by visitors arriving at each New Mexico airport. Then the gross receipts tax rates for each airport in 2014 were applied to compute gross receipts tax collections (**Table 5W**). Visitors arriving at commercial service airports had taxable spending of \$486.6 million and gross receipts tax collections from these travelers were \$34.3 million, accounting for 93 percent of total air visitor tax revenues of \$36.7 million.

The average gross receipts rate paid overall was 0.071 cents per dollar of spending, or \$7.10 of gross receipts tax per \$100 of visitor expenditures. Tax specialists emphasize that spending by visitors has a particularly beneficial effect on the economy and tax collections, since visitors bring with them dollars from outside the state that are injected into the state spending stream. Often, taxes paid by visitors are said to be “exported,” in the sense that the residents of the state benefit from external contributions to state and local governments by non-resident travelers.





**TABLE 5W**  
**Visitor Spending Gross Receipt Taxes**  
**New Mexico Airports**

Facility	Visitor Taxable Gross Receipts	GRT Tax Rate	Total GRT Tax Revenue
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$447,216,000	0.070000	\$31,305,000
Santa Fe Municipal	\$18,559,000	0.081750	\$1,517,000
Roswell International Air Center	\$5,699,000	0.071250	\$406,000
Lea County Regional	\$4,121,000	0.068125	\$281,000
Four Corners Regional	\$2,218,000	0.071875	\$159,000
Los Alamos Airport	\$830,000	0.073125	\$61,000
Cavern City Air Terminal	\$4,690,000	0.074375	\$349,000
Grant County	\$1,529,000	0.073750	\$113,000
Clovis Municipal	\$1,753,000	0.078125	\$137,000
<b>Subtotal</b>	<b>\$486,615,000</b>	<b>0.070544</b>	<b>\$34,328,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$1,916,000	0.078750	\$151,000
Angel Fire - Colfax County Airport	\$1,580,000	0.074375	\$117,000
Artesia Municipal Airport	\$856,000	0.074375	\$64,000
Aztec Municipal Airport	\$819,000	0.078125	\$64,000
Belen-Alexander Municipal Airport	\$903,000	0.078125	\$71,000
Carrizozo Municipal Airport	\$55,000	0.071875	\$4,000
Clayton Municipal Airpark	\$216,000	0.07875	\$17,000
Conchas Lake Airport	\$40,000	0.065000	\$3,000
Crownpoint Airport	\$10,000	0.067500	\$1,000
Deming Municipal Airport	\$812,000	0.075000	\$61,000
Doña Ana County Jetport at Santa Teresa	\$1,454,000	0.063750	\$93,000
Double Eagle II Airport	\$5,189,000	0.070000	\$363,000
Dulce-Jicarilla Apache Nation Airport	\$28,000	0.065000	\$2,000
Ohkay Owingeh Airport	\$197,000	0.065000	\$13,000
Estancia Municipal Airport	*		
Ft. Sumner Municipal Airport	\$4,000	0.076250	
Gallup Municipal Airport	\$193,000	0.083125	\$16,000
Glenwood-Catron County Airport	*		
Grants-Milan Municipal Airport	\$302,000	0.07875	\$24,000
Hatch Municipal Airport	\$3,000	0.074375	
Jewett Mesa Airport	\$1,000	0.056875	
Las Cruces International Airport	\$1,204,000	0.079375	\$96,000
Las Vegas Municipal Airport	\$839,000	0.070625	\$59,000
Lea County-Jal Airport	\$299,000	0.070625	\$21,000
Lea County-Zip Franklin Memorial Airport	\$132,000	0.068750	\$9,000
Lindrith Airpark	\$2,000	0.065000	



**TABLE 5W (Continued)**  
**Visitor Spending Gross Receipt Taxes**  
**New Mexico Airports**

Facility	Visitor Taxable Gross Receipts	GRT Tax Rate	Total GRT Tax Revenue
<b>General Aviation Airports - Continued</b>			
Lordsburg Municipal Airport	\$54,000	0.072500	\$4,000
Magdalena Airport	\$27,000	0.069375	\$2,000
Moriarty Municipal Airport	\$258,000	0.074375	\$19,000
Mountainair Airport	*		
Navajo Lake Airport	\$10,000	0.067500	\$1,000
Portales Municipal Airport	\$780,000	0.078125	\$61,000
Questa Municipal No. 2 Airport	\$8,000	0.081875	\$1,000
Raton Crews Field Municipal Airport	\$662,000	0.079375	\$53,000
Reserve Catron County Airport	\$5,000	0.070000	
Santa Rosa Route 66 Airport	\$63,000	0.080000	\$5,000
Shiprock Airstrip	\$24,000	0.063750	\$2,000
Sierra Blanca Regional Airport	\$3,701,000	0.086250	\$319,000
Socorro Municipal Airport	\$135,000	0.070625	\$10,000
Springer Municipal Airport	\$1,000	0.068125	
Taos Regional Airport	\$5,175,000	0.081875	\$424,000
Tatum Airport	\$2,000	0.068125	
Truth Or Consequences Municipal Airport	\$676,000	0.078750	\$53,000
Tucumcari Municipal Airport	\$2,396,000	0.081250	\$195,000
Vaughn Municipal Airport	*		
Zuni-Black Rock Airport	*		
<b>Subtotal</b>	<b>\$31,031,000</b>	<b>0.077278</b>	<b>\$2,398,000</b>
<b>TOTAL</b>	<b>\$517,646,000</b>	<b>0.070948</b>	<b>\$36,726,000</b>

\*Denotes no reliable estimate available

## GROSS RECEIPT TAXES ON AIRPORT OUTPUT

The second largest source of tax revenues generated by the New Mexico Airport System in 2014 was gross receipt taxes related to on-airport output. Output is defined as the sum of private business revenues, construction and capital improvement spending, and includes the budgets of government agencies on each airport. Gross output on New Mexico airports in 2014 was \$903.1 million and on-airport gross receipt tax collections for the airport system were \$30.8 million (**Table 5X**).

Gross receipts taxes are levied on private businesses located on airports as well as on construction activity, even when the purchaser is the state or local government. For example, an outside janitorial service would be subject to gross receipts taxes on an airport, as would a paving contractor working on a runway maintenance project. However, because of various deductions and adjustments, there is a difference between business revenues and project costs and taxable value. For example, according to data compiled by the New Mexico Taxation and Revenue Department, an average of 69 percent of gross construction receipts constitute taxable receipts and are subject to the gross receipts tax. To estimate taxable output



on New Mexico airports, similar adjustments were applied to gross output and gross receipts taxes were based on the unique value for each airport.

**TABLE 5X**  
**Airport Output Gross Receipt Taxes**  
**New Mexico Airports**

Facility	Gross Output	Taxable Output	Total GRT Tax Revenue
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$612,446,000	\$319,217,000	\$23,143,000
Santa Fe Municipal	\$41,127,000	\$24,084,000	\$1,746,000
Roswell International Air Center	\$6,497,000	\$3,758,000	\$272,000
Lea County Regional	\$19,694,000	\$8,048,000	\$583,000
Four Corners Regional	\$7,919,000	\$2,854,000	\$207,000
Los Alamos Airport	\$5,659,000	\$2,991,000	\$217,000
Cavern City Air Terminal	\$59,300,000	\$9,091,000	\$659,000
Grant County	\$22,579,000	\$11,633,000	\$843,000
Clovis Municipal	\$3,125,000	\$1,706,000	\$124,000
<b>Subtotal</b>	<b>\$778,346,000</b>	<b>\$383,382,000</b>	<b>\$27,795,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$7,162,000	\$2,404,000	\$174,000
Angel Fire - Colfax County Airport	\$875,000	\$293,000	\$21,000
Artesia Municipal Airport	\$1,016,000	\$341,000	\$25,000
Aztec Municipal Airport	\$2,157,000	\$724,000	\$52,000
Belen-Alexander Municipal Airport	\$7,818,000	\$2,624,000	\$190,000
Carrizozo Municipal Airport	\$776,000	\$260,000	\$19,000
Clayton Municipal Airpark	\$738,000	\$248,000	\$18,000
Conchas Lake Airport	\$3,027,000	\$1,016,000	\$74,000
Crownpoint Airport	\$788,000	\$265,000	\$19,000
Deming Municipal Airport	\$4,221,000	\$1,417,000	\$103,000
Doña Ana County Jetport at Santa Teresa	\$11,068,000	\$3,715,000	\$269,000
Double Eagle II Airport	\$15,216,000	\$5,108,000	\$370,000
Dulce-Jicarilla Apache Nation Airport	\$637,000	\$214,000	\$16,000
Ohkay Owingeh Airport	\$1,329,000	\$446,000	\$32,000
Estancia Municipal Airport	\$753,000	\$253,000	\$18,000
Ft. Sumner Municipal Airport	\$702,000	\$235,000	\$17,000
Gallup Municipal Airport	\$10,364,000	\$3,479,000	\$252,000
Glenwood-Catron County Airport	\$264,000	\$88,000	\$6,000
Grants-Milan Municipal Airport	\$308,000	\$103,000	\$7,000
Hatch Municipal Airport	\$451,000	\$151,000	\$11,000
Jewett Mesa Airport	*		
Las Cruces International Airport	\$20,514,000	\$6,886,000	\$499,000
Las Vegas Municipal Airport	\$812,000	\$273,000	\$20,000
Lea County-Jal Airport	\$308,000	\$103,000	\$7,000
Lea County-Zip Franklin Memorial Airport	\$333,000	\$112,000	\$8,000
Lindrith Airpark	\$487,000	\$163,000	\$12,000



**TABLE 5X (Continued)**  
**Airport Output Gross Receipt Taxes**  
**New Mexico Airports**

Facility	Gross Output	Taxable Output	Total GRT Tax Revenue
<b>General Aviation Airports - Continued</b>			
Lordsburg Municipal Airport	\$499,000	\$168,000	\$12,000
Magdalena Airport	\$539,000	\$181,000	\$13,000
Moriarty Municipal Airport	\$9,330,000	\$3,132,000	\$227,000
Mountainair Airport	\$853,000	\$286,000	\$21,000
Navajo Lake Airport	\$9,000	\$3,000	*
Portales Municipal Airport	\$2,145,000	\$720,000	\$52,000
Questa Municipal No. 2 Airport	\$813,000	\$273,000	\$20,000
Raton Crews Field Municipal Airport	\$2,500,000	\$839,000	\$61,000
Reserve Catron County Airport	\$20,000	\$7,000	*
Santa Rosa Route 66 Airport	\$2,386,000	\$801,000	\$58,000
Shiprock Airstrip	\$525,000	\$176,000	\$13,000
Sierra Blanca Regional Airport	\$3,727,000	\$1,251,000	\$91,000
Socorro Municipal Airport	\$503,000	\$169,000	\$12,000
Springer Municipal Airport	\$428,000	\$144,000	\$10,000
Taos Regional Airport	\$4,586,000	\$1,539,000	\$112,000
Tatum Airport	\$25,000	\$9,000	\$1,000
Truth Or Consequences Municipal Airport	\$924,000	\$310,000	\$22,000
Tucumcari Municipal Airport	\$920,000	\$309,000	\$22,000
Vaughn Municipal Airport	\$877,000	\$295,000	\$21,000
Zuni-Black Rock Airport	\$983,000	\$330,000	\$24,000
<b>Subtotal</b>	<b>\$124,716,000</b>	<b>\$41,861,000</b>	<b>\$3,035,000</b>
<b>TOTAL</b>	<b>\$903,062,000</b>	<b>\$425,243,000</b>	<b>\$30,830,000</b>
* Denotes no reliable estimate available			

## AIRPORT AND VISITOR SECTOR EMPLOYEE TAXES

The New Mexico Airport System supports jobs, incomes to workers, and business output in the New Mexico economy. As seen above, tax receipts from output on the airport were \$30.8 million in 2014 and taxes from visitor spending or tourism sector output off the airport were \$36.7 million (in outside dollars injected into the regional economy). The jobs and incomes associated with output both on and off airports are also sources of tax revenues for state and local governments. When airport employees and visitor sector workers make purchases for goods and services using income from their aviation-related jobs, they pay gross receipts taxes like all New Mexico consumers. Similarly, airport and visitor sector employees are subject to income taxes. Gross receipts taxes paid by airport and visitor sector employees were \$9.4 million in 2014 and New Mexico income tax collections were \$12.7 million. The combined total tax revenues from these two sources was \$22.1 million (**Table 5Y**).



**TABLE 5Y**  
**Airport and Visitor Sector Employee Taxes**  
**New Mexico Airports**

Facility	Employee Income Taxes	Employee GRT Taxes	Employee Tax Revenues
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$8,769,000	\$6,681,000	\$15,450,000
Santa Fe Municipal	\$486,000	\$379,000	\$865,000
Roswell International Air Center	\$1,126,000	\$733,000	\$1,859,000
Lea County Regional	\$112,000	\$79,000	\$191,000
Four Corners Regional	\$216,000	\$141,000	\$357,000
Los Alamos Airport	\$32,000	\$21,000	\$53,000
Cavern City Air Terminal	\$214,000	\$138,000	\$352,000
Grant County	\$38,000	\$25,000	\$63,000
Clovis Municipal	\$91,000	\$62,000	\$153,000
<b>Subtotal</b>	<b>\$11,084,000</b>	<b>\$8,259,000</b>	<b>\$19,343,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$74,000	\$53,000	\$127,000
Angel Fire - Colfax County Airport	\$20,000	\$17,000	\$37,000
Artesia Municipal Airport	\$20,000	\$13,000	\$33,000
Aztec Municipal Airport	\$22,000	\$16,000	\$38,000
Belen-Alexander Municipal Airport	\$84,000	\$59,000	\$143,000
Carrizozo Municipal Airport	\$10,000	\$7,000	\$17,000
Clayton Municipal Airpark	\$7,000	\$5,000	\$12,000
Conchas Lake Airport	\$34,000	\$23,000	\$57,000
Crownpoint Airport	\$5,000	\$4,000	\$9,000
Deming Municipal Airport	\$65,000	\$46,000	\$111,000
Doña Ana County Jetport at Santa Teresa	\$167,000	\$118,000	\$285,000
Double Eagle II Airport	\$205,000	\$149,000	\$354,000
Dulce-Jicarilla Apache Nation Airport	\$3,000	\$2,000	\$5,000
Ohkay Owingeh Airport	\$9,000	\$7,000	\$16,000
Estancia Municipal Airport	\$4,000	\$3,000	\$7,000
Ft. Sumner Municipal Airport	\$5,000	\$3,000	\$8,000
Gallup Municipal Airport	\$108,000	\$74,000	\$182,000
Glenwood-Catron County Airport	\$2,000	\$1,000	\$3,000
Grants-Milan Municipal Airport	\$4,000	\$3,000	\$7,000
Hatch Municipal Airport	\$4,000	\$3,000	\$7,000
Jewett Mesa Airport	*		
Las Cruces International Airport	\$254,000	\$175,000	\$429,000
Las Vegas Municipal Airport	\$12,000	\$10,000	\$22,000
Lea County-Jal Airport	\$5,000	\$4,000	\$9,000
Lea County-Zip Franklin Memorial Airport	\$4,000	\$3,000	\$7,000
Lindrith Airpark	\$3,000	\$2,000	\$5,000
Lordsburg Municipal Airport	\$2,000	\$2,000	\$4,000
Magdalena Airport	\$4,000	\$3,000	\$7,000
Moriarty Municipal Airport	\$174,000	\$119,000	\$293,000
Mountainair Airport	\$5,000	\$4,000	\$9,000





**TABLE 5Y (Continued)**  
**Airport and Visitor Sector Employee Taxes**  
**New Mexico Airports**

Facility	Employee Income Taxes	Employee GRT Taxes	Employee Tax Revenues
<b>General Aviation Airports - Continued</b>			
Navajo Lake Airport	*		
Portales Municipal Airport	\$23,000	\$18,000	\$41,000
Questa Municipal No. 2 Airport	\$6,000	\$4,000	\$10,000
Raton Crews Field Municipal Airport	\$25,000	\$18,000	\$43,000
Reserve Catron County Airport	*		
Santa Rosa Route 66 Airport	\$16,000	\$11,000	\$27,000
Shiprock Airstrip	\$4,000	\$2,000	\$6,000
Sierra Blanca Regional Airport	\$58,000	\$48,000	\$106,000
Socorro Municipal Airport	\$4,000	\$3,000	\$7,000
Springer Municipal Airport	\$3,000	\$2,000	\$5,000
Taos Regional Airport	\$88,000	\$71,000	\$159,000
Tatum Airport	*		
Truth Or Consequences Municipal Airport	\$13,000	\$10,000	\$23,000
Tucumcari Municipal Airport	\$27,000	\$24,000	\$51,000
Vaughn Municipal Airport	\$6,000	\$4,000	\$10,000
Zuni-Black Rock Airport	\$7,000	\$5,000	\$12,000
<b>Subtotal</b>	<b>\$1,595,000</b>	<b>\$1,148,000</b>	<b>\$2,743,000</b>
<b>TOTAL</b>	<b>\$12,679,000</b>	<b>\$9,407,000</b>	<b>\$22,086,000</b>

\* Denotes no reliable estimate available

The individual income tax in New Mexico consists of four brackets and a top rate of 4.9 percent. Airport and visitor sector employee income taxes were estimated based on average income levels for each category, after adjustments for marital status. For example, the state-wide average wage for workers on New Mexico commercial service airports was \$61,443 in 2014. The New Mexico average income tax paid by single workers for this salary level was \$2,227 and for married workers was \$1,593. According to the U. S. Census, 46% of New Mexico adults are married, so the average tax values were weighted by this figure to obtain a tax of \$1,935 for workers on commercial service airports. Similar calculations were carried out for employees on general aviation airports and workers in various visitor sector jobs (lodging, food service, retail, entertainment, and auto rental) to obtain income taxes and gross receipts taxes paid by employees in their role as consumers in the New Mexico economy.

## TOTAL TAXES BY AIRPORT

Total 2014 income and gross receipts taxes by airport are shown in **Table 5Z**. Albuquerque international Sunport, the state's largest airport, accounted for 78 percent of all taxes with revenues of \$70 million. Not only is the Sunport an engine of growth for job creation (2,975 direct jobs) and output (\$612.5 million), the facility also makes a major contribution to state and local taxes in New Mexico. Other commercial service airports accounting for more than one million dollars of taxes were Santa Fe (\$4.1 million), Roswell International Air Center (\$2.5 million) and Lea County Regional Airport (\$1.1 million).



**TABLE 5Z**

**Total Income and Gross Receipt Taxes  
New Mexico Airports**

Facility	Income Taxes	GRT Taxes	Total Tax Revenues
<b>Commercial Service Airports</b>			
Albuquerque International Sunport	\$8,769,000	\$61,129,000	\$69,898,000
Santa Fe Municipal	\$486,000	\$3,642,000	\$4,128,000
Roswell International Air Center	\$1,126,000	\$1,411,000	\$2,537,000
Lea County Regional	\$112,000	\$943,000	\$1,055,000
Four Corners Regional	\$216,000	\$507,000	\$723,000
Los Alamos Airport	\$32,000	\$299,000	\$331,000
Cavern City Air Terminal	\$214,000	\$1,146,000	\$1,360,000
Grant County	\$38,000	\$981,000	\$1,019,000
Clovis Municipal	\$91,000	\$323,000	\$414,000
<b>Subtotal</b>	<b>\$11,084,000</b>	<b>\$70,382,000</b>	<b>\$81,466,000</b>
<b>General Aviation Airports</b>			
Alamogordo-White Sands Airport	\$74,000	\$378,000	\$452,000
Angel Fire - Colfax County Airport	\$20,000	\$155,000	\$175,000
Artesia Municipal Airport	\$20,000	\$102,000	\$122,000
Aztec Municipal Airport	\$22,000	\$132,000	\$154,000
Belen-Alexander Municipal Airport	\$84,000	\$320,000	\$404,000
Carrizozo Municipal Airport	\$10,000	\$30,000	\$40,000
Clayton Municipal Airpark	\$7,000	\$40,000	\$47,000
Conchas Lake Airport	\$34,000	\$100,000	\$134,000
Crownpoint Airport	\$5,000	\$24,000	\$29,000
Deming Municipal Airport	\$65,000	\$210,000	\$275,000
Doña Ana County Jetport at Santa Teresa	\$167,000	\$480,000	\$647,000
Double Eagle II Airport	\$205,000	\$882,000	\$1,087,000
Dulce-Jicarilla Apache Nation Airport	\$3,000	\$20,000	\$23,000
Ohkay Owingeh Airport	\$9,000	\$52,000	\$61,000
Estancia Municipal Airport	\$4,000	\$21,000	\$25,000
Ft. Sumner Municipal Airport	\$5,000	\$20,000	\$25,000
Gallup Municipal Airport	\$108,000	\$342,000	\$450,000
Glenwood-Catron County Airport	\$2,000	\$7,000	\$9,000
Grants-Milan Municipal Airport	\$4,000	\$34,000	\$38,000
Hatch Municipal Airport	\$4,000	\$14,000	\$18,000
Jewett Mesa Airport	*		
Las Cruces International Airport	\$254,000	\$770,000	\$1,024,000
Las Vegas Municipal Airport	\$12,000	\$89,000	\$101,000
Lea County-Jal Airport	\$5,000	\$32,000	\$37,000
Lea County-Zip Franklin Memorial Airport	\$4,000	\$20,000	\$24,000
Lindrith Airpark	\$3,000	\$14,000	\$17,000
Lordsburg Municipal Airport	\$2,000	\$18,000	\$20,000
Magdalena Airport	\$4,000	\$18,000	\$22,000
Moriarty Municipal Airport	\$174,000	\$365,000	\$539,000
Mountainair Airport	\$5,000	\$25,000	\$30,000



**TABLE 5Z (Continued)**  
**Total Income and Gross Receipt Taxes**  
**New Mexico Airports**

Facility	Income Taxes	GRT Taxes	Total Tax Revenues
<b>General Aviation Airports - Continued</b>			
Navajo Lake Airport	*	\$1,000	\$1,000
Portales Municipal Airport	\$23,000	\$131,000	\$154,000
Questa Municipal No. 2 Airport	\$6,000	\$25,000	\$31,000
Raton Crews Field Municipal Airport	\$25,000	\$132,000	\$157,000
Reserve Catron County Airport	*		
Santa Rosa Route 66 Airport	\$16,000	\$74,000	\$90,000
Shiprock Airstrip	\$4,000	\$17,000	\$21,000
Sierra Blanca Regional Airport	\$58,000	\$458,000	\$516,000
Socorro Municipal Airport	\$4,000	\$25,000	\$29,000
Springer Municipal Airport	\$3,000	\$12,000	\$15,000
Taos Regional Airport	\$88,000	\$607,000	\$695,000
Tatum Airport	*	\$1,000	\$1,000
Truth Or Consequences Municipal Airport	\$13,000	\$85,000	\$98,000
Tucumcari Municipal Airport	\$27,000	\$241,000	\$268,000
Vaughn Municipal Airport	\$6,000	\$25,000	\$31,000
Zuni-Black Rock Airport	\$7,000	\$29,000	\$36,000
<b>Subtotal</b>	<b>\$1,595,000</b>	<b>\$6,581,000</b>	<b>\$8,176,000</b>
<b>TOTAL</b>	<b>\$12,679,000</b>	<b>\$76,963,000</b>	<b>\$89,642,000</b>

\* Denotes no reliable estimate available

Some entries and column totals affected by rounding

## ECONOMIC IMPACT COMPARISONS

The economic impact of the New Mexico Airport System reported in this study found direct output of \$1,566,696,000 and a total output impact (including all multiplier effects) of \$2,308,251,000, based on data for 2014. These findings are smaller than reported in the *New Mexico Airport System Plan Update 2009*, based on 2008 data, where direct output was \$1,889,397,500 and total output was \$3,196,781,100 (see the 2009 update report, page 7-52).

The differences between the two studies are due to a number of factors. The economic downturn starting at the end of 2007 affected the general New Mexico economy and aviation activity in particular. Multipliers and other coefficients from the IMPLAN input output model used in both the 2008 and 2014 studies can be expected to be different as businesses see declines in revenues and cut back on employment. Just as employers grew more cautious about their spending, visitors postponed travel during the recession and its aftermath, and when they did travel they often were more frugal in their outlays. The analysis below is intended to provide context and background for interpretation of these results.



## THE NEW MEXICO ECONOMIC ENVIRONMENT 2008 – 2014

According to the National Bureau of Economic Research, the U.S. economy entered a severe recession in December of 2007 that continued until June of 2009. To understand the economic environment of the period 2008 – 2014, it is important to recognize that the end date of a recession is the low point of the cycle and is not at all indicative of buoyant economic conditions. In that sense, the recession end is the economy's "darkest hour" of the downturn. In fact, the U. S. unemployment rate continued to increase during 2009, until reaching a peak in June, 2011 at 9.1 percent, two years past the end of the recession. The New Mexico unemployment rate peaked in December of that year, at 7.6 percent, and the economy continued to be weak through 2014.

Although New Mexico unemployment rates were below the national rate, labor markets were harder hit in New Mexico than in the U.S. as a whole (**Table 5AA**). The U.S. economy lost 5 percent of jobs between 2008 and the employment low point of 2010. New Mexico lost 5.1 percent of jobs and Albuquerque lost 5.8 percent of jobs in the same period. But, while the U.S. recovered all the lost jobs between 2010 and 2014, New Mexico only recovered 36 percent of lost jobs and Albuquerque fared even worse, with 15 percent of lost jobs recovered (Source: U. S. Bureau of Labor Statistics, *Current Employment Statistics*, nonfarm jobs).

**TABLE 5AA**  
**Recession Job Losses**  
**New Mexico Economy**

Labor Market Indicators	United States	New Mexico	Albuquerque
2008 Employment	137,242,000	846,800	396,700
2010 Employment	130,361,000	803,400	373,500
Jobs Lost	6,881,000	43,400	23,200
Percent Jobs Lost	5.0	5.1	5.8
2014 Employment	138,958,000	819,100	377,000
2010 – 2014 Job Growth	8,597,000	15,700	3,500
Percent Lost Jobs Replaced	125	36	15

## NEW MEXICO AVIATION OPERATIONS 2008 – 2014

As the national and New Mexico economies weakened in the recession, aviation activity declined as well. According to the U.S. Bureau of Labor Statistics, Private air transportation employment in New Mexico in 2008 accounted for 1,527 jobs. Since 2008, that figure has declined in every year and in 2014 was down by more than one third, to 964 jobs. As airline travel decreased, supporting employment such as ramp workers or mechanics also declined.

The decline in air transport jobs (primarily commercial airline employees) is consistent with the decrease in aviation operations between 2008 and 2014. Figures from the FAA Air Traffic Activity System (ATADS) show that total civilian operations in New Mexico decreased by 18.2 percent between 2008 and 2014,



but air carrier operations were down by 31.3 percent. General aviation itinerant operations decreased by 9.1 percent in this period (**Table 5AB**).

**TABLE 5AB**  
**Itinerant Operations: 2008 & 2014**  
**New Mexico Airport System**

Itinerant Operations	2008	2014	Change	Percent
Air Carrier	76,083	52,250	-23,833	-31.3
Air Taxi	66,147	54,115	-12,032	-18.2
General Aviation	109,283	99,331	-9,952	-9.1
Total Civilian	251,513	205,696	-45,817	-18.2

*Operations data from FAA, Air Traffic Activity System (ATADS) for 2008 and 2014*

The conclusion from these two tables is that the New Mexico economy was weakened by the economic downturn and that weakness continued into 2014. Demand for air travel was affected, including travel by commercial service or private general aviation aircraft. Therefore, comparison of the economic impact of the New Mexico Airport System studies based on 2008 and 2014 data must be interpreted against the backdrop of reduced economic performance and a reduction in overall aviation activity as measured by employment and operations, following the recession.

#### **TOTAL ECONOMIC IMPACT: 2008 & 2014**

The total economic impact refers to combined direct and secondary impacts, accounting for recirculation of initial impacts in the regional economy through the multiplier effect. All three impact measures (employment, payroll and output) were significantly reduced in 2014 compared to the results based on 2008 data and reported in the 2009 system impact study (**Table 5AC**). Employment (on airport and in the air visitor sector) was down by more than 60 percent. The magnitude of difference is 30,222 jobs. Payrolls were down more than 40 percent and total output was more than 25 percent smaller, based on 2014 data.

The figures for 2008 are expressed in 2008 dollars. If the dollar measures (payroll and output) were expressed in 2014 dollars they would be larger by 10 percent, based on changes in the Consumer Price Index (CPI) between 2008 and 2014, as recorded by the U. S. Bureau of Labor Statistics, and the magnitude of decrease in the dollar entries would be even greater for 2014. The 2008 entries are not adjusted for price inflation in order to use those figures to compute key ratios below that help explain some important differences in the impact results for 2014 compared to 2008.





**TABLE 5AC**  
**Total Airport System Economic Impact: 2008 & 2014**  
**New Mexico Airport System**

Impact Study	Employment	Payroll	Output
2008 Study	48,795	\$1,286,420,600	\$3,196,781,100
2014 Study	18,573	\$723,356,000	\$2,308,251,000
Difference	-30,222	-563,064,600	-888,530,100
Percent	-61.9	-43.8	-27.8

#### **DIRECT ON AIRPORT IMPACT: 2008 & 2014**

The direct on airport impact measures the jobs, payrolls and output produced on New Mexico Airport System airports, without any multiplier effects. The direct impacts stem from initial spending on the airport, whether by commercial service passengers for food in the terminal or aircraft owners paying for FBO maintenance services. The direct impact includes construction spending by airport administrators for capital projects to improve safety and meet the needs of the aviation community. The direct output on New Mexico airports increased by 20.5 percent in 2014 over the 2008 base year (adjusting for inflation, the increase would be approximately 10 percent). However, employment fell on airports by 17 percent. This at least partially due to the fact that the 2008 study estimated employment at the rate of 8 jobs per million dollars of output. Note that if the 2008 employment had been estimated at 5.5 jobs per million, 2008 employment would have been 4,122 and employment would have increased by 20 percent in 2014. This example illustrates the sensitivity of economic impact results to this particular ratio.

**TABLE 5AD**  
**Direct On Airport Impact: 2008 & 2014**  
**New Mexico Airport System**

Impact Study	Employment	Output	Jobs/\$ mil	Output/Job
2008 Study	6,004	\$749,592,500	8.0	\$124,849
2014 Study	4,981	\$903,062,000	5.5	\$181,301
Difference	-1,023	153,469,500		
Percent	-17.0%	20.5%		

#### **DIRECT COMMERCIAL SERVICE VISITOR IMPACT: 2008 & 2014**

There are several sharp differences between the 2008 and 2014 studies in the commercial service visitor component, made up of jobs, incomes and business revenues associated with spending by airline visitors on lodging, food, entertainment, retail, and other goods and services. The 2008 visitor spending estimate exceeded one billion dollars, while the 2014 figure was \$602.9 million, some 44 percent lower (**Table 5AE**).



Although spending in 2008 was 44 percent greater than in 2014, employment was nearly three times greater. The number of jobs supported by visitor spending was 23.2 per million dollars in 2008 and less than half this amount in 2014. It is possible that this differential is due to changes in the IMPLAN input-output model, reflecting changes in the structure of business. In a recession many businesses will try to maintain employment even as output falls, resulting in higher levels of output per job.

Some insight on this hypothesis is provided by reference to the 2014 study of New Mexico tourism conducted by the Oxford Economics research firm, for the New Mexico Tourism Department. That study examined tourism by all modes of travel, not just airline visitor spending, and found that tourism output for 2014 was \$6 billion. Employment in the visitor sector was 88,938, which yields a value for jobs per million dollars of output of 11.0, very close to the 2014 airport system impact study findings, and less than one half as many jobs as reported per one million dollars in the 2008 study.

**TABLE 5 AE**  
**Direct Commercial Service Visitor Impact: 2008 & 2014**  
**New Mexico Airport System**

Impact Study	Employment	Output	Jobs/\$ mil	Output/Job
2008 Study	25,063	\$1,078,777,300	23.2	\$43,043
2014 Study	6,843	\$602,906,000	11.4	\$88,106
Difference	-18,220	-\$475,871,300		
Percent	-72.7%	-44.1%		
Oxford Economics*	88,938	\$6,080,000,000	11.0	\$91,006

\**The Economic Impact of Tourism in New Mexico – 2014 Analysis*, Oxford Economics, prepared for New Mexico Tourism Department, August, 2015

## COMMERCIAL SERVICE VISITOR PATTERNS: 2008 & 2014

The output difference between the two studies in the commercial services visitor category, where direct visitor spending in the 2008 study exceeded one billion dollars, compared to \$602,539,000 in the 2014 study, can be further explained by a review of visitor travel and spending patterns. As shown below, the primary source of the difference is not visitor days (which are greater in the 2014 study), but the estimated spending per day per visitor (**Table 5AF**).

New Mexico commercial service enplanements decreased by 23.8 percent between 2008 (reported in the 2009 study) and 2014 according to FAA figures from September, 2015. In the 2008 study, the percentage of visitors was assumed as 50% for all New Mexico commercial service airports. In the 2014 study, the U.S. DOT Origination and Destination data base was used to compute percentage and number of visitors individually at nine commercial service airports. Overall, the percentage of visitors was similar in the two studies. Due to the reduction in New Mexico enplanements, the number of visitors in 2014 was down by 417,633 or 24.6 percent compared to 2008. However, as discussed below, this does not explain the difference in spending between the 2008 and 2015 studies, which is due primarily to estimates for visitor spending per person per day per trip.



**TABLE 5 AF**  
**Commercial Service Visitor Spending: 2008 & 2014**  
**New Mexico Airport System**

Category	2008 Study	2014 Study	Difference	Percent
Enplanements	3,397,952	2,589,299	-808,653	-23.8
Visitors	1,698,976	1,281,343	-417,633	-24.6
% Visitors	0.50	0.49	-0.01	-1.0
Length of Stay	3.0	4.2	1.2	39.9
Visitor Days	5,096,928	5,377,788	280,860	5.5
Dollars Per Day	\$231	\$112	-\$119	-51.5
Dollars Per Trip	\$635	\$470	-\$165	-25.9
Visitor Spending	\$1,078,777,300	\$602,539,000	-\$476,238,300	-44.1
Direct Jobs	25,063	6,843	-18,220	-72.7
Jobs/\$1 mil.	23	11	-12	-51.1
Total Jobs	33,904	9,199	-24,705	-72.9
Jobs Multiplier	1.35	1.34	-0.01	-0.6

## COMMERCIAL SERVICE VISITOR SPENDING

The dollar value of visitor spending (output) depends on a combination of several components:

(a) Dollar Value of Spending = Number of Visitor Days X Spending per Day

Where:

(b) Number of Visitor Days = Number of Visitors X Length of Stay

As noted above, the number of visitors to New Mexico is derived from ticketing information from the O & D data base. The critical variables that influence total spending are the number of days these visitors remain in the state (length of stay) and spending per day. Ideally, length of stay and spending per day would be estimated by statistically reliable survey methods allowing for differences in travel characteristics by commercial service airport. To analyze 2014 commercial service visitor spending, the research team obtained proprietary air visitor survey data for New Mexico through an arrangement with Longwoods International, a consultant to the New Mexico Tourism Department and a regular contributor of tourism information to the state. The Longwoods International air visitor survey data provided length of stay and spending figures for commercial service visitors with unique information for each New Mexico region as defined by the Tourism Department. Statewide, the average length of stay was 4.2 days and spending per person per day was \$112.

The 2008 study did not rely on a statewide statistical survey of visitors for length of stay and daily spending estimates. Length of stay for visitors was set at 3.0 in the 2008 study, based on results from a 2001 survey of Santa Fe passengers. Although the number of visitors was greater in 2008 (1,698,976 compared to 1,281,343 in 2014), the decline in the number of visitors was offset by the longer length of stay from



the Longwoods International survey applied to the 2014 figure (3.0 vs. 4.2). Therefore, the number of visitor days was larger in the 2014 study by 5.5 percent or 280,860 days.

For the 2008 study, visitor spending per day was assumed to be \$231 for all New Mexico commercial service visitors (page 7-20), based on the Santa Fe study of 2001. This \$231 daily spending figure is approximately double the airline visitor daily spending statewide for New Mexico for 2014 of \$112 determined by the Longwoods International statistical survey of air visitors stratified by region. The 2001 Santa Fe figure was most likely greater due to the unique features of the Santa Fe survey, conducted in the summer of 2001 in a resort environment where the proportion of visitors staying with friends and relatives was low and spending on lodging, food, and rental cars was particularly high due to demographic and economic characteristics of travelers.

Spending per visitor per day by region as found in the 2014 Longwoods International survey varied from a high of \$166 in the Northwest region to a low of \$68 per day in the Southeast region. The \$112 per visitor per day figure from Longwoods International used in the 2014 study is consistent with air visitor spending estimates from other sources. For example, a 2014 study of Oregon airline visitors by the Dean Runyan firm found per person per day spending of \$103 ([http://www.deanrunyan.com/doc\\_library/ORImp.pdf](http://www.deanrunyan.com/doc_library/ORImp.pdf)). The 2012 survey of airline visitors at Albuquerque International Sunport conducted by the University of New Mexico found spending per visitor per day to be \$93.

Adjusted for inflation, the \$112 per visitor per day spending figure for New Mexico statewide commercial service visitors would reduce to \$98 in 2008. Multiplying \$98 spending per day by 5,096,928 visitor days from the 2008 study yields adjusted visitor spending of \$499,499,000 in 2008 dollars, less than one half of the value reported in the 2008 study. These calculations illustrate the importance of estimates of visitor spending per day on visitor spending tallies.

## **COMMERCIAL SERVICE VISITOR JOBS**

Commercial service visitor spending of \$1,078,777,300 in the 2008 study was nearly double the spending of \$602,539,000 found in the 2014 study primarily because spending per day in the 2008 study (\$231) was greater than the daily spending from the Longwoods International survey in 2014 (\$112). However, the direct jobs created by the spending in the 2008 study (25,063) are nearly four times the number of direct jobs in the 2014 study (6,843). Part of the difference is due to the greater level of spending reported in 2008. To adjust for the spending differential, employment created can be expressed as jobs per one million dollars of visitor spending. The 2008 study was based on 23 jobs per million while the figure for the 2014 study is 11 jobs per million. According to the methodology section of the 2008 study (page 7-20), "It was estimated that approximately 24 persons are employed in New Mexico as a result of every \$1.0 million in commercial service visitor output (spending)." Employment was then calculated by multiplying 24 by spending for each airport and summing the results.

The 2014 study was based on a different approach, using the IMPLAN input-output model. Spending by category (lodging, food, ground transportation, retail and entertainment/recreation) was adapted from



the Longwoods International air visitor surveys for each region for individual airports. For example, The Four Corners Regional Airport is located in the Northwest region. According to the FAA the airport had 5,678 enplanement in 2014 and from the O&D database, 57 percent of these (3,236) were visitors. The air visitor length of stay in the Northwest region is 2.9 days, according to the Longwoods International survey, yielding 9,386 visitor days. Northwest air visitors spent a total of \$563,000 on lodging. According to the IMPLAN input-output model for San Juan County, this level of spending on lodging creates 7.3 direct jobs in the lodging industry of San Juan County, or 13 jobs per one million dollars of spending. Over all industries, the IMPLAN model shows visitor spending supports 14 jobs per million dollars of spending in San Juan County.

The resulting statewide figure is 11 jobs per million dollars, with food service having the highest employment (about 20 jobs per million dollars) and other industries having lower values. Auto rental, for example, creates only about 4 jobs per million dollars spending and retail is also about 4 jobs per million because most of the products sold are produced elsewhere. As shown below, the multiplier for converting direct jobs to total jobs is similar in the 2008 and 2014 studies, but the methodology for computing the initial direct employment created by visitor spending is quite different. The estimate of 11 New Mexico jobs created per million dollars of visitor spending from the IMPLAN model is the most current figure available, based on data from the U.S. Bureau of Labor Statistics and U.S. Bureau of Economic Analysis. It is possible that the economy changed between 2008 and 2014, causing jobs per million dollars of spending to decline from 23 to 11, but whatever the explanation, this is one of the main reasons employment is much lower in 2014 compared to 2008 baseline figures.

## DIRECT GENERAL AVIATION VISITOR IMPACT: 2008 & 2014

Itinerant general aviation operations in New Mexico decreased by 9.1 percent between 2008 and 2014 (Table 5 AB). General aviation travelers were very likely to follow the spending patterns of consumers and businesses in the overall economy and restrict expenditures and postpone trips unless absolutely necessary. General aviation visitor spending in 2008 was \$61 million (or \$67 million in 2014 dollars). The decrease to \$60.7 million in 2014 is consistent with the weak national and state economies (**Table 5AG**).

Direct general aviation visitor sector employment in 2008 was reported as 1,429, and again it can be seen that this figure is related to the assumption of approximately 23 jobs per million dollars of visitor spending or output. The figure used in the 2014 study as derived from the IMPLAN model based on county data for each airport in the system, was 12.4 jobs per million dollars of general aviation visitor spending.

**TABLE 5 AG**

**Direct General Aviation Visitor Impact: 2008 & 2014**  
**New Mexico Airport System**

Impact Study	Employment	Output	Jobs/\$ mil	Output/Job
2008 Study	1,429	\$61,027,700	23.4	\$42,707
2014 Study	769	\$60,728,000	12.7	\$78,970
Difference	-660	-\$299,700		
Percent	-46.2%	-0.5%		





## COMPARISON OF TOTAL MULTIPLIERS: 2008 & 2014

The sharp differences in jobs, payroll and output between the 2008 and 2014 studies are due largely to differences in the analysis of commercial service visitor spending patterns and the assumptions of how many jobs are supported per million dollars of spending. It is likely that the IMPLAN models used in 2008 and 2014 were quite different, due to the effect of the recession on the structure and coefficients internal to the model. In addition, the implied total multipliers (ratio of total impact to direct impact) were somewhat smaller in the 2014 version of IMPLAN. For example, in 2008 each million dollars of aviation system direct output created an additional \$690,000 of secondary impacts as the initial revenues recirculated in the economy. In the 2014 IMPLAN model for New Mexico counties, one million dollars stimulated only \$470,000 of secondary spending (**Table 5AH**).

**TABLE 5 AH**  
**Multiplier Comparisons: 2008 & 2014**  
**New Mexico Airport System**

Impact Study	Employment	Payroll	Output
2008 Direct	32,496	\$781,951,000	\$1,889,397,500
2008 Total	48,795	\$1,286,420,600	\$3,196,781,100
Multiplier	1.50	1.65	1.69
2014 Direct	12,593	\$489,389,000	\$1,566,696,000
2014 Total	18,573	\$723,356,000	\$2,308,251,000
Multiplier	1.47	1.48	1.47





CHAPTER SIX

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## FINANCIAL NEEDS AND RECOMMENDATIONS

## Chapter Six

# FINANCIAL NEEDS AND RECOMMENDATIONS



Using the facility and service recommendations outlined in Chapter Four, this chapter summarizes the financial needs to maintain and improve the New Mexico Airport System. The recommendations, combined with each airport's existing capital improvement program, will provide an overall cost summary to offer guidance for airport sponsors, the State of New Mexico, and the Federal Aviation Administration (FAA) to determine funding needs over a 20-year planning period. This information will also be used to prioritize State airport system improvements, including those which may not be eligible for federal funding through the FAA's Airport Improvement Program (AIP).

This plan is an update to previous statewide airport system planning efforts conducted in 2003 and 2009. To support the New Mexico Aviation Division's commitment to continuous aviation system planning, this chapter concludes with recommendations to ensure that the system is continuously monitored to maintain and enhance the state's aviation transportation infrastructure.

### ***RECOMMENDATIONS TO RESPOND TO PERFORMANCE MEASURE TARGETS***

As previously discussed, the four goals of the New Mexico Airport System Plan (NMAASP) are as follows:

- Goal 1: Increase/Enhance Safety and Security
- Goal 2: Preserve/Protect Investment in Airports
- Goal 3: Accommodate Existing and Projected Aviation Demand
- Goal 4: Support Economic Growth of the Community

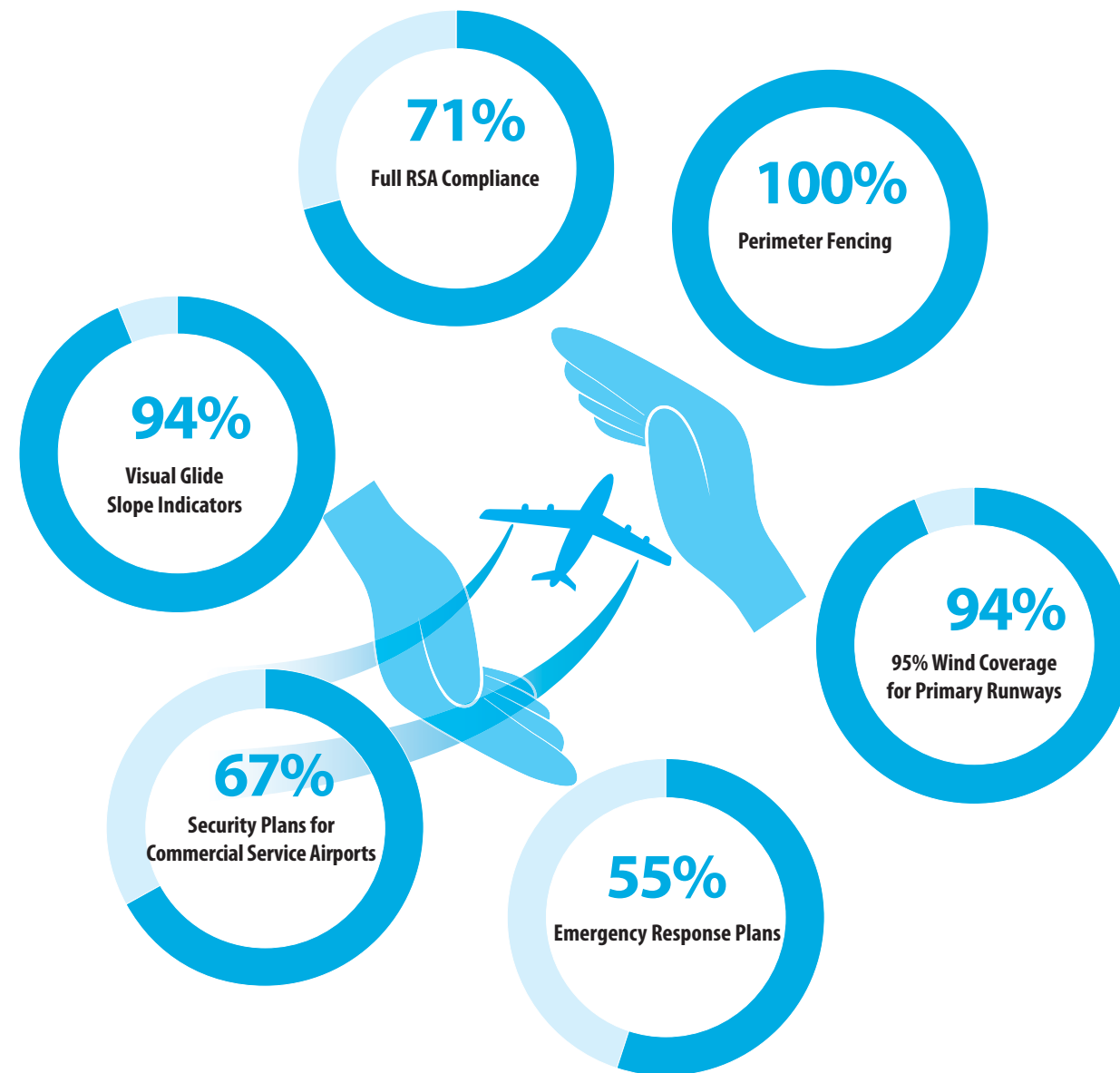


With these goals as a starting point, specific Performance Measures were established to measure the overall health of the system relative to the goals. The Performance Measures are summarized below and **Exhibit 6A** summarizes the status of the NMASP for each of these measures.

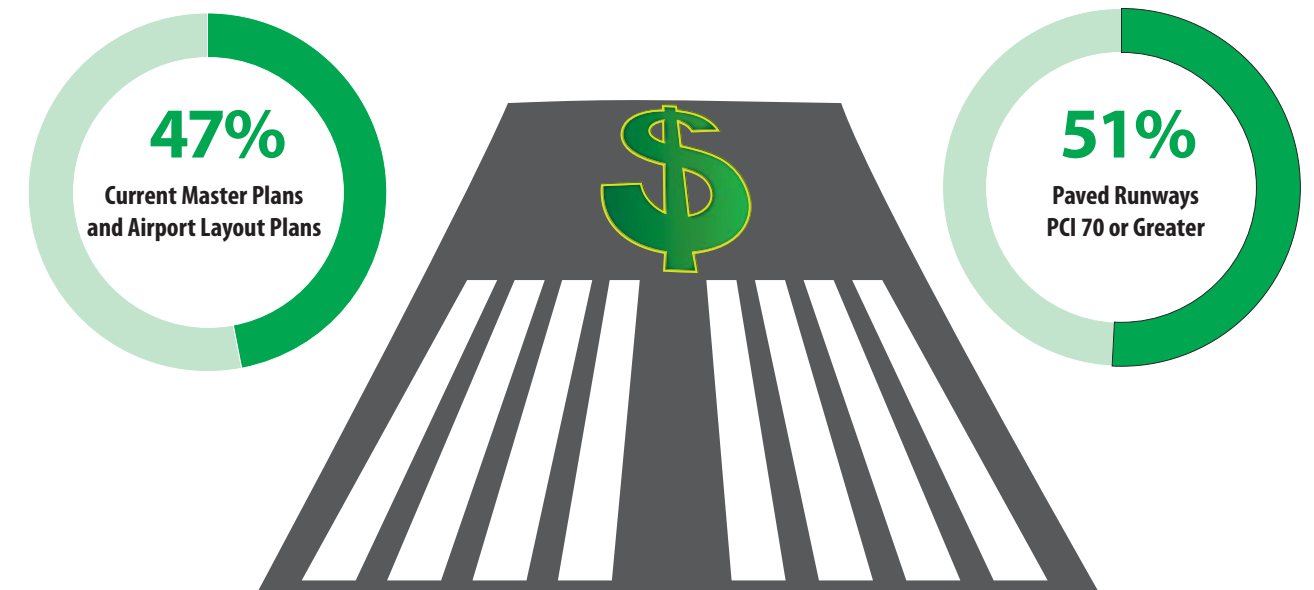
1. Performance Measure (Goal 1): Full compliance with FAA design criteria, including runway safety area (RSA) standards, is recommended for all airport roles.
2. Performance Measure (Goal 1): Perimeter fencing is a facility objective for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, and Regional General Aviation Airports.
3. Performance Measure (Goal 1): Availability of a visual glide slope indicator on at least one runway end is a facility objective for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.
4. Performance Measure (Goal 1): 95% wind coverage for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.
5. Performance Measure (Goal 1): Adoption of a security plan based on Transportation Security Administration (TSA) guidance for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service airports within the system.
6. Performance Measure (Goal 1): Adoption of an Emergency Response Plan for all airports within the New Mexico Airport System.
7. Performance Measure (Goal 2): All facilities within the system should have a current airport layout plan (ALP) and planning study (master plan, ALP narrative report, action plan, or local system plan) that is not more than five years old.
8. Performance Measure (Goal 2): All paved runways within the system should have a minimum Pavement Condition Index (PCI) of 70.
9. Performance Measure (Goal 3): Each of the system categories should have at least one runway long enough to accommodate aircraft at the specified useful load:
  - Primary Commercial Service – 75 percent of large airplanes at 90 percent useful load
  - Non-Primary Commercial Service – 75 percent of large airplanes at 90 percent useful load
  - Limited Commercial Service - 75 percent of large airplanes at 60 percent useful load
  - Regional General Aviation - 75 percent of large airplanes at 60 percent useful load
  - Community General Aviation – 95 percent of small airplanes
  - Low Activity General Aviation – 75 percent of small airplanes



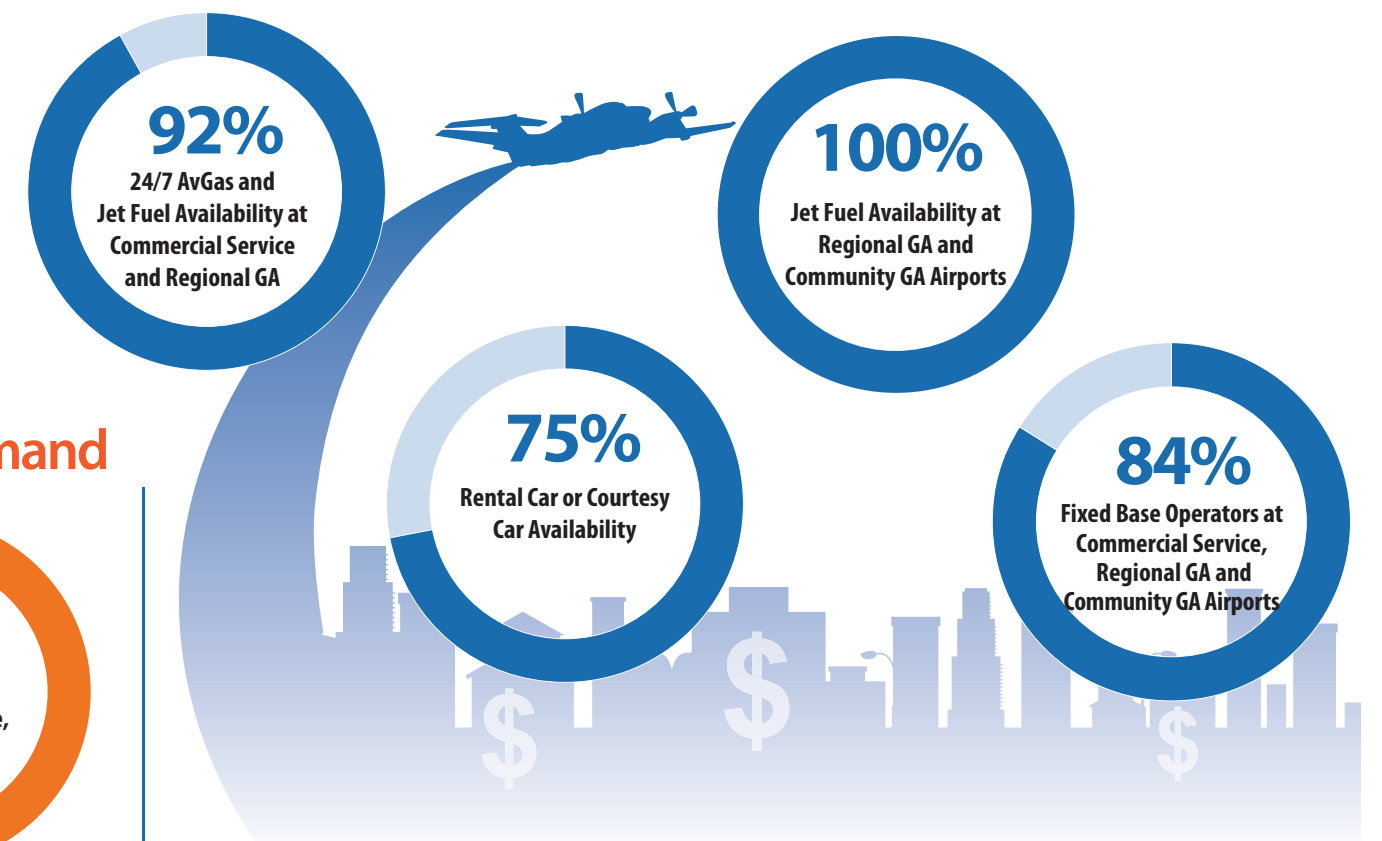
## Goal 1: Increase/Enhance Safety and Security



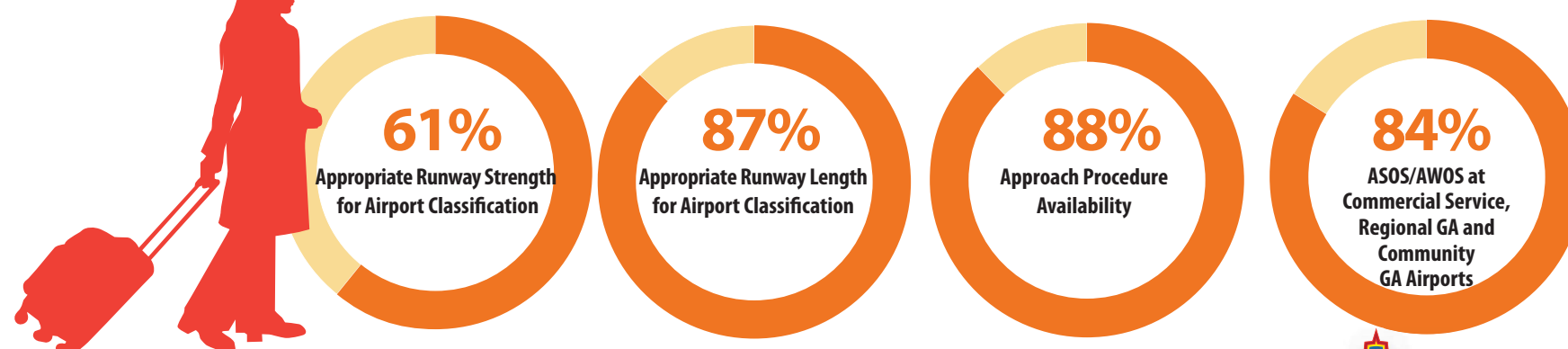
## Goal 2: Preserve/Protect Investment in Airports



## Goal 4: Support Economic Growth of the Community



## Goal 3: Accommodate Existing and Projected Aviation Demand





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10. Performance Measure (Goal 3): It is recommended that all airports within the system have at least one runway that meets the specified width summarized below:
  - Primary Commercial Service (100 ft)
  - Non-Primary Commercial Service (100 ft)
  - Limited Commercial Service (75 ft)
  - Regional General Aviation (75 ft)
  - Community General Aviation (75 ft)
  - Low Activity General Aviation (60 ft)
11. Performance Measure (Goal 3): Availability of an Instrument Approach Procedure is a facility objective for Primary Commercial Service (Precision or Near Precision [LPV]), Non-Primary Commercial Service (Precision or Near Precision [LPV]), Limited Commercial Service (Non-Precision), Regional General Aviation Airports (Non-Precision), Community General Aviation Airports (Non-Precision).
12. Performance Measure (Goal 3): Availability of a ASOS/AWOS for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service, Regional General Aviation, and Community General Aviation Airports.
13. Performance Measure (Goal 4): The minimum objective for Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports is the availability of both aviation gasoline and jet fuel on a 24-hours-a-day, seven-days-a-week basis, either through self-service or on-call.
14. Performance Measure (Goal 4): Regional General Aviation and Community General Aviation Airport should have jet fuel available.
15. Performance Measure (Goal 4): Primary Commercial Service, Non-Primary Commercial Service, and Limited Commercial Service airports should have rental car services available. At Regional General Aviation and Community General Aviation airports, a courtesy car should be available.
16. Performance Measure (Goal 4): A full service fixed base operator (FBO) is recommended for Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation airports. Limited service FBOs are recommended for Community General Aviation airports.

As indicated in **Exhibit 6A**, two performance measures, perimeter fencing for all Primary Commercial Service, Non-Primary Commercial Service, Limited Commercial Service and Regional General Aviation Airports and jet fuel availability at Regional General Aviation and Community General Aviation airports, are met by 100 percent of the airports within these classifications. Of the remaining 14 performance measures, 13 are met by more than 50 percent of the airports, while one has less than 50 percent compliance. The performance measure with less than 50 percent compliance is maintaining an Airport Layout Plan or Master Plan that is not more than five years old. In comparison to the 2009 New Mexico



Airport System Plan Update, the System has improved with continued investment by FAA, the State of New Mexico, and airport sponsors. As reported in the 2009 report, there were five performance measures which were met by less than 50 percent of the airports.

## **DEVELOPMENT COSTS**

Using the performance measures identified above, costs for airport improvements needed to enhance the overall performance were developed. Development costs are those that may be incurred to improve the performance of the system, meet identified targets, correct airport deficiencies and implement current capital improvement plans (CIPs). Using the same methodology from the 2009 NMAASP, CIP information for each airport, available from the New Mexico Department of Transportation Aviation Division CIP website, was reviewed and compared to the recommended enhancements outlined in this plan. For projects needed to meet NMAASP performance measures that were not already included in an airport's CIP, estimated costs were developed.

Cost estimates were categorized into two planning periods: short term (0-5 years) and long term (6-20) years. The timing of current CIP listed items was taken directly from the New Mexico Department of Transportation Aviation Division CIP website. NMAASP projects were reviewed and assigned a time horizon with prioritization given to safety-related projects, such as RSA improvements.

For NMAASP recommended projects not included in the CIP, estimated costs were derived from average unit costs for recently completed projects of similar nature at airports within New Mexico. For all projects except for runway rehabilitation and runway reconstruction, the costs are not reflective of specific airport-related conditions, such as location, which may cause the cost to be higher. For runway rehabilitation and runway reconstruction projects, a detailed assessment of the conditions at the airport were prepared to estimate the costs used in this summary.

It is important to note that inclusion of a project in this study does not commit local, state, or federal funding for this project. An airport master plan and airport layout plan is needed to provide sufficient justification prior to implementation of the project. During the master planning process, cost estimates are refined to reflect the exact conditions at each airport. Additionally, some of the recommended projects may require environmental documentation under the *National Environmental Policy Act* (NEPA), the level of which will be determined through coordination with FAA. NEPA documentation is not included in the estimated costs for the NMAASP projects.

**Table 6A** summarizes the projected costs for CIP and NMAASP projects, summarized by airport classification. As indicated in the table, to fund all projects, an estimated \$522 million in federal, state, and local funds is needed over the next 20 years. As previously discussed, these costs have not been developed to the level of detail that would result from studies such as an airport master plan. The costs included in the table are intended to provide the New Mexico Department of Transportation Aviation Division with an understanding of the cost range associated with achieving higher compliance with the perfor-



mance measures identified previously in this plan. The transportation (courtesy car or public transportation) and fixed base operator performance measure projects were not assigned costs as these items are most frequently undertaken by private entities.

**TABLE 6A**  
**New Mexico Airport System Plan**  
**Development Cost Summary**

Airport Classification	NMA SP			CIP			Combined		
	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term Total	Long Term Total	Grand Total
Primary Commercial Service	\$310,000	\$4,331,050	\$4,641,050	\$80,209,626	\$0	\$80,209,626	\$80,519,626	\$4,331,050	\$84,850,676
Non-Primary Commercial Service	\$3,380,560	\$4,293,330	\$7,673,890	\$18,732,733	\$50,001	\$18,782,734	\$22,113,293	\$4,343,331	\$26,456,624
Limited Commercial Service	\$990,560	\$1,558,000	\$2,548,560	\$27,157,422	\$2,600,000	\$29,757,422	\$28,147,982	\$4,158,000	\$32,305,982
Regional General Aviation	\$1,290,000	\$2,359,280	\$3,649,280	\$78,237,593	\$5,636,000	\$83,873,593	\$79,527,593	\$7,995,280	\$87,522,873
Community General Aviation	\$31,127,960	\$7,774,950	\$38,902,910	\$122,797,926	\$59,945,000	\$182,742,926	\$153,925,886	\$67,719,950	\$221,645,836
Low Activity General Aviation	\$4,565,410	\$3,716,860	\$8,282,270	\$57,049,222	\$4,755,000	\$61,804,222	\$61,614,632	\$8,471,860	\$70,086,492
<b>Total</b>	<b>\$41,664,490</b>	<b>\$24,033,470</b>	<b>\$65,697,960</b>	<b>\$383,673,522</b>	<b>\$72,986,001</b>	<b>\$456,659,523</b>	<b>\$425,588,012</b>	<b>\$97,019,471</b>	<b>\$522,868,483</b>

Source: Development costs based on Unit Bid Prices, Molzen Corbin, Airport Sponsor CIP, and Coffman Associates analysis.

Note: Long term CIP is not all-inclusive; in most cases, Airport Sponsor CIP reflect only 5-10 year projects and long term CIP needs are likely understated.

Project costs are summarized in two categories: NMA SP and CIP. Projects that were already included in the CIP, but were also identified in the NMA SP, are counted within the CIP totals. For planning purposes, short term projects are those within years 0-5 and long term projects are those within years 6-20.

CIP data used in this summary is current as of December 2015 and was accessed through the New Mexico Department of Transportation Aviation Division website which relies on information submitted by airport sponsors. It is important to note that the level of detail among the airports varies. In some cases, the CIP only includes projects through the next five years, while others include more long range projects. Therefore, it is important to note that long term CIP costs are likely understated.

Airport planning costs, including airport layout plans, narrative reports, and master plan updates, have been included in the short term planning horizon for airports which have airport planning documents that are more than five years old. For airports with current planning studies or for those which are in the process of updating these studies, airport planning study costs are included as long term items.

Additionally, pavement rehabilitation and maintenance project costs such as pavement overlays, crack sealing, and remarking costs have been included as long term projects for airports that currently have pavements with a PCI rating of 70 or greater. The costs for crack seal, seal coat, and remarking is scheduled every five years and overlays are scheduled every 15 years.



**Table 6B** summarizes the estimated development costs for each airport separated into short and long term costs for both NMASP recommended projects and existing CIP projects.

**TABLE 6B**
**New Mexico Airport System Plan  
Development Cost Summary**

	NMASP Short Term	NMASP Long Term	CIP Short Term	CIP Long Term	Total
Albuquerque International Sunport	\$0	\$1,000,000	\$0	\$0	\$1,000,000
Lea County-Hobbs Regional Airport	\$0	\$810,000	\$25,411,202	\$0	\$26,221,202
Roswell International Air Center	\$310,000	\$500,000	\$27,302,057	\$0	\$28,112,057
Santa Fe Municipal Airport	\$0	\$2,021,050	\$27,496,367	\$0	\$29,517,417
<b>Primary Commercial Service Total</b>	<b>\$310,000</b>	<b>\$4,331,050</b>	<b>\$80,209,626</b>	<b>\$0</b>	<b>\$84,850,676</b>
Farmington Four Corners Regional Airport	\$765,560	\$900,000	\$5,258,333	\$50,001	\$6,973,894
Los Alamos County Airport	<b>\$2,615,000</b>	<b>\$3,393,330</b>	<b>\$13,474,400</b>	0	\$19,482,730
<b>Non-Primary Commercial Service Total</b>	<b>\$3,380,560</b>	<b>\$4,293,330</b>	<b>\$18,732,733</b>	<b>\$50,001</b>	<b>\$26,456,624</b>
Carlsbad - Cavern City Air Terminal	\$15,000	\$500,000	\$9,432,200	\$0	\$9,947,200
Clovis Municipal Airport	\$210,000	\$558,000	\$6,875,000	\$0	\$7,643,000
Grant County - Silver City Airport	\$765,560	\$500,000	\$10,850,222	\$2,600,000	\$14,715,782
<b>Limited Commercial Service Total</b>	<b>\$990,560</b>	<b>\$1,558,000</b>	<b>\$27,157,422</b>	<b>\$2,600,000</b>	<b>\$32,305,982</b>
Alamogordo-White Sands Airport	\$0	\$310,000	\$23,988,045	\$5,636,000	\$29,934,045
Doña Ana County Jetport at Santa Teresa	\$20,000	\$400,000	\$13,854,012	\$0	\$14,274,012
Double Eagle II Airport	\$15,000	\$920,110	\$8,320,000	\$0	\$9,255,110
Las Cruces International Airport	\$1,255,000	\$729,170	\$32,075,536	\$0	\$34,059,706
<b>Regional General Aviation Total</b>	<b>\$1,290,000</b>	<b>\$2,359,280</b>	<b>\$78,237,593</b>	<b>\$5,636,000</b>	<b>\$87,552,873</b>





**TABLE 6B (Continued)**  
**New Mexico Airport System Plan**  
**Development Cost Summary**

	NMASP Short Term	NMASP Long Term	CIP Short Term	CIP Long Term	Total
Artesia Municipal Airport	\$7,661,500	\$100,000	\$9,626,955	\$0	\$17,388,455
Aztec Municipal Airport	\$635,830	\$811,630	\$3,521,455	\$800,000	\$5,768,915
Belen-Alexander Municipal Airport	\$0	\$350,000	\$8,798,000	\$0	\$9,148,000
Clayton Municipal Airpark	\$2,645,000	\$195,740	\$9,070,000	\$0	\$11,910,740
Deming Municipal Airport	\$6,202,000	\$250,000	\$7,863,034	\$0	\$14,315,034
Gallup Municipal Airport	\$6,099,630	\$200,000	\$150,000	\$43,925,000	\$50,374,630
Grants-Milan Municipal Airport	\$120,000	\$200,000	\$7,788,333	\$0	\$8,108,333
Las Vegas Municipal Airport	\$470,000	\$236,500	\$5,102,086	\$0	\$5,808,586
Lea County-Jal Airport	\$1,899,330	\$1,000,000	\$2,175,000	\$0	\$5,074,330
Lea County-Zip Franklin Memorial Airport	\$15,000	\$602,670	\$1,555,000	\$0	\$2,172,670
Moriarty Municipal Airport	\$10,000	\$349,040	\$7,171,078		\$7,530,118
Ohkay Owingeh Airport	\$1,205,000	\$350,000	\$5,534,091	\$0	\$7,089,091
Portales Municipal Airport	\$5,000	\$100,000	\$4,215,833	\$0	\$4,320,833
Raton Crews Field Municipal Airport	\$1,030,000	\$628,440	\$1,081,250	\$40,000	\$2,779,690
Sierra Blanca Regional Airport	\$10,000	\$500,000	\$14,971,711	\$2,650,000	\$18,131,711
Socorro Municipal Airport	\$233,000	\$550,000	\$3,228,333	\$0	\$4,011,333
Taos Regional Airport	\$15,000	\$375,000	\$14,277,542	\$0	\$14,667,542
Truth Or Consequences Municipal Airport	\$120,000	\$410,000	\$9,393,781	\$8,430,000	\$18,353,781
Tucumcari Municipal Airport	\$2,751,670	\$565,930	\$7,274,444	\$4,100,000	\$14,692,044
<b>Community General Aviation Airport Total</b>	<b>\$31,127,960</b>	<b>\$7,774,950</b>	<b>\$122,797,926</b>	<b>\$59,945,000</b>	<b>\$221,645,836</b>



**TABLE 6B (Continued)**  
**New Mexico Airport System Plan**  
**Development Cost Summary**

	NMASP Short Term	NMASP Long Term	CIP Short Term	CIP Long Term	Total
Angel Fire - Colfax County Airport	0	80000	\$8,023,774	\$3,555,000	\$11,658,774
Carrizozo Municipal Airport	\$25,000	\$0	\$6,394,440	\$0	\$6,419,440
Catron County Heliport	\$0	\$50,000	\$0	\$0	\$50,000
Cimarron Heli- port	\$0	\$50,000	\$0	\$0	\$50,000
Conchas Lake Air- port	\$320,000	\$0	\$1,216,334	\$0	\$1,536,334
Conchas Lake Seaplane Base	\$0	\$50,000	\$0	\$0	\$50,000
Crownpoint Airport	\$10,000	\$230,000	\$4,047,555	\$0	\$4,287,555
Dulce-Jicarilla Apache Nation Airport	\$233,750	\$230,000	\$3,340,300	\$0	\$3,804,050
Estancia Municipal Airport	\$55,000	\$0	\$1,369,444	\$0	\$1,424,444
Ft. Sumner Municipal Airport	\$583,330	\$400,000	\$1,607,557	\$0	\$2,590,887
Glenwood-Catron County Airport	\$595,000	\$0	\$0	\$0	\$595,000
Hatch Municipal Airport	\$315,000	\$58,910	\$2,812,246	\$0	\$3,186,156
Jewett Mesa Airport	\$550,000	\$0	\$0	\$0	\$550,000
Lindrith Airpark	\$100,000	\$200,000	\$0	\$0	\$300,000
Lordsburg Municipal Airport	\$95,000	\$200,000	\$2,484,030	\$0	\$2,779,030
Magdalena Airport	\$135,000	\$150,000	\$1,155,555	\$0	\$1,440,555
Mosquero Heliport	\$0	\$50,000	\$0	\$0	\$50,000
Mountainair	\$115,000	\$200,000	\$544,000	\$0	\$859,000
Navajo Lake Airport	\$150,000	\$150,000	\$1,783,000	\$0	\$2,083,000
Questa Municipal No. 2 Airport	\$70,000	\$80,000	\$7,473,333	\$0	\$7,623,333
Red River Heliport	\$0	\$50,000	\$0	\$0	\$50,000
Reserve Catron County Airport	\$170,000	\$80,000	\$1,489,551	\$0	\$1,739,551
Sandoval County Airport	\$0	\$400,000	\$0	\$0	\$400,000
Santa Rosa Route 66 Airport	\$100,000	\$207,460	\$4,568,333	\$1,200,000	\$6,075,793



**TABLE 6B (Continued)**  
**New Mexico Airport System Plan**  
**Development Cost Summary**

	NMASP Short Term	NMASP Long Term	CIP Short Term	CIP Long Term	Total
Shiprock Airstrip	\$110,000	\$230,000	\$4,916,666	\$0	\$5,256,666
Springer Municipal Airport	\$475,000	\$196,670	\$1,124,440	\$0	\$1,796,110
Tatum Airport	\$243,330	\$150,000	\$0	\$0	\$393,330
Vaughn Municipi- pal Airport	\$20,000	\$73,820	\$1,665,331	\$0	\$1,759,151
Zuni-Black Rock Airport	\$95,000	\$150,000	\$1,033,333	\$0	\$1,278,333
<b>Low Activity General Aviation Total</b>	<b>\$4,565,410</b>	<b>\$3,716,860</b>	<b>\$57,049,222</b>	<b>\$4,755,000</b>	<b>\$70,086,492</b>
<b>Grant Total</b>	<b>\$41,664,490</b>	<b>\$24,033,470</b>	<b>\$384,184,522</b>	<b>\$72,986,001</b>	<b>\$522,868,483</b>

Source: Development costs based on Unit Bid Prices, Molzen Corbin, Airport Sponsor CIP, and Coffman Associates analysis.  
Note: Long term CIP is not all-inclusive; in most cases, Airport Sponsor CIP reflect only 5-10 year projects and long term CIP needs are likely understated.

**Exhibit 6B** displays the development costs broken down by airport classification, short term CIP, long term CIP, short term NMASP, and long term NMASP projects.

## FUNDING SOURCES

Funding for airport improvement projects is essential when considering the future of the New Mexico Airport System. In order to meet user needs, communities most commonly rely on funding sources beyond airport revenues. The ability of airport sponsors to identify funding sources and successfully obtain funding directly influences the pace of development at an airport.

The primary sources of funding available to airports in New Mexico include federal grants, state grants, local funding, and private funding. It is important to note that the funding requirements identified for each year for CIP and NMASP projects exceeds projected funding levels and, therefore, it is unlikely that all projects will be funded. A majority of funding for airport improvement projects comes from federal grants distributed by FAA under the AIP from the Airport and Airway Trust Fund. It is important to note that not all NMASP recommended improvements are eligible for federal funding and therefore may require state grants or local funding. Further information regarding project eligibility can be found in FAA Order 5100.38D, *Airport Improvement Program Handbook*.

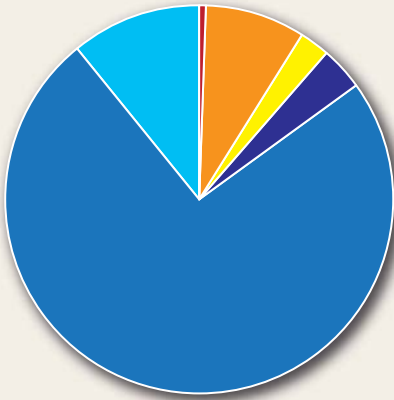
### Federal Funding

As previously mentioned, many airport projects are eligible for grant funding through the FAA from the Airport and Airway Trust Fund. The Airport and Airway Trust Fund was established in 1970 to provide

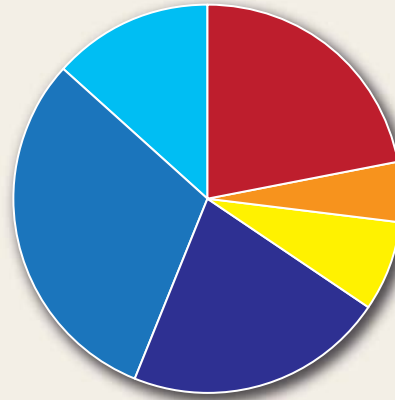




## SHORT TERM



NMAASP

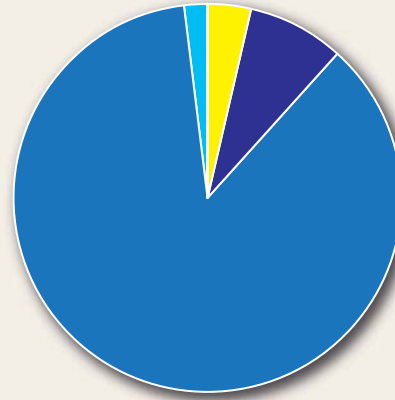


CIP

## LONG TERM

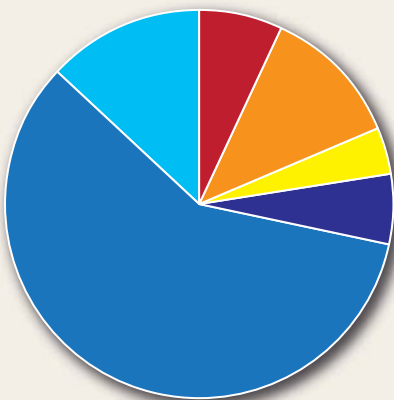


NMAASP

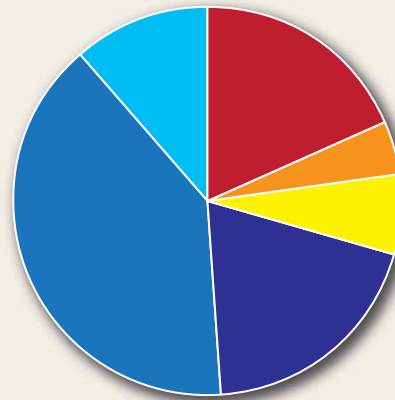


CIP

## TOTAL



NMAASP



CIP

- Primary Commercial Service
- Non-Primary Commercial Service
- Limited Commercial Service

- Regional General Aviation
- Community General Aviation
- Low Activity General Aviation



funding for capital improvements to the United States airport and airways system. The fund is supported by excising taxes on passengers, air cargo, and aircraft fuel sales. For federal fiscal year 2015, approximately \$3.35 billion dollars were allocated for grants-in-aid to fund airport improvements nationwide. Only airports included in the National Plan of Integrated Airport Systems (NPIAS) are eligible to receive FAA grant funding under the AIP.

FAA grants-in-aid are categorized as either entitlements or discretionary. Entitlement funds are distributed through grants by a formula based on the number of enplanements at individual airports. In cases where entitlement funds are not used during the current federal fiscal year, these funds are redistributed to other airport sponsors as discretionary funds and become what is known as protected entitlement funding in the next federal fiscal year.

At the beginning of each federal fiscal year, the FAA sets aside the amount of discretionary funds to cover the Letter of Intent (LOI) payment schedules. The total discretionary funds in all LOIs subject to future obligation are limited to approximately 50 percent of the forecast discretionary funds available for that purpose. The authorizing statute directs the FAA to allocate certain discretionary funding first to set aside categories such as noise projects and the Military Airport Program, and then projects relating to capacity, safety, security, and noise. However, the FAA has some discretion in funding specific projects within these discretionary funding set-aside categories. The FAA approves discretionary funds for use on specific projects, after consideration of project priority and other selection criteria.

As outlined in the *Airport Improvement Program Handbook*, the federal share for some airports within states with large amounts of publicly owned land, such as New Mexico, is increased as authorized under 49 USC § 47109. The federal share by NPIAS classification is summarized as follows:

- Large Hub Airports – 75%
- Medium Hub Airports – 84.29% (Albuquerque International Sunport)
- Small or Non-Hub Commercial Service Airports – 93.75%
- Non-primary General Aviation and Reliever Airports – 90%

Generally, the remaining share of these projects is split evenly between state and local funding.

## **State Funding**

The New Mexico Department of Transportation Aviation Division administers a grant program to fund airport planning, construction, and maintenance projects. In addition to providing matching grant funds for FAA grants, the New Mexico Department of Transportation Aviation Division also provides grants for airport sponsors which require a local match. State participation in these grants is typically 50 percent, with a 50 percent local match. The NMDOTAD establishes the overall policy and procedure for the development and funding of capital improvements. The primary sources of funding utilized by the Aviation Division are generated by State of New Mexico general fund appropriations, aviation fuel taxes, and registration fees on aircraft registered in New Mexico. The revenue generated from these taxes and





fees are deposited into a restricted account. The NMDOTAD also receives a general fund appropriation from the New Mexico State legislature.

## **Local Funding**

Local airport sponsors such as municipalities, counties, and tribal entities are responsible for costs associated with airport development projects that remain after federal and state shares have been applied, and for projects that are not eligible for state or federal funding. As previously discussed, the local share is half of the remaining amount after a federal grant is received, with the other half funded by the state. The percentage is dependent on the NPIAS hub classification as noted above.

Additional local funding sources include local general fund revenues, bond issues, and airport generated revenues. Of these, general fund revenues are the most common source of local funding for airport projects. Bonds supported by airport-generated revenues are seldom used at general aviation airports because these airports typically do not generate enough revenue to offset operating expenses plus the debt service of capital funding requirements.

## **Passenger Facility Charges**

Commercial service airports, with approval from FAA, may collect passenger facility charges (PFCs). PFCs are authorized by Title 14 of the Code of Federal Regulations, Part 158 and are administered by the FAA. PFCs collected from qualified enplaned passengers are used to fund eligible projects. An airport operator can impose a PFC of \$1, \$2, \$3, \$4, or \$4.50 per eligible, enplaned passenger. Once a PFC is imposed, it is added to the ticket price paid by passengers enplaning at the airport, collected by the airlines and remitted to the airport operator, less an allowance for airline processing expenses. The PFC legislation stipulates that if a medium to large hub airport institutes a PFC of \$1, \$2, or \$3, they must forego 50 percent of their AIP entitlement funds. This increases to 75 percent if they charge a \$4 or \$4.50 PFC.

Projects that are eligible for PFC funding include those that preserve or enhance the capacity, safety, or security of the air transportation system; reduce noise or mitigate noise effects; or furnish opportunities for enhanced competition between or among air carriers. PFCs cannot be used for revenue-generating facilities at airports, such as restaurants and other concession space, rental car facilities, public parking facilities, or construction of exclusively-leased space or facilities. The airport industry is currently lobbying the FAA to increase the PFC charge to \$8.50 per passenger along with annual indexing for inflation.

As of December 2015, three airports within the State of New Mexico collect PFCs: Albuquerque International Sunport (\$4.50), Four Corners Regional Airport (\$3.00), and Roswell International Air Center (\$4.50). Santa Fe Municipal Airport is currently undertaking the PFC application process.



## **Private and Miscellaneous Funding**

Additional sources of revenue and assistance occasionally used at general aviation airports to fund or finance airport improvements are listed below. These funds are sometimes generated through public agencies or come in the form of donations, grants, leases, or other means such as:

- State rural/industrial bonds
- Private/commercial financing
- Ground lease/rental
- Bank loans
- Business license tax
- Sale of land for commercial purposes
- Display/advertisement rentals
- Economic development grants

Money from private sources is traditionally used to construct hangar facilities or terminal areas or to establish aviation fuel service. Rarely, private funds have been used to support costs associated with larger scale projects such as runway or taxiway maintenance and repair costs.

## ***SUMMARY***

The following tables summarized the projected capital improvement programs for each of the airports within the New Mexico Airport System. It is important to note that CIP items are current as of December 2015 based on information included in the New Mexico Department of Transportation Aviation Division online database. Additionally, as stated previously, inclusion of a project in this study does not commit local, state, or federal funding for this project.

## ***INDIVIDUAL AIRPORT TABLES***

The following tables present the individual projects for each airport in the system. As previously discussed, the development costs are based on Unit Bid Prices and Airport Sponsor CIP information as of December 2015. It should be noted that the long term CIP items are not all-inclusive; in most cases, Airport Sponsor CIP reflects only 5-10 year projects and, therefore, long term CIP needs are likely understated.



**TABLE 6C**
**New Mexico Airport System Plan  
Development Cost Summary  
Alamogordo-White Sands Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Pavement Maintenance	\$622,850	-
2016	CIP	Pavement Rehabilitation and Marking Taxiway A & Apron	\$860,195	-
2016	CIP	Wildlife Hazard Assessment	\$100,000	-
2017	CIP	Annual Maintenance	\$11,000	-
2017	CIP	Preliminary Design Runway 3-21/Twy A Rehab Strengthening	\$750,000	-
2018	CIP	Annual Maintenance	\$11,000	-
2018	CIP	Runway 3-21 Rehabilitation (Construction)	\$12,000,000	-
2019	CIP	Annual Maintenance	\$11,000	-
2019	CIP	Crosswind Runway Relocation (EA)	\$500,000	-
2019	CIP	Taxiway Alpha Rehabilitation (Construction)	\$8,000,000	-
2020	CIP	Annual Maintenance	\$11,000	-
2020	CIP	Crosswind Runway Relocation (Design)	\$500,000	-
2020	CIP	Large Aircraft Parking Apron/Taxiway Alpha Extension (EA)	\$100,000	-
2021	CIP	Annual Maintenance	\$11,000	-
2021	CIP	Large Aircraft Parking Apron/Taxiway Extension(Design)	\$500,000	-
2022	CIP	Annual Maintenance	\$11,000	-
2022	CIP	Large Aircraft Parking Apron/Taxiway A Extension(Construct)	\$5,625,000	-
2025	NMASP	Prepare noise exposure contours	-	\$10,000
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
<b>Short Term Total (2016-2021)</b>			<b>\$23,477,045</b>	<b>-</b>
<b>Long Term Total (2022-2035)</b>			<b>\$5,636,000</b>	<b>\$310,000</b>
<b>Airport Total</b>			<b>\$29,423,045</b>	

**TABLE 6D**
**New Mexico Airport System Plan  
Development Cost Summary  
Albuquerque International Sunport**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Master plan & airport layout plan update	-	\$1,000,000
<b>Short Term Total (2016-2021)</b>			<b>-</b>	<b>-</b>
<b>Long Term Total (2022-2035)</b>			<b>-</b>	<b>\$1,000,000</b>
<b>Airport Total</b>			<b>\$1,000,000</b>	



**TABLE 6E**

**New Mexico Airport System Plan  
Development Cost Summary  
Angel Fire - Colfax County Airport**

Year	Source	Project Name	CIP	NMASP
2017	CIP	Snow removal equipment and land acquisition	\$304,313	-
2017	CIP	Annual Maintenance	\$10,000	-
2018	CIP	RPZ Land Acquisition	\$332,500	-
2018	CIP	Annual Maintenance	\$10,000	-
2018	CIP	Design and construct helipad, land acquisition	\$190,000	-
2019	CIP	Annual Maintenance	\$10,000	-
2019	CIP	AWOS Update and land acquisition	\$178,000	-
2020	CIP	Annual Maintenance	\$10,000	-
2020	CIP	Extend hangar area taxiways and land acquisition	\$211,111	-
2021	CIP	Airfield lighting rehabilitation and land acquisition	\$572,850	-
2021	CIP	Annual Maintenance	\$10,000	-
2021	CIP	Rehabilitate Runway 17-35	\$6,175,000	-
2022	CIP	Annual Maintenance	\$10,000	-
2022	CIP	Taxiway Alpha Rehabilitation and Land Acquisition	\$3,515,000	-
2023	CIP	Annual Maintenance	\$10,000	-
2024	CIP	Annual Maintenance	\$10,000	-
2025	CIP	Annual Maintenance	\$10,000	-
2025	NMASP	Airport Layout Plan	-	\$80,000
<b>Short Term Total (2016-2021)</b>			<b>\$8,023,774</b>	<b>-</b>
<b>Long Term Total (2022-2035)</b>			<b>\$3,555,000</b>	<b>\$80,000</b>
<b>Airport Total</b>			<b>\$11,658,774</b>	



**TABLE 6F**  
**New Mexico Airport System Plan**  
**Development Cost Summary**  
**Artesia Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Annual Maintenance	-	\$9,000
2016	CIP	Pavement Maintenance	\$90,000	-
2017	CIP	Airport entrance	\$113,112	-
2017	CIP	Pavement Maintenance	\$90,000	-
2017	CIP	Taxiway A Environmental Assessment	\$148,500	-
2017	NMASP	Reconstruct Runway 12-30 (PCI 40-55)	-	\$3,105,000
2017	NMASP	Reconstruct Runway 3-21 (PCI 40-55) Outer	-	\$3,622,500
2017	NMASP	Rehabilitate Runway 3-21 (PCI 55-70) keel	-	\$525,000
2018	CIP	Pavement Maintenance	\$90,000	-
2018	CIP	Runway 4-22 Electrical Improvements, Taxiway A Pavement Environmental Assessment	\$148,500	-
2018	CIP	Taxiway A Design	\$453,796	-
2019	CIP	Pavement Maintenance	\$180,000	-
2019	CIP	Runway 4-22 Electrical Improvements, Taxiway A Pavement Design	\$482,970	-
2019	CIP	Taxiway A Construction	\$3,694,483	-
2020	CIP	Pavement Maintenance	\$90,000	-
2020	CIP	Runway 4-22 Electrical Improvements, Taxiway A Pavement Construction	\$4,045,594	-
2020	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2020	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
<b>Short Term Total (2016-2021)</b>			<b>\$9,626,955</b>	<b>\$7,661,500</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$100,000</b>
<b>Airport Total</b>			<b>\$17,388,455</b>	





**TABLE 6G**  
**New Mexico Airport System Plan**  
**Development Cost Summary**  
**Aztec Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Crosswind Runway Maintenance	\$100,000	-
2015	CIP	Reconstruct Terminal Apron, Phase 2 - construction	\$705,900	-
2016	CIP	Airport Action Plan Update	\$50,000	-
2016	CIP	Install Automated Weather Observation System (AWOS)	\$200,000	-
2016	CIP	Mower and Sweeper - State only	\$100,000	-
2016	CIP	Reconstruct Terminal Apron, Phase 3 - construction	\$500,000	-
2016	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2017	CIP	Annual Maintenance Grant – State Only	-	-
2017	CIP	Construct Crosswind Runway, Phase 1 - environmental	\$100,000	-
2018	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2018	CIP	Construct Crosswind Runway, Phase 2- land acquisition	\$100,000	-
2018	NMASP	Reconstruct Runway 4-22 (PCI 0-25)	-	\$555,830
2019	CIP	Annual Maintenance Grant - State Only	-	-
2019	CIP	Construct Crosswind Runway, Phase 3 - design	\$300,000	-
2019	CIP	Wildlife Hazard Site Visit	\$10,000	-
2019	NMASP	Instrument Approach Procedure	-	\$75,000
2020	CIP	Animal Control Fence	-	-
2020	CIP	Annual Maintenance Grant - State	\$11,111	-
2020	CIP	Construct Crosswind Runway, Phase 4 - construction	\$1,000,000	-
2021	CIP	Annual Maintenance Grant	\$11,111	-
2022	CIP	Construct Access Road to Future Landside Development Area	\$300,000	-
2023	CIP	Construct Taxiway Access to Future Landside Development Area	\$500,000	-
2023	NMASP	Jet fuel service	-	\$400,000
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2025	NMASP	Limited service restaurant and/or vending	-	\$0
2025	NMASP	Terminal with phones and restrooms	-	\$150,000
2030	NMASP	Rehabilitate Runway 8-26 (PCI 85-100)	-	\$61,630
<b>Short Term Total (2016-2021)</b>			<b>\$3,521,455</b>	<b>\$635,830</b>
<b>Long Term Total (2022-2035)</b>			<b>\$800,000</b>	<b>\$811,630</b>
<b>Airport Total</b>			<b>\$5,768,915</b>	



**TABLE 6H**

**New Mexico Airport System Plan  
Development Cost Summary  
Belen-Alexander Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Action Plan/ALP Update	\$60,000	-
2016	CIP	Design and Construct Helipad	\$250,000	-
2017	CIP	Annual Maintenance 2017	\$10,000	-
2017	CIP	Phase I Multi-Use Facility	\$230,000	-
2018	CIP	Annual Maintenance 2018	\$10,000	-
2018	CIP	Crosswind Runway Lighting	\$350,000	-
2018	CIP	EA for Runway 13-31 Extension	\$103,000	-
2018	CIP	Hangar Development Area	\$500,000	-
2018	CIP	Parallel Taxiway Construction	\$600,000	-
2018	CIP	Phase II Construction of Multi-Use Facility	\$2,150,000	-
2019	CIP	Annual Maintenance 2019	\$10,000	-
2019	CIP	Runway 3-21 Rehabilitation/Reconstruction	\$2,800,000	-
2019	CIP	Taxiway A Rehabilitation/reconstruction	\$800,000	-
2020	CIP	Annual Maintenance 2020	-	-
2020	CIP	SE Lease Area Access Taxilanes	\$875,000	-
2020	CIP	Wildlife Hazard Survey	\$50,000	-
2025	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$150,000
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
<b>Short Term Total (2016-2021)</b>			<b>\$8,798,000</b>	<b>\$0</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$350,000</b>
<b>Airport Total</b>			<b>\$9,148,000</b>	

**TABLE 6I**

**New Mexico Airport System Plan  
Development Cost Summary  
Carlsbad - Cavern City Air Terminal**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Rehabilitate Runway 14R-32L - Design	\$435,000	-
2015	CIP	Rehabilitate/Replace MIRL Runway 3-21	\$475,000	-
2015	CIP	Surface Seal Runway 8-26 - Design and Construct-ARFF Vehicle	\$1,225,000	-
2015	CIP	Taxiway C Pavement Maintenance	\$210,000	-
2016	CIP	New Terminal Building - Design	\$250,000	-
2016	CIP	Rehabilitate Runway 14R-32L - Construction	\$4,175,000	-
2016	CIP	Runway 8 & 26 (PAPI 2) each end	\$290,000	-
2017	CIP	Maintenance Grant	\$11,100	-
2017	CIP	New Terminal Building	\$2,350,000	-
2018	CIP	Maintenance Grant	\$11,100	-
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2022	NMASP	Full service maintenance	-	-
2022	NMASP	Limited service restaurant and/or vending	-	-
2025	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2025	NMASP	Public transportation	-	-
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
<b>Short Term Total (2016-2021)</b>			<b>\$9,432,200</b>	<b>\$15,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$500,000</b>
<b>Airport Total</b>			<b>\$9,947,200</b>	



**TABLE 6J**
**New Mexico Airport System Plan  
Development Cost Summary  
Carrizozo Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,110	-
2016	CIP	Runway Pavement Maintenance	\$200,000	-
2016	CIP	South Hangar Area Reconstruction-Design Only	\$80,000	-
2017	CIP	Apron Pavement Maintenance	\$100,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Pilot's Lounge	\$250,000	-
2017	CIP	South Hangar Area Reconstruction Phase II Construction	\$600,000	-
2018	CIP	Action Plan	\$100,000	-
2018	CIP	EA, Purpose & Need Documentation Runway Rehabilitation	\$95,000	-
2018	CIP	Maintenance Grant	\$11,110	-
2018	CIP	Maintenance Grant	-	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2019	CIP	Maintenance Grant	\$11,110	-
2019	CIP	Runway Rehabilitation Phase I (Design)	\$425,000	-
2020	CIP	Runway Rehabilitation Phase II (construction)	\$4,500,000	-
<b>Short Term Total (2016-2021)</b>			<b>\$6,394,440</b>	<b>\$25,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$0</b>
<b>Airport Total</b>			<b>\$6,419,440</b>	

**TABLE 6K**
**New Mexico Airport System Plan  
Development Cost Summary  
Catron County Heliport**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$50,000
<b>Short Term Total (2016-2021)</b>			-	-
<b>Long Term Total (2022-2035)</b>			-	\$50,000
<b>Airport Total</b>			<b>\$50,000</b>	

**TABLE 6L**
**New Mexico Airport System Plan  
Development Cost Summary  
Cimarron Heliport**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$50,000
<b>Short Term Total (2016-2021)</b>			-	-
<b>Long Term Total (2022-2035)</b>			-	\$50,000
<b>Airport Total</b>			<b>\$50,000</b>	



**TABLE 6M**

**New Mexico Airport System Plan  
Development Cost Summary  
Clayton Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Animal Control Fence	\$600,000	-
2015	CIP	Apron Rehabilitation	\$600,000	-
2015	CIP	CAO 2015 - Maintenance & Expendable Materials	\$10,000	-
2015	CIP	Mower/Sweeper & New Primary Windcone	\$100,000	-
2016	CIP	Runway 2-20 Rehabilitation Design Only	\$300,000	-
2016	CIP	Taxiway A Pavement Maintenance	\$100,000	-
2016	CIP	Terminal Parking Area	\$200,000	-
2016	CIP	Terminal Renovations & Security Lights & Cameras	\$300,000	-
2017	CIP	CAO 2017 - Maintenance & Expendable Materials	\$10,000	-
2017	CIP	Runway 2-20 Rehabilitation and Strengthen	\$5,000,000	-
2017	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2017	NMASP	Prepare runway strength evaluation	-	\$5,000
2017	NMASP	Prepare runway width evaluation	-	\$5,000
2018	CIP	Runway 12-30 Pavement Maintenance	\$250,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	RSA Improvements Runway 2-20 (property ownership)	-	\$2,625,000
2019	CIP	Expand T-Hangar Apron Phase 1 Design	\$100,000	-
2019	NMASP	Provide courtesy car service	-	-
2020	CIP	Expand T-Hangar Apron, Phase 2 construction	\$500,000	-
2021	CIP	Reconstruct Taxiway A & B	\$1,000,000	-
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
2030	NMASP	Rehabilitate Runway 12-30 (PCI 70-85)	-	\$95,740
<b>Short Term Total (2016-2021)</b>			<b>\$9,070,000</b>	<b>\$2,645,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$195,740</b>
<b>Airport Total</b>			<b>\$11,910,740</b>	



**TABLE 6N**
**New Mexico Airport System Plan  
Development Cost Summary  
Clovis Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Pavement Maintenance Runways, Taxiways, and Aprons	\$500,000	-
2016	CIP	Sanitation Sewer System & Utility Upgrade	\$500,000	-
2017	CIP	Hangar Development, Phase 1 - design	\$250,000	-
2017	CIP	Overlay Runway 12-30	\$750,000	-
2017	CIP	Perimeter Fence Improvements	\$1,200,000	-
2017	CIP	Reconstruct Taxilanes - Phase 1	\$900,000	-
2018	CIP	Drainage, Access Road, Parking Improve	\$750,000	-
2018	CIP	Hangar Development, Phase 2 - construction	\$800,000	-
2018	CIP	Reconstruct Hangar Access Taxiway, Add Vehicle Parking	\$325,000	-
2018	CIP	Reconstruct Taxilanes - Phase 2	\$900,000	-
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2020	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2025	NMASP	Public transportation	-	-
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
2030	NMASP	Rehabilitate Runway 4-22 (PCI 85-100)	-	\$258,000
<b>Short Term Total (2016-2021)</b>			<b>\$6,875,000</b>	<b>\$210,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$558,000</b>
<b>Airport Total</b>			<b>\$7,643,000</b>	

**TABLE 6O**
**New Mexico Airport System Plan  
Development Cost Summary  
Conchas Lake Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Install Game Fence - Design Only	\$83,000	-
2016	CIP	Install Game Fence - Phase I	\$400,000	-
2017	CIP	Install Game Fence - Phase II	\$400,000	-
2018	CIP	Taxiway and Runway Pavement Maintenance	\$166,667	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Rehabilitate Runway 9-27 (PCI 55-70)	-	\$75,000
2019	CIP	Rehabilitate Beacon and Retro-Reflective Lighting	\$166,667	-
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,216,334</b>	<b>\$320,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$0</b>
<b>Airport Total</b>			<b>\$1,536,334</b>	





**TABLE 6P**

**New Mexico Airport System Plan  
Development Cost Summary  
Conchas Lake Seaplane Base**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$50,000
<b>Short Term Total (2016-2021)</b>			-	-
<b>Long Term Total (2022-2035)</b>			-	\$50,000
<b>Airport Total</b>			<b>\$50,000</b>	

**TABLE 6Q**

**New Mexico Airport System Plan  
Development Cost Summary  
Crownpoint Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,111	-
2016	CIP	Runway 18/36 Pavement Maintenance	\$350,000	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Pavement Maintenance Apron & Taxiway	\$400,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	CIP	Mower Attachment	\$12,000	-
2018	CIP	Snow Removal Equipment Building	\$450,000	-
2018	CIP	Sweeper	\$30,000	-
2018	CIP	Upgrade Airfield Electrical Service	\$150,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway strength evaluation	-	\$5,000
2019	CIP	Maintenance Grant	\$11,111	-
2019	CIP	Runway Reconstruction	\$1,000,000	-
2019	CIP	Snow Removal Equipment	\$350,000	-
2020	CIP	Apron Reconstruction	\$1,000,000	-
2020	CIP	AWOS III	\$250,000	-
2020	CIP	Maintenance Grant	\$11,111	-
2025	NMASP	Airport Layout Plan Update	-	\$80,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$4,047,555</b>	<b>\$10,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$230,000</b>
<b>Airport Total</b>			<b>\$4,287,555</b>	



**TABLE 6R**

**New Mexico Airport System Plan  
Development Cost Summary  
Deming Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Acquire easements & permitting for runway protection zones	\$25,000	-
2015	CIP	Rehab Runway 4-22 and 8-26	\$590,000	-
2015	CIP	Runway Sweeper	\$180,000	-
2016	CIP	Airport Energy Efficiency Study	\$80,000	-
2016	CIP	Design Tapia Rd Relocation	\$300,000	-
2016	CIP	DMN-16-01 Annual Maintenance Grant	\$10,034	-
2016	CIP	T-hangar site development	\$550,000	-
2017	CIP	Build T-Hangars	\$500,000	-
2017	CIP	Tapia Road Relocation Phase I	\$1,500,000	-
2018	CIP	Friction course for Runway 8-26	\$1,200,000	-
2018	CIP	Rehabilitate South Side Taxiways	\$450,000	-
2018	CIP	Tapia Road Relocation Phase II	\$1,500,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2018	NMASP	Reconstruct Runway 8-26 (PCI 40-55)	-	\$6,187,000
2019	CIP	Terminal area apron expansion	\$170,000	-
2020	CIP	Conventional hangar	\$700,000	-
2020	CIP	Land Release Documentation & ESA	\$48,000	-
2020	CIP	Survey for instrument approach to runway 26	\$60,000	-
2022	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$150,000
2025	CIP	Upgrade runway 8-26 for ARC C-II (strengthen, widen, move east)	-	
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
<b>Short Term Total (2016-2021)</b>			<b>\$7,863,034</b>	<b>\$6,202,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$250,000</b>
<b>Airport Total</b>			<b>\$14,315,034</b>	



**TABLE 6S**

**New Mexico Airport System Plan  
Development Cost Summary  
Doña Ana County Jetport at Santa Teresa**

Year	Source	Project Name	CIP	NMASP
2016	CIP	5T6-16-02 New Terminal Phase 1 - Schematic Design	\$65,000	-
2016	CIP	5T6-16-03 Taxiway to Corporate Hangar	\$253,457	-
2016	CIP	West Taxiways, Phase 1 - Design/Environmental-State Only	\$60,000	-
2016	CIP	Wildlife Hazard Site Visit	\$10,000	-
2017	CIP	2017 Maintenance and Expendable Materials	\$11,111	-
2017	CIP	Apron and taxiways pavement maintenance	\$500,000	-
2017	CIP	Reconstruct Runway 10-28, phase 1 - Environmental	\$250,000	-
2017	CIP	Reconstruct Runway 10-28, phase 2 - Design	\$210,000	-
2017	CIP	Runway 1-19 Phase 2 Environmental	\$350,000	-
2017	CIP	West Taxiways Phase 2 - Construction	\$1,750,000	-
2018	CIP	2018 Maintenance and Expendable Materials	\$11,111	-
2018	CIP	Reconstruct Runway 10-28, phase 3 Construction	\$4,000,000	-
2018	CIP	Runway 1-19 Phase 3 - Land Acquisition (BLM, State land Office, private)	\$700,000	-
2018	CIP	Runway 1-19 Phase 4 - Design (B-II 5700')	\$400,000	-
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2019	CIP	2019 Maintenance and Expendable Materials	\$11,111	-
2019	CIP	Runway 1-19 Phase 5 - Construction - site work and earthwork	\$2,500,000	-
2020	CIP	2020 Maintenance and Expendable Materials	\$11,111	-
2020	CIP	Runway 1-19 Phase 6 - construction paving and lighting	\$2,750,000	-
2021	CIP	2021 Maintenance and Expendable Materials	\$11,111	-
2030	NMASP	Master plan & airport layout plan update	-	\$400,000
<b>Short Term Total (2016-2021)</b>			<b>\$13,854,012</b>	<b>\$20,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$420,000</b>
<b>Airport Total</b>			<b>\$14,274,012</b>	



**TABLE 6T**

**New Mexico Airport System Plan  
Development Cost Summary  
Double Eagle II Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Taxiway B Extension	\$450,000	-
2016	CIP	Perimeter Fencing Upgrade	\$210,000	-
2016	CIP	Purchase Snow Removal Equipment	\$120,000	-
2017	CIP	Annual Maintenance 2017	\$10,000	-
2017	CIP	Runway 4-22 Rehabilitation	\$250,000	-
2017	CIP	Runway and Taxiway Extension Design	\$300,000	-
2018	CIP	Annual Maintenance 2018	\$10,000	-
2018	CIP	Runway and Taxiway Extension Construction	\$4,900,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2019	CIP	Airfield Lighting and NAVAIDs Upgrade (LED's)	\$250,000	-
2019	CIP	Annual Maintenance	\$10,000	-
2020	CIP	Annual Maintenance	\$10,000	-
2020	CIP	Crosswind Runway EA	\$1,800,000	-
2025	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2030	NMASP	Master plan & airport layout plan update	-	\$400,000
2030	NMASP	Rehabilitate Runway 17-35 (PCI 85-100)	-	\$143,330
2030	NMASP	Rehabilitate Runway 4-22 (PCI 85-100)	-	\$176,780
<b>Short Term Total (2016-2021)</b>			<b>\$8,320,000</b>	<b>\$15,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$920,110</b>
<b>Airport Total</b>			<b>\$9,255,110</b>	

**TABLE 6U**

**New Mexico Airport System Plan  
Development Cost Summary  
Dulce-Jicarilla Apache Nation Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Preliminary Engineering Report-Runway Reconstruction	\$25,000	-
2017	CIP	Reconstruct/Rehabilitate Airfield Pavements	\$3,315,300	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2020	NMASP	Rehabilitate Runway 17-35 (PCI 70-85)	-	\$218,750
2025	NMASP	Airport Layout Plan Update	-	\$80,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$3,340,300</b>	<b>\$233,750</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$230,000</b>
<b>Airport Total</b>			<b>\$3,804,050</b>	



**TABLE 6V**
**New Mexico Airport System Plan  
Development Cost Summary  
Estancia Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,111	-
2015	CIP	Runway Safety Area Improvements	\$25,000	-
2015	CIP	Runway Surface improvement	\$750,000	-
2016	CIP	Airport Lighting Improvements	\$250,000	-
2016	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Airport Reflective Improvements	\$75,000	-
2017	CIP	Land Acquisition	\$25,000	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Perimeter Fencing and Gates	\$200,000	-
2017	NMASP	Master Plan & Airport Layout Plan Update	-	\$50,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,369,444</b>	<b>\$55,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$0</b>
<b>Airport Total</b>			<b>\$1,424,444</b>	

**TABLE 6W**
**New Mexico Airport System Plan  
Development Cost Summary  
Farmington Four Corners Regional Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Self Service Fueling Station	\$600,000	-
2016	CIP	Taxiways G, E & F Rehab (Construction)	\$1,000,000	-
2017	CIP	Annual Maintenance Grant	\$11,111	-
2017	CIP	Runway 5-23 Pavement Rehab design only	\$200,000	-
2017	CIP	Taxiway A Reconstruction, Hot Spot and electrical	\$1,025,000	-
2018	CIP	Annual Maintenance Grant	\$11,111	-
2018	CIP	Runway 5-23 rehabilitation construction	\$2,000,000	-
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2019	CIP	Annual Maintenance Grant	\$11,111	-
2019	CIP	Upgrade ASOS/ Install AWOS	\$400,000	-
2019	NMASP	Prepare runway length evaluation	-	\$5,000
2019	NMASP	Prepare runway strength evaluation	-	\$5,000
2020	NMASP	Rehabilitate Runway 7-25 (PCI 55-70)	-	\$745,560
2022	CIP	Wildlife Hazard Assessment Update (10 years after 2012)	\$50,001	-
2025	NMASP	Hangar storage for 75% of based aircraft and 25% of transient	-	\$500,000
2030	NMASP	Master plan & airport layout plan update	-	\$400,000
<b>Short Term Total (2016-2021)</b>			<b>\$5,258,333</b>	<b>\$765,560</b>
<b>Long Term Total (2022-2035)</b>			<b>\$50,001</b>	<b>\$900,000</b>
<b>Airport Total</b>			<b>\$6,973,894</b>	





**TABLE 6X**

**New Mexico Airport System Plan  
Development Cost Summary  
Ft. Sumner Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Construct West End Taxiway	\$572,250	-
2015	CIP	Surface Seal Runway 8-26	\$89,250	-
2016	CIP	Design Mid-Field Taxiway	\$53,557	-
2017	CIP	Construct Mid-Field Taxiway	\$420,000	-
2018	CIP	VASI lighting, Wind Sock and Crack Seal apron	\$472,500	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Rehabilitate Runway 3-21 (PCI 55-70)	-	\$483,330
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
2025	NMASP	Turn around or connector taxiway	-	\$250,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,607,557</b>	<b>\$583,330</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$400,000</b>
<b>Airport Total</b>			<b>\$2,590,887</b>	



**TABLE 6Y**
**New Mexico Airport System Plan  
Development Cost Summary  
Gallup Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2020	NMASP	Reconstruct Runway 6-24 (PCI 25-40)	-	\$6,089,630
2021	CIP	Implement GPS Vertically Guided Approach	\$75,000	-
2021	CIP	Improve Future RPZ for Runway 24	\$75,000	-
2022	CIP	Acquire/Relocate East Mobile Home Park	\$2,500,000	-
2022	CIP	Construct South Side Parallel Taxiway	\$15,000,000	-
2022	CIP	Construct Taxilanes to Industrial Park	\$1,500,000	-
2022	CIP	Extend Utilities to New Industrial Area	\$2,000,000	-
2023	CIP	Acquire Land On Southside Airport	\$1,000,000	-
2023	CIP	Airport Master Plan Update	\$200,000	-
2023	CIP	Construct Aircraft Assembly Hangar	\$3,000,000	-
2023	CIP	Construct South Side Aircraft Apron	\$1,000,000	-
2023	CIP	Overlay All Airport Pavements	\$2,000,000	-
2025	CIP	Acquire Land for New Terminal & Cargo Area	\$1,000,000	-
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2026	CIP	Arizona Street Access Improvements	\$250,000	-
2026	CIP	Construct New Air Cargo Facility	\$1,000,000	-
2026	CIP	Construct New Apron - Air Cargo	\$750,000	-
2026	CIP	Construct New Apron - Air Medivac	\$750,000	-
2026	CIP	Construct New Apron - Commercial Service	\$1,000,000	-
2026	CIP	Extend Utilities to New Commercial Area	\$2,000,000	-
2027	CIP	Runway Lighting, Visual Aids, & Pavement Parking	\$500,000	-
2028	CIP	Acquire/Relocate West Mobile Home Park	\$5,000,000	-
2028	CIP	Close Armond Ortega Dr for Runway Extension	\$100,000	-
2028	CIP	Environmental Assessment for Runway Extension	\$150,000	-
2028	CIP	Extend Perimeter Security Fence	\$150,000	-
2028	CIP	Extend Runway 6 for Future Air Traffic	\$3,000,000	-
2028	CIP	Improve Future RPZ for Runway 6	\$75,000	-
<b>Short Term Total (2016-2021)</b>			<b>\$150,000</b>	<b>\$6,099,630</b>
<b>Long Term Total (2022-2035)</b>			<b>\$43,925,000</b>	<b>\$200,000</b>
<b>Airport Total</b>			<b>\$50,374,630</b>	

**TABLE 6Z**
**New Mexico Airport System Plan  
Development Cost Summary  
Glenwood-Catron County Airport**

Year	Source	Project Name	CIP	NMASP
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Reflective lighting	-	\$50,000
2020	NMASP	Rotating beacon	-	\$50,000
2020	NMASP	Turn around or connector taxiway	-	\$250,000
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$0</b>	<b>\$595,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$0</b>
<b>Airport Total</b>			<b>\$595,000</b>	



**TABLE 6AA**

**New Mexico Airport System Plan  
Development Cost Summary  
Grant County - Silver City Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Purchase Terminal Building	\$75,000	-
2016	CIP	SVC-16-03 New PAPI Light System for Runway 8-26	\$15,000	-
2016	CIP	SVC-16-04 New AWOS	\$90,000	-
2016	CIP	SVC-16-05 Replace/Repair Airport Beacon	\$16,000	-
2017	CIP	Annual Maintenance Grant	\$11,111	-
2017	CIP	RW 8-26 Mill and Inlay-Phase II Construction	\$2,500,000	-
2017	CIP	T-Hanger Industrial Site Development	\$250,000	-
2017	CIP	TW A & Connectors Rehabilitation - Design	\$132,000	-
2018	CIP	Annual Maintenance Grant	\$11,111	-
2018	CIP	Phase I New Runway Environmental Assessment	\$250,000	-
2018	CIP	TW A & Connectors Rehabilitation Construction	\$1,500,000	-
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2018	NMASP	Prepare security plan	-	\$5,000
2018	NMASP	Rehabilitate Runway 8-26 (PCI 55-70)	-	\$755,560
2019	CIP	T-Hangar Area Paving	\$500,000	-
2020	CIP	Phase II New Runway Design and Land Acquisition	\$500,000	-
2021	CIP	Phase III New Runway - Site Work, Paving, Lighting, Marking	\$5,000,000	-
2022	CIP	Phase IV New Runway-- Parallel Taxiway New Runway	\$2,500,000	-
2022	CIP	Wildlife Hazard Assessment Update	\$100,000	-
2022	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
<b>Short Term Total (2016-2021)</b>			<b>\$10,850,222</b>	<b>\$765,560</b>
<b>Long Term Total (2022-2035)</b>			<b>\$2,600,000</b>	<b>\$500,000</b>
<b>Airport Total</b>			<b>\$14,715,782</b>	



**TABLE 6AB**
**New Mexico Airport System Plan  
Development Cost Summary  
Grants-Milan Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Apron Expansion- Environmental	\$80,000	-
2016	CIP	Reconstruct Rwy 13/31 - Design Only	\$250,000	-
2017	CIP	Apron Expansion (Design)	-	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	New Terminal Building - Design and Construction	\$225,000	-
2017	CIP	Reconstruct Rwy 13/31 - Construction	\$6,000,000	-
2018	CIP	Apron Expansion-Construction Phase I	\$600,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$100,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2019	CIP	Apron Expansion- Construction Phase II	\$600,000	-
2019	CIP	Maintenance Grant	\$11,111	-
2019	NMASP	Provide courtesy car service	-	-
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
<b>Short Term Total (2016-2021)</b>			<b>\$7,788,333</b>	<b>\$120,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$200,000</b>
<b>Airport Total</b>			<b>\$8,108,333</b>	

**TABLE 6AC**
**New Mexico Airport System Plan  
Development Cost Summary  
Hatch Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Pave Parallel Taxiway Design	\$80,953	-
2016	CIP	E05-16-02 Airport Erosion Control	\$35,090	-
2016	CIP	Pave Parallel Taxiway	\$755,562	-
2017	CIP	MIRL Construction Design	\$80,953	-
2018	CIP	MIRL Construction	\$385,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway strength evaluation	-	\$5,000
2018	NMASP	Reflective lighting	-	\$50,000
2019	CIP	Paved Apron Extension	\$336,500	-
2020	CIP	Runway Extension and Widening	\$1,138,188	-
2020	NMASP	Prepare runway length evaluation	-	\$5,000
2020	NMASP	Prepare runway width evaluation	-	\$5,000
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
2030	NMASP	Rehabilitate Runway 11-29 (PCI 85-100)	-	\$58,910
<b>Short Term Total (2016-2021)</b>			<b>\$2,812,246</b>	<b>\$315,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$58,910</b>
<b>Airport Total</b>			<b>\$3,186,156</b>	



**TABLE 6AD**  
**New Mexico Airport System Plan**  
**Development Cost Summary**  
**Jewett Mesa Airport**

Year	Source	Project Name	CIP	NMASP
2018	NMASP	Airport Layout Plan	-	\$50,000
2018	NMASP	Reflective lighting	-	\$50,000
2020	NMASP	Rotating beacon	-	\$50,000
2020	NMASP	Turn around or connector taxiway	-	\$250,000
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$0</b>	<b>\$550,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$0</b>
<b>Airport Total</b>			<b>\$550,000</b>	

**TABLE 6AE**  
**New Mexico Airport System Plan**  
**Development Cost Summary**  
**Las Cruces International Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Apron Sealing	\$120,000	-
2016	CIP	Seal Taxiway A	\$370,000	-
2017	CIP	Airfield Electrical Improvements (Vault, PAPI 12-30 & 8-26)	\$450,000	-
2017	CIP	Maintenance Grant	\$11,112	-
2017	CIP	Terminal Apron Rehabilitation - Design	\$400,000	-
2018	CIP	Install Wildlife Perimeter Fence - Design & Construction	\$1,280,000	-
2018	CIP	Maintenance Grant	\$11,112	-
2018	CIP	Security Fence Rehabilitation/Gates	\$500,000	-
2018	CIP	Terminal Apron Rehabilitation - Construction Phase I	\$1,350,000	-
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2018	NMASP	Rehabilitate Runway 4-22 (PCI 55-70)	-	\$200,000
2018	NMASP	RSA Improvements Runway 22 (service road)	-	\$350,000
2018	NMASP	RSA Improvements Runway 26 (service road)	-	\$350,000
2018	NMASP	RSA Improvements Runway 30 (service road)	-	\$350,000
2019	CIP	Maintenance Grant	\$11,100	-
2019	CIP	Rehabilitate Rwy 8-26 - Design	\$550,000	-
2019	CIP	Rehabilitate Taxiways "B" and "C" - Design and Construction	\$1,750,000	-
2019	CIP	Terminal Apron Rehabilitation - Construction - Phase II	\$1,750,000	-
2020	CIP	Airport Equipment Storage Facility	\$2,100,000	-
2020	CIP	Maintenance Grant	\$11,100	-
2020	CIP	Rehabilitate Rwy 8-26 - Construction Phase II	\$3,360,000	-
2020	CIP	Runway 8-26 Extension-EA	\$500,000	-
2021	CIP	Air Traffic Control Tower - Construction	\$4,750,000	-
2021	CIP	Construct West End Taxiway - Design & Construction Phase II	\$500,000	-
2021	CIP	Maintenance Grant	\$11,112	-
2021	CIP	Rehabilitate West End Apron - Design and Construction	\$980,000	-
2021	CIP	Runway 8-26 Extension - Design and Construction Phase II	\$11,310,000	-
2022	NMASP	Apron tie downs for 40% of based aircraft and 25% of transient	-	\$250,000
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
2030	NMASP	Rehabilitate Runway 12-30 (PCI 85-100)	-	\$179,170
<b>Short Term Total (2016-2021)</b>			<b>\$32,075,536</b>	<b>\$1,255,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$729,170</b>
<b>Airport Total</b>			<b>\$34,059,706</b>	





**TABLE 6AF**

**New Mexico Airport System Plan  
Development Cost Summary  
Las Vegas Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	EA, Runway 2-20 South 800' Extension	\$75,000	-
2015	CIP	Pavement Maintenance - Taxiways and Aprons	\$100,000	-
2016	CIP	LVS-16-01 Maintenance Grant	\$11,086	-
2016	CIP	Mowing Equipment	\$10,000	-
2017	CIP	Demo old Flight Service Station and fencing	\$200,000	-
2017	CIP	Pavement Maintenance - Runway 14-32	\$850,000	-
2017	CIP	Purchase Snow Removal Equipment	\$326,000	-
2017	CIP	Relocate Taxiway B to 300-foot Environmental	\$30,000	-
2018	CIP	Extend Runway 2-20 South 800' - Design Only	\$150,000	-
2018	CIP	Extend Runway 2-20 South 800' inc MIRL (Phase 1 - Earthwork)	\$750,000	-
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$100,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2018	NMASP	RSA Improvements Runway 20 (service road)	-	\$350,000
2019	CIP	Extend Runway 2-20 South 800' -PH 2 - Paving & Lights	\$1,000,000	-
2019	NMASP	Provide courtesy car service	-	-
2020	CIP	Relocate Taxiway B - Construction	\$1,500,000	-
2020	CIP	Relocate Taxiway B to 300-foot separation from Runway centerline Design	\$100,000	-
2025	NMASP	Limited service maintenance	-	-
2030	NMASP	Rehabilitate Runway 14-32 (PCI 85-100)	-	\$146,920
2030	NMASP	Rehabilitate Runway 2-20 (PCI 85-100)	-	\$89,580
<b>Short Term Total (2016-2021)</b>			<b>\$5,102,086</b>	<b>\$470,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$236,500</b>
<b>Airport Total</b>			<b>\$5,808,586</b>	



**TABLE 6AG**

**New Mexico Airport System Plan  
Development Cost Summary  
Lea County-Hobbs Regional Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Airfield Taxiway Improvements	\$166,000	-
2015	CIP	Design and Construct Drainage Channel and Retention on East side of airport	\$680,000	-
2015	CIP	Runway 3-21 - Safety Improvements - Relocate Localizer	\$1,500,000	-
2015	CIP	Runway 3-21 Rehabilitation	\$2,660,000	-
2015	CIP	RW 17-35 Rehab.	\$1,000,000	-
2015	CIP	Terminal Expansion	\$2,600,000	-
2016	CIP	Extend RW 3-21 and TW D 602'	\$2,670,000	-
2016	CIP	Runway 12-30 PFC	\$1,500,000	-
2016	CIP	Runway 3-21 Extension - Design and Environmental	\$250,000	-
2017	CIP	Runway 12-30 Improvements - Design and Environmental	\$400,000	-
2017	CIP	Taxiway A, Taxiway D, Remove C	\$800,000	-
2017	CIP	Taxiway C Relocation	\$1,200,000	-
2018	CIP	Acquire Property Interests associated with Runway 12-30 Improvement	\$100,000	-
2018	CIP	Apron Rehab - Design Only	\$175,000	-
2018	CIP	Relocate portions of perimeter access road southeast RW 12-30	\$500,000	-
2019	CIP	Rehabilitate NW Ramp (39,000 SY)	\$3,392,000	-
2020	CIP	Acquire Property Interests, Construct Wildlife Fence, Rehab - Runway 3-21 and 12-30 - Design, Runway 3-21 Safety Improvements	\$220,000	-
2020	CIP	Rehabilitate NE Ramp (44,000 SY)	\$3,762,000	-
2020	CIP	Runway 3-21 RSA Improvements	\$1,151,602	-
2020	CIP	Wildlife Fencing - Design and Environmental	\$54,600	-
2021	CIP	Rehabilitate Taxiway Lighting - PH II (D, E, F)	\$630,000	-
2025	NMASP	Full service maintenance	-	-
2025	NMASP	Hangar storage for 80% of based aircraft and 20% of transient	-	\$500,000
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
2030	NMASP	Prepare noise exposure contours	-	\$10,000
<b>Short Term Total (2016-2021)</b>			<b>\$25,411,202</b>	<b>\$0</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$810,000</b>
<b>Airport Total</b>			<b>\$26,221,202</b>	



**TABLE 6AH**
**New Mexico Airport System Plan  
Development Cost Summary  
Lea County-Jal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Mill/Overlay Parallel Taxiway	\$1,000,000	-
2016	CIP	Acquire Property for RPZs On All 4 Runways	\$75,000	-
2016	CIP	Construct Access Road Behind Hangars	\$400,000	-
2016	CIP	Future Vehicle Parking Area (6,000 S.F.)	\$150,000	-
2017	CIP	Remove PLASIs & Install PAPIs to RW 1-19	\$100,000	-
2017	CIP	Security Fence for Airfield and Terminal Areas	\$200,000	-
2018	CIP	Install AWOS	\$250,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway width evaluation	-	\$5,000
2018	NMASP	Reconstruct Runway 9-27 (PCI 0-25)	-	\$1,081,000
2018	NMASP	Rehabilitate Runway 1-19 (PCI 55-70)	-	\$313,330
2019	NMASP	Instrument Approach Procedure	-	\$75,000
2020	NMASP	24/7 availability of AvGas and Jet-A	-	\$400,000
2023	NMASP	Jet fuel service	-	\$400,000
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
2025	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$150,000
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2030	NMASP	Terminal with phones and restrooms	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$2,175,000</b>	<b>\$1,899,330</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$1,000,000</b>
<b>Airport Total</b>			<b>\$5,074,330</b>	

**TABLE 6AI**
**New Mexico Airport System Plan  
Development Cost Summary  
Lea County-Zip Franklin Memorial Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Acquire Property Interest of RPZs	\$35,000	-
2016	CIP	Install AWOS	\$300,000	-
2016	CIP	Rehab 3/21 Crack Seal Sealcoat Striping	\$650,000	-
2017	CIP	Apron Rehab Phase 2	\$250,000	-
2017	CIP	Rehab 3/21 Crack Seal Sealcoat Striping	\$220,000	-
2018	CIP	Install Fencing for Airfield and Hangars	\$100,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2023	NMASP	Jet fuel service	-	\$400,000
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
2025	NMASP	Fixed Base Operator	-	-
2025	NMASP	Rehabilitate Runway 12-30 (PCI 70-85)	-	\$102,670
<b>Short Term Total (2016-2021)</b>			<b>\$1,555,000</b>	<b>\$415,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$202,670</b>
<b>Airport Total</b>			<b>\$2,172,670</b>	



**TABLE 6AJ**
**New Mexico Airport System Plan  
Development Cost Summary  
Lindrith Airpark**

Year	Source	Project Name	CIP	NMASP
2018	NMASP	Reflective lighting	-	\$50,000
2020	NMASP	Rotating beacon	-	\$50,000
2025	NMASP	Airport Layout Plan	-	\$50,000
2030	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$0</b>	<b>\$100,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$200,000</b>
<b>Airport Total</b>			<b>\$300,000</b>	

**TABLE 6AK**
**New Mexico Airport System Plan  
Development Cost Summary  
 Lordsburg Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Sprayer Attachment	\$5,000	-
2016	CIP	Approach Survey (GPS)	\$120,000	-
2016	CIP	EA for Parallel Taxiway	\$95,000	-
2016	CIP	Soil Stabilization Crosswind Runway	\$250,000	-
2017	CIP	Apron Reconstruction (Design)	\$60,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Parallel Taxiway (Design)	\$150,000	-
2018	CIP	Apron Reconstruction (Construction)	\$450,000	-
2018	CIP	Maintenance Grant	\$11,110	-
2018	CIP	Parallel Taxiway Phase I (Construction)	\$570,700	-
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2018	NMASP	Prepare runway strength evaluation	-	\$5,000
2019	CIP	Maintenance Grant	\$11,110	-
2019	CIP	Parallel Taxiway Phase II (Construction)	\$500,000	-
2019	CIP	Pilot's Lounge	\$250,000	-
2022	NMASP	Rehabilitate Runway 12-30 (PCI 70-85)	-	\$200,000
<b>Short Term Total (2016-2021)</b>			<b>\$2,484,030</b>	<b>\$95,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$200,000</b>
<b>Airport Total</b>			<b>\$2,779,030</b>	



**TABLE 6AL**

**New Mexico Airport System Plan  
Development Cost Summary  
Los Alamos County Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	1. Runway, South Apron and East T-Hangar Pavement Maintenance	\$250,000	-
2016	CIP	2. Replace Wildlife/Security Fence	\$410,000	-
2016	CIP	3. Environmental Documentation	\$200,000	-
2016	CIP	Hangar Acquisition	\$30,000	-
2017	CIP	Acquire Runway Tow Broom	\$300,000	-
2017	CIP	Acquire Tractor and Mower	\$80,000	-
2017	CIP	Design and Construct SRE Building	\$560,000	-
2017	CIP	Design West Area Development and Taxiway "F"	\$210,000	-
2017	CIP	Fuel Farm - Construction	\$1,286,000	-
2017	CIP	Maintenance Grant	\$11,100	-
2018	CIP	Airport Entrance Road, Parking Lots, and Hangar Site	\$1,872,000	-
2018	CIP	Maintenance Grant	\$11,100	-
2018	CIP	South Apron Sealcoat	\$40,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	RSA Improvements Runway 27 (road)	-	\$350,000
2018	NMASP	RSA Improvements Runway 9 (blast fence)	-	\$250,000
2019	CIP	Acquire and Remove Taxiway "F" Hangars	\$608,000	-
2019	CIP	Construct Phase 1 Hangars	\$1,092,000	-
2019	CIP	Construct Phase 1 of Taxiway "F"	\$358,000	-
2019	CIP	Construct Phase 1 Taxilanes	\$337,000	-
2019	CIP	Maintenance Grant	\$11,100	-
2019	NMASP	Hangar storage for 75% of based aircraft and 25% of transient	-	\$500,000
2019	NMASP	Precision or near precision (LPV) instrument approach	-	\$1,500,000
2020	CIP	Construct Phase 2 Hangars	\$588,000	-
2020	CIP	Construct Phase 2 Taxilanes	\$169,000	-
2020	CIP	Maintenance Grant	\$11,100	-
2020	CIP	Terminal Building	\$5,040,000	-
2025	NMASP	Full parallel taxiway	-	\$3,000,000
2030	NMASP	Master plan & airport layout plan update	-	\$250,000
2030	NMASP	Rehabilitate Runway 9-27 (PCI 85-100)	-	\$143,330
<b>Short Term Total (2016-2021)</b>			<b>\$13,474,400</b>	<b>\$2,615,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$3,393,330</b>
<b>Airport Total</b>			<b>\$19,482,730</b>	





**TABLE 6AM**

**New Mexico Airport System Plan  
Development Cost Summary  
Magdalena Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Connector Taxiway and Apron Improvements	\$150,000	-
2015	CIP	Maintenance Grant	\$11,111	-
2016	CIP	2016 Maintenance	\$11,111	-
2016	CIP	EA Runway 2/20 Turnarounds	\$60,000	-
2017	CIP	Design Runway 2/20 Turnarounds	\$40,000	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	RSA Grading and Runway Improvements	\$450,000	-
2018	CIP	Construction of Runway 2/20 Turnarounds	\$250,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2019	CIP	Maintenance Grant	\$11,111	-
2019	CIP	Pavement Maintenance	\$150,000	-
2020	NMASP	Rotating beacon	-	\$50,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,155,555</b>	<b>\$135,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$150,000</b>
<b>Airport Total</b>			<b>\$1,440,555</b>	



**TABLE 6AN**
**New Mexico Airport System Plan  
Development Cost Summary  
Moriarty Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Applebay Way Access Road Improvement	\$400,000	-
2015	CIP	Purchase Sweeper Attachment	\$4,000	-
2015	CIP	Annual Maintenance 2015	\$10,000	-
2016	CIP	Install PAPIs on Runways 8 and 26	\$150,000	-
2016	CIP	Taxiway E Extension and AC Parking	\$333,333	-
2016	CIP	Update ALP	\$50,000	-
2016	CIP	Annual Maintenance 2016	\$10,000	-
2017	CIP	Annual Maintenance 2017	\$10,000	-
2017	CIP	Parking Apron Rehabilitation	\$765,000	-
2017	CIP	Snow Removal Equipment	\$375,000	-
2017	CIP	Taxiway E Extension and Improvements	\$550,000	-
2018	CIP	Annual Maintenance 2018	\$10,000	-
2018	CIP	Construct Airport Parking Apron	\$861,112	-
2018	CIP	Crosswind Runway 18-36 Edge Reflector System	\$83,333	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2019	CIP	Airport Utility Upgrade	\$400,000	-
2019	CIP	Annual Maintenance 2019	\$10,000	-
2019	CIP	Hangar Area Expansion	\$1,930,000	-
2020	CIP	Annual Maintenance 2020	\$10,000	-
2020	CIP	New Access Road to Hangar Area Expansion	\$525,300	-
2020	CIP	Perimeter Fencing	\$664,000	-
2020	CIP	Wildlife Hazard Survey	\$20,000	-
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
2030	NMASP	Rehabilitate Runway 18-36 (PCI 85-100)	-	\$111,080
2030	NMASP	Rehabilitate Runway 8-26 (PCI 85-100)	-	\$137,960
<b>Short Term Total (2016-2021)</b>			<b>\$7,171,078</b>	<b>\$10,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$349,040</b>
<b>Airport Total</b>			<b>\$7,530,118</b>	

**TABLE 6AO**
**New Mexico Airport System Plan  
Development Cost Summary  
Mosquero Heliport**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$50,000
<b>Short Term Total (2016-2021)</b>			-	-
<b>Long Term Total (2022-2035)</b>			-	\$50,000
<b>Airport Total</b>			<b>\$50,000</b>	



**TABLE 6AP**
**New Mexico Airport System Plan  
Development Cost Summary  
Mountainair Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Annual Maintenance Grant	\$10,000	-
2016	CIP	Property Map and Runway Design Survey	\$30,000	-
2016	CIP	Runway Stabilization and RSA Improvements	\$175,000	-
2016	CIP	Runway Threshold Markers	\$4,000	-
2017	CIP	Annual Maintenance Grant	\$10,000	-
2017	CIP	Perimeter Fencing and Gates	\$300,000	-
2018	CIP	Runway Edge Reflectors	\$5,000	-
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2018	NMASP	Prepare runway strength evaluation	-	\$5,000
2018	NMASP	Prepare runway width evaluation	-	\$5,000
2019	CIP	Wildlife Hazard Site Visit	\$10,000	-
2020	NMASP	Reflective lighting	-	\$50,000
2020	NMASP	Rotating beacon	-	\$50,000
2025	NMASP	Airport Layout Plan	-	\$50,000
2025	NMASP	Pilots lounge with phones and restroom	\$0	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$544,000</b>	<b>\$115,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$200,000</b>
<b>Airport Total</b>			<b>\$859,000</b>	

**TABLE 6AQ**
**New Mexico Airport System Plan  
Development Cost Summary  
Navajo Lake Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Access Road Rehabilitation	\$400,000	-
2015	CIP	Runway 6-24 Pavement Maintenance	\$250,000	-
2015	CIP	Wildlife Fence - Phase I Design Only	\$83,000	-
2016	CIP	Wildlife Fence - Phase II	\$400,000	-
2017	CIP	Wildlife Fence - Phase III	\$400,000	-
2018	CIP	Pavement Maintenance	\$250,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2021	NMASP	Rotating beacon	-	\$50,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,783,000</b>	<b>\$150,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$150,000</b>
<b>Airport Total</b>			<b>\$2,083,000</b>	



**TABLE 6AR**

**New Mexico Airport System Plan  
Development Cost Summary  
Ohkay Owingeh Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,110	-
2016	CIP	E14-16-01 Maintenance Grant	\$9,650	-
2016	CIP	Reconstruction of Runway Phase I (PER)	\$80,000	-
2016	CIP	SRE Building- Construction	\$350,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Reconstruction of Runway Phase II (Design)	\$250,000	-
2017	NMASP	AWOS or ASOS	-	\$250,000
2018	CIP	Maintenance Grant	\$11,110	-
2018	CIP	Reconstruction of Runway (Construction)	\$4,500,000	-
2018	CIP	Snow Removal Equipment	\$150,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$100,000
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2019	CIP	Maintenance Grant	\$11,111	-
2019	NMASP	Non-precision instrument approach	-	\$75,000
2020	CIP	Runway Pavement Maintenance	\$150,000	-
2020	NMASP	Terminal with phones and restrooms	-	\$150,000
2020	NMASP	Visual glide slope indicator	-	\$100,000
2021	NMASP	Partial parallel taxiway	-	\$500,000
2022	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2022	NMASP	Limited service restaurant and/or vending	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$5,534,091</b>	<b>\$1,205,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$350,000</b>
<b>Airport Total</b>			<b>\$7,089,091</b>	



**TABLE 6AS**
**New Mexico Airport System Plan  
Development Cost Summary  
Portales Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Install Windcone and PAPIs - Design Only	\$157,500	-
2015	CIP	T-Hangars	\$300,000	-
2016	CIP	Install PAPI 1,19, 8, 26 & Install Windcone	\$250,000	-
2016	CIP	RPZ 2016 Maintenance & Expendables	\$11,111	-
2016	CIP	Runway 1-19 and 8-26 PER	\$150,000	-
2017	CIP	RPZ 2017 Maintenance & Expendables	\$11,111	-
2017	CIP	Runway 1-19 and 8-26 Rehab - Design Only	\$300,000	-
2018	CIP	PRZ 2018 Maintenance & Expendables	\$11,111	-
2018	CIP	Runway 8-26 Construction	\$1,500,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2019	CIP	RPZ 2019 Maintenance & Expendables	\$15,000	-
2019	CIP	Runway 1-19 Construction	\$1,500,000	-
2019	NMASP	Provide courtesy car service	-	-
2020	CIP	Wildlife Hazard Site Visit	\$10,000	-
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
<b>Short Term Total (2016-2021)</b>			<b>\$4,215,833</b>	<b>\$5,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$100,000</b>
<b>Airport Total</b>			<b>\$4,320,833</b>	

**TABLE 6AT**
**New Mexico Airport System Plan  
Development Cost Summary  
Questa Municipal No. 2 Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Wildlife Fence Phase II Construction	\$250,000	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Pilots Lounge	\$220,000	-
2017	CIP	Runway 17/35 Rehabilitation Phase I	\$185,000	-
2017	CIP	SRE Building Phase I Design	\$45,000	-
2018	CIP	Annual Maintenance	\$11,111	-
2018	CIP	Fuel Farm Facility Phase I-Design Only	\$80,000	-
2018	CIP	Runway 17/35 Rehabilitation Phase II Construction	\$1,800,000	-
2018	CIP	SRE Building Phase II Construction	\$350,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2019	CIP	Aeronautical Surveys - GPS Approach	\$100,000	-
2019	CIP	Fuel Farm Facility Phase II	\$830,000	-
2019	CIP	Maintenance Grant	\$11,111	-
2019	CIP	Parallel Taxiway EA	\$95,000	-
2019	CIP	Snow Removal Equipment	\$200,000	-
2020	CIP	Parallel Taxiway-Design Only	\$250,000	-
2020	CIP	Relocate Windsock and Segmented Circle	\$35,000	-
2020	NMASP	Rotating beacon	-	\$50,000
2021	CIP	Parallel Taxiway Construction	\$3,000,000	-
2025	NMASP	Airport Layout Plan Update	-	\$80,000
<b>Short Term Total (2016-2021)</b>			<b>\$7,473,333</b>	<b>\$70,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$80,000</b>
<b>Airport Total</b>			<b>\$7,623,333</b>	





**TABLE 6AU**
**New Mexico Airport System Plan  
Development Cost Summary  
Raton Crews Field Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Rehabilitate Taxiway A, Replace PAPI	\$475,000	
2016	CIP	Maintenance Grant	\$10,000	
2016	CIP	Airport Master Plan	\$71,250	
2017	CIP	Maintenance Grant	\$10,000	
2017	CIP	Taxiway Bravo MITL	\$475,000	
2018	CIP	Maintenance Grant	\$10,000	
2018	NMASP	Airport Layout Plan and Narrative Report	-	\$800,000
2018	NMASP	Prepare noise exposure contours	-	\$210,000
2019	CIP	Maintenance Grant	\$10,000	
2020	CIP	Maintenance Grant	\$10,000	
2020	NMASP	Adopt height and hazard zoning	-	\$15,000
2020	NMASP	Prepare emergency response plan	-	\$5,000
2021	CIP	Maintenance Grant	\$10,000	
2022	CIP	Maintenance Grant	\$10,000	
2023	CIP	Maintenance Grant	\$10,000	
2024	CIP	Maintenance Grant	\$10,000	
2025	CIP	Maintenance Grant	\$10,000	
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2025	NMASP	Limited service maintenance	-	\$200,000
2030	NMASP	Rehabilitate Runway 2-20 (PCI 85-100)	-	\$137,060
2030	NMASP	Rehabilitate Runway 7-25 (PCI 85-100)	-	\$91,380
<b>Short Term Total (2016-2021)</b>			<b>\$1,081,250</b>	<b>\$1,030,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$40,000</b>	<b>\$628,440</b>
<b>Airport Total</b>			<b>\$2,779,690</b>	

**TABLE 6AV**
**New Mexico Airport System Plan  
Development Cost Summary  
Red River Heliport**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$50,000
<b>Short Term Total (2016-2021)</b>			-	-
<b>Long Term Total (2022-2035)</b>			-	<b>\$50,000</b>
<b>Airport Total</b>			<b>\$50,000</b>	



**TABLE 6AW**

**New Mexico Airport System Plan  
Development Cost Summary  
Reserve Catron County Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Runway 06-24 Pavement Rehabilitation	\$300,000	-
2015	CIP	Runway 06-24 Runway Safety Area Grading	\$250,000	-
2016	CIP	Airfield Lighting Rehabilitation	\$280,000	-
2016	CIP	T16-16-01 Maintenance Grant	\$9,551	-
2017	CIP	Helipad Construction	\$300,000	-
2018	CIP	Replace Perimeter Fencing	\$350,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Prepare runway width evaluation	-	\$5,000
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
2025	NMASP	Airport Layout Plan	-	\$80,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,489,551</b>	<b>\$170,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$80,000</b>
<b>Airport Total</b>			<b>\$1,739,551</b>	

**TABLE 6AX**

**New Mexico Airport System Plan  
Development Cost Summary  
Roswell International Air Center**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Runway 3/21 Phase IIb (Construction)	\$10,084,836	-
2016	CIP	Taxiway K Pavement Relocation (Design and Construction)	\$1,100,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Taxiway A Pavement Rehabilitation Phase I (Design)	\$170,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	CIP	Taxiway A Pavement Rehabilitation Phase II (construction)	\$2,200,000	-
2018	NMASP	Master plan & airport layout plan update	-	\$300,000
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2019	CIP	Taxiway C, G, & H Pavement Maintenance	\$500,000	-
2019	CIP	Taxiway J Rehabilitation Phase I (Design and Construction)	-	-
2020	CIP	747 Hangar	\$13,025,000	-
2020	CIP	Runway 17-35 Pavement Maintenance	\$200,000	-
2025	NMASP	Hangar storage for 80% of based aircraft and 20% of transient	-	\$500,000
2025	NMASP	Public transportation	-	-
<b>Short Term Total (2016-2021)</b>			<b>\$27,302,057</b>	<b>\$310,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$500,000</b>
<b>Airport Total</b>			<b>\$28,112,057</b>	



**TABLE 6AY**
**New Mexico Airport System Plan  
Development Cost Summary  
Sandoval County Airport (Proposed)**

Year	Source	Project Name	CIP	NMASP
2030	NMASP	Airport Layout Plan	-	\$400,000
Short Term Total (2016-2021)			-	-
Long Term Total (2022-2035)			-	\$400,000
Airport Total			\$400,000	

**TABLE 6AZ**
**New Mexico Airport System Plan  
Development Cost Summary  
Santa Fe Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	2 RW 2-20 Reconstruction Design	\$400,000	-
2015	CIP	3 E. Apron Crack & Surf Seal	\$200,000	-
2016	CIP	2 TW D Rehab	\$2,154,001	-
2016	CIP	3 RW 10-28 Rehab	\$679,944	-
2016	CIP	6 North Apron Reconstruction	\$800,000	-
2016	CIP	7 New Maintenance Building Design	\$75,000	-
2016	CIP	8 Anti-Icing Equipment	\$400,000	-
2016	CIP	9 eALP	\$100,000	-
2016	CIP	RW 2-20 S End Rehab	\$2,154,001	-
2016	CIP	RW 33 RSA	\$487,752	-
2016	CIP	Taxiway G Reconstruction and RW 15 PAPI	\$2,154,001	-
2016	CIP	Terminal Building Expansion	\$3,000,000	-
2017	CIP	1 New Maintenance Building Construction	\$500,000	-
2017	CIP	2 Terminal Parking Lot Construction	\$750,000	-
2017	CIP	3 East Access Road	\$770,000	-
2017	CIP	4 Terminal Parking Lot Design	\$75,000	-
2017	CIP	5 Car Rental Offices and Car Wash Facility	\$200,000	-
2017	CIP	99 Airport Maintenance Grant	\$11,112	-
2018	CIP	1 Reconstruct Runway 2-20	\$8,000,000	-
2018	CIP	2 BLM Land Acquisition	\$100,000	-
2018	CIP	99 Airport Maintenance Grant	\$11,112	-
2019	CIP	Parallel Taxiway Construction, 15-33, C, G	\$4,444,444	-
2020	CIP	5 Installation of REIL on Runway 02	\$30,000	-
2025	NMASP	Hangar storage for 80% of based aircraft and 20% of transient	-	\$500,000
2030	NMASP	Master plan & airport layout plan update	-	\$400,000
2030	NMASP	Rehabilitate Runway 10-28 (PCI 85-100)	-	\$112,880
2030	NMASP	Rehabilitate Runway 15-33 (PCI 55-70)	-	\$700,000
2030	NMASP	Rehabilitate Runway 2-20 (PCI 85-100)	-	\$308,170
Short Term Total (2016-2021)			\$27,496,367	\$0
Long Term Total (2022-2035)			\$0	\$2,021,050
Airport Total			\$29,517,417	



**TABLE 6BA**  
**New Mexico Airport System Plan**  
**Development Cost Summary**  
**Santa Rosa Route 66 Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	East Apron - reseal joints	\$30,000	-
2015	CIP	Replace Beacon and demolish building	\$150,000	-
2015	CIP	TW A, East apron, RW 1-19 crack fill - state only	\$200,000	-
2016	CIP	Equipment Shelter-State Only	\$130,000	-
2016	CIP	Multi-Purpose Equipment-State only	\$100,000	-
2016	CIP	Reconstruct ~1,500' RW 1-19 and TW D, Phase 1 - Design - sta	\$100,000	-
2017	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2017	CIP	Instrument Approach Survey	\$75,000	-
2017	CIP	Mower and Sweeper - State Only	\$150,000	-
2017	CIP	Reconstruct ~1500' RW 1-19 and TW D, Phase 2-construction	\$1,250,000	-
2017	CIP	RW 1-19 Extn, Phase 1-environmental/purpose and need - state	\$75,000	-
2018	CIP	RW 1-19 Extn, Phase 2 design - state only	\$175,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2019	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2019	CIP	RW 1-19 Extn, Phase 3 - construction	\$1,500,000	-
2020	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2020	CIP	Hangar Development East Side, Phase 1-environmental	\$50,000	-
2021	CIP	Hangar Development East Side, Phase 2-design	\$100,000	-
2021	CIP	Reconstruct/construct north side aprons	\$400,000	-
2021	CIP	Wildlife Hazard Site Visit	\$50,000	-
2022	CIP	Hangar Development East Side, Phase 3-construction	\$1,200,000	-
2030	NMASP	Rehabilitate Runway 1-19 (PCI 70-85)	-	\$145,830
2030	NMASP	Rehabilitate Runway 8-26 (PCI 85-100)	-	\$61,630
<b>Short Term Total (2016-2021)</b>			<b>\$4,568,333</b>	<b>\$100,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$1,200,000</b>	<b>\$207,460</b>
<b>Airport Total</b>			<b>\$6,075,793</b>	



**TABLE 6BB**

**New Mexico Airport System Plan  
Development Cost Summary  
Shiprock Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,111	-
2016	CIP	Reconstruct Apron & Parking Areas	\$1,010,000	-
2016	CIP	Runway 2/20 Rehabilitation Reconstruction	\$1,830,000	-
2016	NMASP	Prepare runway strength evaluation	-	\$5,000
2016	NMASP	Reflective lighting	-	\$50,000
2017	CIP	Access Road and Vehicle Parking	\$300,000	-
2017	CIP	Maintenance Grant	\$11,111	-
2017	CIP	Power Supply to Airport	\$150,000	-
2017	CIP	SRE Building	\$450,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	CIP	Perimeter Fencing	-	-
2018	CIP	Snow Removal Equipment	\$300,000	-
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Rotating beacon	-	\$50,000
2019	CIP	AWOS III	\$350,000	-
2019	CIP	Maintenance Grant	\$11,111	-
2019	CIP	Runway and Taxiway Lighting	-	-
2020	CIP	Airport Electrical System (Vault, PAPIs, Beacon, Wind Co.)	\$460,000	-
2020	CIP	Maintenance Grant	\$11,111	-
2021	CIP	Maintenance Grant	\$11,111	-
2025	NMASP	Airport Layout Plan	-	\$80,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$4,916,666</b>	<b>\$110,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$230,000</b>
<b>Airport Total</b>			<b>\$5,256,666</b>	



**TABLE 6BC**
**New Mexico Airport System Plan  
Development Cost Summary  
Sierra Blanca Regional Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Conduct Environmental Assessment 5-year plan	\$500,000	-
2015	CIP	Extend Airport Equipment Garage	\$140,000	-
2015	CIP	Purchase ARFF Turn-Out Gear	\$10,000	-
2016	CIP	Pavement Rehabilitation PH1 - Taxiway A, B, RWY 12-30	\$256,000	-
2016	CIP	Rehabilitate Runway 6/24, Design Only	\$598,000	-
2016	CIP	Terminal Remodel-Village funds	\$150,000	-
2017	CIP	Airfield Electrical Upgrades, Phase I Design	\$175,000	-
2017	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2017	CIP	Construct West Taxilanes, Design Only	\$100,000	-
2017	CIP	Pavement Rehabilitation PH2 - Taxiway A, B, RWY 12-30	\$395,300	-
2017	CIP	Rehabilitate Runway 6/24, Construction	\$5,382,000	-
2018	CIP	Airfield Electrical Upgrades, Phase II Construction	\$1,000,000	-
2018	CIP	Annual Maintenance Grant	\$11,000	-
2018	CIP	Construct West Taxilanes, Construction	\$915,000	-
2018	CIP	Extend Runway 6/24 TWY A, (Design Only)	\$175,000	-
2018	CIP	Improve RSA (RWY 6-24 grading) Construction	\$675,000	-
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2019	CIP	Acquire SRE Equipment (Disp. Plow)	\$500,000	-
2019	CIP	Acquire SRE Equipment (Rotary Blower)	\$90,000	-
2019	CIP	Annual Maintenance Grant	\$11,000	-
2019	CIP	Install MITL TWY A (Construction)	\$810,000	-
2019	CIP	Pavement Rehabilitation PH 3	\$395,300	-
2020	CIP	Annual Maintenance Grant	\$11,000	-
2020	CIP	Renovate ARFF Building, Phase 1 design	\$100,000	-
2020	CIP	Terminal Remodel, Phase II Construction	\$1,500,000	-
2021	CIP	Annual Maintenance Grant	\$11,000	-
2021	CIP	Purchase large ARFF Vehicle	\$300,000	-
2021	CIP	Renovate ARFF Building, Phase 2 Construction	\$750,000	-
2022	CIP	Rehabilitate Runway 12-30, Phase 1 Design	\$150,000	-
2023	CIP	Rehabilitate Runway 12-30, Phase 2 Construction	\$1,000,000	-
2024	CIP	Construct FBO Hangar-State Only	\$1,500,000	-
2025	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2030	NMASP	Master plan & airport layout plan update	-	\$300,000
<b>Short Term Total (2016-2021)</b>			<b>\$14,971,711</b>	<b>\$10,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$2,650,000</b>	<b>\$500,000</b>
<b>Airport Total</b>			<b>\$18,131,711</b>	





**TABLE 6BD**

**New Mexico Airport System Plan  
Development Cost Summary  
Socorro Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	RWs/TWs pavement maintenance, phase 2	\$150,000	-
2016	CIP	Acquire multi-tool maintenance equipment-State Only	\$100,000	-
2016	CIP	Airport Action Plan	\$100,000	-
2016	CIP	ALP Update	\$15,000	-
2016	CIP	Heavy Aircraft Apron	\$500,000	-
2016	CIP	Mill & Fill Terminal Apron	\$400,000	-
2016	CIP	ONM-16-01 Annual Maintenance Grant – State Only	\$11,111	-
2016	CIP	PAPAI RWY 15-33 Construction	\$270,000	-
2016	CIP	Taxiways A and B reflectors	\$75,000	-
2016	CIP	Vacuum Sweeper	\$100,000	-
2017	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2017	CIP	RW 6 Construct Turn Around	\$300,000	-
2018	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2018	CIP	TW B, phase 1: environmental	\$100,000	-
2018	NMASP	Prepare noise exposure contours	-	\$10,000
2018	NMASP	Rehabilitate Runway 15-33 (PCI 55-70)	-	\$95,000
2018	NMASP	Rehabilitate Runway 6-24 (PCI 55-70)	-	\$75,000
2018	NMASP	RSA Improvements Runway 15 (terrain)	-	\$25,000
2018	NMASP	RSA Improvements Runway 33 (terrain)	-	\$25,000
2018	NMASP	RSA Improvements Runway 6-24 (remove tree)	-	\$3,000
2019	CIP	TW B, phase 2: design	\$75,000	-
2020	CIP	TW B, phase 3: construction	\$1,000,000	-
2021	CIP	Wildlife Hazard Site Visit	\$10,000	-
2022	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$150,000
2023	NMASP	Jet fuel service	-	\$400,000
<b>Short Term Total (2016-2021)</b>			<b>\$3,228,333</b>	<b>\$233,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$550,000</b>
<b>Airport Total</b>			<b>\$4,011,333</b>	



**TABLE 6BE**

**New Mexico Airport System Plan  
Development Cost Summary  
Springer Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Pavement Maintenance Runway & Apron	\$150,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	SRE Building Construction	\$250,000	-
2018	CIP	Demo/Replace Existing Building	\$150,000	-
2018	CIP	Maintenance Grant	\$11,110	-
2018	CIP	Snow Removal/Mowing Equipment	\$50,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Prepare runway length evaluation	-	\$5,000
2018	NMASP	Prepare runway strength evaluation	-	\$5,000
2018	NMASP	RSA Improvements Runway 19 (fence)	-	\$300,000
2019	CIP	Helipad Design and Construction	\$380,000	-
2019	CIP	Maintenance Grant	\$11,110	-
2020	CIP	Maintenance Grant	\$11,110	-
2020	CIP	Parallel Runway Property Acquisition	\$100,000	-
2021	NMASP	Pilots lounge with phones and restroom	-	\$150,000
2025	NMASP	Airport Layout Plan	-	\$80,000
2025	NMASP	Rehabilitate Runway 1-19 (PCI 70-85)	-	\$116,670
<b>Short Term Total (2016-2021)</b>			<b>\$1,124,440</b>	<b>\$475,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$196,670</b>
<b>Airport Total</b>			<b>\$1,796,110</b>	



**TABLE 6BF**

**New Mexico Airport System Plan  
Development Cost Summary  
Taos Regional Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	Airport Master Plan	\$540,000	-
2016	CIP	EA Heavy Aircraft Apron	\$100,000	-
2016	CIP	Mower Attachment	\$7,000	-
2016	CIP	SKX-16-02 Maintenance Grant	\$11,102	-
2017	CIP	Design Heavy Aircraft Apron	\$400,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Partial Parallel Taxiway A Design Only Phase I	\$275,000	-
2017	CIP	Pavement Maintenance	\$750,000	-
2018	CIP	Construct Heavy Aircraft Apron	\$3,800,000	-
2018	CIP	Maintenance Grant	\$11,110	-
2018	CIP	Reconstruct Partial Parallel Taxiway A	\$2,750,000	-
2018	CIP	Terminal Building Phase I Design Only	\$450,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2019	CIP	Maintenance Grant	\$11,110	-
2019	CIP	Move NAVAIDS, RCO and AWOS	\$500,000	-
2019	CIP	Terminal Building - Phase II	\$2,000,000	-
2020	CIP	Maintenance Grant	\$11,110	-
2020	CIP	Remove TW A3, Reconstruct TW A4,A5,A6 & add Bypass to 22	\$1,650,000	-
2020	CIP	Runway 12/30 Approach Lights	\$1,000,000	-
2022	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2025	NMASP	Rehabilitate Runway 4-22 (PCI 70-85)	-	\$175,000
<b>Short Term Total (2016-2021)</b>			<b>\$14,277,542</b>	<b>\$15,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$375,000</b>
<b>Airport Total</b>			<b>\$14,667,542</b>	

**TABLE 6BG**

**New Mexico Airport System Plan  
Development Cost Summary  
Tatum Airport**

Year	Source	Project Name	CIP	NMASP
2020	NMASP	Airport Layout Plan Update	-	\$50,000
2020	NMASP	Rehabilitate Runway 12-30 (PCI 55-70)	-	\$193,330
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$0</b>	<b>\$243,330</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$150,000</b>
<b>Airport Total</b>			<b>\$393,330</b>	



**TABLE 6BH**
**New Mexico Airport System Plan  
Development Cost Summary  
Truth Or Consequences Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Access Road Construction	\$265,000	-
2015	CIP	Fuel Farm Construction	\$800,000	-
2015	CIP	Fuel Truck Purchase	\$80,000	-
2016	CIP	Airport Utilities-State Only, phase 1: three phase electric	\$200,000	-
2016	CIP	ALP Update with Narrative	\$380,000	-
2016	CIP	TCS-16-01 Annual Maintenance Grant – State Only	\$9,781	-
2016	CIP	TW A Relocation: EA	\$215,000	-
2017	CIP	Airport Utilities-State Only, phase 2: water/wastewater	\$430,000	-
2017	CIP	Annual Maintenance Grant – State Only	\$11,000	-
2017	CIP	TW A Relocation, Phase 1 Construction	\$1,500,000	-
2017	CIP	TW A Relocation: phase 1 Design	\$160,000	-
2018	CIP	Annual Maintenance Grant – State Only	\$11,000	-
2018	CIP	TW A Relocation, phase 2: Construction	\$2,050,000	-
2018	CIP	TW A Relocation, phase 2: Design	\$110,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$100,000
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2019	CIP	Annual Maintenance Grant - State Only	\$11,000	-
2019	CIP	New Terminal Design - State Only	\$110,000	-
2019	CIP	TW Apron Expansion, phase 3: Construction	\$1,725,000	-
2019	CIP	TW Apron Expansion, phase 3: Design	\$185,000	-
2020	CIP	Airfield Electrical vault and sign upgrades	\$270,000	-
2020	CIP	Annual Maintenance Grant - State Only	\$11,000	-
2020	CIP	New Terminal Building - Construction-State Only	\$650,000	-
2021	CIP	Animal Control Fence, phase 1: environmental and design	\$150,000	-
2021	CIP	Replace ASOS with AWOS	\$50,000	-
2021	CIP	Wildlife Hazard Site Visit	\$10,000	-
2022	CIP	Animal Control Fence, phase 2: construction	\$400,000	-
2022	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2022	NMASP	Rehabilitate Runway 13-31 (PCI 70-85)	-	\$210,000
2023	CIP	RW 7-25 and TW-phase 1: purpose and need/BCA-State Only	\$30,000	-
2024	CIP	Construct Box Hangars - State Only	\$750,000	-
2025	CIP	RW 7-25 development-phase 2: Environmental Assessment	\$150,000	-
2025	CIP	Snow Removal Equipment	\$200,000	-
2026	CIP	RW 7-25 development-phase 3: land acquisition	\$100,000	-
2026	CIP	SRE Building	\$500,000	-
2027	CIP	RW 7-25 and connector TW-phase 4: design	\$300,000	-
2028	CIP	RW 7-25 and connector TW-phase 5: construction	\$6,000,000	-
<b>Short Term Total (2016-2021)</b>			<b>\$9,393,781</b>	<b>\$120,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$8,430,000</b>	<b>\$410,000</b>
<b>Airport Total</b>			<b>\$18,353,781</b>	



**TABLE 6BI**

**New Mexico Airport System Plan  
Development Cost Summary  
Tucumcari Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2016	CIP	SRE Building, Phase 1 - Design - State Only	\$50,000	-
2016	CIP	TCC-16-01 Upgrade and Repair fuel farm piping and storage	\$160,000	-
2016	CIP	Terminal Parking Area - PH 2 - Construction	\$500,000	-
2017	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2017	CIP	Replace Septic System	\$200,000	-
2017	CIP	Snow Removal Building, Phase 2 - Construction	\$500,000	-
2017	CIP	TW and apron Reconstruction, Phase 1 - design - state only	\$100,000	-
2018	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2018	CIP	Runway 8-26 Extension, Phase 1 - Environmental	\$120,000	-
2018	CIP	TW and Apron, Phase 2 - Construction	\$1,500,000	-
2018	CIP	Wildlife Hazard Site Visit	\$50,000	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Evaluate Airport Reference Code (ARC) for primary runway	-	\$5,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2018	NMASP	Prepare noise exposure contours	-	\$5,000
2018	NMASP	Reconstruct Runway 3-21 (PCI 40-55)	-	\$2,721,670
2019	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2019	CIP	Runway 21 taxiway turn arounds	\$750,000	-
2019	CIP	Runway 8-26 Extension, Phase 2 Design - state only	\$150,000	-
2020	CIP	Annual Maintenance Grant – State Only	\$11,111	-
2020	CIP	Runway 8-26 Extension, Phase 3 - Construction	\$3,000,000	-
2020	CIP	Vacuum Sweeper	\$150,000	-
2022	CIP	Land Acquisition Runway 21	\$100,000	-
2022	CIP	Runway 3-21 Mill and Inlay	\$4,000,000	-
2022	NMASP	Apron tie downs for 40% of based aircraft and 50% of transient	-	\$200,000
2022	NMASP	Hangar storage for 60% of based aircraft and 25% of transient	-	\$200,000
2025	NMASP	Airport Layout Plan and Narrative Report	-	\$100,000
2030	NMASP	Rehabilitate Runway 8-26 (PCI 85-100)	-	\$65,930
<b>Short Term Total (2016-2021)</b>			<b>\$7,274,444</b>	<b>\$2,751,670</b>
<b>Long Term Total (2022-2035)</b>			<b>\$4,100,000</b>	<b>\$565,930</b>
<b>Airport Total</b>			<b>\$14,692,044</b>	



**TABLE 6BJ**
**New Mexico Airport System Plan  
Development Cost Summary  
Vaughn Municipal Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Maintenance Grant	\$11,110	-
2015	CIP	Mower Attachment	\$12,000	-
2016	CIP	Fencing Improvements	\$150,000	-
2017	CIP	Maintenance Grant	\$11,110	-
2017	CIP	Pavement Maintenance Runway 9/27	\$150,000	-
2017	CIP	Pilot's Lounge	\$250,000	-
2017	CIP	Runway MIRL System	\$400,000	-
2018	CIP	Apron Lighting	\$200,000	-
2018	CIP	Fuel Farm	\$250,000	-
2018	CIP	Maintenance Grant	\$11,111	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Prepare emergency response plan	-	\$5,000
2019	CIP	Action Plan	\$70,000	
2019	CIP	Maintenance Grant	-	-
2019	CIP	Pavement Maintenance Apron and Taxiways	\$150,000	-
2030	NMASP	Rehabilitate Runway 9-27 (PCI 85-100)	-	\$73,820
<b>Short Term Total (2016-2021)</b>			<b>\$1,665,331</b>	<b>\$20,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$73,820</b>
<b>Airport Total</b>			<b>\$1,759,151</b>	

**TABLE 6BK**
**New Mexico Airport System Plan  
Development Cost Summary  
Zuni-Black Rock Airport**

Year	Source	Project Name	CIP	NMASP
2015	CIP	Black Rock Heliport	\$250,000	-
2016	CIP	Annual Maintenance Grant	\$11,111	-
2017	CIP	Annual Maintenance Grant	\$11,111	-
2017	CIP	New Airport Construction Apron/Hangars-Construction	\$750,000	-
2018	CIP	Annual Maintenance Grant	\$11,111	-
2018	NMASP	Adopt height and hazard zoning	-	\$15,000
2018	NMASP	Airport Layout Plan update and Narrative Report	-	\$80,000
2025	NMASP	Pilots lounge with phones and restroom	-	\$150,000
<b>Short Term Total (2016-2021)</b>			<b>\$1,033,333</b>	<b>\$95,000</b>
<b>Long Term Total (2022-2035)</b>			<b>\$0</b>	<b>\$150,000</b>
<b>Airport Total</b>			<b>\$1,278,333</b>	







APPENDIX A

# ECONOMIC IMPACT BY AIRPORT

## COMMERCIAL SERVICE AIRPORTS

**Table A1**  
**Albuquerque International Sunport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	2,975	\$192,578,000	\$612,446,000
Commercial Service Visitors	6,465	155,786,000	565,801,000
General Aviation Visitors	95	2,260,000	7,553,000
<b>Direct Impact</b>	<b>9,535</b>	<b>\$350,624,000</b>	<b>\$1,185,800,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2,524	\$99,460,000	\$292,580,000
Commercial Service Visitors	2,233	89,616,000	297,895,000
General Aviation Visitors	32	1,289,000	4,451,000
<b>Secondary Impact</b>	<b>4,789</b>	<b>\$190,365,000</b>	<b>\$594,926,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	5,499	\$292,038,000	\$905,026,000
Commercial Service Visitors	8,698	245,402,000	863,696,000
General Aviation Visitors	127	3,549,000	12,004,000
<b>Total Impact</b>	<b>14,324</b>	<b>\$540,989,000</b>	<b>\$1,780,726,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$28,998,000.

**Table A2**  
**Carlsbad – Cavern City Air Terminal**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	75	\$6,742,000	\$41,127,000
Commercial Service Visitors	3	62,000	339,000
General Aviation Visitors	2	50,000	177,000
<b>Direct Impact</b>	<b>80</b>	<b>\$6,854,000</b>	<b>\$41,643,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	43	\$1,956,000	\$6,455,000
Commercial Service Visitors	1	33,000	113,000
General Aviation Visitors	1	20,000	55,000
<b>Secondary Impact</b>	<b>45</b>	<b>\$2,009,000</b>	<b>\$6,623,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	118	\$8,698,000	\$47,582,000
Commercial Service Visitors	4	95,000	452,000
General Aviation Visitors	3	70,000	232,000
<b>Total Impact</b>	<b>125</b>	<b>\$8,863,000</b>	<b>\$48,266,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$542,200.

**Table A3**  
**Clovis Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	58	\$2,472,000	\$6,497,000
Commercial Service Visitors	5	109,000	399,000
General Aviation Visitors	22	544,000	1,830,000
<b>Direct Impact</b>	<b>85</b>	<b>\$3,125,000</b>	<b>\$8,726,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	22	\$782,000	\$2,907,000
Commercial Service Visitors	2	38,000	141,000
General Aviation Visitors	5	181,000	670,000
<b>Secondary Impact</b>	<b>29</b>	<b>\$1,001,000</b>	<b>\$3,718,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	80	\$325,400	\$9,404,000
Commercial Service Visitors	7	147,000	540,000
General Aviation Visitors	27	724,000	2,500,000
<b>Total Impact</b>	<b>114</b>	<b>\$4,125,000</b>	<b>\$12,444,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,467,400.

**Table A4**  
**Farmington Four Corners Regional Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	103	\$6,442,000	\$19,694,000
Commercial Service Visitors	18	407,000	1,557,000
General Aviation Visitors	13	303,000	2,072,000
<b>Direct Impact</b>	<b>134</b>	<b>\$7,152,000</b>	<b>\$23,323,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	62	\$2,562,000	\$8,068,000
Commercial Service Visitors	5	174,000	590,000
General Aviation Visitors	5	191,000	658,000
<b>Secondary Impact</b>	<b>72</b>	<b>\$2,927,000</b>	<b>\$9,316,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	165	\$9,004,000	\$27,762,000
Commercial Service Visitors	23	581,000	2,147,000
General Aviation Visitors	18	494,000	2,730,000
<b>Total Impact</b>	<b>206</b>	<b>\$10,079,000</b>	<b>\$32,639,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,672,800.

**Table A5**  
**Lea County – Hobbs Regional Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	44	\$2,847,000	\$7,919,000
Commercial Service Visitors	34	893,000	3,211,000
General Aviation Visitors	12	353,000	1,286,000
<b>Direct Impact</b>	<b>90</b>	<b>\$4,093,000</b>	<b>\$12,416,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	17	\$757,000	\$2,456,000
Commercial Service Visitors	8	335,000	1,149,000
General Aviation Visitors	5	133,000	331,000
<b>Secondary Impact</b>	<b>30</b>	<b>\$1,225,000</b>	<b>\$3,936,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	61	\$3,604,000	\$10,375,000
Commercial Service Visitors	42	1,228,000	4,360,000
General Aviation Visitors	17	486,000	1,617,000
<b>Total Impact</b>	<b>120</b>	<b>\$5,318,000</b>	<b>\$16,352,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$596,200.

**Table A6**  
**Los Alamos County Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	15	\$852,000	\$5,659,000
Commercial Service Visitors	4	120,000	702,000
General Aviation Visitors	4	130,000	362,000
<b>Direct Impact</b>	<b>23</b>	<b>\$1,102,000</b>	<b>\$6,723,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	8	\$340,000	\$1,088,000
Commercial Service Visitors	1	19,000	61,000
General Aviation Visitors	1	20,000	65,000
<b>Secondary Impact</b>	<b>10</b>	<b>\$379,000</b>	<b>\$1,214,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	23	\$1,192,000	\$6,747,000
Commercial Service Visitors	5	139,000	763,000
General Aviation Visitors	5	150,000	427,000
<b>Total Impact</b>	<b>33</b>	<b>\$1,481,000</b>	<b>\$7,937,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,190,500.

**Table A7**  
**Roswell International Air Center**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	748	\$34,507,000	\$59,300,000
Commercial Service Visitors	52	1,463,000	7,129,000
General Aviation Visitors	30	730,000	1,848,000
<b>Direct Impact</b>	<b>830</b>	<b>\$36,700,000</b>	<b>\$68,277,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	219	\$7,444,000	\$25,481,000
Commercial Service Visitors	11	357,000	2,290,000
General Aviation Visitors	6	233,000	813,000
<b>Secondary Impact</b>	<b>236</b>	<b>\$8,034,000</b>	<b>\$28,584,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	967	\$41,951,000	\$84,781,000
Commercial Service Visitors	63	1,820,000	9,419,000
General Aviation Visitors	36	963,000	2,661,000
<b>Total Impact</b>	<b>1,066</b>	<b>\$4,734,000</b>	<b>\$96,861,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$3,299,400.

**Table A8**  
**Santa Fe Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	148	\$9,563,000	\$22,579,000
Commercial Service Visitors	261	8,463,000	23,638,000
General Aviation Visitors	65	2,070,000	5,674,000
<b>Direct Impact</b>	<b>474</b>	<b>\$20,096,000</b>	<b>\$51,891,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	96	\$4,417,000	\$12,394,000
Commercial Service Visitors	88	3,708,000	11,383,000
General Aviation Visitors	22	908,000	2,556,000
<b>Secondary Impact</b>	<b>206</b>	<b>\$9,033,000</b>	<b>\$26,333,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	244	\$13,980,000	\$34,973,000
Commercial Service Visitors	349	12,171,000	35,021,000
General Aviation Visitors	87	2,978,000	8,230,000
<b>Total Impact</b>	<b>680</b>	<b>\$29,129,000</b>	<b>\$78,224,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$3,513,400.

**Table A9**  
**Grant County-Silver City Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	19	\$1,136,000	\$3,125,000
Commercial Service Visitors	1	36,000	130,000
General Aviation Visitors	2	46,000	156,000
<b>Direct Impact</b>	<b>22</b>	<b>\$1,218,000</b>	<b>\$3,411,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	7	\$222,000	\$878,000
Commercial Service Visitors	1	11,000	43,000
General Aviation Visitors	1	14,000	41,000
<b>Secondary Impact</b>	<b>9</b>	<b>\$247,000</b>	<b>\$962,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	26	\$1,358,000	\$4,003,000
Commercial Service Visitors	2	47,000	173,000
General Aviation Visitors	3	60,000	197,000
<b>Total Impact</b>	<b>31</b>	<b>\$1,465,000</b>	<b>\$4,373,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$422,900.



## GENERAL AVIATION AIRPORTS

**Table A10**

**Alamogordo-White Sands Regional Airport**

**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	46	\$2,030,000	\$7,162,000
General Aviation Visitors	29	711,000	2,456,000
<b>Direct Impact</b>	<b>75</b>	<b>\$2,741,000</b>	<b>\$9,618,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	16	\$553,000	\$2,220,000
General Aviation Visitors	7	191,000	818,000
<b>Secondary Impact</b>	<b>23</b>	<b>\$744,000</b>	<b>\$3,038,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	52	\$2,583,000	\$9,382,000
General Aviation Visitors	36	902,000	3,274,000
<b>Total Impact</b>	<b>98</b>	<b>\$3,485,000</b>	<b>\$12,656,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,547,000.

**Table A11**

**Double Eagle II Airport**

**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	97	\$5,628,000	\$15,216,000
General Aviation Visitors	82	1,962,000	6,652,000
<b>Direct Impact</b>	<b>179</b>	<b>\$7,590,000</b>	<b>\$21,868,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	81	\$3,497,000	\$10,335,000
General Aviation Visitors	28	1,116,000	3,094,000
<b>Secondary Impact</b>	<b>109</b>	<b>\$4,613,000</b>	<b>\$13,429,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	178	\$9,125,000	\$25,551,000
General Aviation Visitors	110	3,078,000	9,746,000
<b>Total Impact</b>	<b>288</b>	<b>\$12,203,000</b>	<b>\$35,297,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,750,500.

**Table A12**  
**Angel Fire-Colfax County Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	6	\$211,000	\$875,000
General Aviation Visitors	28	729,000	2,025,000
<b>Direct Impact</b>	<b>34</b>	<b>\$940,000</b>	<b>\$2,900,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$239,000	\$836,000
General Aviation Visitors	7	176,000	767,000
<b>Secondary Impact</b>	<b>11</b>	<b>\$415,000</b>	<b>\$1,603,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	10	\$450,000	\$1,711,000
General Aviation Visitors	35	905,000	2,792,000
<b>Total Impact</b>	<b>45</b>	<b>\$1,355,000</b>	<b>\$4,503,000</b>
Employment, payroll and output include annual average capital improvement expenditures of \$642,000.			

**Table A13**  
**Artesia Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	6	\$353,000	\$1,016,000
General Aviation Visitors	15	355,000	1,098,000
<b>Direct Impact</b>	<b>21</b>	<b>\$708,000</b>	<b>\$2,114,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$183,000	\$568,000
General Aviation Visitors	4	127,000	437,000
<b>Secondary Impact</b>	<b>8</b>	<b>\$310,000</b>	<b>\$1,005,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	10	\$536,000	\$1,584,000
General Aviation Visitors	19	482,000	1,535,000
<b>Total Impact</b>	<b>29</b>	<b>\$1,018,000</b>	<b>\$3,119,000</b>
Employment, payroll and output include annual average capital improvement expenditures of \$202,000.			

**Table A14**  
**Aztec Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	9	\$553,000	\$2,157,000
General Aviation Visitors	12	273,000	1,050,000
<b>Direct Impact</b>	<b>21</b>	<b>\$826,000</b>	<b>\$3,207,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	10	\$453,000	\$1,386,000
General Aviation Visitors	3	117,000	397,000
<b>Secondary Impact</b>	<b>13</b>	<b>\$570,000</b>	<b>\$1,783,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	19	\$1,006,000	\$3,543,000
General Aviation Visitors	15	390,000	1,447,000
<b>Total Impact</b>	<b>34</b>	<b>\$1,396,000</b>	<b>\$4,990,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$320,900.

**Table A15**  
**Belen-Alexander Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	58	\$2,609,000	\$7,818,000
General Aviation Visitors	14	317,000	1,158,000
<b>Direct Impact</b>	<b>72</b>	<b>\$2,926,000</b>	<b>\$8,976,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	23	\$716,000	\$2,587,000
General Aviation Visitors	3	75,000	313,000
<b>Secondary Impact</b>	<b>26</b>	<b>\$791,000</b>	<b>\$2,900,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	81	\$3,325,000	\$10,405,000
General Aviation Visitors	17	392,000	1,471,000
<b>Total Impact</b>	<b>98</b>	<b>\$3,717,000</b>	<b>\$11,876,000</b>

**Table A16**  
**Carrizozo Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$333,000	\$776,000
General Aviation Visitors	1	23,000	71,000
<b>Direct Impact</b>	<b>5</b>	<b>\$356,000</b>	<b>\$847,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$133,000	\$487,000
General Aviation Visitors	1	7,000	32,000
<b>Secondary Impact</b>	<b>5</b>	<b>\$140,000</b>	<b>\$519,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8	\$466,000	\$1,263,000
General Aviation Visitors	2	30,000	103,000
<b>Total Impact</b>	<b>10</b>	<b>\$496,000</b>	<b>\$1,366,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$213,100.

**Table A17**  
**Clayton Municipal Airpark**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$153,000	\$738,000
General Aviation Visitors	4	\$87,000	\$276,000
<b>Direct Impact</b>	<b>8</b>	<b>\$240,000</b>	<b>\$1,014,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3	\$58,000	\$306,000
General Aviation Visitors	1	19,000	82,000
<b>Secondary Impact</b>	<b>4</b>	<b>\$77,000</b>	<b>\$388,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	7	\$211,000	\$1,044,000
General Aviation Visitors	5	107,000	358,000
<b>Total Impact</b>	<b>12</b>	<b>\$318,000</b>	<b>\$1,402,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$203,200.

**Table A18**  
**Conchas Lake Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	12	\$1,137,000	\$3,027,000
General Aviation Visitors	1	10,000	51,000
<b>Direct Impact</b>	<b>13</b>	<b>\$1,147,000</b>	<b>\$3,078,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	5	\$162,000	\$592,000
General Aviation Visitors	1	3,000	14,000
<b>Secondary Impact</b>	<b>6</b>	<b>\$165,000</b>	<b>\$606,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	17	\$1,299,000	\$3,619,000
General Aviation Visitors	2	13,000	65,000
<b>Total Impact</b>	<b>19</b>	<b>\$1,312,000</b>	<b>\$3,684,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$66,700.

**Table A19**  
**Crownpoint Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$182,000	\$788,000
General Aviation Visitors		2,000	12,000
<b>Direct Impact</b>	<b>3</b>	<b>\$184,000</b>	<b>\$800,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$66,000	\$265,000
General Aviation Visitors			3,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$66,000</b>	<b>\$268,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	5	\$248,000	\$1,053,000
General Aviation Visitors		1,500	15,000
<b>Total Impact</b>	<b>5</b>	<b>\$249,500</b>	<b>\$1,068,000</b>

**Table A20**  
**Deming Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	17	\$1,876,000	\$4,221,000
General Aviation Visitors	19	482,000	1,040,000
<b>Direct Impact</b>	<b>36</b>	<b>\$2,358,000</b>	<b>\$5,261,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	9	\$303,000	\$1,030,000
General Aviation Visitors	4	185,000	639,000
<b>Secondary Impact</b>	<b>13</b>	<b>\$488,000</b>	<b>\$1,669,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	26	\$2,179,000	\$5,251,000
General Aviation Visitors	23	666,000	1,679,000
<b>Total Impact</b>	<b>49</b>	<b>\$2,845,000</b>	<b>\$6,930,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$472,500.

**Table A21**  
**Dulce-Jicarilla Apache Nation Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$117,000	\$637,000
General Aviation Visitors	1	13,000	37,000
<b>Direct Impact</b>	<b>4</b>	<b>\$130,000</b>	<b>\$674,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$56,000	\$241,000
General Aviation Visitors		2,000	13,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$58,000</b>	<b>\$254,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	5	\$173,000	\$878,000
General Aviation Visitors	1	15,000	50,000
<b>Total Impact</b>	<b>6</b>	<b>\$188,000</b>	<b>\$928,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$150,100.



**Table A22**  
**Ohkay Owingeh Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	7	\$246,000	\$1,329,000
General Aviation Visitors	3	95,000	252,000
<b>Direct Impact</b>	<b>10</b>	<b>\$341,000</b>	<b>\$1,581,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$116,000	\$499,000
General Aviation Visitors	1	19,000	82,000
<b>Secondary Impact</b>	<b>5</b>	<b>\$135,000</b>	<b>\$581,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	11	\$362,000	\$1,828,000
General Aviation Visitors	4	113,000	334,000
<b>Total Impact</b>	<b>15</b>	<b>\$475,000</b>	<b>\$2,162,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$354,500.

**Table A23**  
**Estancia Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$148,000	\$753,000
<b>Direct Impact</b>	<b>3</b>	<b>\$148,000</b>	<b>\$753,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$76,000	\$328,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$76,000</b>	<b>\$328,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	5	\$224,000	\$1,081,000
<b>Total Impact</b>	<b>5</b>	<b>\$224,000</b>	<b>\$1,081,000</b>

**Table A24**  
**Fort Sumner Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$156,000	\$702,000
General Aviation Visitors	1	3,000	5,000
<b>Direct Impact</b>	<b>4</b>	<b>\$159,000</b>	<b>\$707,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3	\$38,000	\$260,000
General Aviation Visitors			3,000
<b>Secondary Impact</b>	<b>3</b>	<b>\$38,000</b>	<b>\$263,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	6	\$194,000	\$962,000
General Aviation Visitors	1	3,000	8,000
<b>Total Impact</b>	<b>7</b>	<b>\$197,000</b>	<b>\$970,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$164,000.

**Table A25**  
**Gallup Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	92	\$3,577,000	\$10,364,000
General Aviation Visitors	2	56,000	247,000
<b>Direct Impact</b>	<b>94</b>	<b>\$3,633,000</b>	<b>\$10,611,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	32	\$929,000	\$3,700,000
General Aviation Visitors	1	18,000	55,000
<b>Secondary Impact</b>	<b>33</b>	<b>\$947,000</b>	<b>\$3,755,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	124	\$4,506,000	\$14,064,000
General Aviation Visitors	3	74,000	302,000
<b>Total Impact</b>	<b>127</b>	<b>\$4,580,000</b>	<b>\$14,366,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$662,700.

**Table A26**  
**Glenwood-Catron County Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$62,000	\$264,000
<b>Direct Impact</b>	<b>1</b>	<b>\$62,000</b>	<b>\$264,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$14,000	\$84,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$14,000</b>	<b>\$84,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$76,000	\$348,000
<b>Total Impact</b>	<b>2</b>	<b>\$76,000</b>	<b>\$348,000</b>

**Table A27**  
**Grants-Milan Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$68,000	\$308,000
General Aviation Visitors	5	117,000	387,000
<b>Direct Impact</b>	<b>6</b>	<b>\$185,000</b>	<b>\$695,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$23,000	\$79,000
General Aviation Visitors	2	29,000	107,000
<b>Secondary Impact</b>	<b>3</b>	<b>\$52,000</b>	<b>\$186,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$91,000	\$387,000
General Aviation Visitors	7	146,000	494,000
<b>Total Impact</b>	<b>9</b>	<b>\$237,000</b>	<b>\$881,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$52,900.

**Table A28**  
**Hatch Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	2	\$126,000	\$451,000
<b>Direct Impact</b>	<b>2</b>	<b>\$126,000</b>	<b>\$454,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$79,000	\$248,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$79,000</b>	<b>\$248,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	4	\$205,000	\$699,000
<b>Total Impact</b>	<b>4</b>	<b>\$205,000</b>	<b>\$699,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$174,900.

**Table A29**  
**Lea County - Jal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$96,000	\$308,000
General Aviation Visitors	4	107,000	384,000
<b>Direct Impact</b>	<b>5</b>	<b>\$203,000</b>	<b>\$692,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$72,000	\$212,000
General Aviation Visitors	3	41,000	130,000
<b>Secondary Impact</b>	<b>4</b>	<b>\$113,000</b>	<b>\$342,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$168,000	\$520,000
General Aviation Visitors	7	148,000	514,000
<b>Total Impact</b>	<b>9</b>	<b>\$316,000</b>	<b>\$1,034,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$17,000.

**Table A30**  
**Las Cruces International Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	94	\$7,922,000	\$20,514,000
General Aviation Visitors	30	816,000	1,544,000
<b>Direct Impact</b>	<b>124</b>	<b>\$8,738,000</b>	<b>\$22,058,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	53	\$1,836,000	\$5,892,000
General Aviation Visitors	6	214,000	704,000
<b>Secondary Impact</b>	<b>59</b>	<b>\$2,050,000</b>	<b>\$6,596,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	147	\$9,758,000	\$26,406,000
General Aviation Visitors	36	1,030,000	2,248,000
<b>Total Impact</b>	<b>183</b>	<b>\$10,788,000</b>	<b>\$28,654,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,404,400.

**Table A31**  
**Las Vegas Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	7	\$204,000	\$812,000
General Aviation Visitors	15	320,000	1,075,000
<b>Direct Impact</b>	<b>22</b>	<b>\$524,000</b>	<b>\$1,887,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$76,000	\$285,000
General Aviation Visitors	3	119,000	314,000
<b>Secondary Impact</b>	<b>5</b>	<b>\$195,000</b>	<b>\$599,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	9	\$280,000	\$1,097,000
General Aviation Visitors	18	439,000	1,389,000
<b>Total Impact</b>	<b>27</b>	<b>\$719,000</b>	<b>\$2,486,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$552,500.

**Table A32**  
**Lindrith Airpark**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	2	\$84,000	\$487,000
<b>Direct Impact</b>	<b>2</b>	<b>\$84,000</b>	<b>\$487,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$46,000	\$196,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$46,000</b>	<b>\$196,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	3	\$130,000	\$683,000
<b>Total Impact</b>	<b>3</b>	<b>\$130,000</b>	<b>\$683,000</b>

**Table A33**  
**Lordsburg Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$74,000	\$499,000
General Aviation Visitors	1	24,000	69,000
<b>Direct Impact</b>	<b>4</b>	<b>\$98,000</b>	<b>\$568,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$22,000	\$107,000
General Aviation Visitors	1	4,000	14,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$26,000</b>	<b>\$121,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	4	\$96,000	\$606,000
General Aviation Visitors	2	28,000	83,000
<b>Total Impact</b>	<b>6</b>	<b>\$124,000</b>	<b>\$689,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$243,200.



**Table A34****Lea County-Zip Franklin Memorial Airport****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$107,000	\$333,000
General Aviation Visitors	2	48,000	169,000
<b>Direct Impact</b>	<b>3</b>	<b>\$155,000</b>	<b>\$502,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$75,000	\$223,000
General Aviation Visitors	1	19,200	50,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$94,200</b>	<b>\$273,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$182,000	\$556,000
General Aviation Visitors	3	67,000	219,000
<b>Total Impact</b>	<b>5</b>	<b>\$249,000</b>	<b>\$775,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$41,600.

**Table A35****Magdalena Airport****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	2	\$125,000	\$539,000
General Aviation Visitors	1	17,000	34,000
<b>Direct Impact</b>	<b>3</b>	<b>\$142,000</b>	<b>\$573,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$37,000	\$154,000
General Aviation Visitors		3,000	10,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$40,000</b>	<b>\$164,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	3	\$162,000	\$693,000
General Aviation Visitors	1	20,000	44,000
<b>Total Impact</b>	<b>4</b>	<b>\$182,000</b>	<b>\$737,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$12,500.

**Table A36**  
**Moriarty Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	137	\$5,768,000	\$9,330,000
General Aviation Visitors	3	75,000	331,000
<b>Direct Impact</b>	<b>140</b>	<b>\$5,843,000</b>	<b>\$9,661,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	22	\$568,000	\$2,855,000
General Aviation Visitors	1	14,000	68,000
<b>Secondary Impact</b>	<b>23</b>	<b>\$582,000</b>	<b>\$2,923,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	159	\$6,336,000	\$12,185,000
General Aviation Visitors	4	89,000	399,000
<b>Total Impact</b>	<b>163</b>	<b>\$6,425,000</b>	<b>\$12,584,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$919,800.

**Table A37**  
**Mountainair Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$175,000	\$853,000
<b>Direct Impact</b>	<b>4</b>	<b>\$175,000</b>	<b>\$853,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3	\$82,000	\$351,000
<b>Secondary Impact</b>	<b>3</b>	<b>\$82,000</b>	<b>\$351,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	7	\$257,000	\$1,204,000
<b>Total Impact</b>	<b>7</b>	<b>\$257,000</b>	<b>\$1,204,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$99,700.

**Table A38**  
**Navajo Lake Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$3,000	\$9,000
General Aviation Visitors	1		12,000
<b>Direct Impact</b>	<b>2</b>	<b>\$3,000</b>	<b>\$21,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$1,000	\$4,000
General Aviation Visitors			3,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$1,000</b>	<b>\$7,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$4,000	\$13,000
General Aviation Visitors	1		15,000
<b>Total Impact</b>	<b>3</b>	<b>\$4,000</b>	<b>\$28,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$9,000.

**Table A39**  
**Portales Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	10	\$445,000	\$2,145,000
General Aviation Visitors	26	515,000	1,000,000
<b>Direct Impact</b>	<b>36</b>	<b>\$960,000</b>	<b>\$3,145,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$122,000	\$469,000
General Aviation Visitors	4	90,000	403,000
<b>Secondary Impact</b>	<b>8</b>	<b>\$212,000</b>	<b>\$872,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	14	\$567,000	\$2,614,000
General Aviation Visitors	30	604,000	1,403,000
<b>Total Impact</b>	<b>44</b>	<b>\$1,171,000</b>	<b>\$4,017,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$224,200.

**Table A40****Questa Municipal No. 2 Airport****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$188,000	\$813,000
General Aviation Visitors	1	4,000	11,000
<b>Direct Impact</b>	<b>5</b>	<b>\$192,000</b>	<b>\$824,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	4	\$124,000	\$509,000
General Aviation Visitors		2,000	4,000
<b>Secondary Impact</b>	<b>4</b>	<b>\$126,000</b>	<b>\$513,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8	\$312,000	\$1,322,000
General Aviation Visitors	1	7,000	15,000
<b>Total Impact</b>	<b>9</b>	<b>\$319,000</b>	<b>\$1,337,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$304,200.

**Table A41****Raton Crews Field Municipal Airport****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	16	\$646,000	\$2,500,000
General Aviation Visitors	11	293,000	849,000
<b>Direct Impact</b>	<b>27</b>	<b>\$939,000</b>	<b>\$3,349,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	10	\$311,000	\$1,178,000
General Aviation Visitors	3	70,000	280,000
<b>Secondary Impact</b>	<b>13</b>	<b>\$381,000</b>	<b>\$1,458,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	26	\$957,000	\$3,678,000
General Aviation Visitors	14	363,000	1,129,000
<b>Total Impact</b>	<b>40</b>	<b>\$1,320,000</b>	<b>\$4,807,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$1,421,000.

**Table A42**  
**Reserve Catron County Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$4,000	\$20,000
General Aviation Visitors	1	2,000	7,000
<b>Direct Impact</b>	<b>2</b>	<b>\$6,000</b>	<b>\$27,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$1,000	\$4,000
General Aviation Visitors			2,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$1,000</b>	<b>\$6,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$5,000	\$24,000
General Aviation Visitors	1	2,000	9,000
<b>Total Impact</b>	<b>3</b>	<b>\$7,000</b>	<b>\$33,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$19,500.

**Table A43**  
**Sierra Blanca Regional Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	16	\$1,165,000	\$3,727,000
General Aviation Visitors	45	1,316,000	4,745,000
<b>Direct Impact</b>	<b>61</b>	<b>\$2,481,000</b>	<b>\$8,472,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	19	\$650,000	\$2,500,000
General Aviation Visitors	16	500,000	1,946,000
<b>Secondary Impact</b>	<b>35</b>	<b>\$1,150,000</b>	<b>\$4,446,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	35	\$1,815,000	\$6,227,000
General Aviation Visitors	61	1,816,000	6,691,000
<b>Total Impact</b>	<b>96</b>	<b>\$3,631,000</b>	<b>\$12,918,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$385,000.

**Table A44****Santa Rose Route 66 Airport****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	11	\$533,000	\$2,386,000
General Aviation Visitors	1	21,000	81,000
<b>Direct Impact</b>	<b>12</b>	<b>\$554,000</b>	<b>\$2,467,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	6	\$144,000	\$738,000
General Aviation Visitors	1	3,000	21,000
<b>Secondary Impact</b>	<b>7</b>	<b>\$147,000</b>	<b>\$759,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	17	\$677,000	\$3,124,000
General Aviation Visitors	2	24,000	102,000
<b>Total Impact</b>	<b>19</b>	<b>\$701,000</b>	<b>\$3,226,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$599,600.

**Table A45****Dona Ana County Jetport At Santa Teresa****Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	54	\$4,961,000	\$11,068,000
General Aviation Visitors	36	986,000	1,864,000
<b>Direct Impact</b>	<b>90</b>	<b>\$5,947,000</b>	<b>\$12,932,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	38	\$1,385,000	\$4,281,000
General Aviation Visitors	7	259,000	852,000
<b>Secondary Impact</b>	<b>45</b>	<b>\$1,644,000</b>	<b>\$5,133,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	92	\$6,346,000	\$15,349,000
General Aviation Visitors	43	1,245,000	2,716,000
<b>Total Impact</b>	<b>135</b>	<b>\$7,591,000</b>	<b>\$18,065,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$931,700.



**Table A46**  
**Shiprock Airstrip**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	3	\$121,000	\$525,000
General Aviation Visitors	1	7,000	31,000
<b>Direct Impact</b>	<b>4</b>	<b>\$128,000</b>	<b>\$556,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$34,000	\$107,000
General Aviation Visitors		3,000	12,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$37,000</b>	<b>\$119,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	4	\$155,000	\$632,000
General Aviation Visitors	1	10,000	43,000
<b>Total Impact</b>	<b>5</b>	<b>\$165,000</b>	<b>\$675,000</b>

**Table A47**  
**Socorro Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$109,000	\$503,000
General Aviation Visitors	2	60,000	173,000
<b>Direct Impact</b>	<b>6</b>	<b>\$169,000</b>	<b>\$676,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$31,000	\$127,000
General Aviation Visitors	1	12,000	44,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$43,000</b>	<b>\$171,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	5	\$140,000	\$630,000
General Aviation Visitors	3	72,000	217,000
<b>Total Impact</b>	<b>8</b>	<b>\$212,000</b>	<b>\$847,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$239,500.

**Table A48**  
**Springer Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	2	\$109,000	\$428,000
<b>Direct Impact</b>	<b>2</b>	<b>\$109,000</b>	<b>\$428,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$55,000	\$215,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$55,000</b>	<b>\$215,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	4	\$164,000	\$643,000
<b>Total Impact</b>	<b>4</b>	<b>\$164,000</b>	<b>\$643,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$164,500.

**Table A49**  
**Taos Regional Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	28	\$1,427,000	\$4,586,000
General Aviation Visitors	77	2,392,000	6,635,000
<b>Direct Impact</b>	<b>105</b>	<b>\$3,819,000</b>	<b>\$11,221,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	20	\$593,000	\$2,364,000
General Aviation Visitors	23	739,000	2,824,000
<b>Secondary Impact</b>	<b>43</b>	<b>\$1,332,000</b>	<b>\$5,188,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	48	\$2,020,000	\$6,950,000
General Aviation Visitors	100	3,131,000	9,459,000
<b>Total Impact</b>	<b>148</b>	<b>\$5,151,000</b>	<b>\$16,409,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$2,338,000.

**Table A50**  
**Tatum Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	1	\$11,000	\$25,000
<b>Direct Impact</b>	<b>1</b>	<b>\$11,000</b>	<b>\$25,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	1	\$3,000	\$11,000
<b>Secondary Impact</b>	<b>1</b>	<b>\$3,000</b>	<b>\$11,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	2	\$14,000	\$36,000
<b>Total Impact</b>	<b>2</b>	<b>\$14,000</b>	<b>\$36,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$25,000.

**Table A51**  
**Truth Or Consequences Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	5	\$251,000	\$924,000
General Aviation Visitors	11	313,000	867,000
<b>Direct Impact</b>	<b>16</b>	<b>\$564,000</b>	<b>\$1,791,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3	\$88,000	\$380,000
General Aviation Visitors	2	60,000	277,000
<b>Secondary Impact</b>	<b>5</b>	<b>\$148,000</b>	<b>\$657,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8	\$339,000	\$1,304,000
General Aviation Visitors	13	374,000	1,144,000
<b>Total Impact</b>	<b>21</b>	<b>\$713,000</b>	<b>\$2,448,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$380,700.

**Table A52**  
**Tucumcari Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	5	\$216,000	\$920,000
General Aviation Visitors	38	1,130,000	3,072,000
<b>Direct Impact</b>	<b>43</b>	<b>\$1,346,000</b>	<b>\$3,992,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	3	\$96,000	\$370,000
General Aviation Visitors	8	256,000	989,000
<b>Secondary Impact</b>	<b>11</b>	<b>\$352,000</b>	<b>\$1,359,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8	\$312,000	\$1,290,000
General Aviation Visitors	46	1,386,000	4,061,000
<b>Total Impact</b>	<b>54</b>	<b>\$1,698,000</b>	<b>\$5,351,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$419,000.

**Table A53**  
**Vaughn Municipal Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	4	\$190,000	\$877,000
<b>Direct Impact</b>	<b>4</b>	<b>\$190,000</b>	<b>\$877,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$55,000	\$277,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$55,000</b>	<b>\$277,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	6	\$245,000	\$1,154,000
<b>Total Impact</b>	<b>6</b>	<b>\$245,000</b>	<b>\$1,154,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$111,400.

**Table A54**  
**Zuni Black Rock Airport**  
**Total Economic Impacts**

Source	Employment	Payroll	Output
<b>Direct Economic Impact</b>			
On-Airport Activity	6	\$248,000	\$983,000
<b>Direct Impact</b>	<b>6</b>	<b>\$248,000</b>	<b>\$983,000</b>
<b>Secondary Economic Impact</b>			
On-Airport Activity	2	\$53,000	\$279,000
<b>Secondary Impact</b>	<b>2</b>	<b>\$53,000</b>	<b>\$279,000</b>
<b>Total Economic Impact</b>			
On-Airport Activity	8	\$301,000	\$1,262,000
<b>Total Impact</b>	<b>8</b>	<b>\$301,000</b>	<b>\$1,262,000</b>

Employment, payroll and output include annual average capital improvement expenditures of \$728,300.



APPENDIX B

## SUMMARY INFORMATION



## **Appendix B**

### **SUMMARY INFORMATION**

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This appendix includes a detailed summary of the information provided in Chapter 1 in the following tables. The information was initially collected in 2014.

- B1     Airport Code
- B2     Taxiway System Type for Primary Runway by Airport
- B3     Rotating Beacons by Airport
- B4     Runway Edge Lighting By Runway
- B5     Approach Lighting Systems by Runway End
- B6     Instrument Landing Systems by Runway End
- B7     Other Navigational Aids by Runway End
- B8     Approach Procedures by Runway End
- B9     Wind Cones by Airport
- B10    Fuel Types by Airport
- B11    Fuel Service by Airport
- B12    General Aviation Amenities by Airport

**Table B1**  
**Airport Codes**

Airport Code	Airport	Airport Code	Airport
0E8	Crownpoint Airport	FSU	Ft. Sumner Municipal Airport
0E0	Moriarty Municipal Airport	GNT	Grants-Milan Municipal Airport
13Q	Jewett Mesa Airport	GUP	Gallup Municipal Airport
18T	Tatum Airport	HOB	Lea County Regional Airport
1V0	Navajo Lake Airport	LAM	Los Alamos County Airport
24N	Dulce-Jicarilla Apache Nation Airport	LRU	Las Cruces International Airport
5T6	Doña Ana County Jetport at Santa Teresa	LSB	Lordsburg Municipal Airport
5V5	Shiprock Airstrip	LVS	Las Vegas Municipal Airport
ABQ	Albuquerque International Sunport	M10	Mountainair Airport
AEG	Double Eagle II Airport	N01	Mosquero Heliport
ALM	Alamogordo-White Sands Airport	N02	Red River Heliport
ATS	Artesia Municipal Airport	N17	Vaughn Municipal Airport
AXX	Angel Fire - Colfax County Airport	N19	Aztec Municipal Airport
C12	Cimarron Heliport	N24	Questa Municipal No. 2 Airport
C54	Catron County Heliport	N29	Magdalena Airport
CAO	Clayton Municipal Airpark	ONM	Socorro Municipal Airport
CNM	Carlsbad - Cavern City Air Terminal	Proposed	Sandoval County Airport
CVN	Clovis Municipal Airport	PRZ	Portales Municipal Airport
DMN	Deming Municipal Airport	ROW	Roswell International Air Center
E05	Hatch Municipal Airport	RTN	Raton Crews Field Municipal Airport
E06	Lea County-Zip Franklin Memorial Airport	S42	Springer Municipal Airport
E14	Ohkay Owingeh Airport	SAF	Santa Fe Municipal Airport
E26	Lea County-Jal Airport	SKX	Taos Regional Airport
E32	Lindrith Airpark	SRR	Sierra Blanca Regional Airport
E61	Conchas Lake Seaplane Base	SVC	Grant County - Silver City Airport
E80	Belen-Alexander Municipal Airport	SXU	Santa Rosa Route 66 Airport
E89	Conchas Lake Airport	T16	Reserve Catron County Airport
E92	Estancia Municipal Airport	TCC	Tucumcari Municipal Airport
E94	Glenwood-Catron County Airport	TCS	Truth Or Consequences Municipal Airport
F37	Carrizozo Municipal Airport	ZUN	Zuni-Black Rock Airport
FMN	Farmington Four Corners Regional Airport		

**Table B2****Taxiway System Type for Primary Runway by Airport**

Airport Code	Primary Runway Taxiway Type	Airport Code	Primary Runway Taxiway Type
OE0	Full	FMN	Full
OE8	Stub	FSU	Stub
13Q	None	GNT	Full
18T	Stub	GUP	Full
1V0	Stub	HOB	Full
24N	Partial	LAM	Partial
5T6	Full	LRU	Partial
5V5	Partial	LSB	Partial
ABQ	Full	LVS	Partial
AEG	Full	M10	Stub
ALM	Full	N01	None
ATS	Partial	N02	None
AXX	Full	N17	Partial
C12	None	N19	Turn-Around
C54	None	N24	Stub
CAO	Full	N29	Stub
CNM	Full	ONM	Full
CVN	Full	PRZ	Full
DMN	Full	ROW	Full
E05	Turn-Around	RTN	Partial
E06	Full	S42	Stub
E14	Stub	SAF	Full
E26	Full	SKX	Full
E32	Stub	SRR	Full
E61	None	SVC	Full
E80	Full	SXU	Full
E89	Full	T16	Stub
E92	Stub	TCC	Partial
E94	Stub	TCS	Full
F37	Partial	ZUN	Stub

**Table B3****Rotating Beacons by Airport**

<b>Airport Code</b>	<b>Identification Lighting</b>	<b>Airport Code</b>	<b>Identification Lighting</b>
OE0	Airport Beacon	GNT	Airport Beacon
OE8	Airport Beacon	GUP	Airport Beacon
18T	Airport Beacon	HOB	Airport Beacon
24N	Airport Beacon	LAM	Airport Beacon
5T6	Airport Beacon	LRU	Airport Beacon
ABQ	Airport Beacon	LSB	Airport Beacon
AEG	Airport Beacon	LVS	Airport Beacon
ALM	Airport Beacon	N01	Airport Beacon
ATS	Airport Beacon	N02	Airport Beacon
AXX	Airport Beacon	N17	Airport Beacon
C12	Airport Beacon	N19	Airport Beacon
C54	Airport Beacon	ONM	Airport Beacon
CAO	Airport Beacon	PRZ	Airport Beacon
CNM	Airport Beacon	ROW	Airport Beacon
CVN	Airport Beacon	RTN	Airport Beacon
E05	Airport Beacon	S42	Airport Beacon
E06	Airport Beacon	SAF	Airport Beacon
E14	Airport Beacon	SKX	Airport Beacon
E26	Airport Beacon	SRR	Airport Beacon
E80	Airport Beacon	SVC	Airport Beacon
E89	Airport Beacon	SXU	Airport Beacon
E92	Airport Beacon	T16	Airport Beacon
F37	Airport Beacon	TCC	Airport Beacon
FMN	Airport Beacon	TCS	Airport Beacon
FSU	Airport Beacon	ZUN	Airport Beacon

**Table B4****Runway Edge Lighting By Runway**

Airport Code	Runway End	NAVAID Type	Airport Code	Runway End	NAVAID Type
OE8	18	MIRL	HOB	3	HIRL
OE8	36	MIRL	HOB	21	HIRL
OE0	8	MIRL	HOB	12	MIRL
OE0	26	MIRL	HOB	30	MIRL
24N	17	MIRL	LAM	9	MIRL
24N	35	MIRL	LAM	27	MIRL
5T6	10	MIRL	LRU	4	MIRL
5T6	28	MIRL	LRU	22	MIRL
ABQ	8	HIRL	LRU	12	HIRL
ABQ	26	HIRL	LRU	30	HIRL
ABQ	3	HIRL	LRU	8	MIRL
ABQ	21	HIRL	LRU	26	MIRL
ABQ	12	MIRL	LSB	12	MIRL
ABQ	30	MIRL	LSB	30	MIRL
AEG	22	MIRL	LVS	14	MIRL
AEG	4	MIRL	LVS	32	MIRL
AEG	17	MIRL	LVS	2	MIRL
AEG	35	MIRL	LVS	20	MIRL
ALM	3	MIRL	N24	17	MIRL
ALM	21	MIRL	N24	35	MIRL
ATS	3	MIRL	ONM	15	MIRL
ATS	21	MIRL	ONM	33	MIRL
ATS	12	MIRL	ONM	6	MIRL
ATS	30	MIRL	ONM	24	MIRL
AXX	17	MIRL	PRZ	1	MIRL
AXX	35	MIRL	PRZ	19	MIRL
CAO	2	MIRL	PRZ	8	MIRL
CAO	20	MIRL	PRZ	26	MIRL
CNM	3	MIRL	ROW	17	MIRL
CNM	21	MIRL	ROW	35	MIRL
CNM	8	MIRL	ROW	3	MIRL
CNM	26	MIRL	ROW	21	MIRL
CNM	14R	MIRL	RTN	2	MIRL
CNM	32L	MIRL	RTN	20	MIRL
CVN	4	MIRL	RTN	7	MIRL
CVN	22	MIRL	RTN	25	MIRL
CVN	12	MIRL	S42	1	MIRL
CVN	30	MIRL	S42	19	MIRL
E06	3	MIRL	SAF	2	MIRL
E06	21	MIRL	SAF	20	MIRL
E06	12	MIRL	SAF	15	MIRL
E06	30	MIRL	SAF	28	MIRL
E14	16	MIRL	SAF	33	MIRL
E14	34	MIRL	SAF	10	MIRL
E26	1	MIRL	SKX	4	MIRL
E26	19	MIRL	SKX	22	MIRL
E80	3	MIRL	SRR	6	MIRL
E80	21	MIRL	SRR	24	MIRL

**Table B4 (Continued)****Runway Edge Lighting By Runway**

Airport Code	Runway End	NAVAID Type	Airport Code	Runway End	NAVAID Type
E92	7	MIRL	SRR	12	MIRL
E92	25	MIRL	SRR	30	MIRL
E92	5	MIRL	SVC	8	MIRL
E92	23	MIRL	SVC	26	MIRL
F37	24	MIRL	SXU	1	MIRL
F37	6	MIRL	SXU	8	MIRL
FMN	7	MIRL	SXU	19	MIRL
FMN	25	MIRL	SXU	26	MIRL
FMN	5	MIRL	T16	6	MIRL
FMN	23	MIRL	T16	24	MIRL
FSU	8	MIRL	TCC	3	MIRL
FSU	26	MIRL	TCC	21	MIRL
FSU	3	MIRL	TCC	8	MIRL
FSU	21	MIRL	TCC	26	MIRL
GNT	13	MIRL	TCS	13	MIRL
GNT	31	MIRL	TCS	31	MIRL
GUP	6	MIRL	ZUN	6	LIRL
GUP	24	MIRL	ZUN	24	LIRL

Definitions:

MIRL – Medium Intensity Runway Lights

HIRL – High Intensity Runway Lights

**Table B5****Approach Lighting Systems by Runway End**

Airport Code	Runway End	Approach Lighting
18T	12	NSTD-ODALS
18T	30	NSTD-ODALS
ABQ	8	MALSR
ABQ	3	MALSR
AEG	22	MALSR
CNM	3	MALSR
CVN	4	MALSR
E05	11	ODALS
E05	29	ODALS
E89	9	ODALS
E89	27	ODALS
HOB	3	MALSR
HOB	21	ODALS
LRU	30	MALSR
LVS	2	NSTD-ODALS
LVS	20	NSTD-ODALS
N19	8	ODALS
ROW	21	MALSR
SVC	26	MALS

Definitions:

MALS - Medium Intensity Approach Lighting System

MALSR, MALS supplemented with runway alignment indicator lights (RAIL)

ODALS - Omnidirectional Approach Lighting System



**Table B6****Instrument Landing Systems by Runway End**

Airport Code	Runway End	Instrument Landing System Type
ABQ	8	Localizer
ABQ	8	Glideslope
ABQ	3	Localizer
ABQ	3	Glideslope
AEG	22	Localizer
AEG	22	Glideslope
CNM	3	Localizer
CNM	3	Glideslope
CVN	4	Localizer
CVN	4	Glideslope
FMN	25	Localizer
FMN	25	Glideslope
GUP	6	Localizer
HOB	3	Localizer
HOB	3	Glideslope
LRU	30	Localizer
LRU	30	Glideslope
SAF	2	Localizer
SAF	2	Glideslope
SRR	24	Localizer
SRR	24	Glideslope

**Table B7****Other Navigational Aids by Runway End**

Airport Code	Runway End	Other NAVAID	Airport Code	Runway End	Other NAVAID
OE8	18	PLASI	FMN	23	REIL
24N	17	REIL	FMN	7	VASI-4
24N	35	REIL	FMN	25	VASI-4
24N	17	PAPI-2	FMN	5	VASI-4
24N	35	PAPI-2	FMN	23	VASI-4
5T6	10	REIL	FSU	21	PLASI
5T6	28	REIL	GNT	31	PAPI-2
5T6	10	PAPI-2	GNT	13	PAPI-2
5T6	28	PAPI-4	GUP	24	REIL
ABQ	26	REIL	GUP	6	PAPI-2
ABQ	26	PAPI-4	GUP	24	PAPI-2
ABQ	3	REIL	HOB	12	PAPI-4
ABQ	3	PAPI-4	HOB	30	PAPI-4
ABQ	21	PAPI-4	LAM	27	REIL
ABQ	21	REIL	LAM	27	PAPI-2
ABQ	30	PAPI-4	LRU	8	VASI-2
ABQ	30	REIL	LRU	26	VASI-2
AEG	4	PAPI-4	LRU	12	REIL
AEG	17	REIL	LRU	22	VASI-4
AEG	35	REIL	LVS	2	PLASI
AEG	17	PAPI-4	LVS	20	PLASI

**Table B7 (Continued)**  
**Other Navigational Aids by Runway End**

Airport Code	Runway End	Other NAVAID	Airport Code	Runway End	Other NAVAID
ALM	21	REIL	N19	26	PLASI
ALM	21	VASI-4	N19	26	REIL
ALM	3	REIL	N24	17	REIL
ALM	3	PAPI-4	N24	35	REIL
ATS	12	PLASI	N24	17	PAPI-4
ATS	3	PLASI	N24	35	PAPI-4
ATS	30	PLASI	ONM	15	VASI-2
ATS	21	PLASI	ONM	33	VASI-2
AXX	17	PLASI	PRZ	19	PLASI
AXX	17	PLASI	PRZ	26	PLASI
CAO	2	PAPI-2	ROW	17	PAPI-4
CAO	20	PAPI-2	ROW	35	PAPI-4
CNM	21	VASI-4	RTN	2	PLASI
CNM	14R	PAPI-4	SAF	33	VASI-4
CNM	32L	PAPI-4	SAF	20	REIL
CVN	30	PLASI	SAF	2	VASI-4
CVN	12	REIL	SAF	20	VASI-4
CVN	30	REIL	SAF	15	REIL
CVN	4	PAPI-4	SAF	33	REIL
CVN	22	PAPI-4	SAF	15	PLASI
DMN		REIL	SKX	4	REIL
E05	11	APAP	SKX	22	REIL
E05	29	APAP	SKX	4	PAPI-2
E06	3	PLASI	SKX	22	PAPI-2
E06	21	PLASI	SRR	6	VASI-2
E80	21	PLASI	SRR	24	PLASI
E92	25	REIL	SVC	8	PAPI-4
E92	23	REIL	SVC	26	PAPI-4
E92	7	VASI-4	SVC	8	REIL
E92	25	VASI-4	SXU	19	PAPI-2
E92	5	VASI-4	SXU	26	PAPI-2
E92	23	VASI-4	T16	24	PLASI
F37	6	PAPI-2	TCC	21	VASI-4
F37	6	REIL	TCS	13	PAPI-2
F37	24	PAPI-2	TCS	31	PAPI-2
F37	24	REIL			

Definitions:

VASI - Visual Approach Slope Indicator

PAPI - Precision Approach Path Indicator

PLASI - Pulsating Visual Approach Slope Indicator

**Table B8****Approach Procedures by Runway End**

Airport Code	Runway End	Instrument Approach Type	Airport Code	Runway End	Instrument Approach Type
5T6	10	RNAV (GPS)	GUP	24	RNAV (GPS)
ABQ	21	RNAV (RNP)	GUP	6	LOC
ABQ	3	ILS or LOC	GUP		VOR
ABQ	8	HI-ILS	HOB	3	RNAV (GPS)
ABQ	26	RNAV (RNP)	HOB	21	VOR
ABQ	8	ILS or LOC	HOB	21	RNAV (GPS)
ABQ	8	RNAV (GPS)	HOB	30	RNAV (GPS)
ABQ	8	RNAV (RNP)	HOB	3	ILS or LOC
ABQ	26	RNAV (RNP)	HOB	21	LOC/DME
ABQ	8	HI-TACAN	HOB	3	VOR
ABQ	8	VOR	LAM	27	RNAV (GPS)
ABQ		RADAR	LAM	27	RNAV (GPS)
ABQ	3	RNAV (GPS)	LRU	30	RNAV (GPS)
ABQ	3	RNAV (RNP)	LRU	12	RNAV (GPS)
ABQ	21	RNAV (RNP)	LRU	30	ILS or LOC
AEG	22	ILS	LVS	20	VOR
AEG	22	RNAV (GPS)	LVS	20	RNAV (GPS)
ALM	3	RNAV (GPS)	LVS	2	VOR
ALM	3	VOR	LVS	32	RNAV (GPS)
ALM	3	VOR	LVS	2	RNAV (GPS)
ATS	21	RNAV (GPS)	ONM	Airport	VOR
ATS	12	RNAV (GPS)	ONM	33	RNAV (GPS)
ATS	12	NDB	PRZ	1	RNAV (GPS)
ATS	30	RNAV (GPS)	ROW	3	RNAV (GPS)
ATS	30	NDB	ROW	35	RNAV (GPS)
AXX	17	RNAV (GPS)	ROW	21	HI-ILS
CAO	2	RNAV (GPS)	ROW	21	ILS or LOC
CAO	20	RNAV (GPS)	ROW	Airport	VOR
CNM	21	RNAV (GPS)	ROW	17	RNAV (GPS)
CNM	3	RNAV (GPS)	ROW	21	RNAV (GPS)
CNM	3	ILS	ROW	3	LOC
CNM	14R	RNAV (GPS)	RTN	25	RNAV (GPS)
CNM	32L	RNAV (GPS)	RTN	2	VOR
CNM	32L	VOR	RTN	2	RNAV (GPS)
CVN	22	RNAV (GPS)	SAF	15	RNAV (GPS)
CVN	4	RNAV (GPS)	SAF	28	RNAV (GPS)
CVN	4	ILS	SAF	Airport	VOR
CVN	30	RNAV (GPS)	SAF	2	RNAV (GPS)
CVN	22	VOR	SAF	33	VOR
DMN	22	RNAV (GPS)	SAF	33	RNAV (GPS)
DMN	26	RNAV (GPS)	SAF	20	RNAV (GPS)
DMN	4	RNAV (GPS)	SAF	2	ILS or LOC
DMN	8	RNAV (GPS)	SKX	4	RNAV (GPS)
DMN	26	VOR	SKX	Airport	VOR
E06	3	RNAV (GPS)	SRR	24	ILS
E06	21	RNAV (GPS)	SRR	24	RNAV (GPS)
E80	21	RNAV (GPS)	SVC	8	RNAV (GPS)
E80	Airport	VOR	SVC	Airport	VOR

**Table B8 (Continued)****Approach Procedures by Runway End**

Airport Code	Runway End	Instrument Approach Type	Airport Code	Runway End	Instrument Approach Type
FMN	Airport	VOR	SVC	Airport	VOR
FMN	Airport	VOR	SVC	26	RNAV (GPS)
FMN	5	RNAV (GPS)	SVC	26	LOC/DME
FMN	25	RNAV (GPS)	TCC	26	RNAV (GPS)
FMN	7	RNAV (GPS)	TCC	3	RNAV (GPS)
FMN	25	ILS or LOC	TCC	21	RNAV (GPS)
FMN	23	RNAV (GPS)	TCC	26	VOR
FMN	7	VOR	TCC	21	VOR
FMN	5	VOR	TCS	Airport	VOR
GNT	31	RNAV (GPS)	TCS	Airport	RNAV (GPS)
GNT	13	RNAV (GPS)	ZUN	6	RNAV (GPS)
GUP	6	RNAV (GPS)	ZUN	6	VOR

## Definitions:

DME – Distance Measuring Equipment

GPS – Global Positioning System

HI - Indicates a high-altitude option for an instrument approach procedure. Used as a pre-fix only.

ILS – Instrument Landing System

LOC – Localizer

NDB – Non-Directional Beacon

RADAR – Radio detection and Ranging

RNAV – Area Navigation

RNP - Required Navigation Performance

TACAN - Tactical Air Navigation

VOR – Very high frequency Omnidirectional Radar

**Table B9**  
**Wind Cones by Airport**

Airport Code	Wind Indicator Type	Airport Code	Wind Indicator Type
OE8	Lighted Wind Indicator	FSU	Lighted Wind Indicator
OE0	Lighted Wind Indicator	GNT	Lighted Wind Indicator
13Q	Wind Indicator	GUP	Lighted Wind Indicator
18T	Wind Indicator	HOB	Lighted Wind Indicator
1V0	Wind Indicator	LAM	Lighted Wind Indicator
24N	Lighted Wind Indicator	LRU	Lighted Wind Indicator
5T6	Lighted Wind Indicator	LSB	Lighted Wind Indicator
5V5	Wind Indicator	LVS	Lighted Wind Indicator
ABQ	Lighted Wind Indicator	M10	Wind Indicator
AEG	Lighted Wind Indicator	N01	Lighted Wind Indicator
ALM	Lighted Wind Indicator	N02	Lighted Wind Indicator
ATS	Lighted Wind Indicator	N17	Lighted Wind Indicator
AXX	Lighted Wind Indicator	N19	Wind Indicator
C12	Lighted Wind Indicator	N24	Wind Indicator
C54	Lighted Wind Indicator	N29	Wind Indicator
CAO	Lighted Wind Indicator	ONM	Lighted Wind Indicator
CNM	Lighted Wind Indicator	PRZ	Lighted Wind Indicator
CVN	Lighted Wind Indicator	ROW	Lighted Wind Indicator
E05	Lighted Wind Indicator	RTN	Lighted Wind Indicator
E06	Lighted Wind Indicator	S42	Lighted Wind Indicator
E14	Lighted Wind Indicator	SAF	Lighted Wind Indicator
E26	Lighted Wind Indicator	SKX	Lighted Wind Indicator
E32	Wind Indicator	SRR	Lighted Wind Indicator
E80	Lighted Wind Indicator	SVC	Lighted Wind Indicator
E89	Lighted Wind Indicator	SXU	Lighted Wind Indicator
E92	Lighted Wind Indicator	T16	Lighted Wind Indicator
E94	Wind Indicator	TCC	Lighted Wind Indicator
F37	Lighted Wind Indicator	TCS	Lighted Wind Indicator
FMN	Lighted Wind Indicator	ZUN	Lighted Wind Indicator

**Table B10**  
**Fuel Types By Airport**

Airport Code	Jet-A	AvGas	Airport Code	Jet-A	AvGas
0E8	No	No	FMN	Yes	Yes
0E0	Yes	Yes	FSU	No	No
13Q	No	No	GNT	Yes	Yes
18T	No	No	GUP	Yes	Yes
1V0	No	No	HOB	Yes	Yes
24N	No	No	LAM	No	Yes
5T6	Yes	Yes	LRU	Yes	Yes
5V5	No	No	LSB	Yes	Yes
ABQ	Yes	Yes	LVS	Yes	Yes
AEG	Yes	Yes	M10	No	No
ALM	Yes	Yes	N01	No	No
ATS	Yes	Yes	N02	No	No
AXX	Yes	Yes	N17	No	No
C12	No	No	N19	No	Yes
C54	No	No	N24	No	No
CAO	Yes	Yes	N29	No	No
CNM	Yes	Yes	ONM	No	Yes
CVN	Yes	Yes	PRZ	Yes	Yes
DMN	Yes	Yes	ROW	Yes	Yes
E05	No	No	RTN	Yes	Yes
E06	No	No	S42	No	No
E14	Yes	Yes	SAF	Yes	Yes
E26	No	No	SKX	Yes	Yes
E32	No	No	SRR	Yes	Yes
E61	No	No	SVC	Yes	Yes
E80	Yes	Yes	SXU	Yes	Yes
E89	No	No	T16	No	No
E92	No	No	TCC	Yes	Yes
E94	No	No	TCS	Yes	Yes
F37	No	Yes	ZUN	No	No



**Table B11**  
**Fuel Service by Airport**

Airport Code	Jet-A Service	AvGas Service	Airport Code	Jet-A Service	AvGas Service
0E8	None	None	FMN	Full Service	Full Service
0E0	Full Service	Self Service	FSU	None	None
13Q	None	None	GNT	Full Service	Self Service
18T	None	None	GUP	Full Service	Full Service
1V0	None	None	HOB	Full Service	Full Service
24N	None	None	LAM	None	Self Service
5T6	Full Service	Full Service/Self Service	LRU	Full Service	Full Service
5V5	None	None	LSB	Self Service	Self Service
ABQ	Full Service	Full Service	LVS	Full Service	Full Service/Self Service
AEG	Full Service	Full Service/Self Service	M10	None	None
ALM	Full Service	Full Service	N01	None	None
ATS	Full Service	Full Service	N02	None	None
AXX	Full Service/Self Service	Full Service/Self Service	N17	None	None
C12	None	None	N19	None	Self Service
C54	None	None	N24	None	None
CAO	Full Service	Full Service	N29	None	None
CNM	Full Service/Self Service	Full Service/Self Service	ONM	None	Self Service
CVN	Full Service/Self Service	Self Service	PRZ	Full Service	Full Service
DMN	Full Service	Full Service	ROW	Full Service	Full Service
E05	None	None	RTN	Full Service	Full Service/Self Service
E06	None	None	S42	None	None
E14	Self Service	Self Service	SAF	Full Service/Self Service	Self Service
E26	None	None	SKX	Full Service	Self Service
E32	None	None	SRR	Full Service	Full Service
E61	None	None	SVC	Full Service	Self Service
E80	Full Service	Full Service	SXU	Self Service	Self Service
E89	None	None	T16	None	None
E92	None	None	TCC	None	None
E94	None	None	TCS	Full Service	Full Service
F37	None	Full Service	ZUN	None	None

**Table B12****General Aviation Amenities by Airport**

Airport Code	Rental Car	Terminal	Tie Downs	Hangars
OE8	No	Yes	Yes	None
OE0	No	Yes	Yes	None
13Q	No	No	No	None
18T	No	No	Yes	None
1V0	No	No	Yes	None
24N	No	No	Yes	None
5T6	No	Yes	Yes	Yes
5V5	No	No	Yes	None
ABQ	Yes	Yes	Yes	Yes
AEG	Yes	Yes	Yes	Yes
ALM	Yes	Yes	Yes	Yes
ATS	Yes	Yes	Yes	Yes
AXX	No	Yes	Yes	Yes
C12	No	No	Yes	None
C54	No	No	Yes	None
CAO	No	Yes	Yes	Yes
CNM	Yes	Yes	Yes	Yes
CVN	No	Yes	Yes	Yes
DMN	No	Yes	Yes	Yes
E05	No	No	Yes	None
E06	No	Yes	Yes	None
E14	No	No	Yes	Yes
E26	No	No	Yes	None
E32	No	No	No	None
E61	No	No	Yes	None
E80	No	Yes	Yes	Yes
E89	No	No	Yes	None
E92	No	No	Yes	None
E94	No	No	No	None
F37	No	Yes	Yes	Yes
FMN	Yes	Yes	Yes	Yes
FSU	No	No	Yes	Yes
GNT	No	Yes	Yes	None
GUP	No	Yes	Yes	Yes
HOB	Yes	Yes	Yes	Yes
LAM	Yes	Yes	Yes	None
LRU	Yes	Yes	Yes	Yes
LSB	No	Yes	Yes	Yes
LVS	Yes	Yes	Yes	Yes
M10	No	No	No	None
N01	No	No	No	None
N02	No	No	Yes	None
N17	No	No	Yes	None
N19	No	Yes	Yes	None
N24	No	No	No	None
N29	No	Yes	No	None
ONM	No	Yes	Yes	None
PRZ	No	Yes	Yes	Yes
ROW	No	Yes	Yes	Yes

**Table B12 (Continued)****General Aviation Amenities by Airport**

<b>Airport Code</b>	<b>Rental Car</b>	<b>Terminal</b>	<b>Tie Downs</b>	<b>Hangars</b>
RTN	Yes	Yes	Yes	Yes
S42	No	No	Yes	None
SAF	Yes	Yes	Yes	Yes
SKX	Yes	Yes	Yes	Yes
SRR	Yes	Yes	Yes	Yes
SVC	Yes	Yes	Yes	None
SXU	Yes	Yes	Yes	Yes
T16	No	No	Yes	None
TCC	No	Yes	Yes	Yes
TCS	No	Yes	Yes	Yes
ZUN	No	No	No	None



APPENDIX C

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# LAND USE DIAGRAMS

## Appendix C

### LAND USE DIAGRAMS

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A land use diagram was prepared for each study airport depicting a suggested “Airport Influence Area.” These diagrams can be used by the state, airport management, and local planning agencies to examine their specific land use planning and encroachment issues as they seek to protect the airport from future incompatible development. However, it is important to note that the federal government has no direct legal authority to regulate land use; this responsibility rests exclusively with state and local governments. The Airport Influence Areas used for New Mexico reflect the property most likely to have aircraft overflights, particularly on approach or departure.

Land use compatibility guidance from the FAA is limited to the immediate vicinity of the runway and protection of airport airspace. This guidance is primarily safety-related but does not address the potential for incompatible development near airports. In order to assist airports with understanding land use issues and the current circumstances of airports within the system, the following land use Airport Influence Area maps were prepared. The Airport Influence Area maps zones are based on guidance from the following sources:

Federal Aviation Administration Advisory Circular 150/5300-13, *Airport Design*, which contains FAA’s standards and recommendations for airport design.

Objects Affecting Navigable Airspace, Code of Federal Regulations (CFR) Title 14, Part 77 establishes standards for determining obstructions in navigable airspace. It sets forth requirements for construction and alteration of structures (i.e., buildings, towers, etc.). It also provides for studies of obstructions to determine their effect on the safe and efficient use of airspace, as well as providing for public hearings regarding these obstructions, along with provisions for the creation of antenna farm areas. It also establishes methods of identifying surfaces that must be free from

penetration by obstructions, including buildings, cranes, cell towers, etc., in the vicinity of an airport. Implementation and enforcement of the elements contained in this regulation are a cooperative effort between the FAA and the individual state aviation agencies or the airports themselves.

Using these documents, three zones are recommended to promote land use compatibility near airports within the New Mexico Airport System.

**Zone 1 – Runway Protection Zone (RPZ):** The RPZ is a trapezoidal area beyond the end of the runway that serves to enhance the protection of people and property on the ground in the event than an aircraft lands or overruns beyond the end of the runway.

**Land Use Recommendation:** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, *Airport Design*, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners, at a minimum, should maintain the RPZ clear of all facilities supporting incompatible activities.

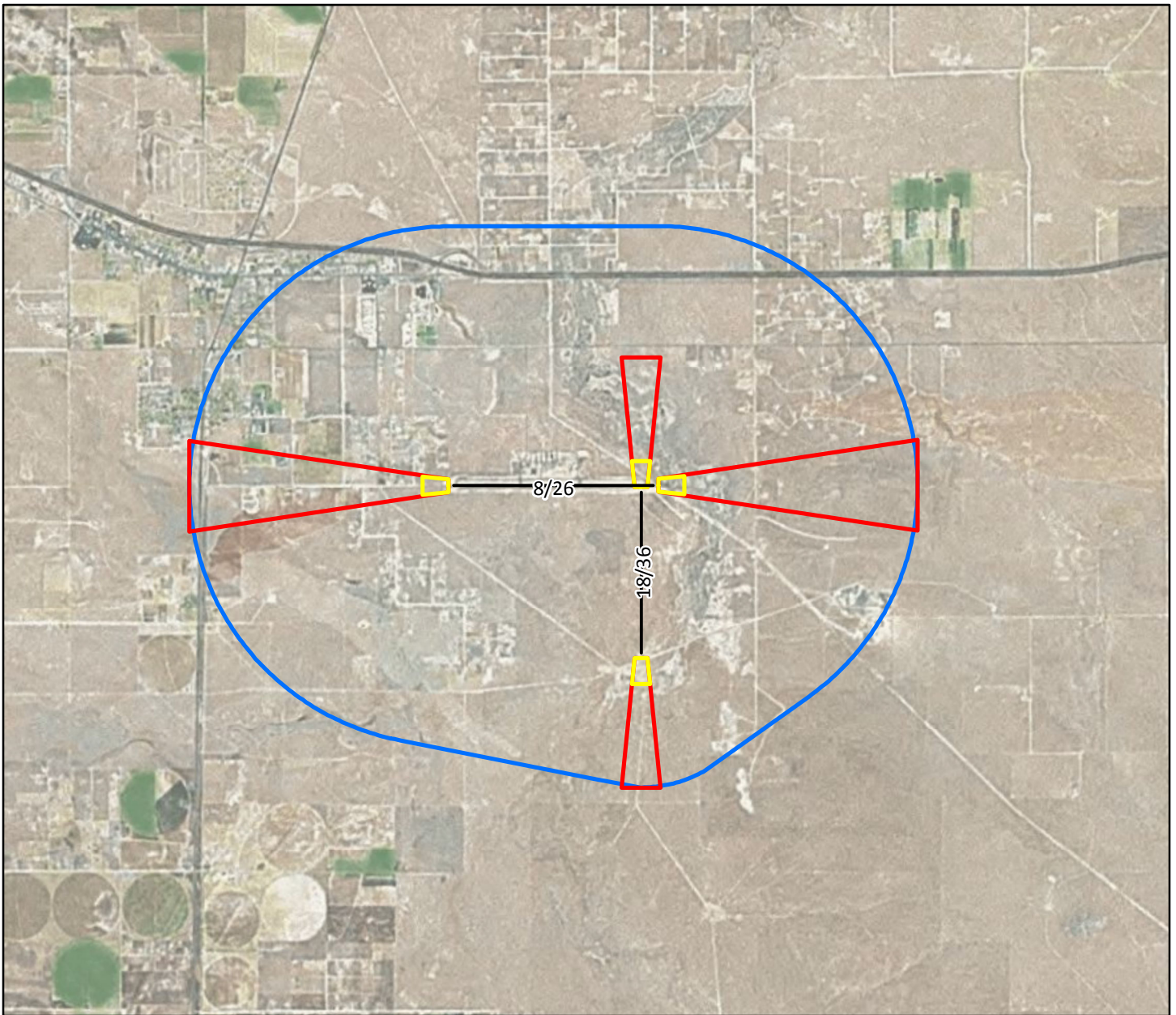
**Zone 2 – Part 77 Approach Surface:** The Part 77 Approach Surface is longitudinally centered on the extended runway centerline and extends outward and upward from the end of the runway primary surface, which is located 200 feet beyond the end of the runway. The height of any proposed development within this area should be reviewed through the Part 77 process to ensure existing and future Part 77 surfaces are not penetrated and to determine if airport operations would be negatively impacted.

**Land Use Recommendation:** Aviation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. A sample aviation easement and deed notification are included in this appendix.

**Zone 3 – Part 77 Horizontal Surface:** The Part 77 Horizontal Surface is a horizontal plane 150 feet above the established airport elevation. It is drawn by swinging arcs around the end of the primary surface. The radius of the horizontal surface is either 5,000 feet (for visual runways) or 10,000 feet (for non-precision and precision instrument runways).

**Land Use Recommendation:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, *Notice of Proposed Construction or Alteration*. A sample deed notification is included in this appendix.





## Moriarty Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

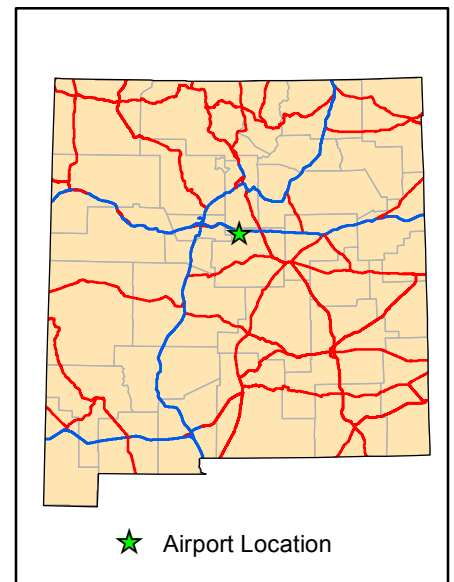
1 inch = 6,000 feet

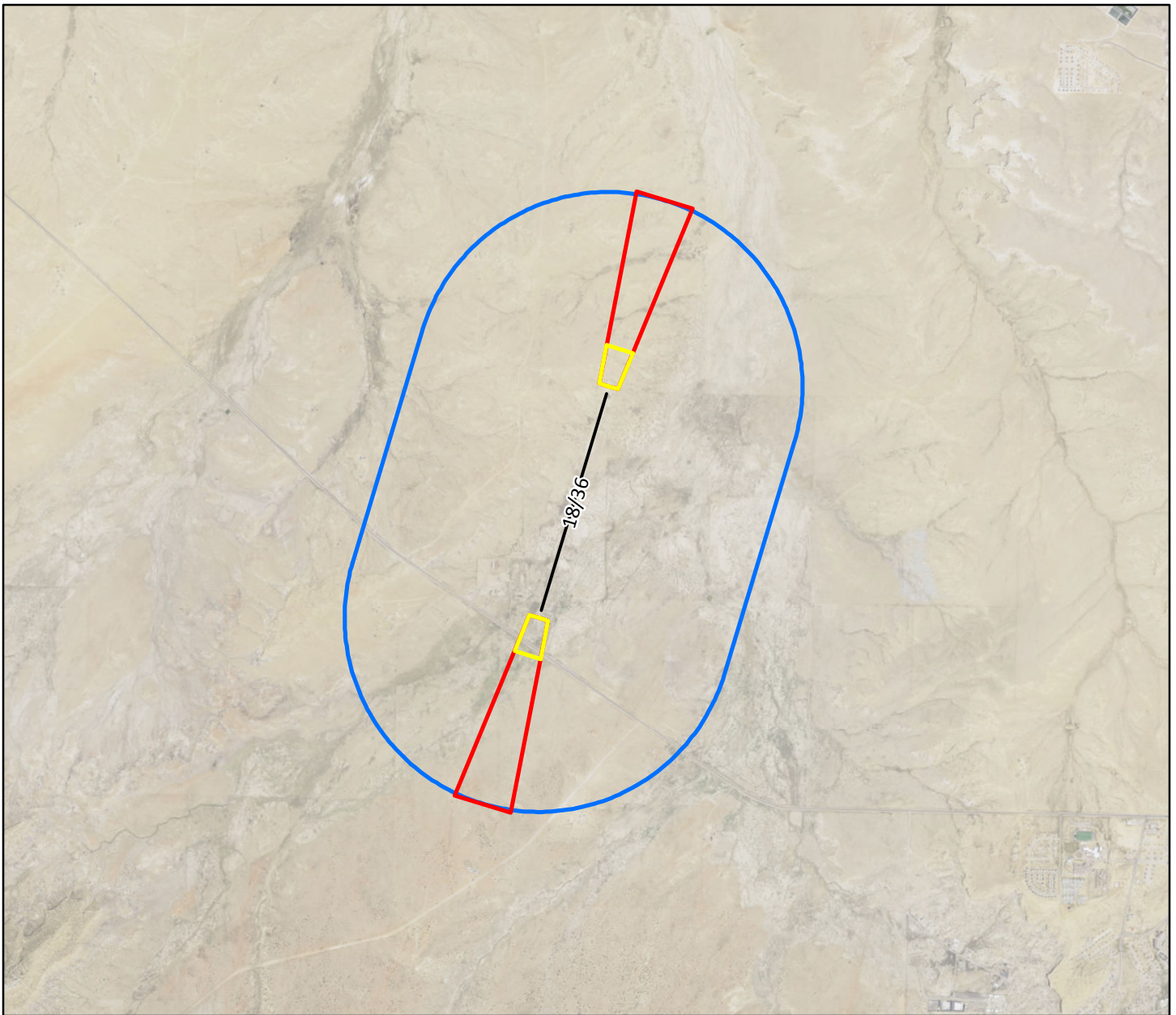


**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

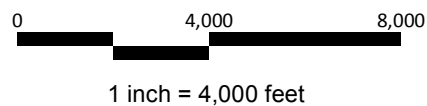
**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.





## Crownpoint

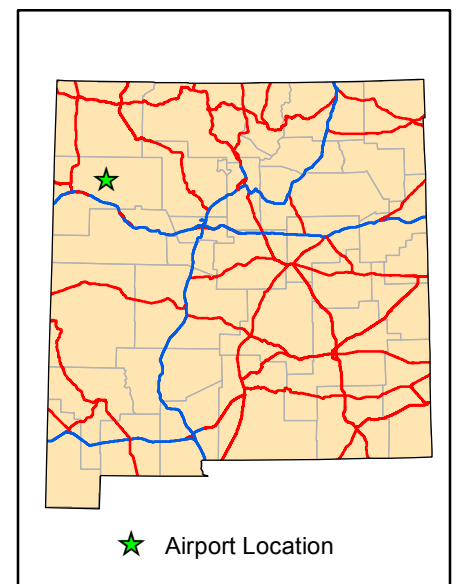
LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface



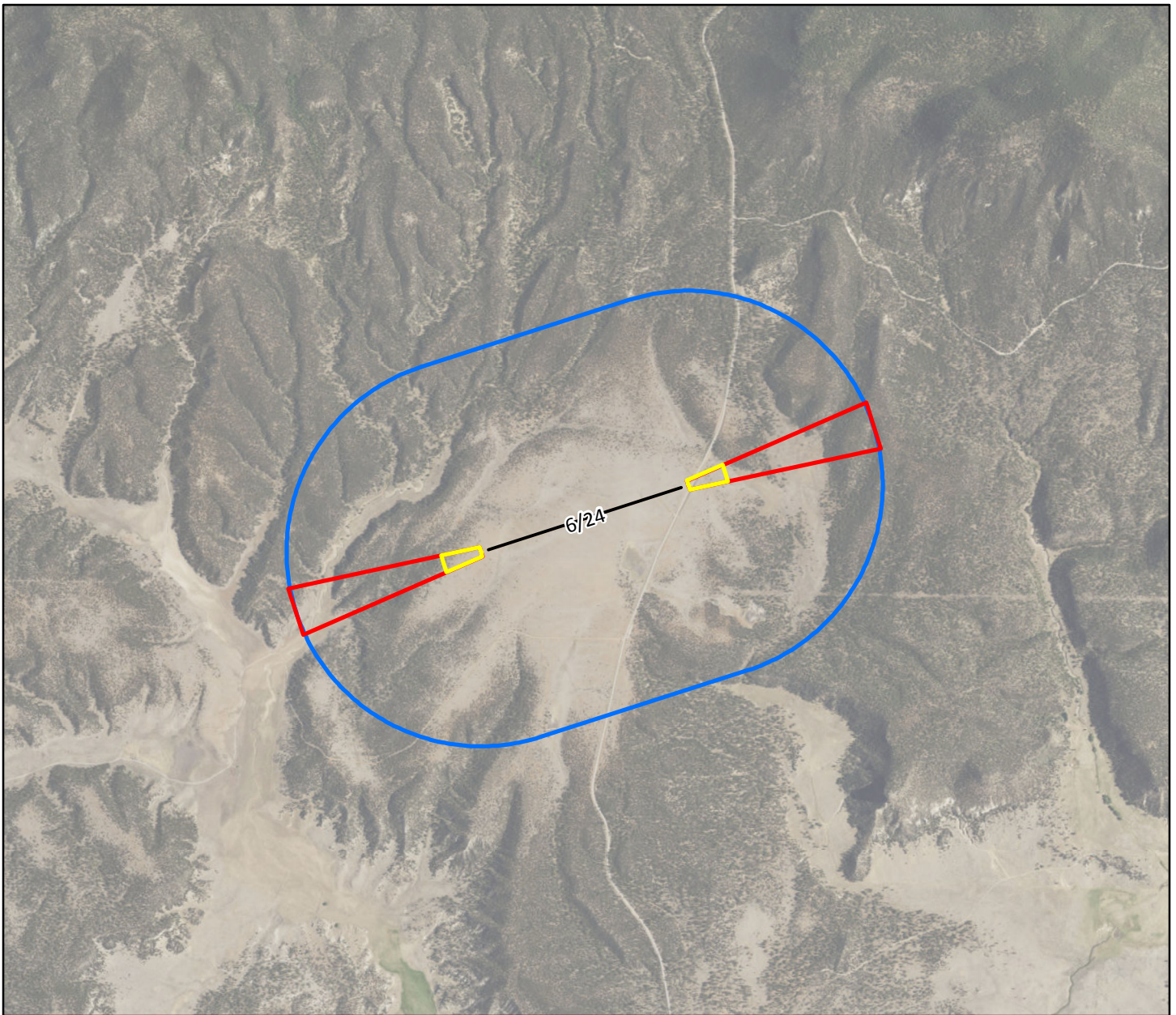
Zone 1 - Runway Protection Zone (RPZ): As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

Zone 2 - Part 77 Approach Surface: Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

Zone 3 - Part 77 Horizontal Surface: Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Jewett Mesa

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

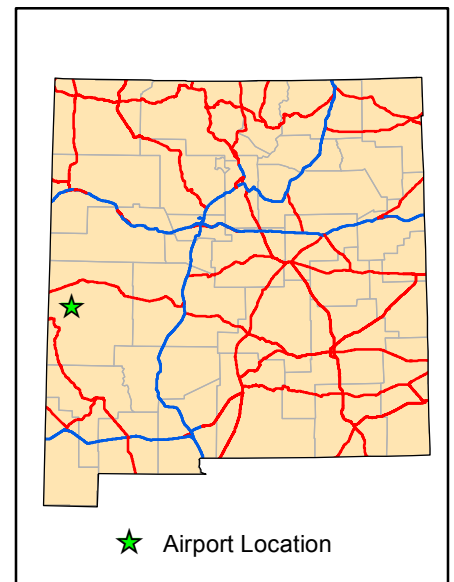
1 inch = 4,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

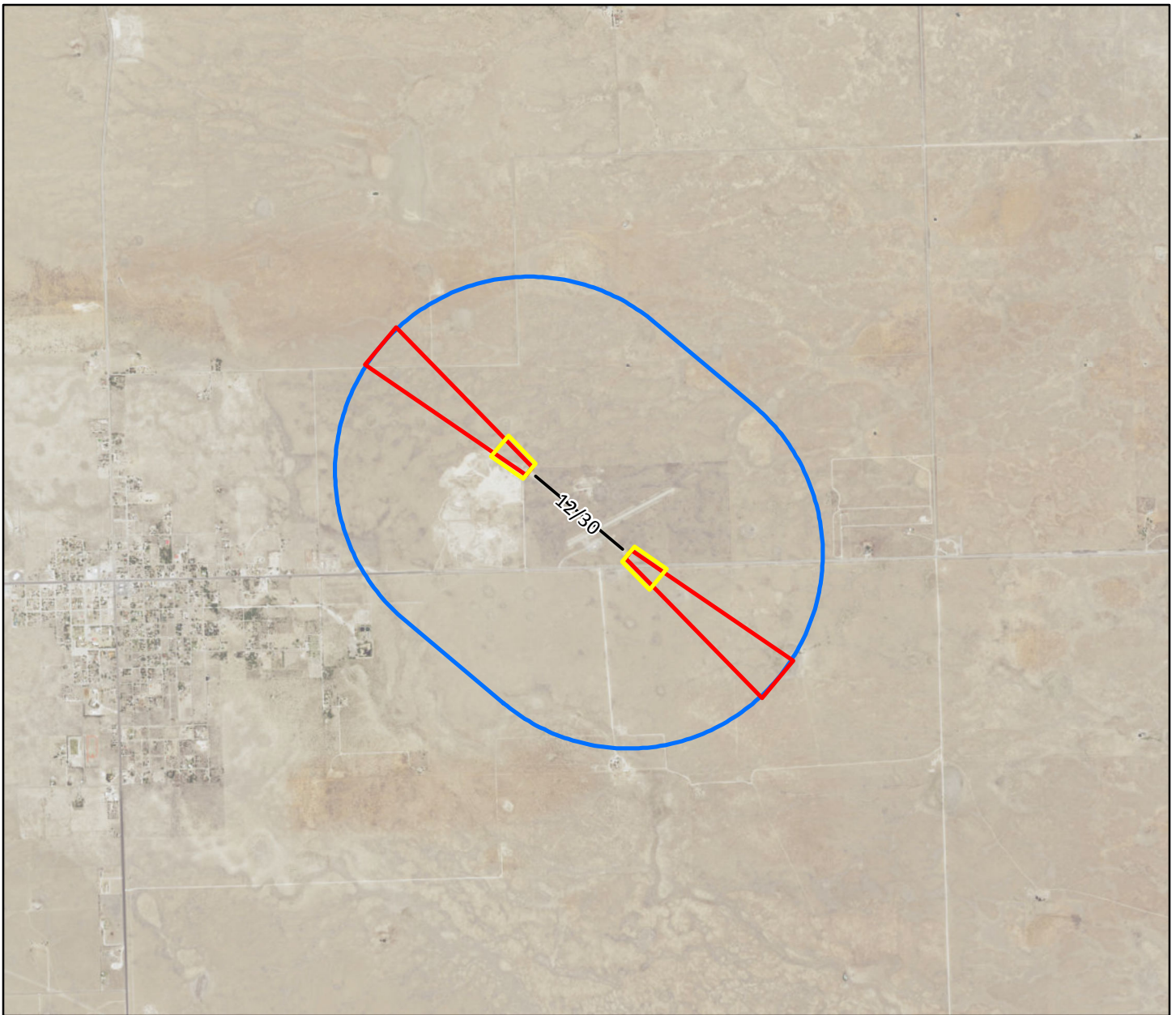
**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.



★ Airport Location





## Tatum Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

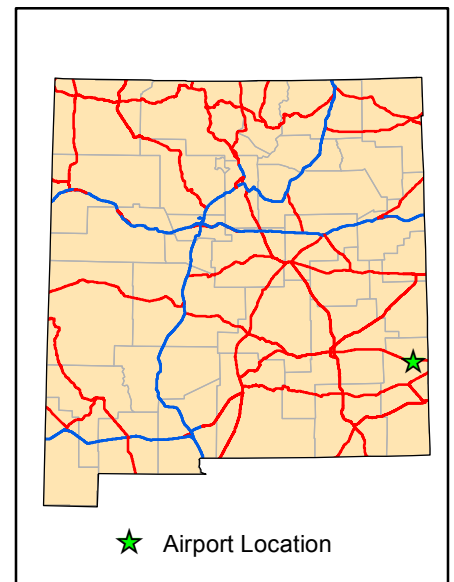
1 inch = 4,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Navajo Lake Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

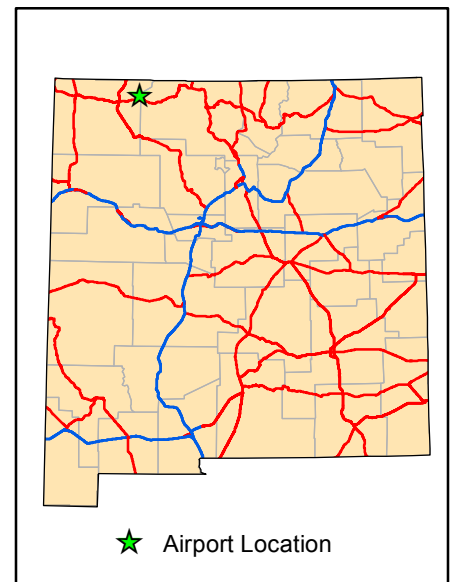
1 inch = 4,000 feet



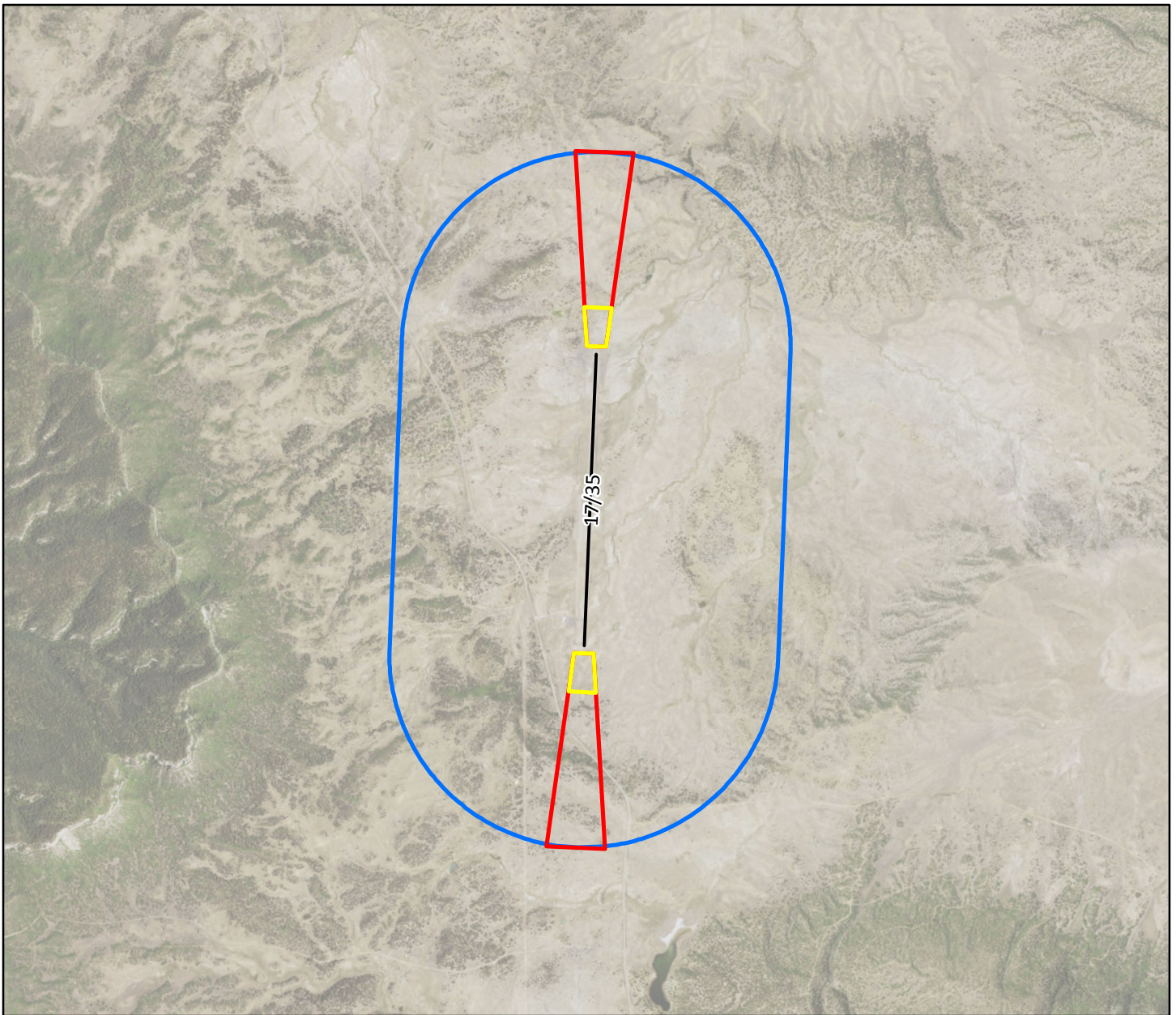
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Jicarilla Apache Nation

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

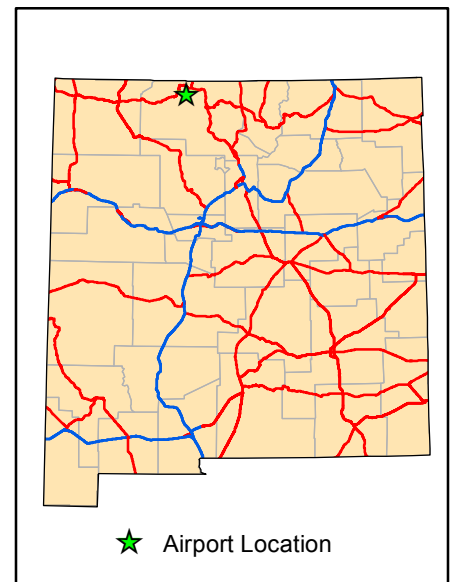
1 inch = 4,000 feet



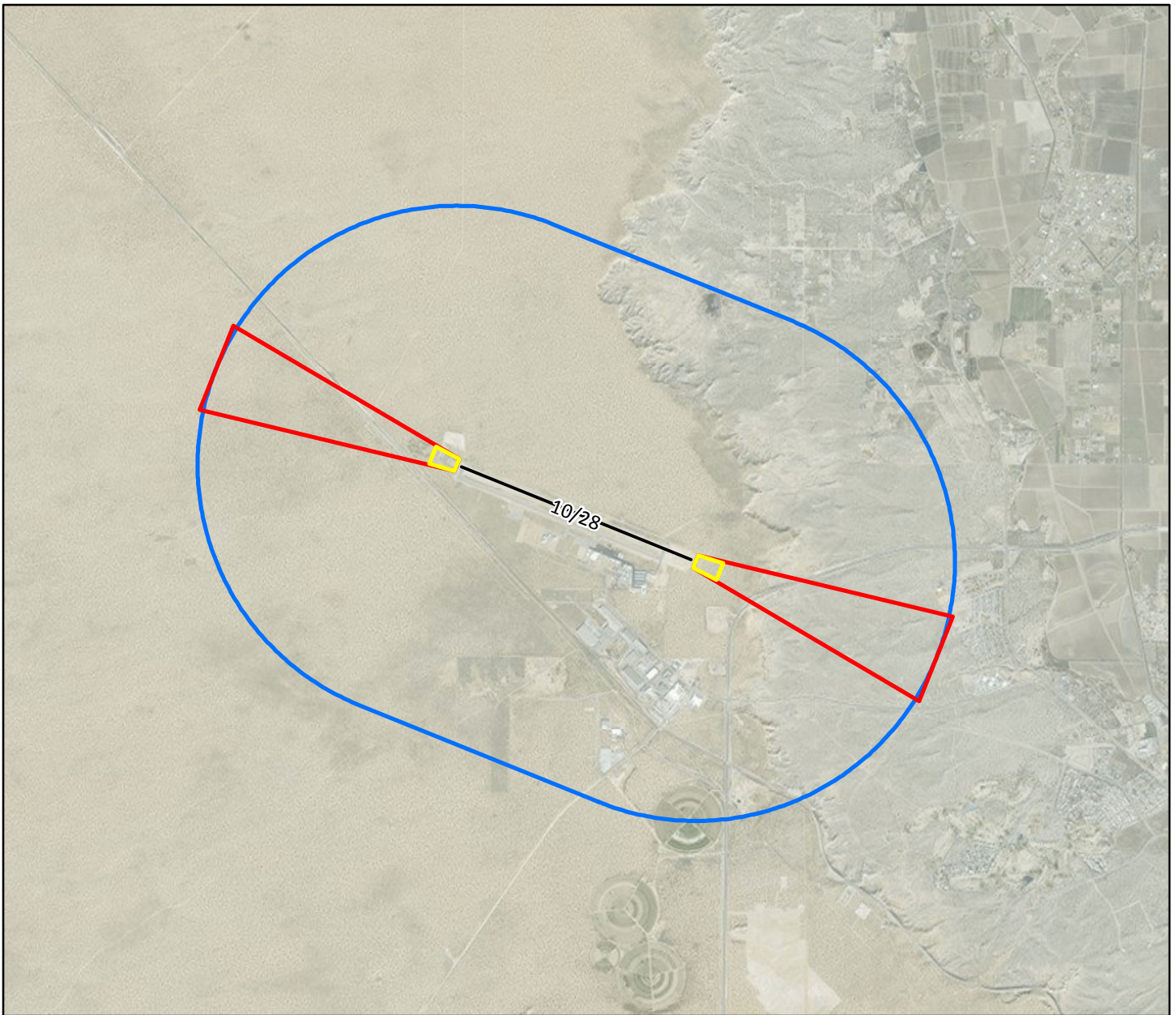
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Dona Ana County At Santa Teresa

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

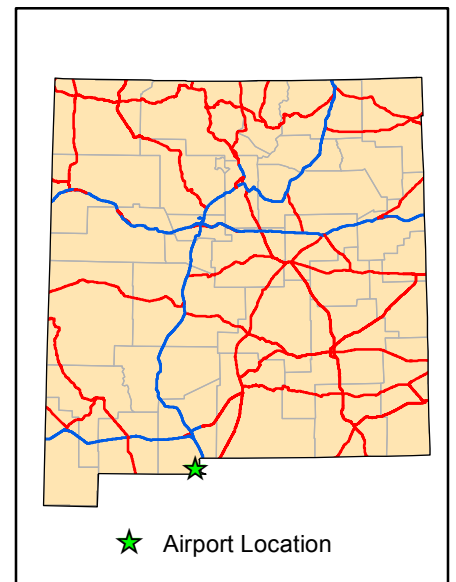
0 6,000 12,000  
1 inch = 6,000 feet

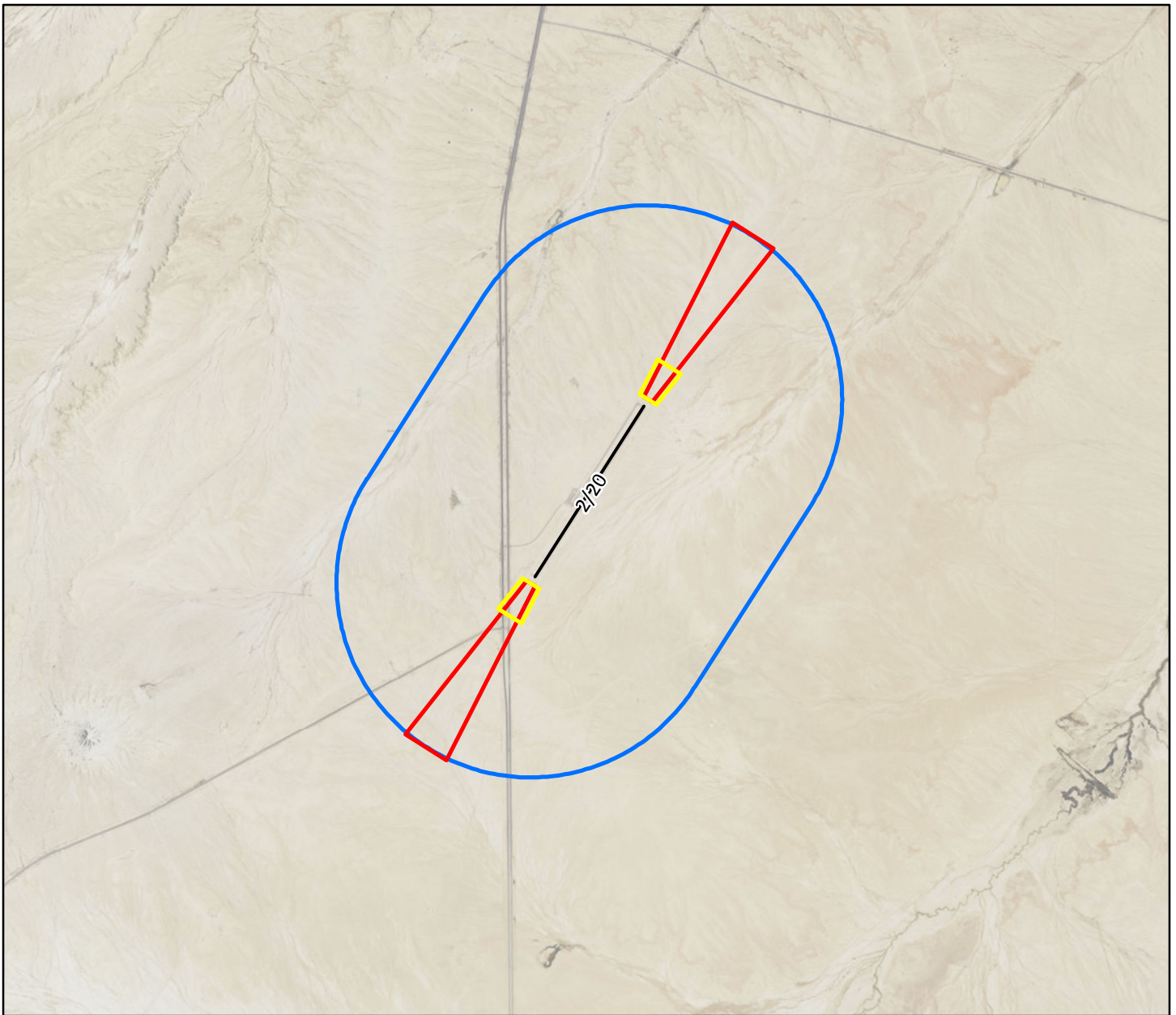


**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.





## Shiprock Airstrip

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

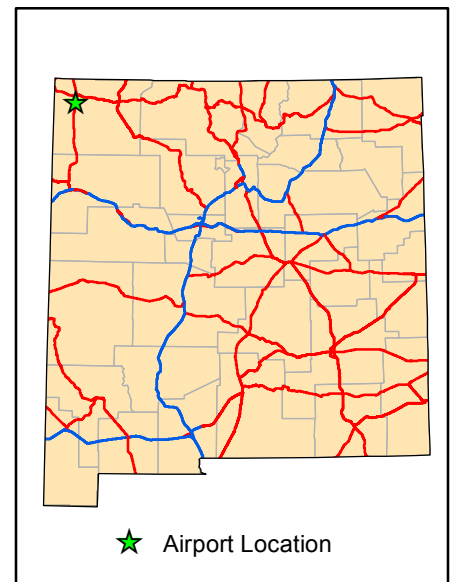
1 inch = 4,000 feet



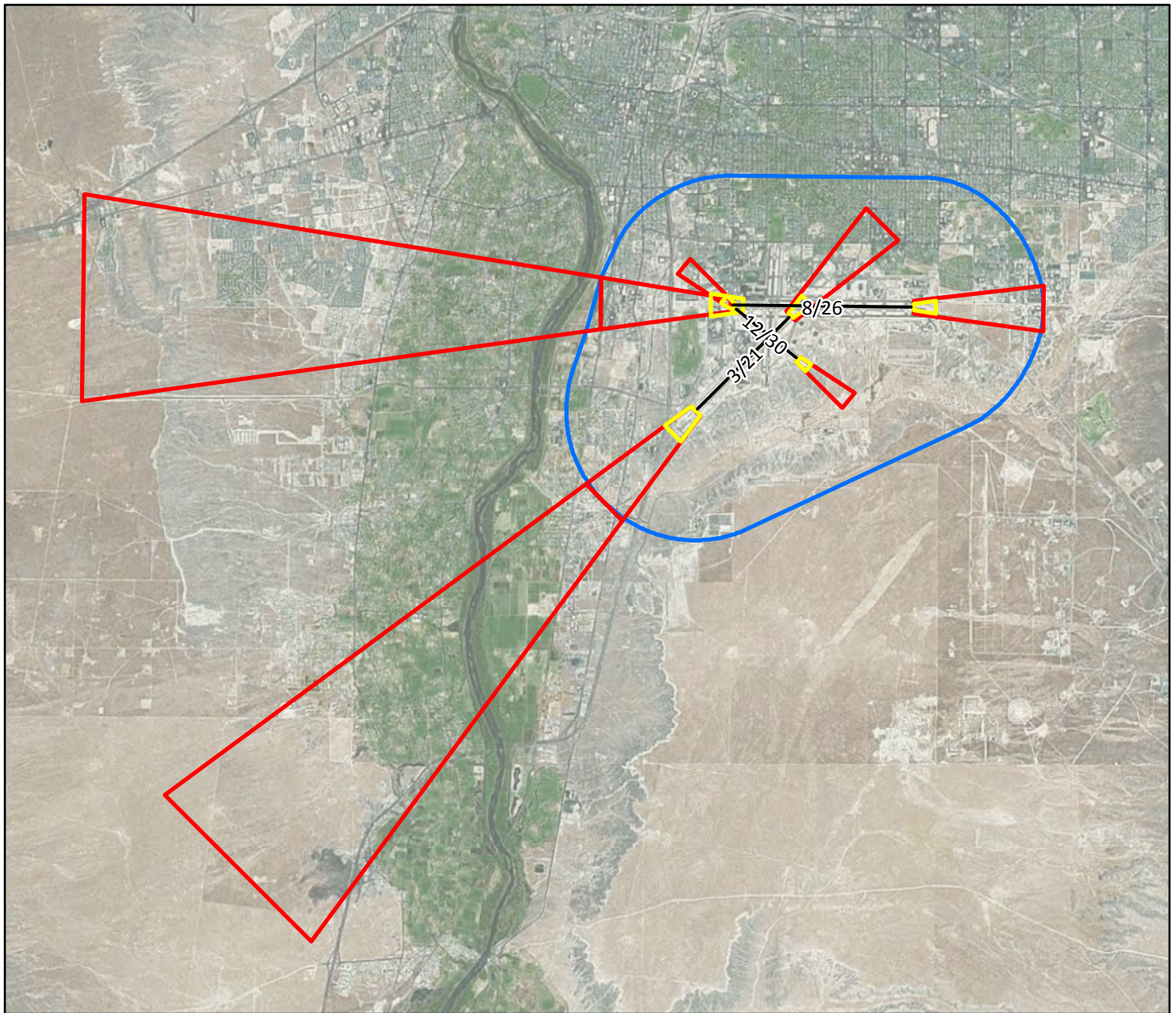
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Albuquerque Intl Sunport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

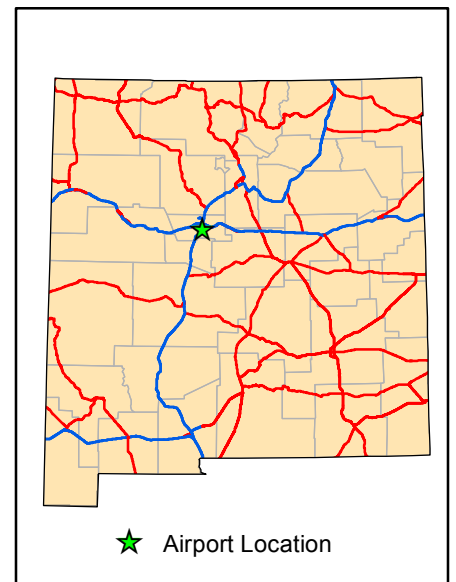
1 inch = 12,000 feet



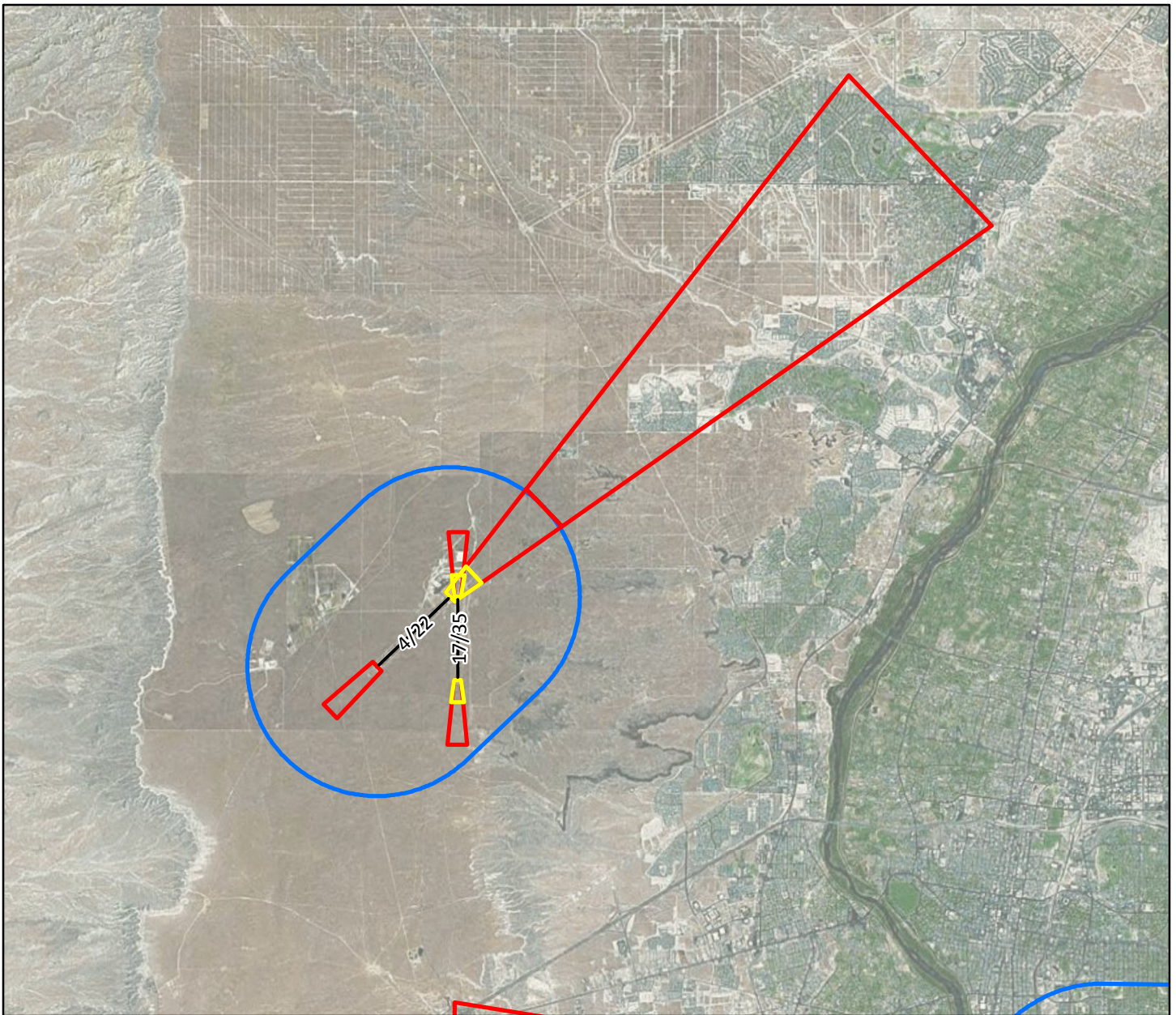
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Double Eagle II

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

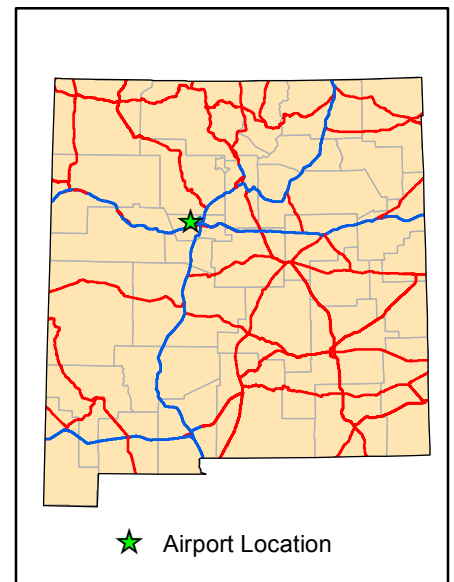
1 inch = 12,000 feet



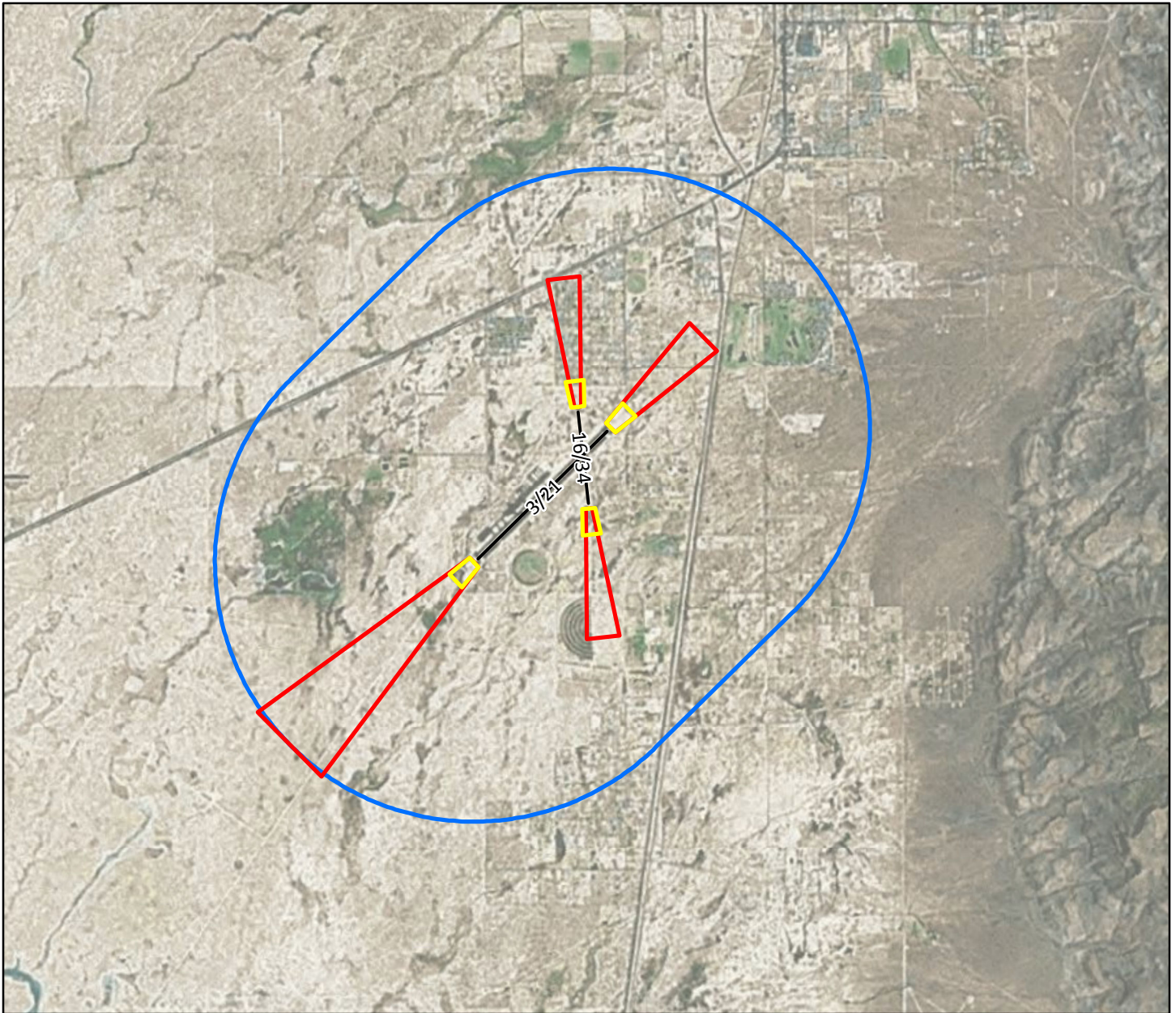
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Alamogordo-White Sands Rgnl

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 6,000 12,000

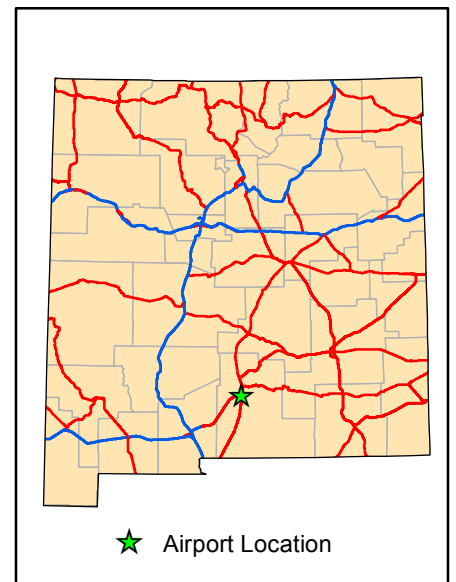
1 inch = 6,000 feet



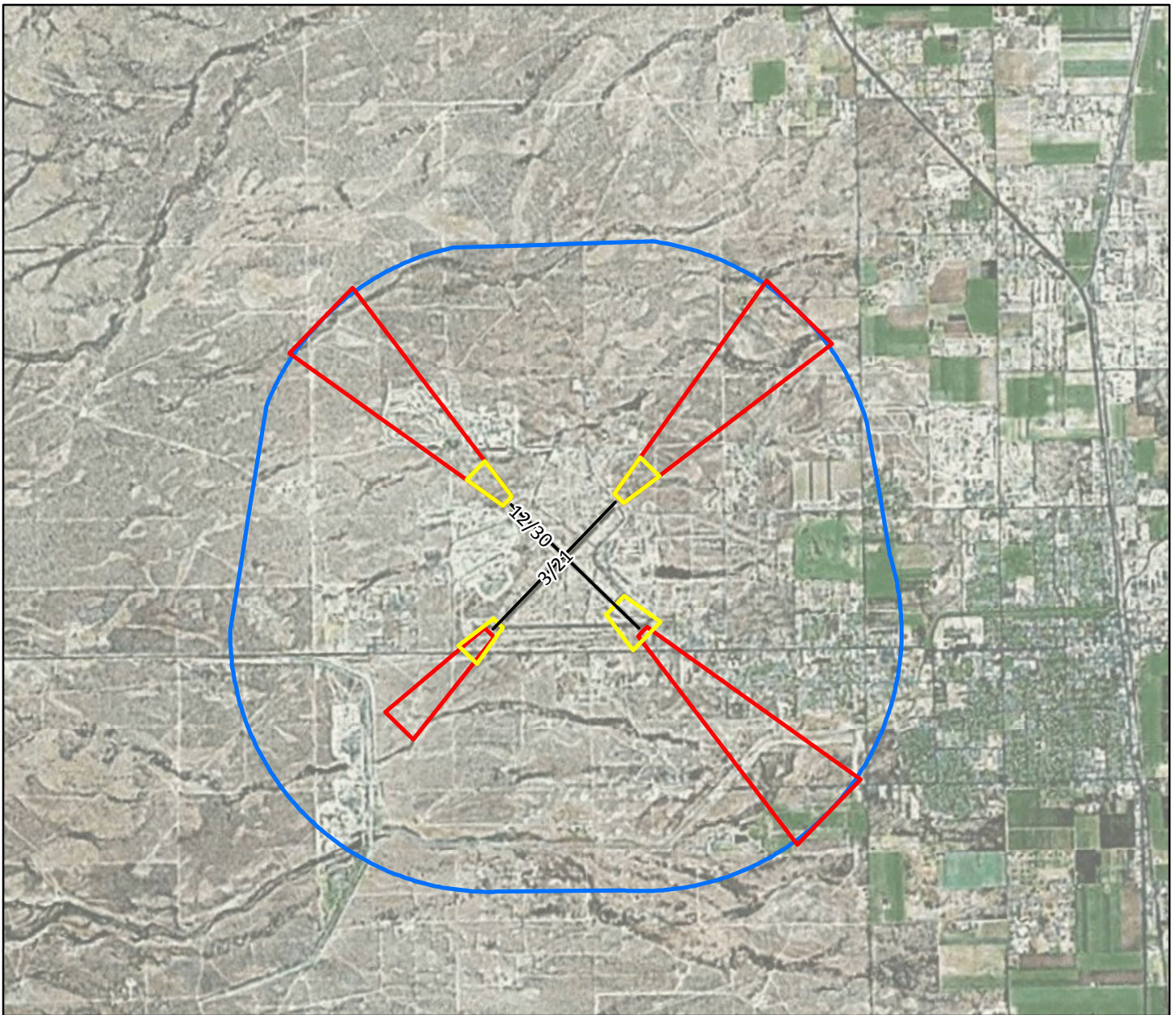
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Artesia Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

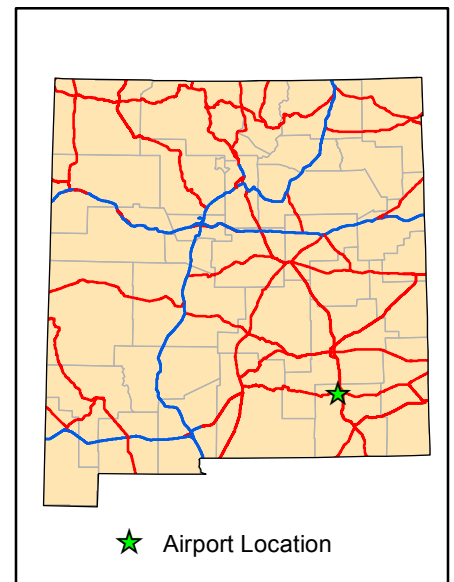
1 inch = 6,000 feet



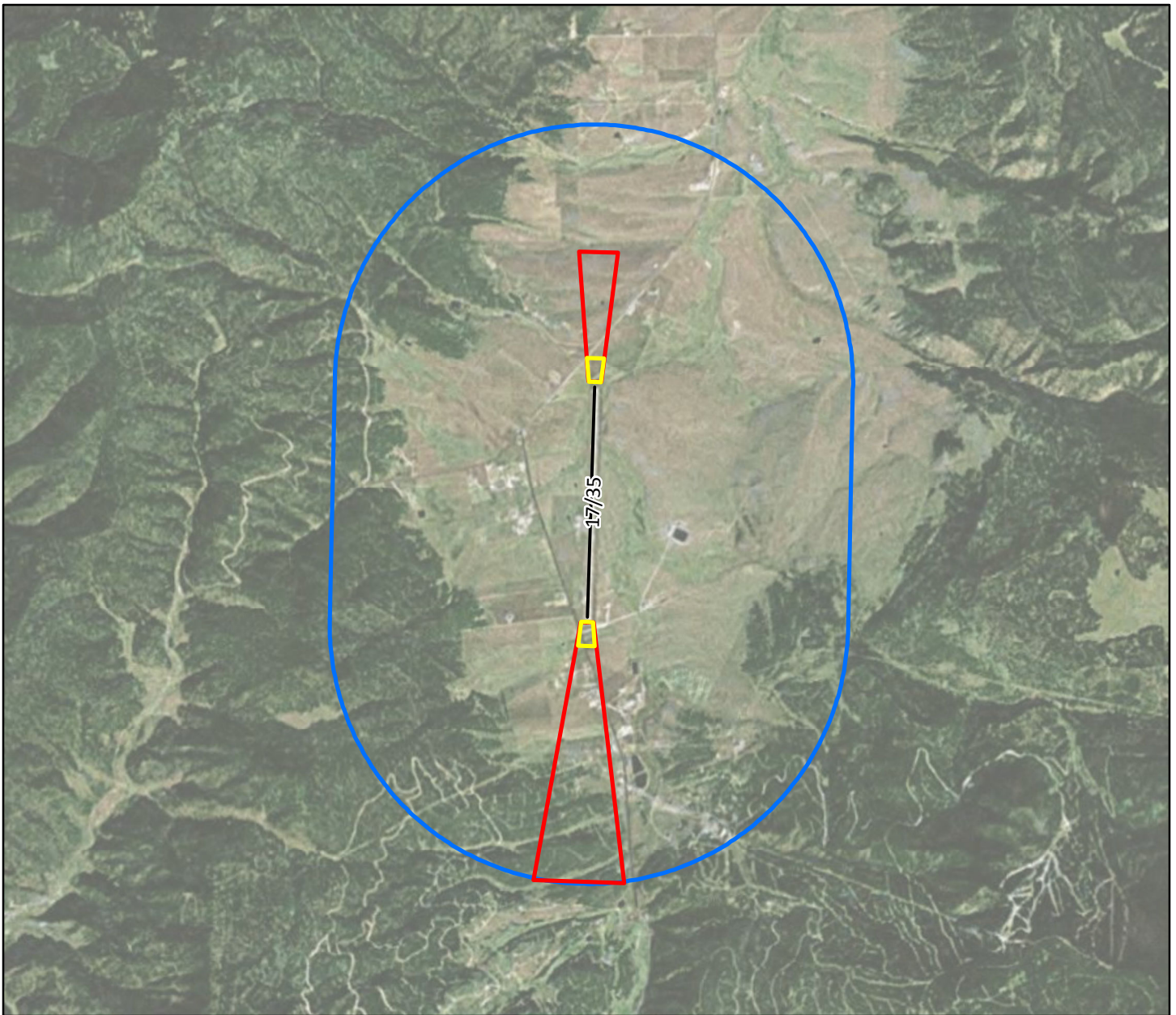
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Angel Fire -Colfax County

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

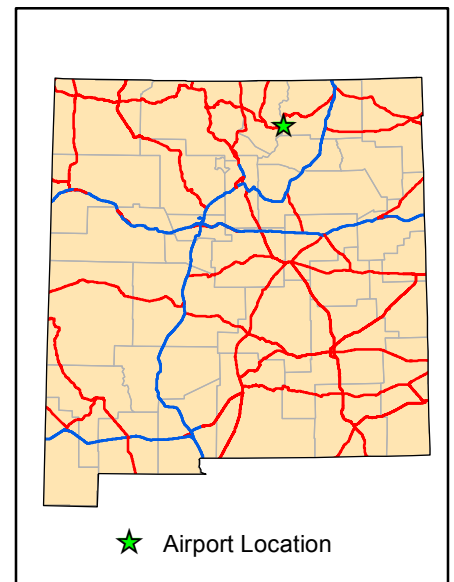
1 inch = 6,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.








## Cimarron Heliport

### LEGEND

 Zone 2: Approach Surface

0 1,500 3,000

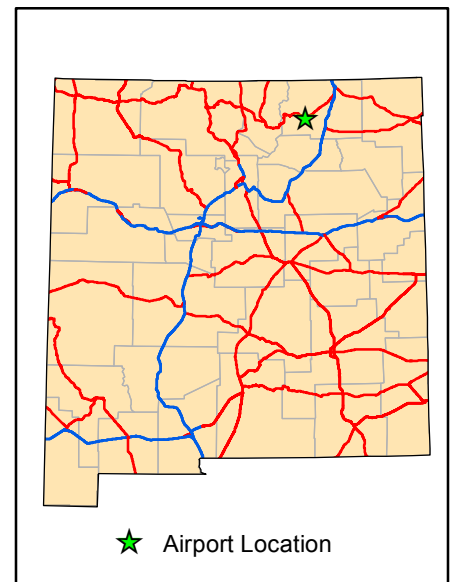
1 inch = 1,500 feet

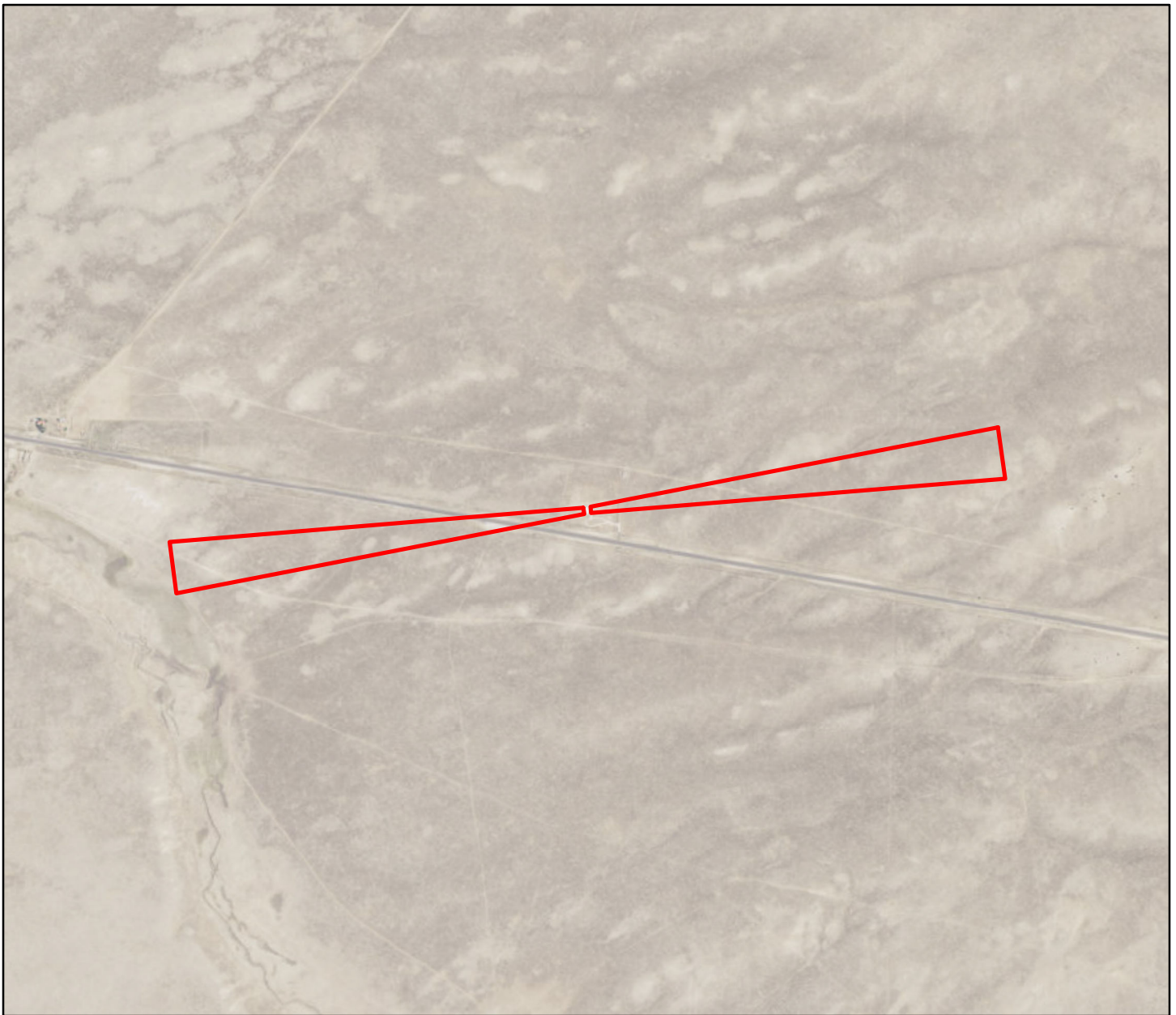


**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.


**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.





## Catron County Heliport

### LEGEND

 Zone 2: Approach Surface

0 1,500 3,000

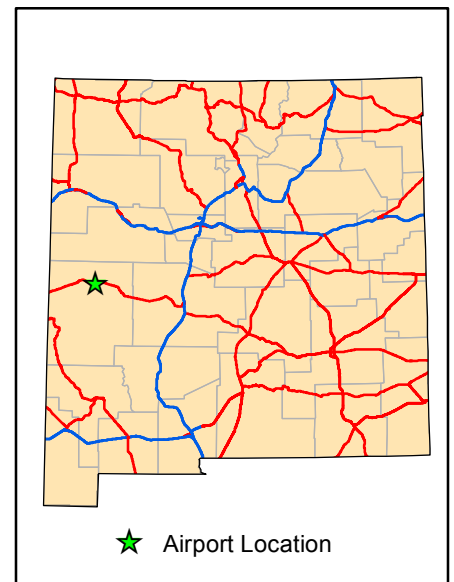
1 inch = 1,500 feet



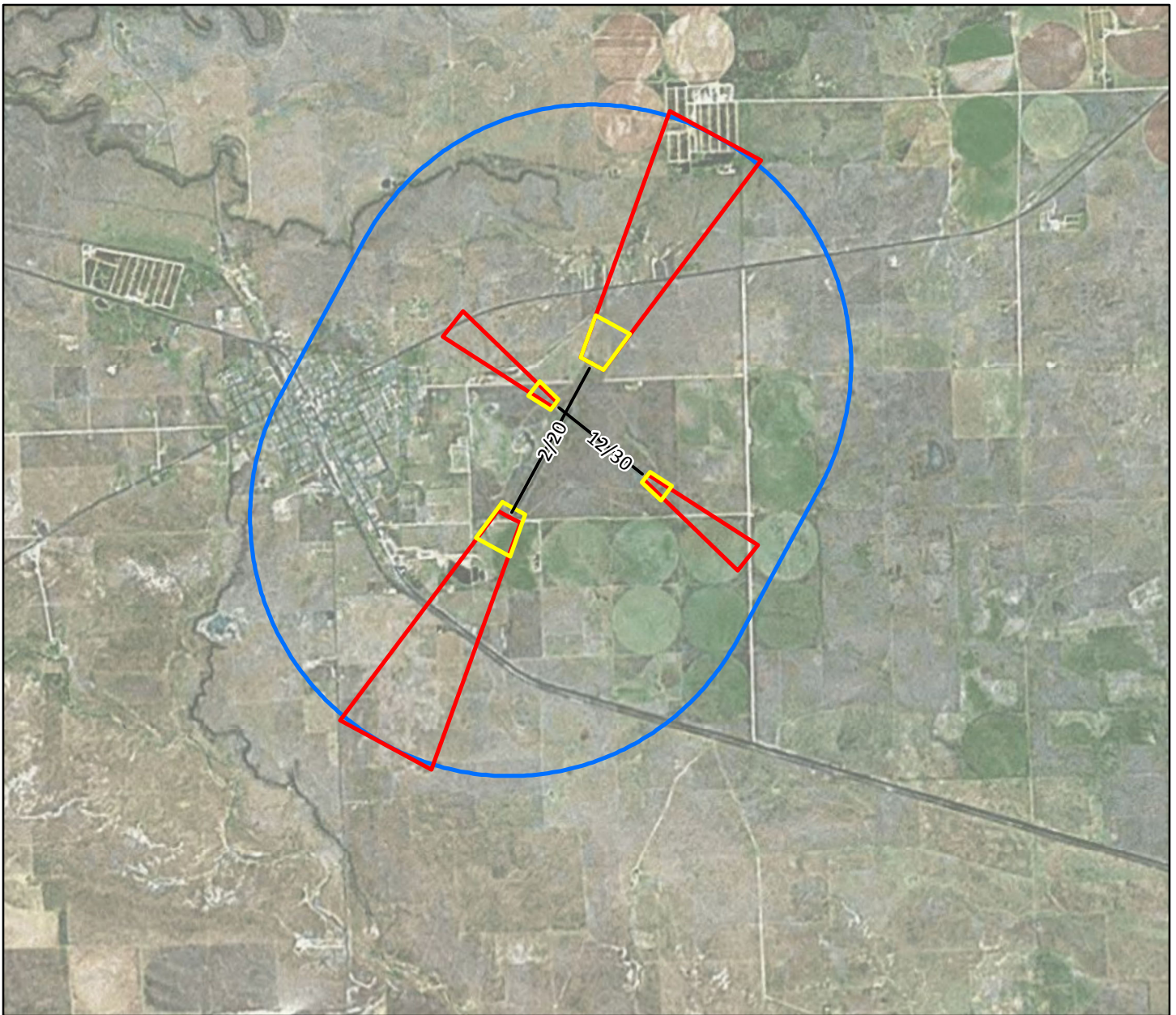
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Clayton Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 6,000 12,000

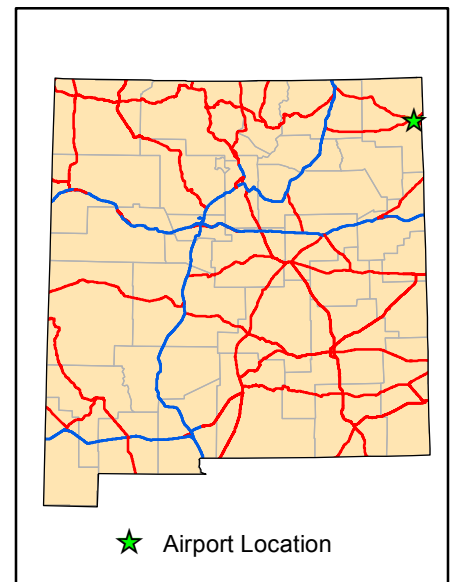
1 inch = 6,000 feet



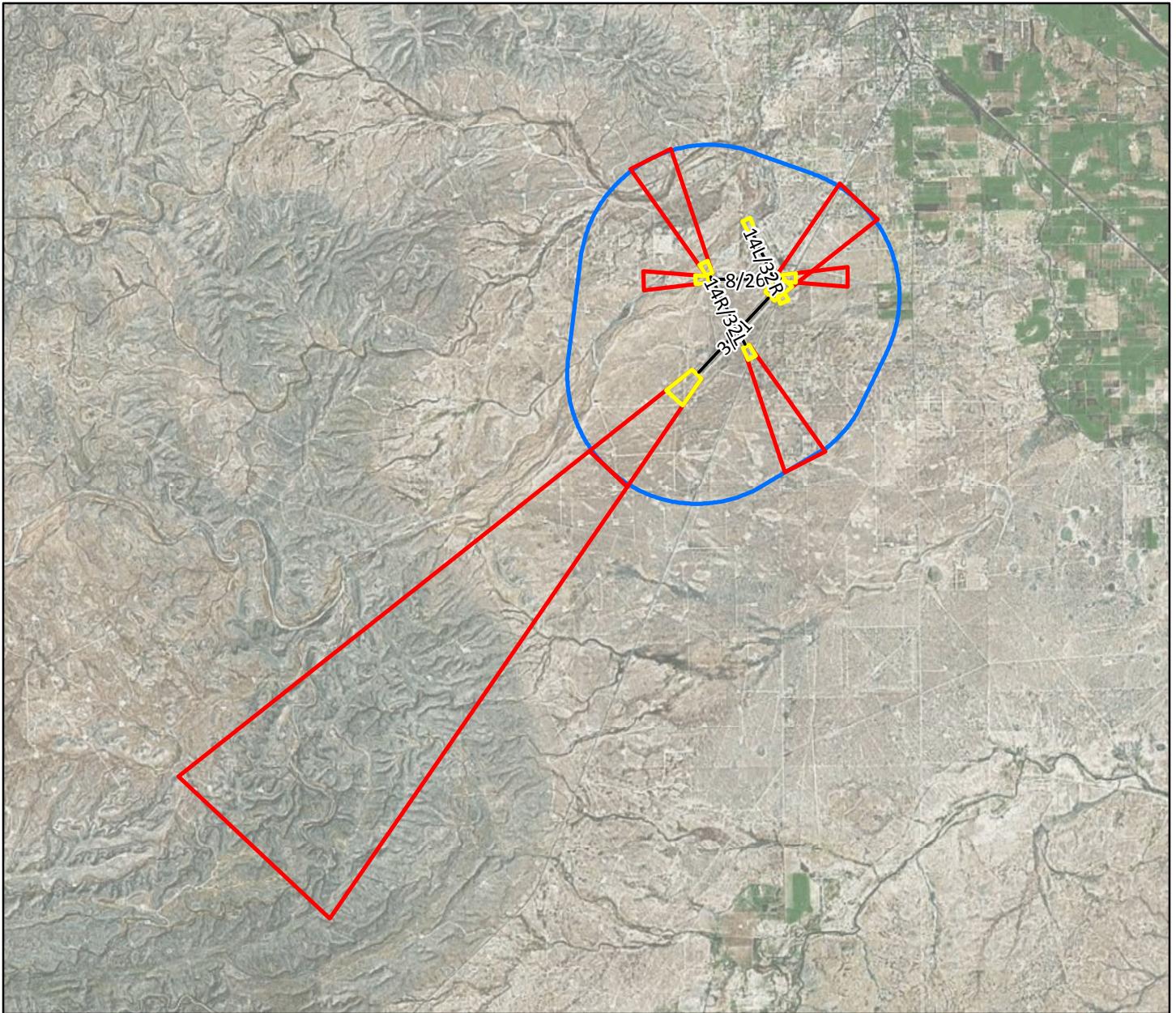
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Cavern City Air Terminal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

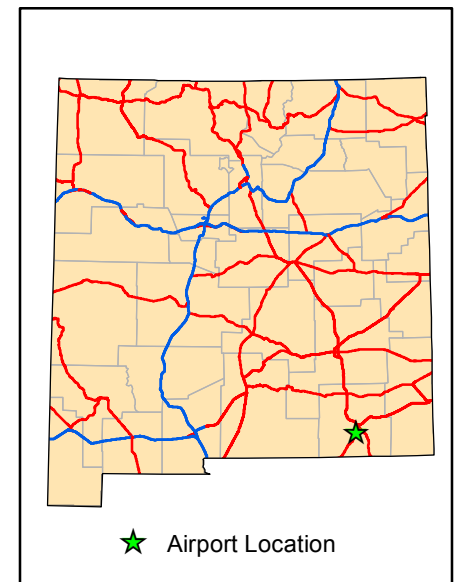
1 inch = 12,000 feet



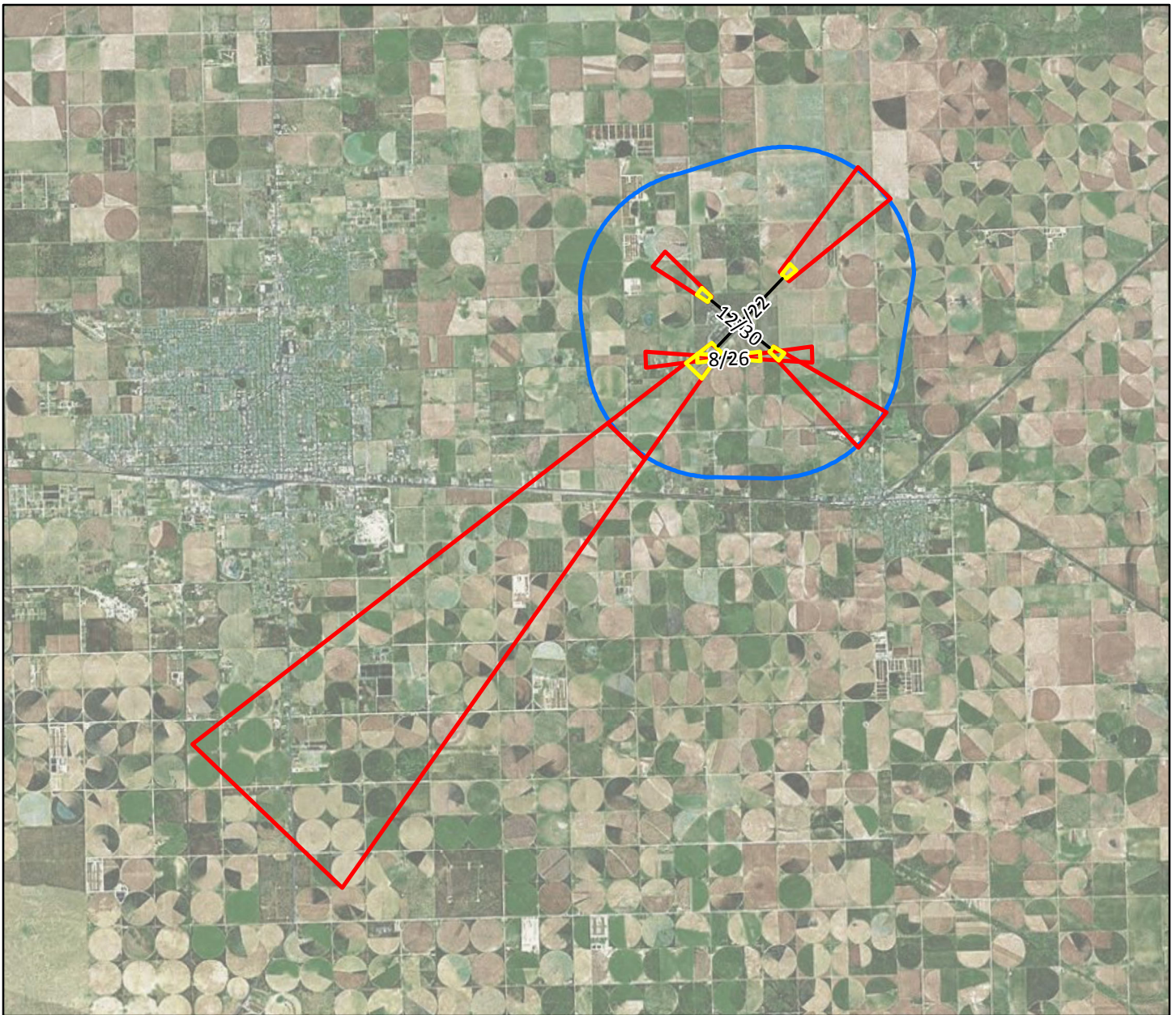
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Clovis Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

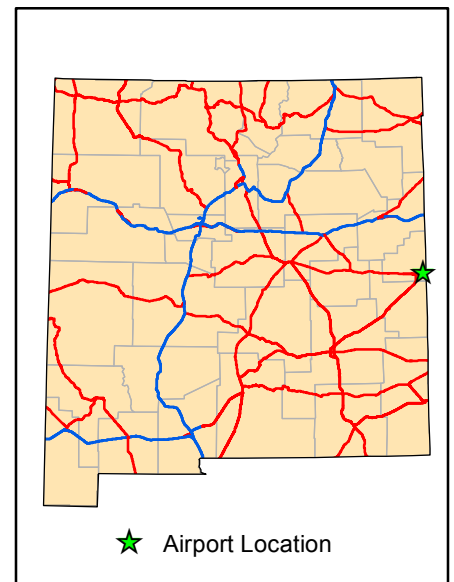
1 inch = 12,000 feet



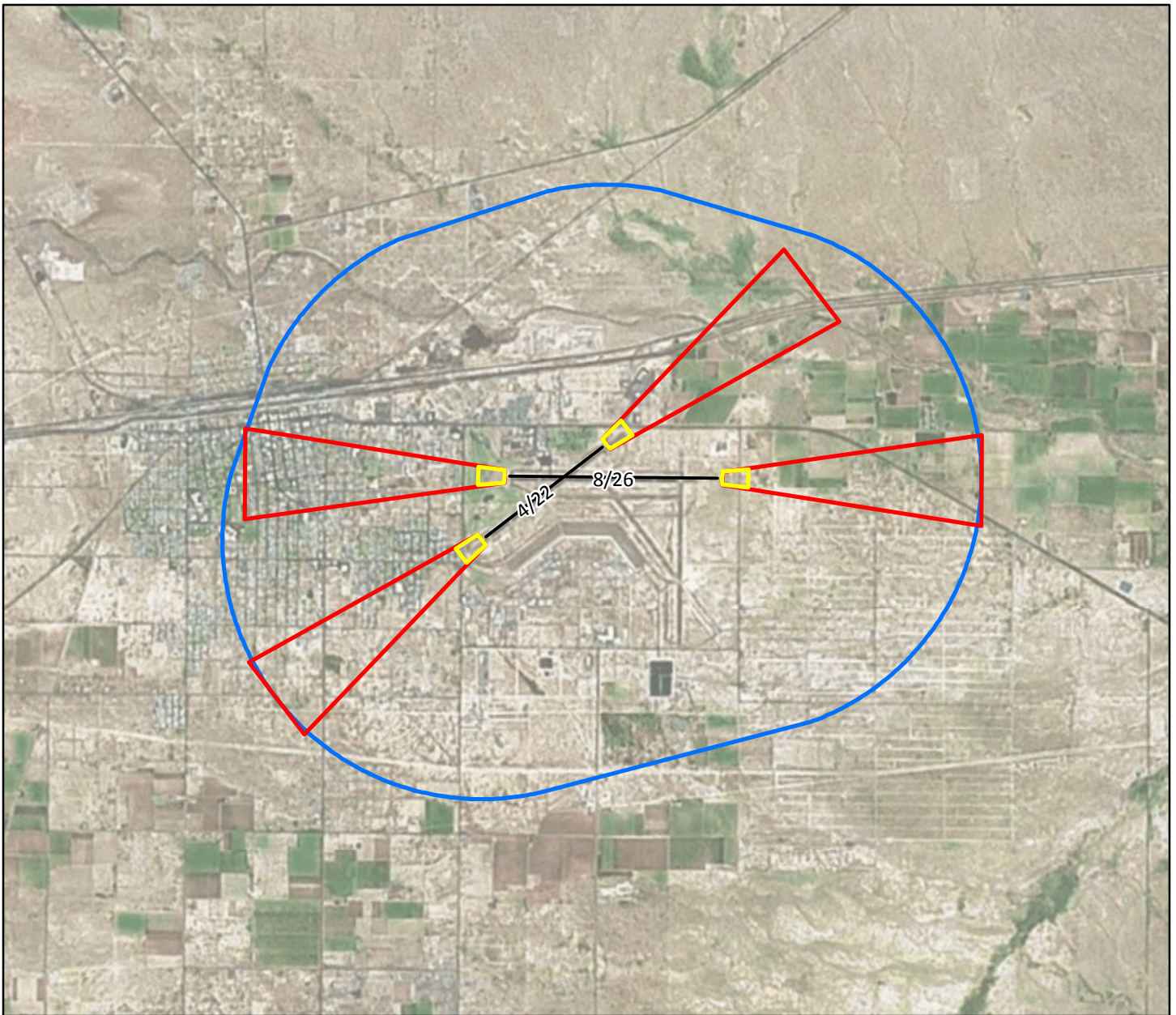
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Deming Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

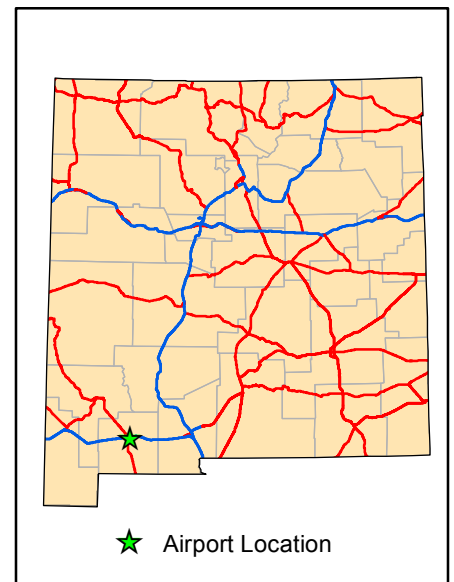
1 inch = 6,000 feet



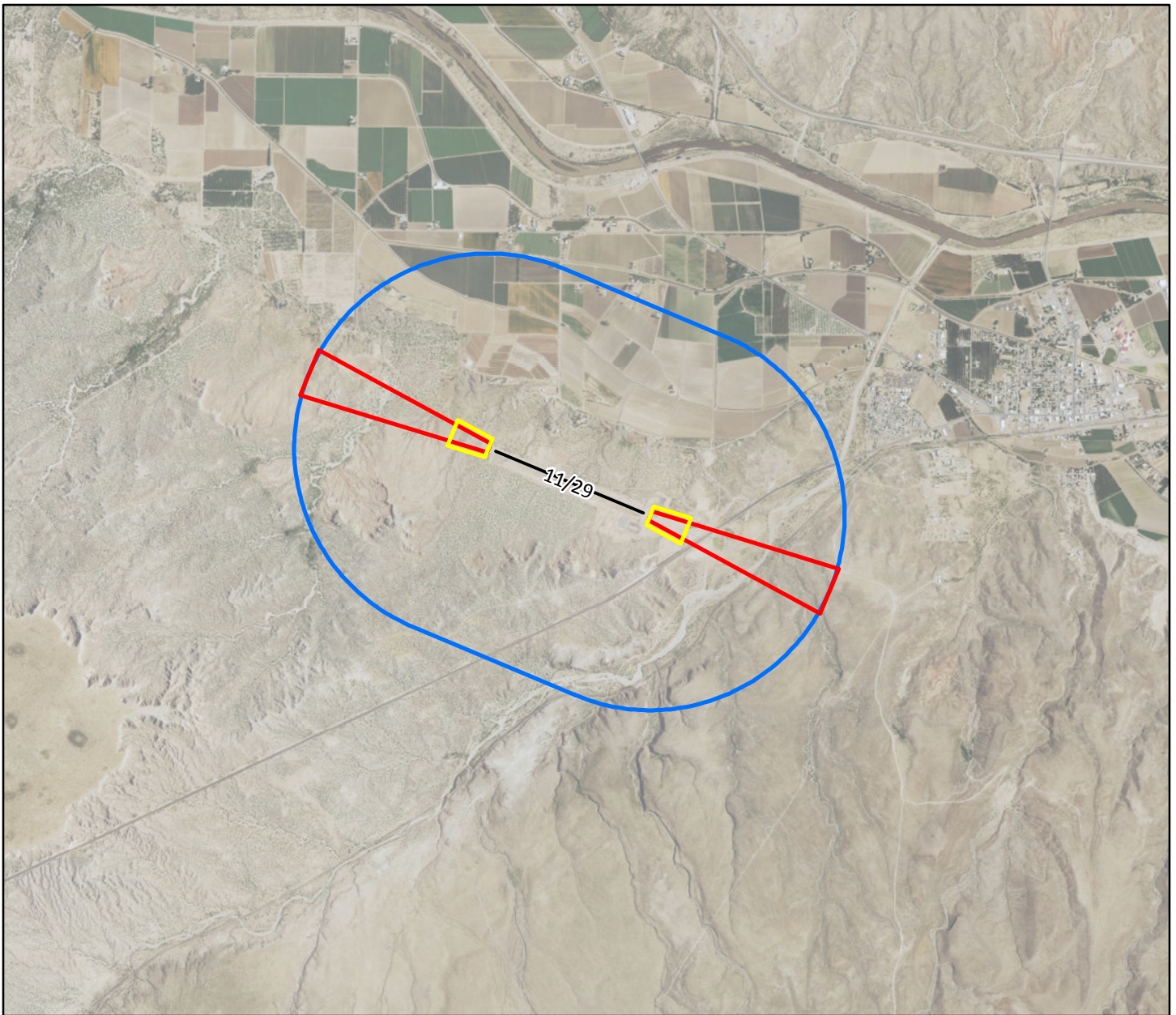
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Hatch Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

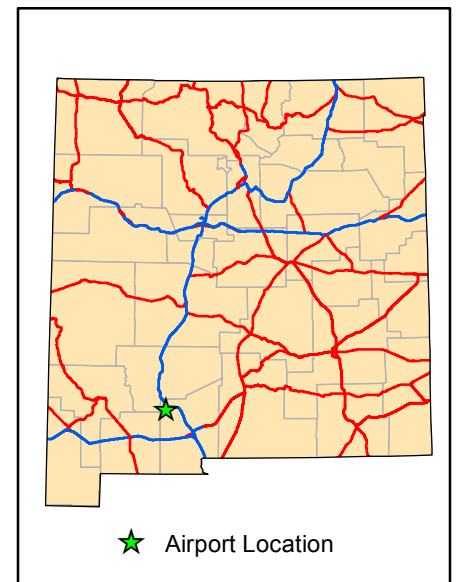
1 inch = 4,000 feet



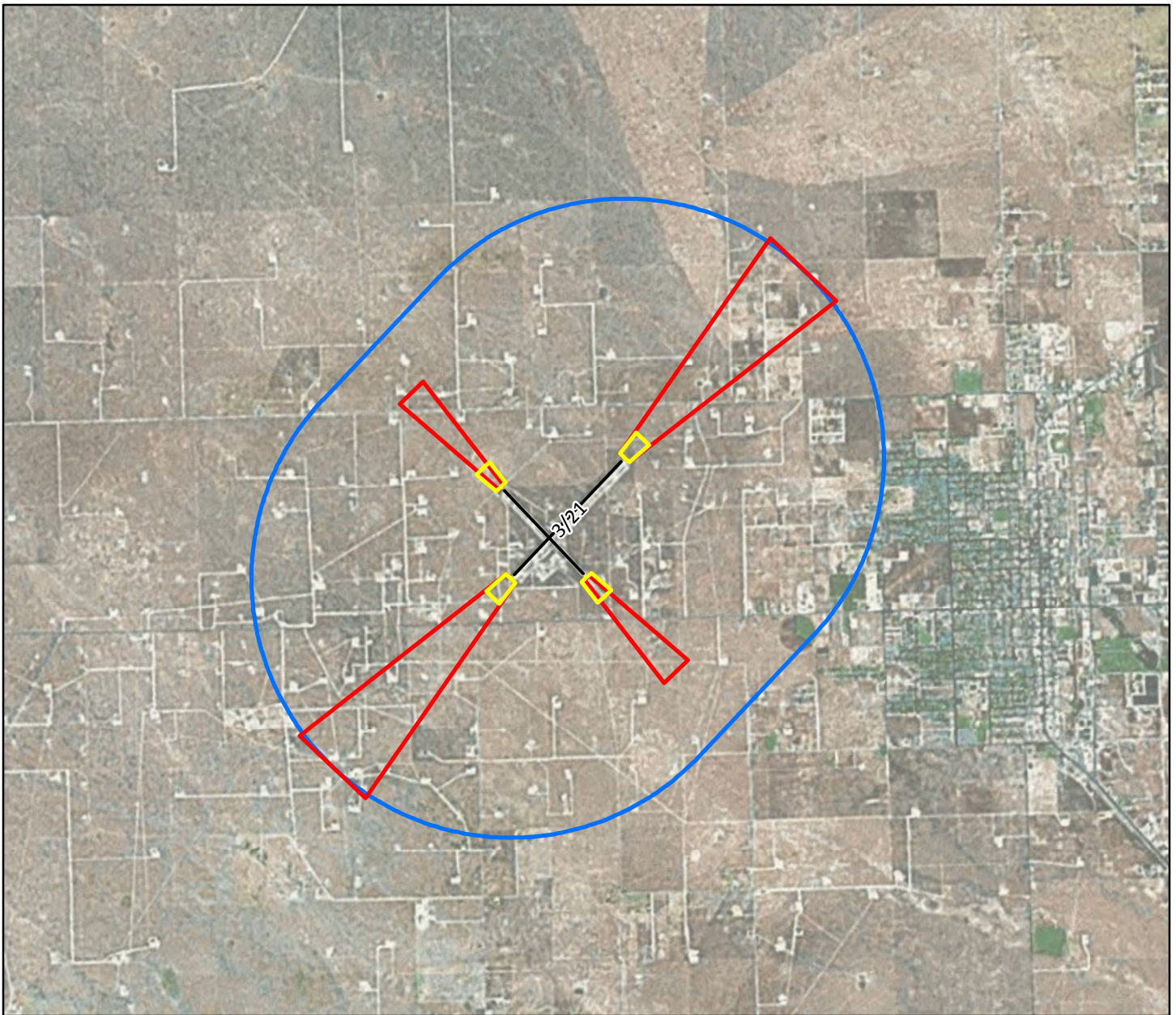
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Lea County-Zip Franklin Memorial

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

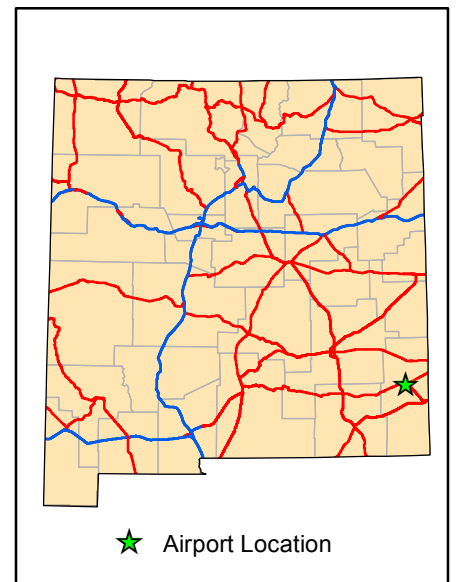
0 6,000 12,000  
1 inch = 6,000 feet



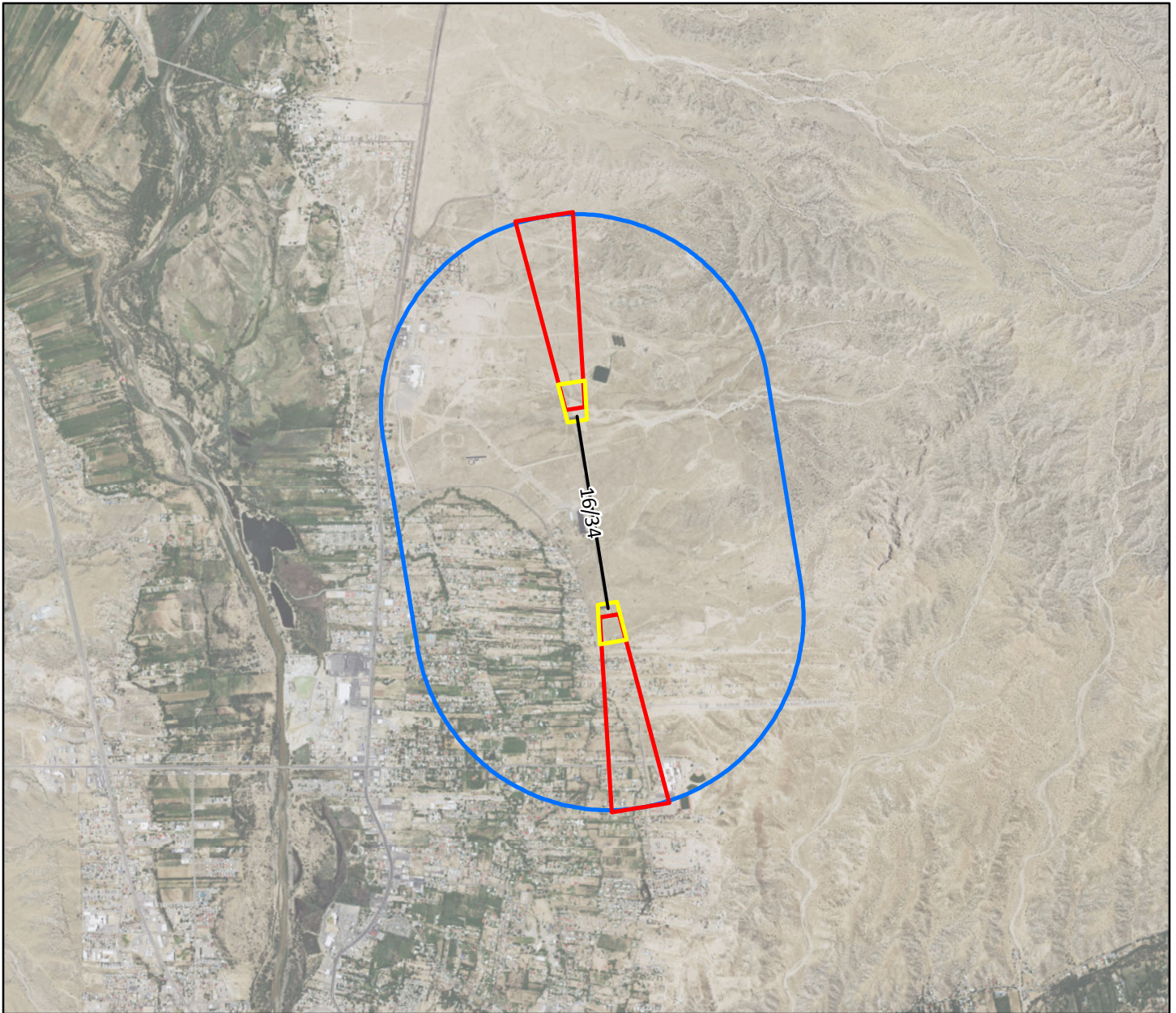
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Ohkay Owingeh Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

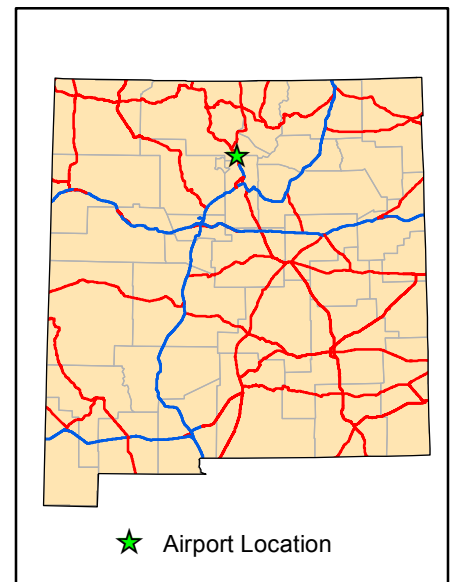
1 inch = 4,000 feet



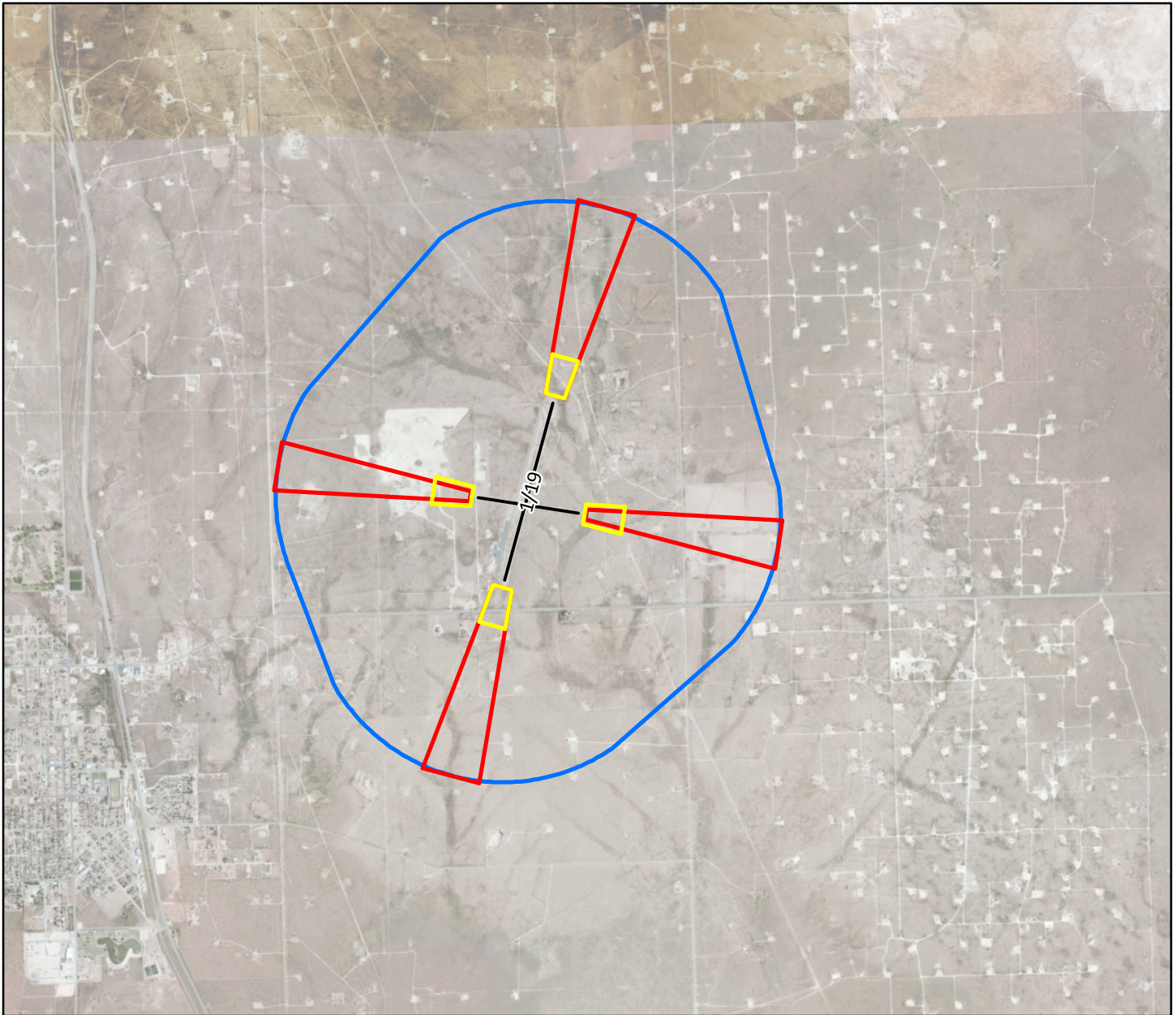
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Lea County/Jal Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

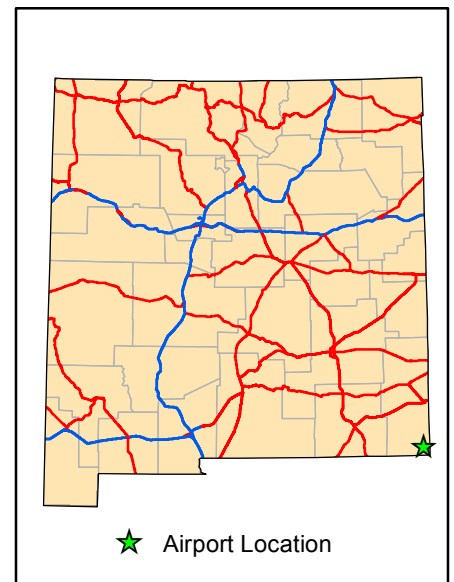
1 inch = 4,000 feet



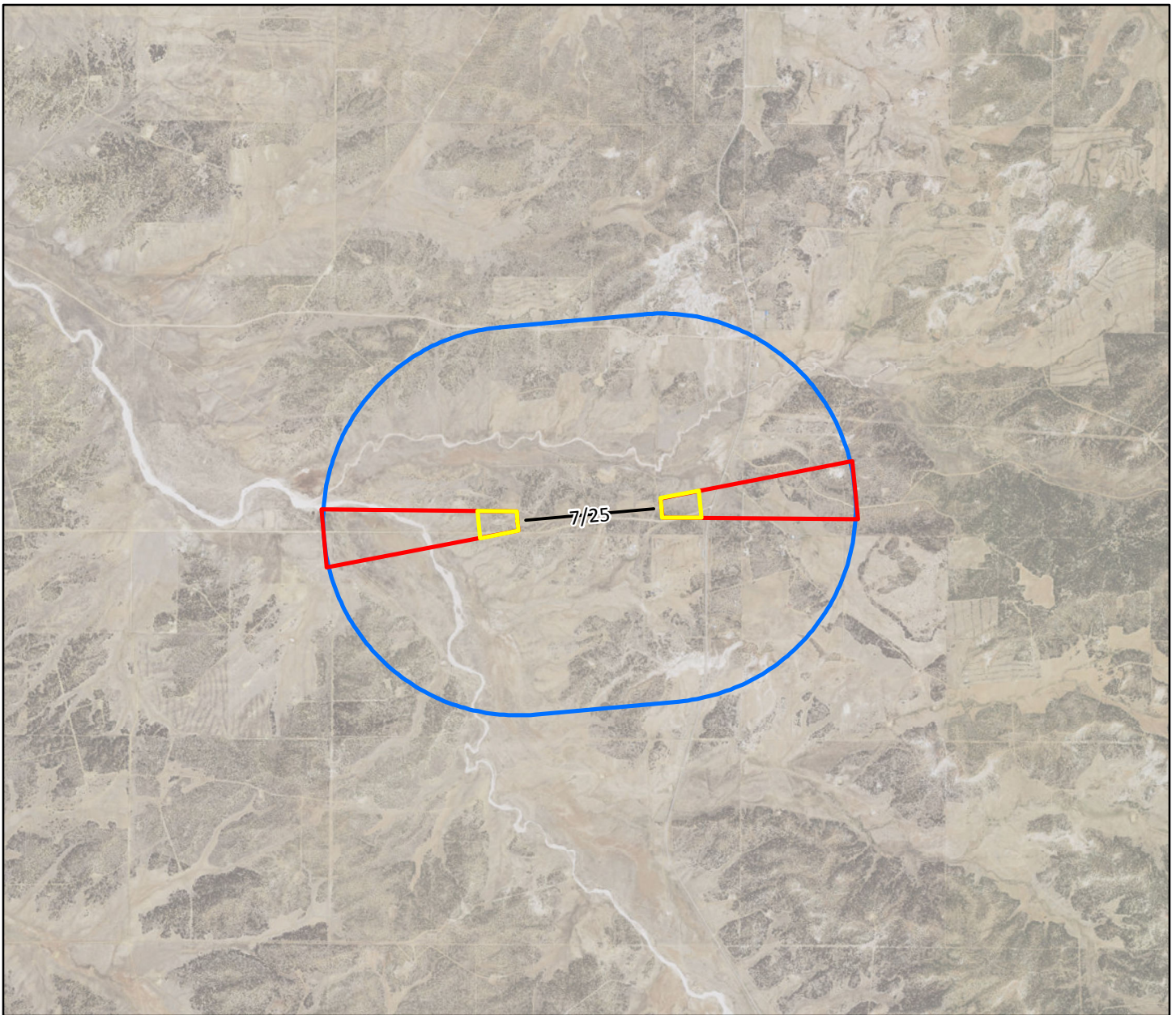
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Lindrith Airpark

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

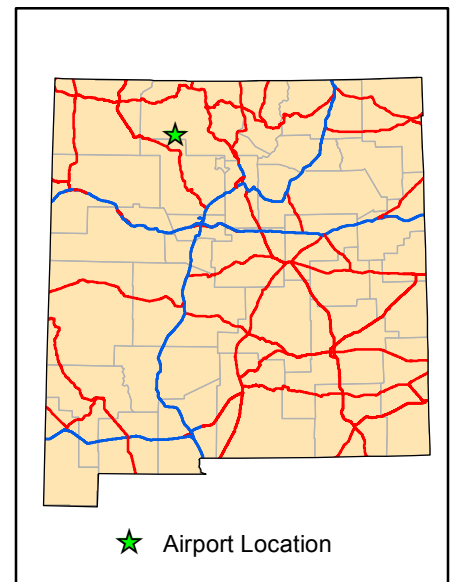
1 inch = 4,000 feet



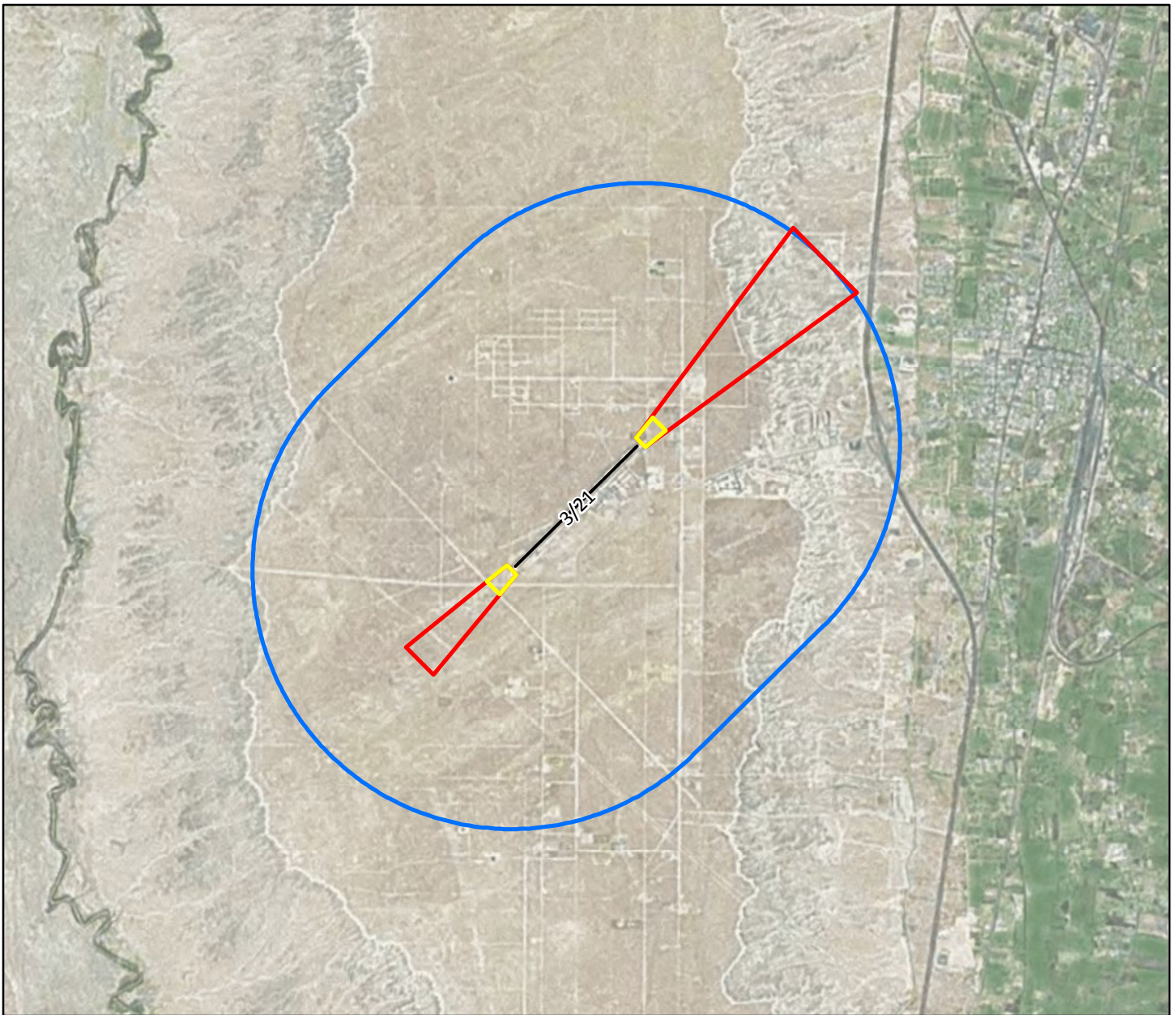
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Belen-Alexander Municipal

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 6,000 12,000

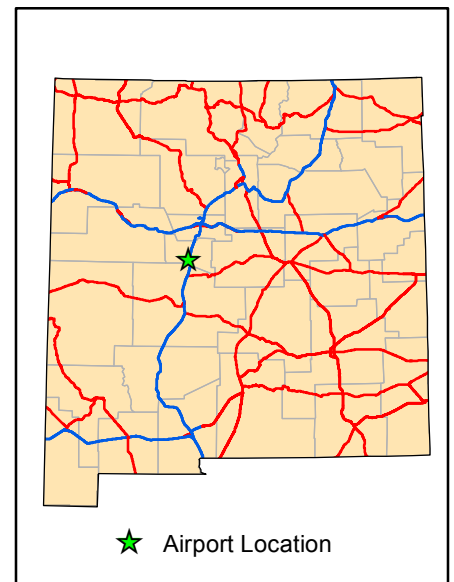
1 inch = 6,000 feet



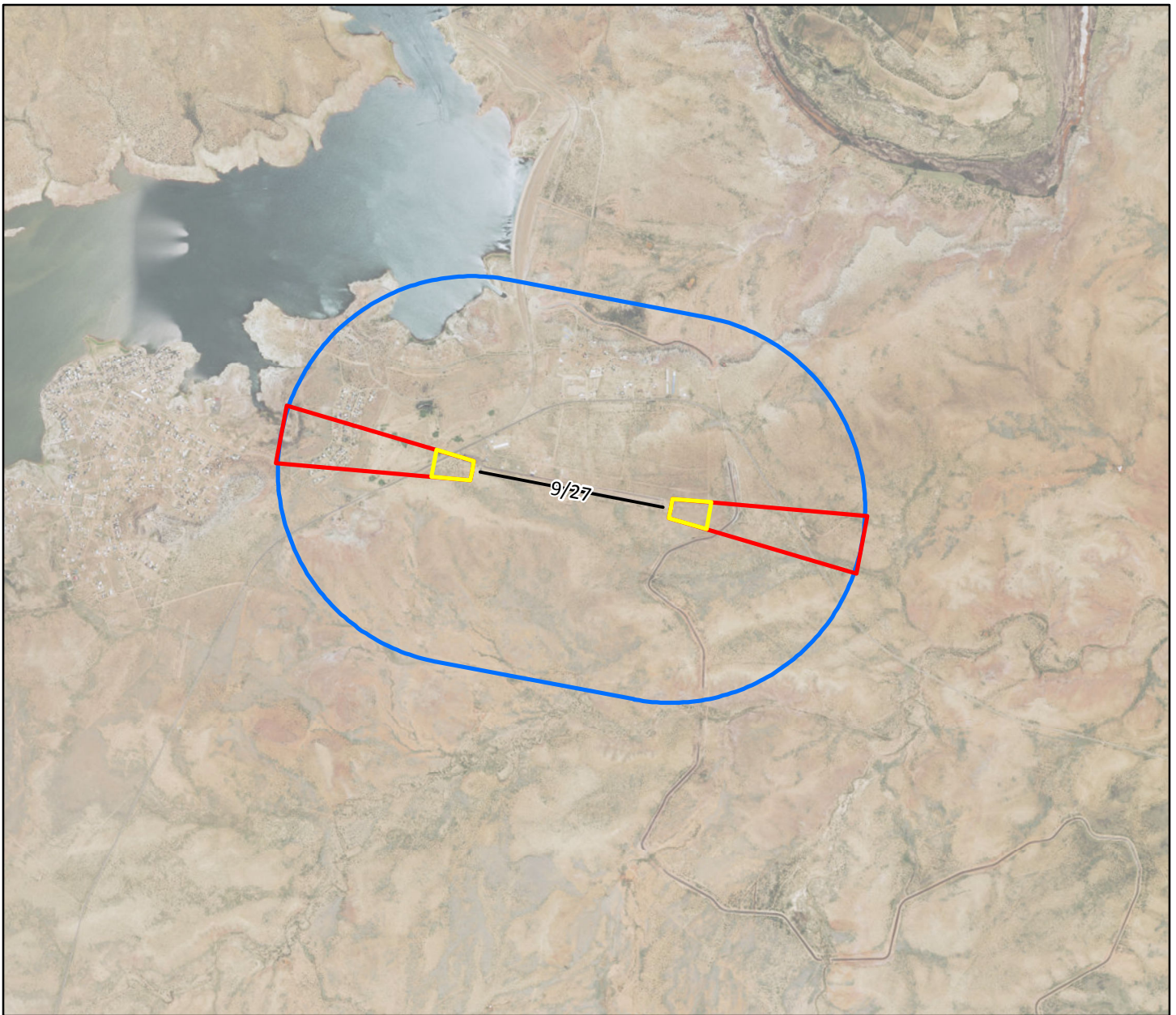
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Conchas Lake

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

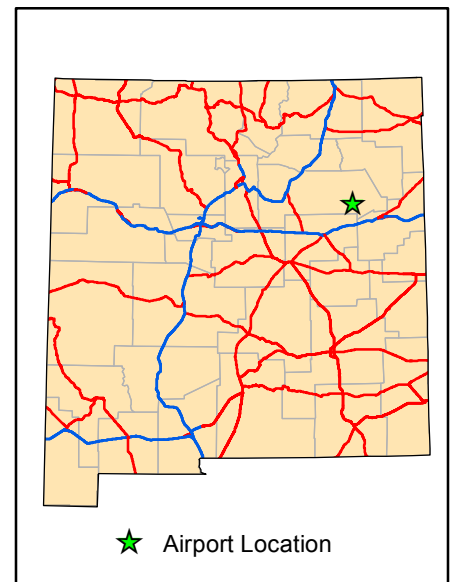
1 inch = 4,000 feet



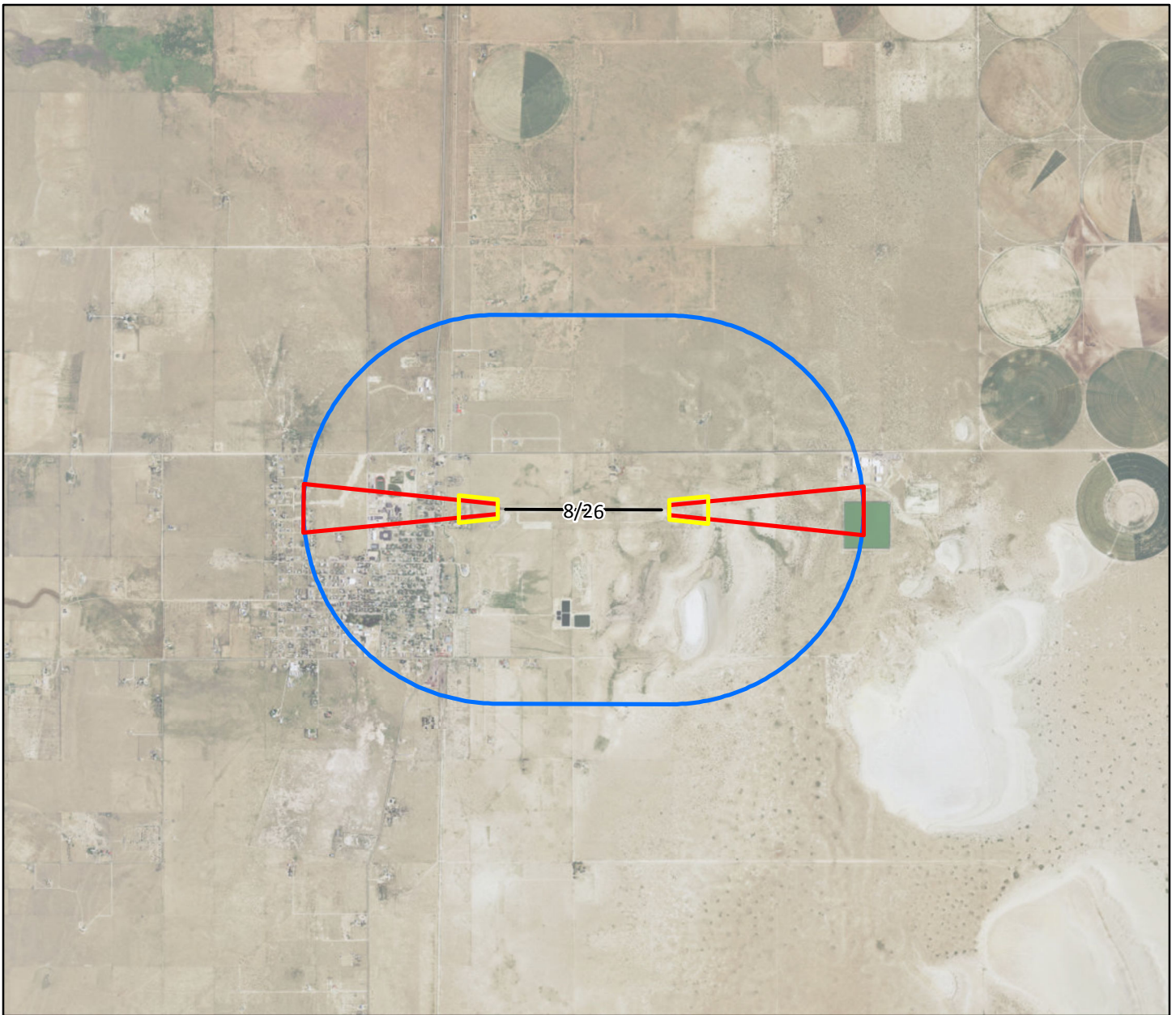
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Estancia Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

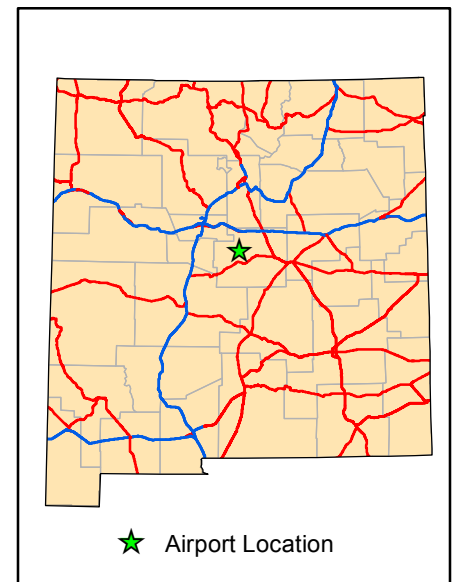
1 inch = 4,000 feet



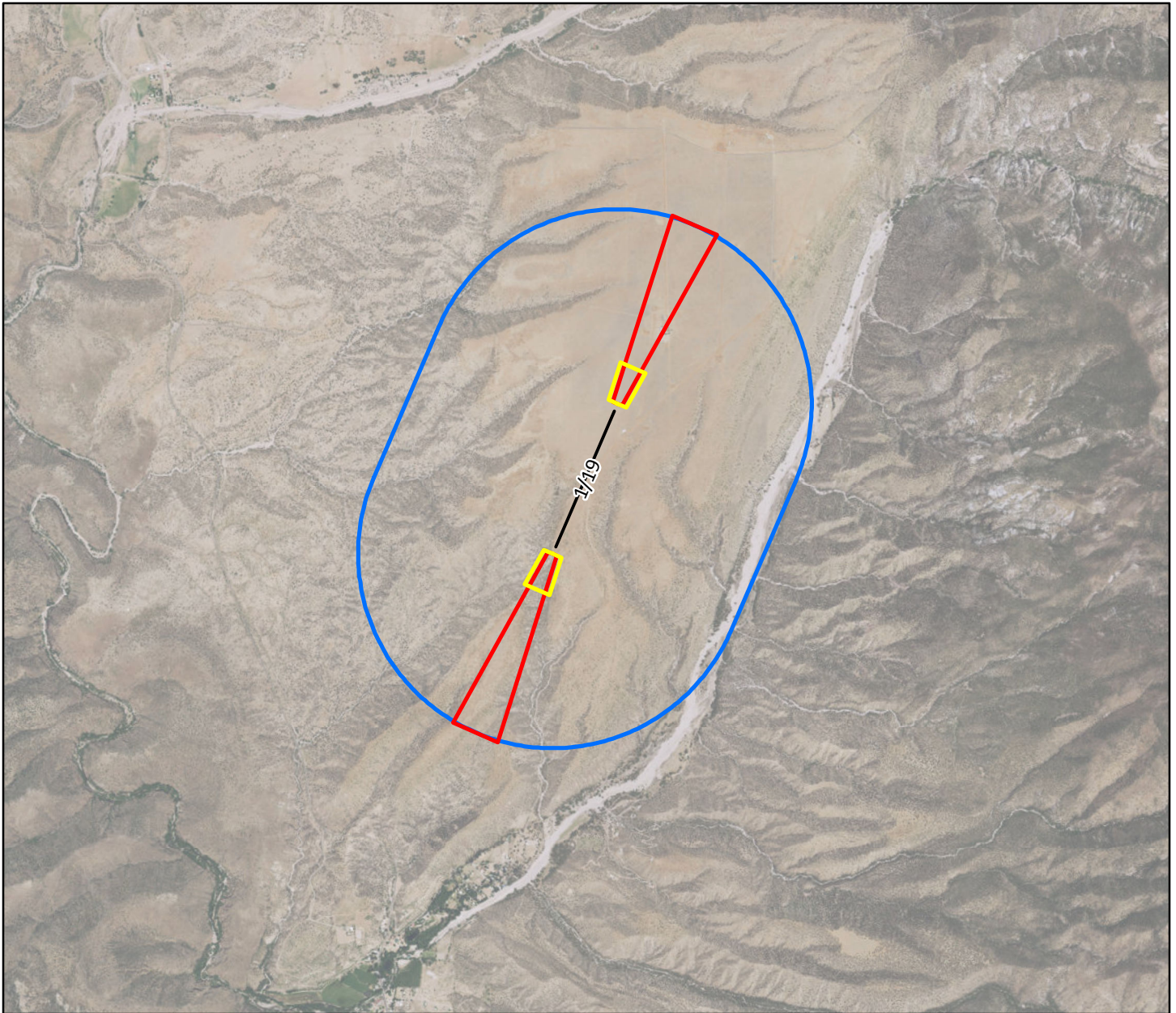
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Glenwood-Catron County

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

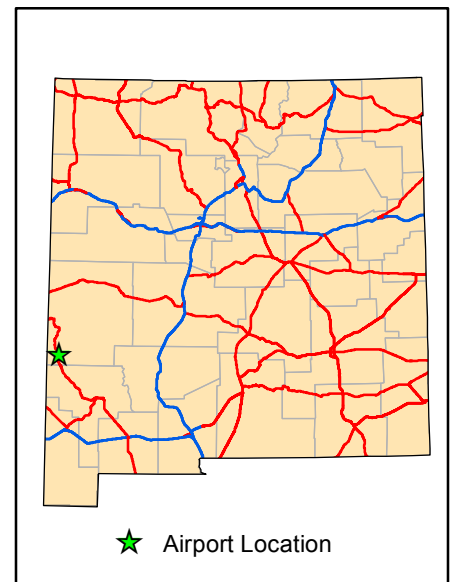
1 inch = 4,000 feet



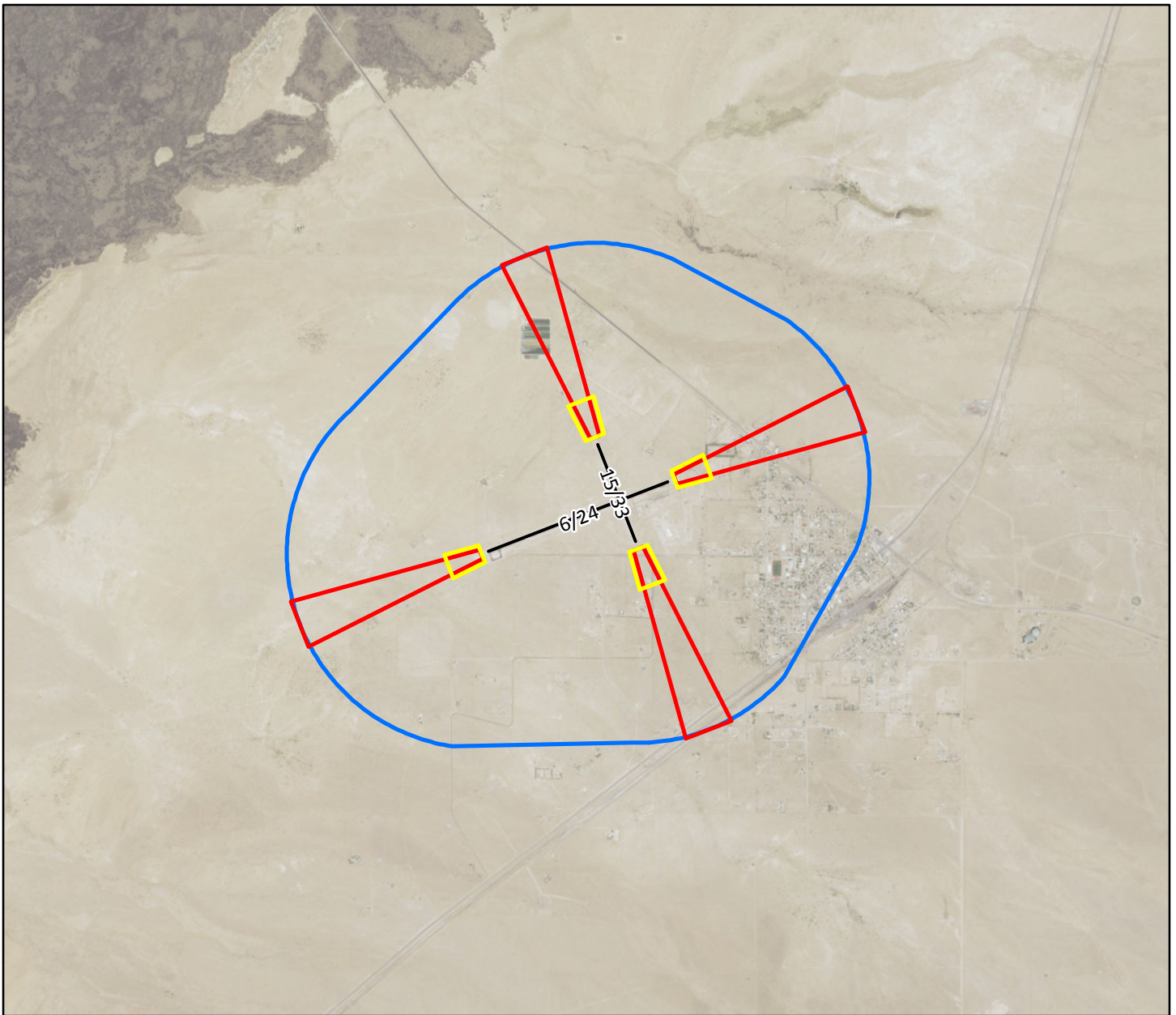
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Carrizozo Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

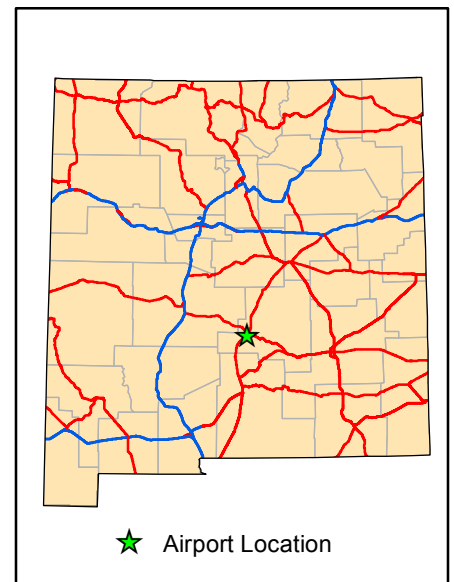
1 inch = 4,000 feet



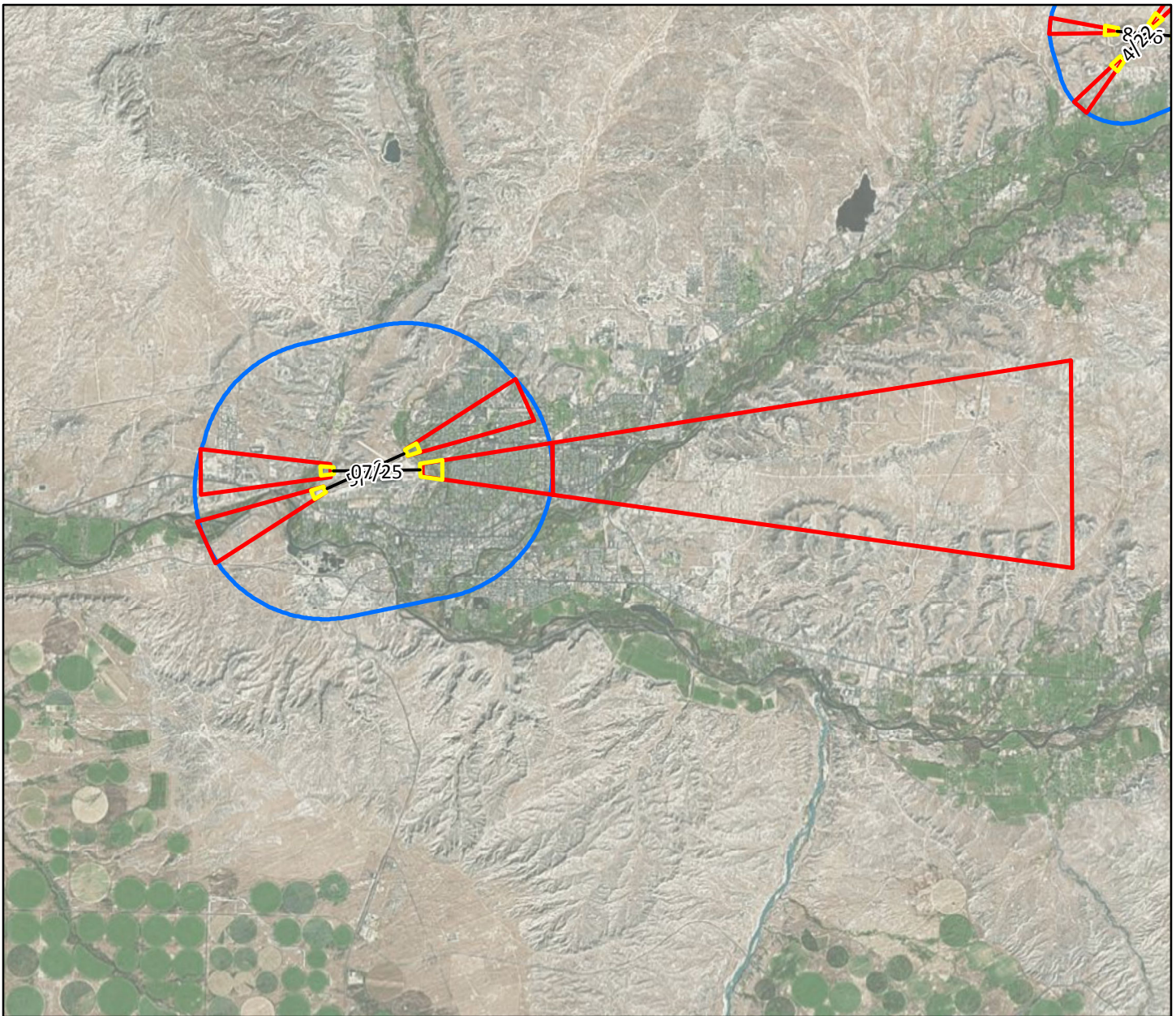
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Four Corners Regional

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

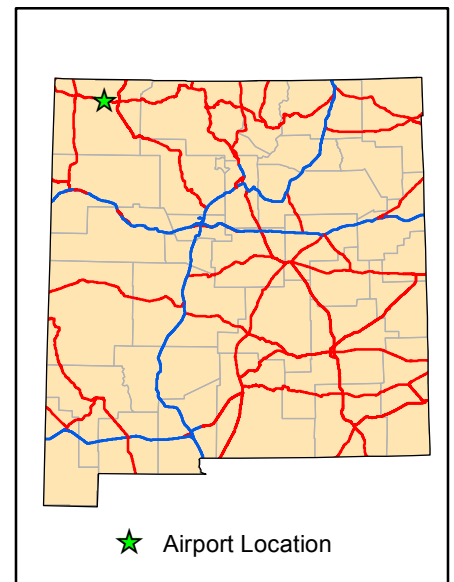
1 inch = 12,000 feet



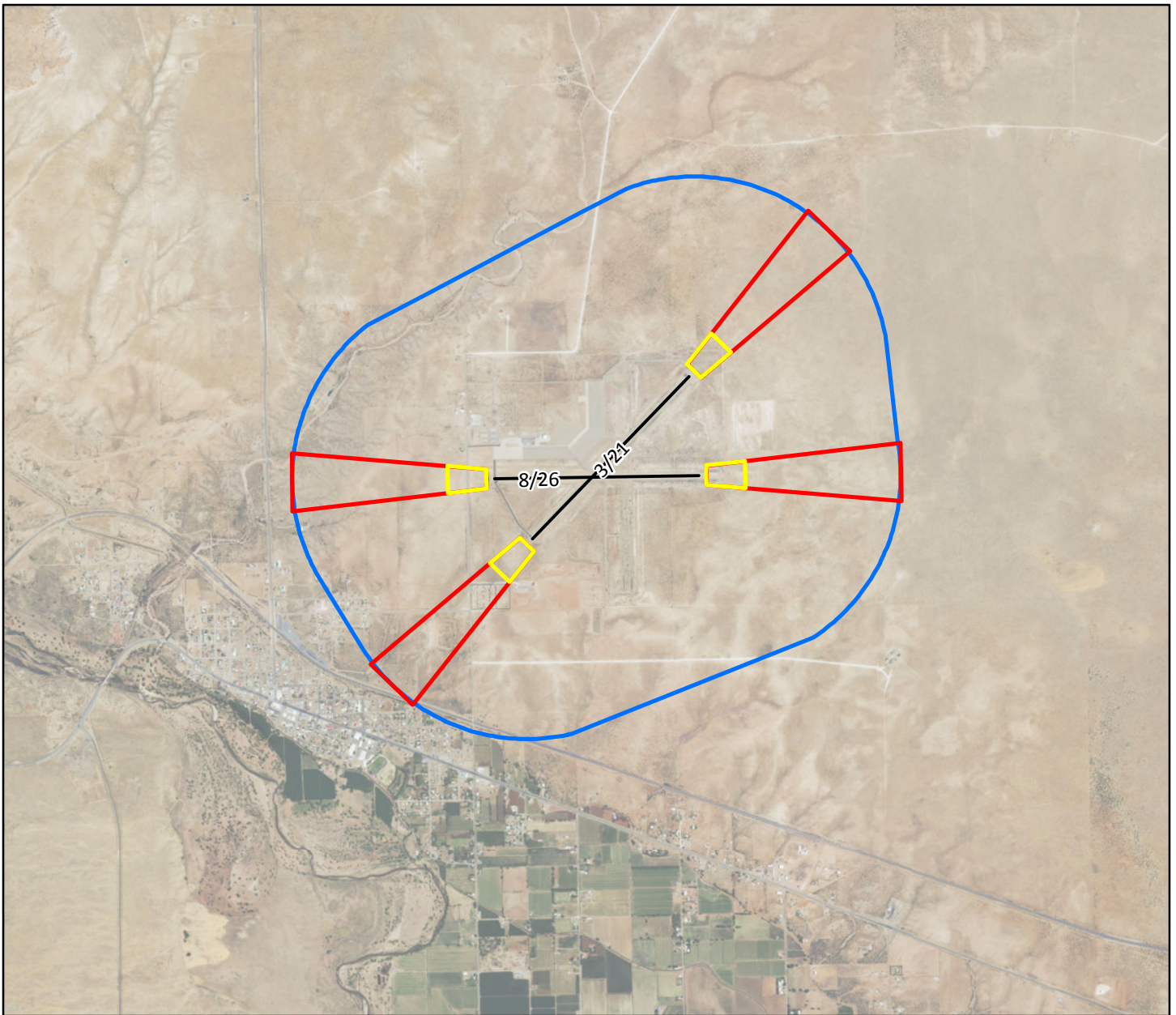
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Fort Sumner Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

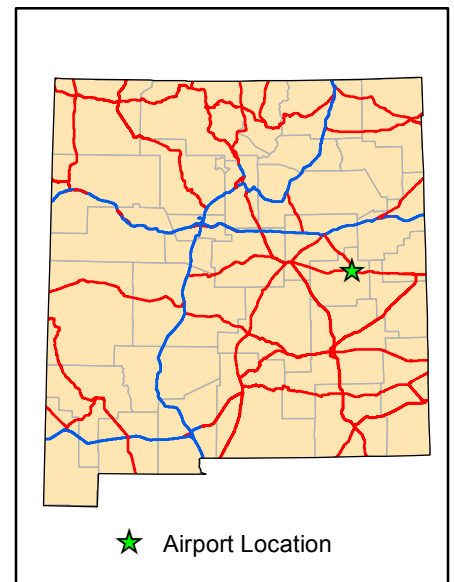
1 inch = 4,000 feet



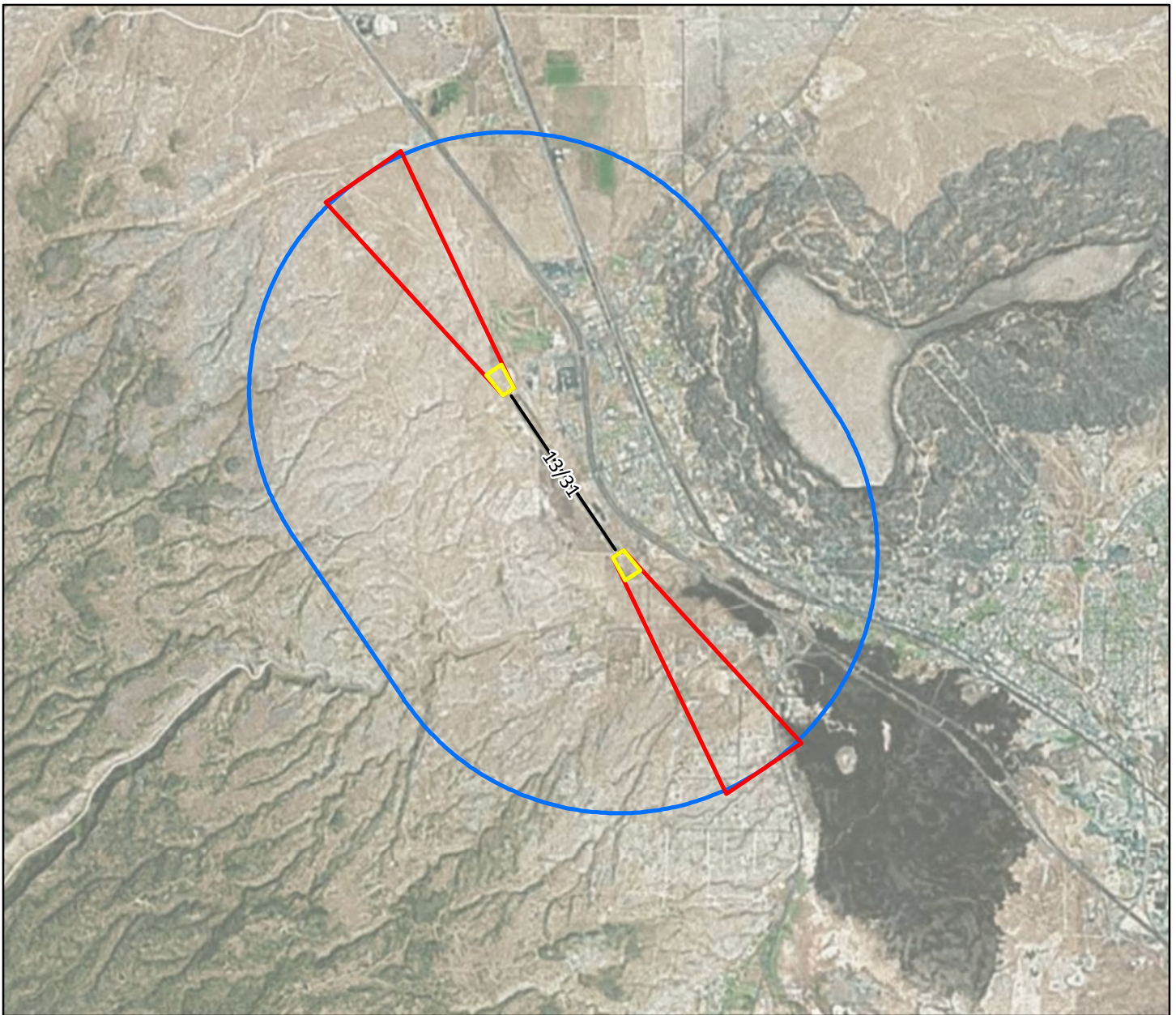
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Grants-Milan Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

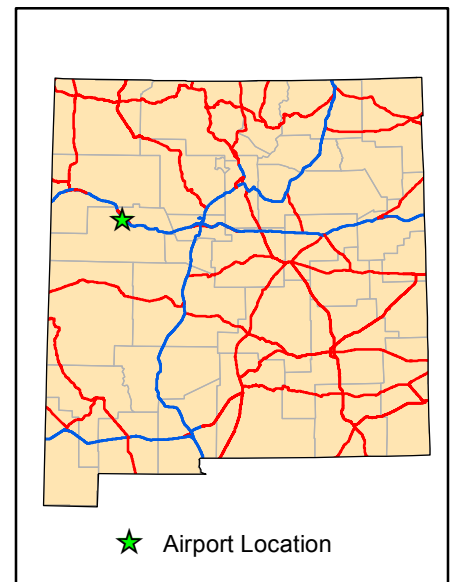
1 inch = 6,000 feet



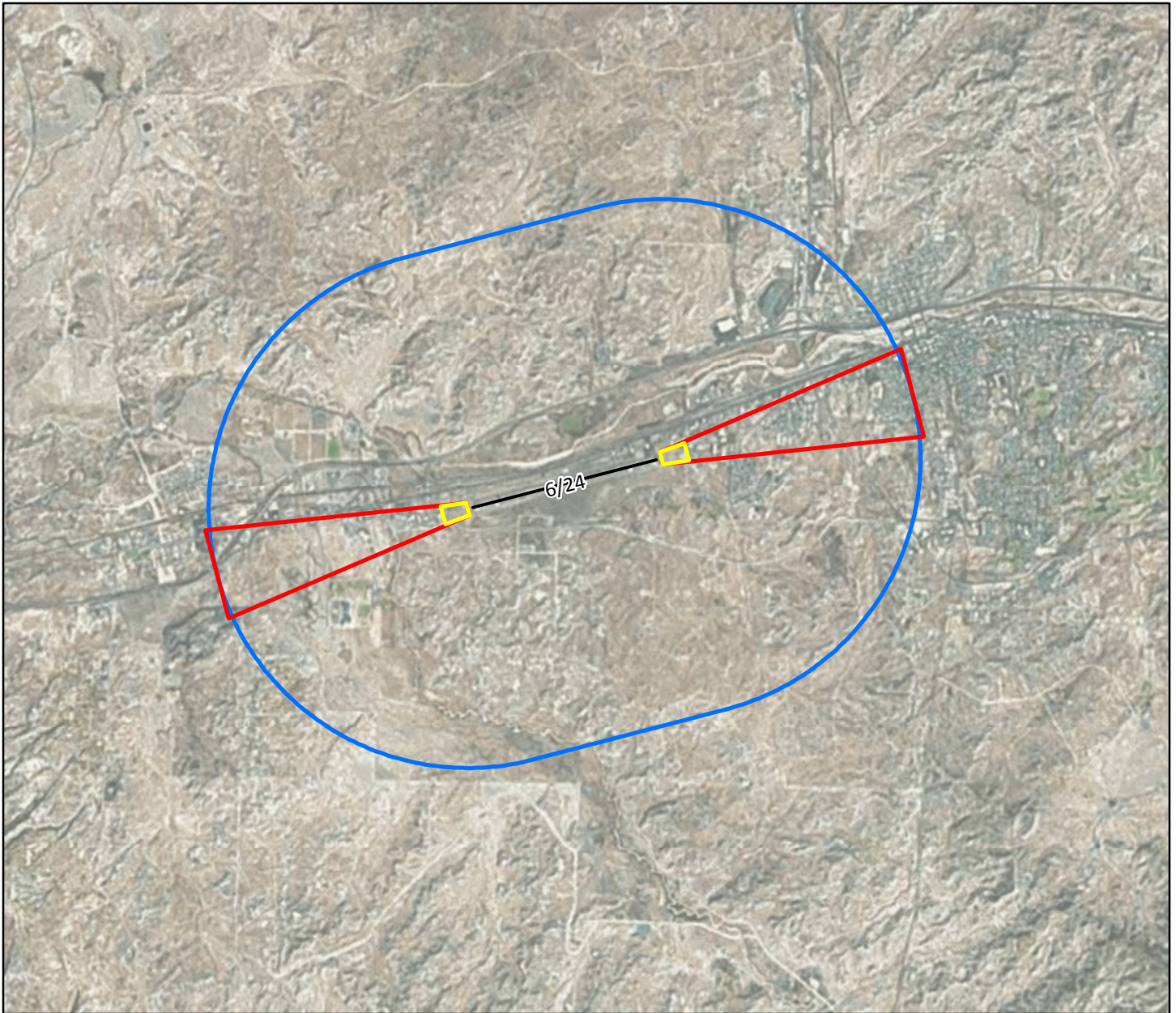
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Gallup Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

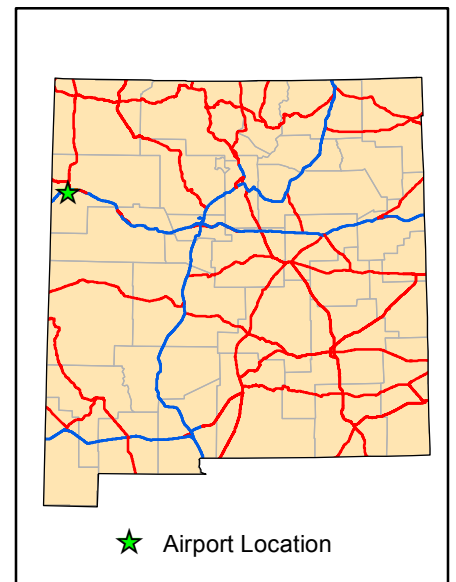
1 inch = 6,000 feet



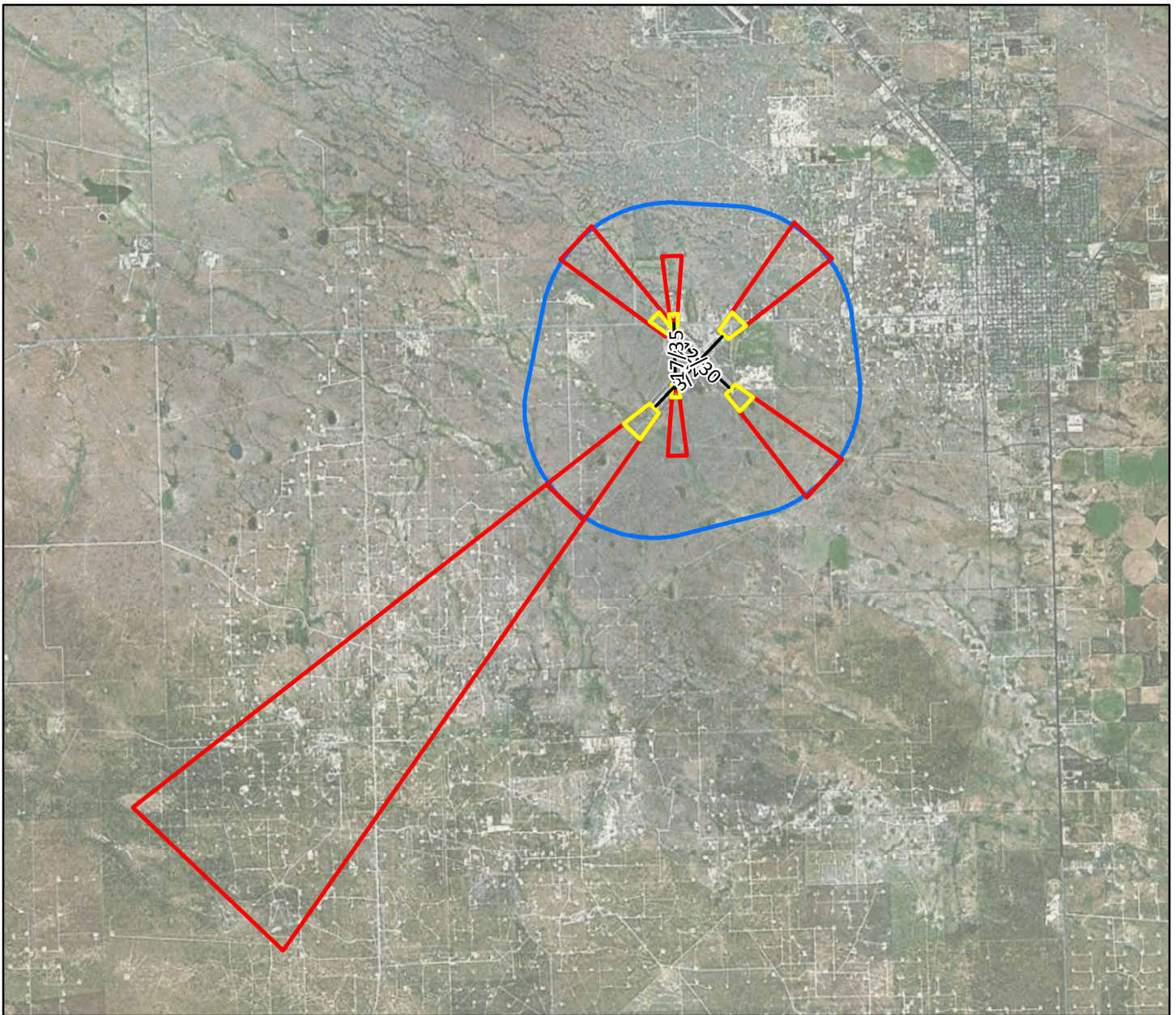
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Lea County Regional Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

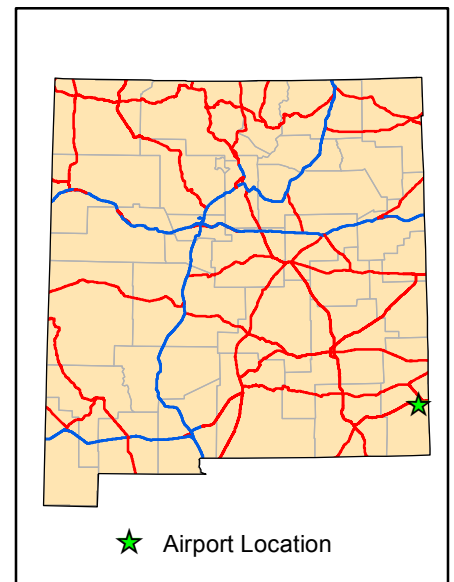
0 12,000 24,000  
1 inch = 12,000 feet



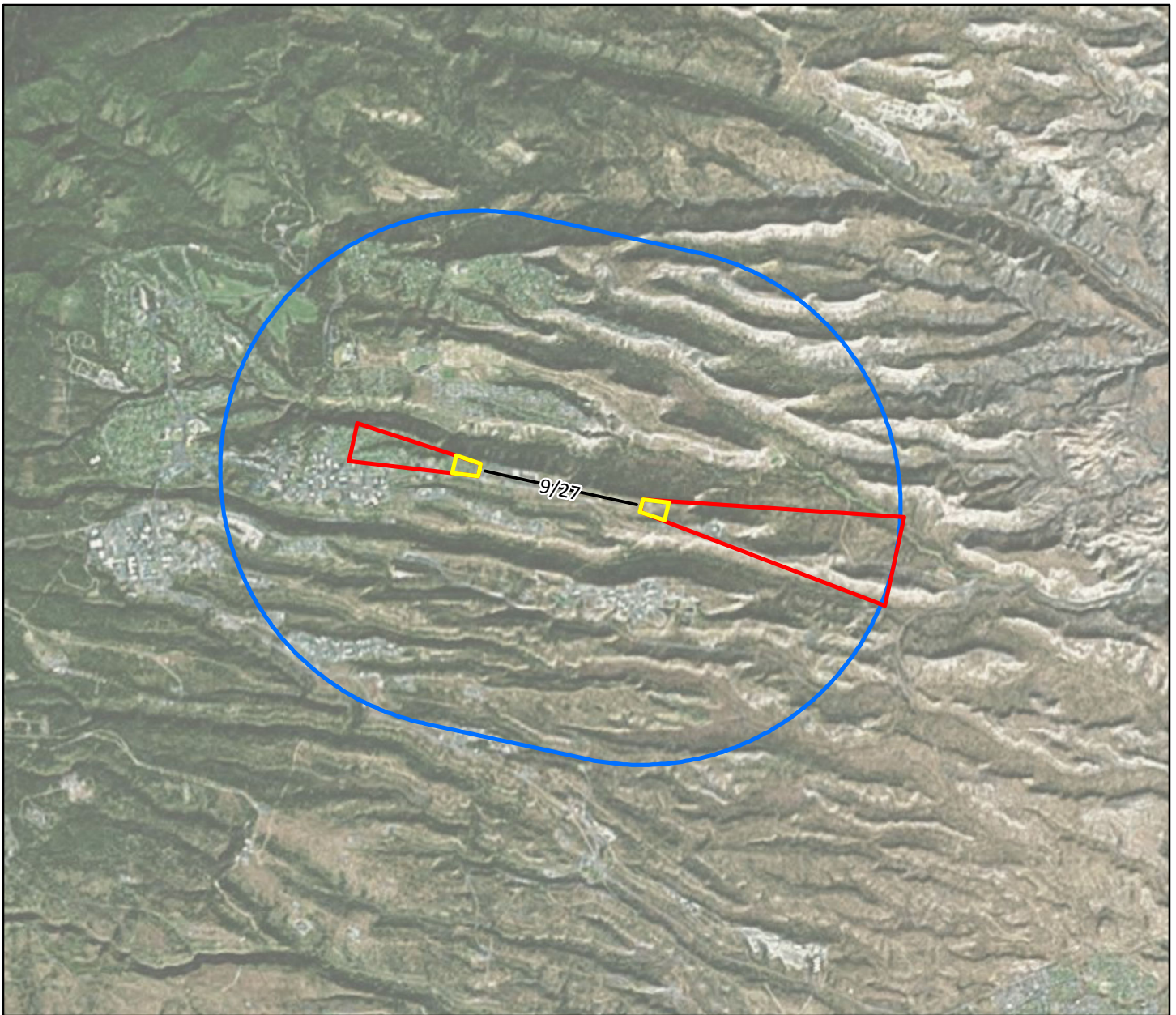
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Los Alamos Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

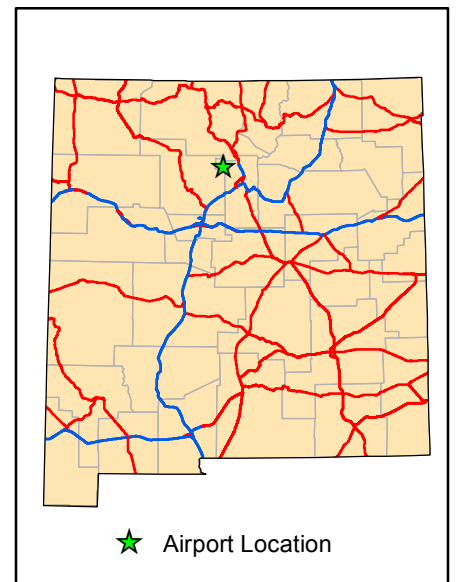
1 inch = 6,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

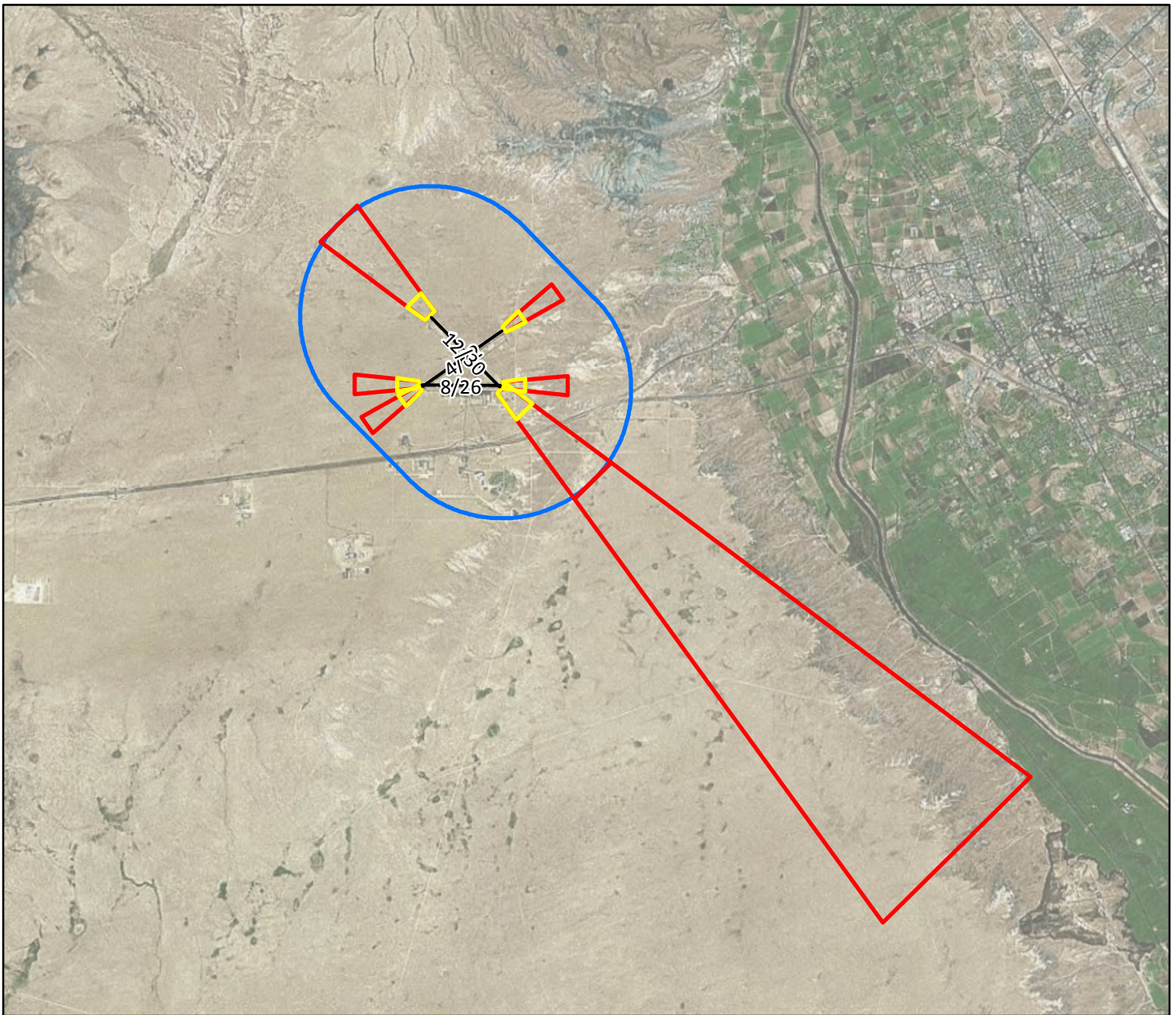
**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.



★ Airport Location





## Las Cruces Intl

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

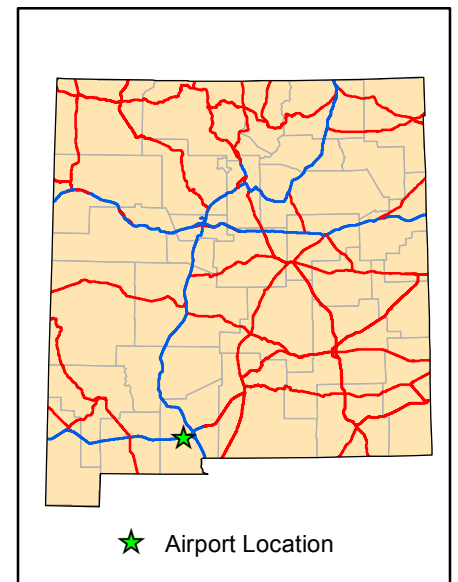
1 inch = 12,000 feet



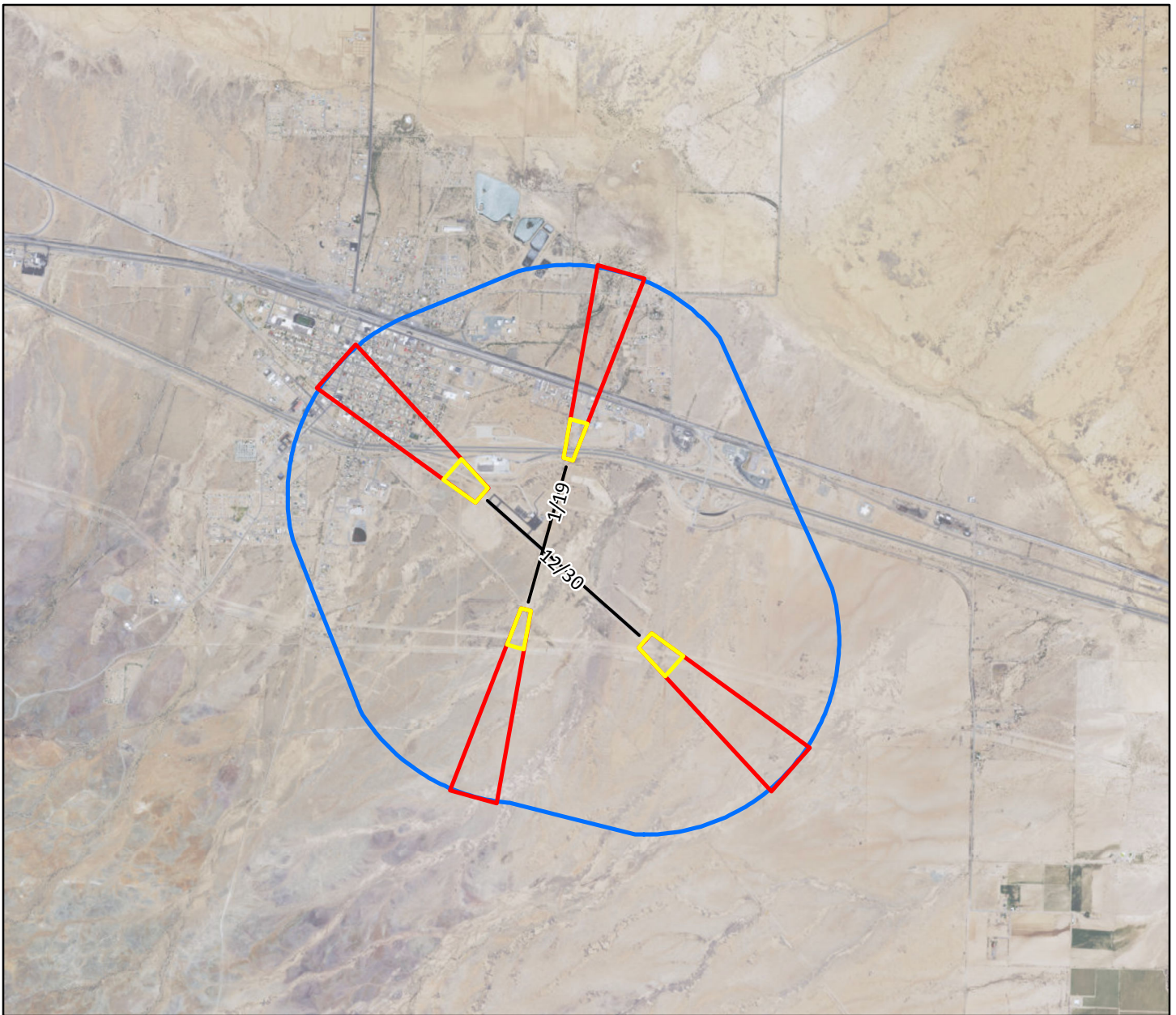
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Lordsburg Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

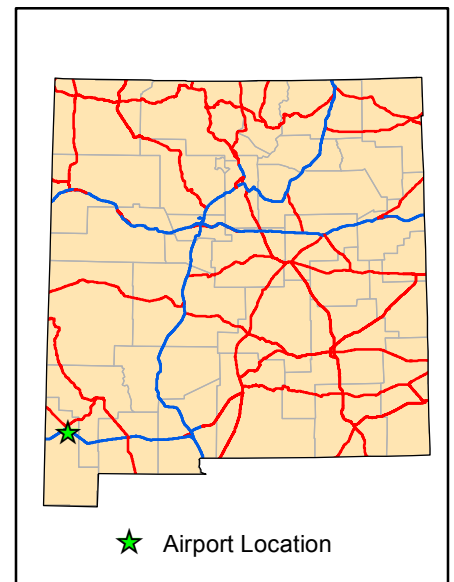
1 inch = 4,000 feet



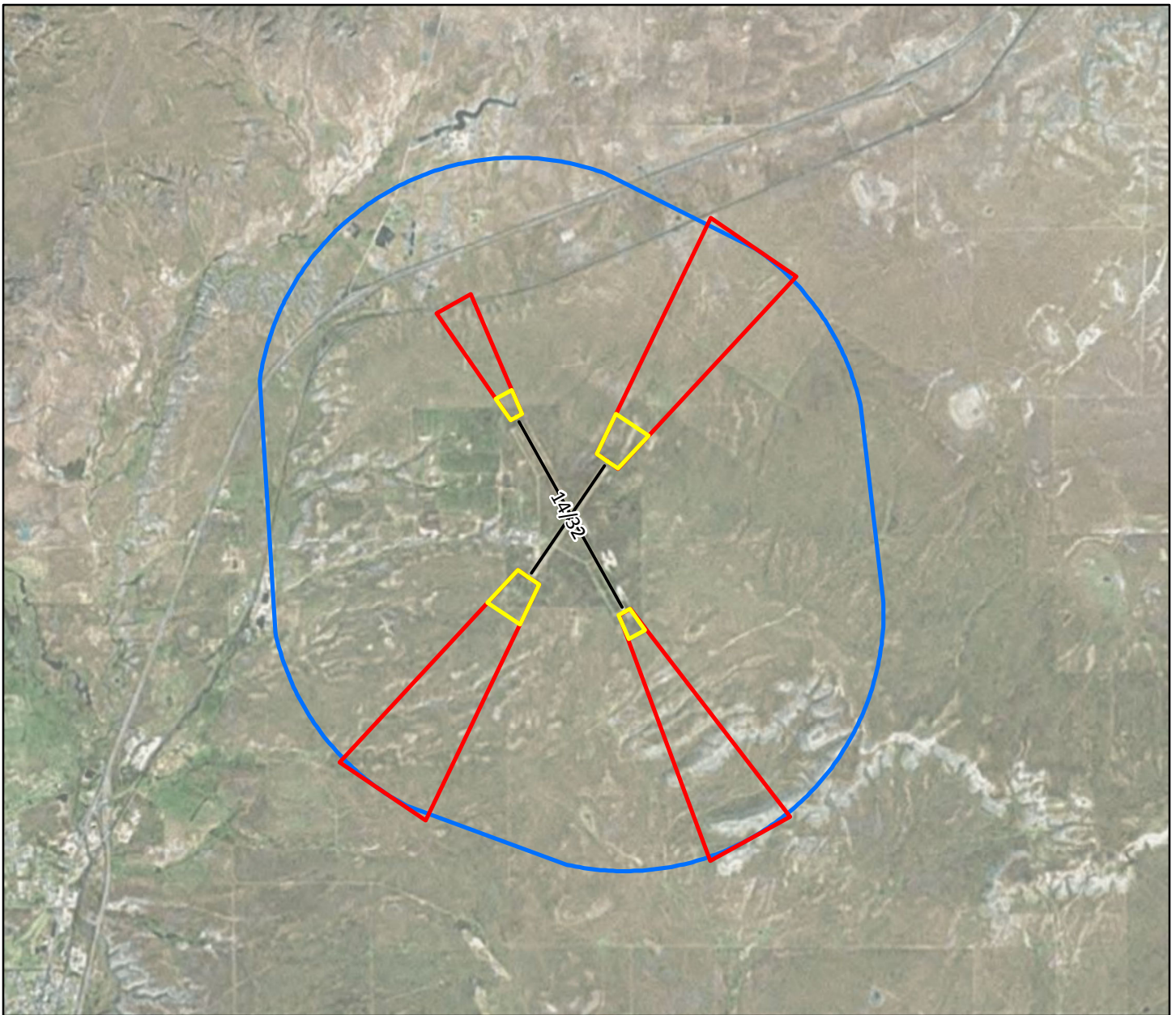
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Las Vegas Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

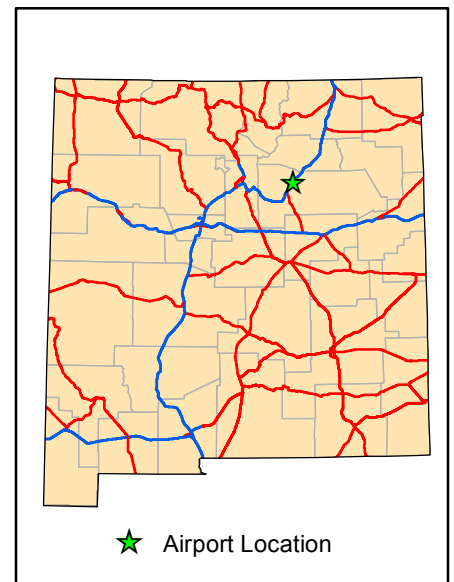
1 inch = 6,000 feet

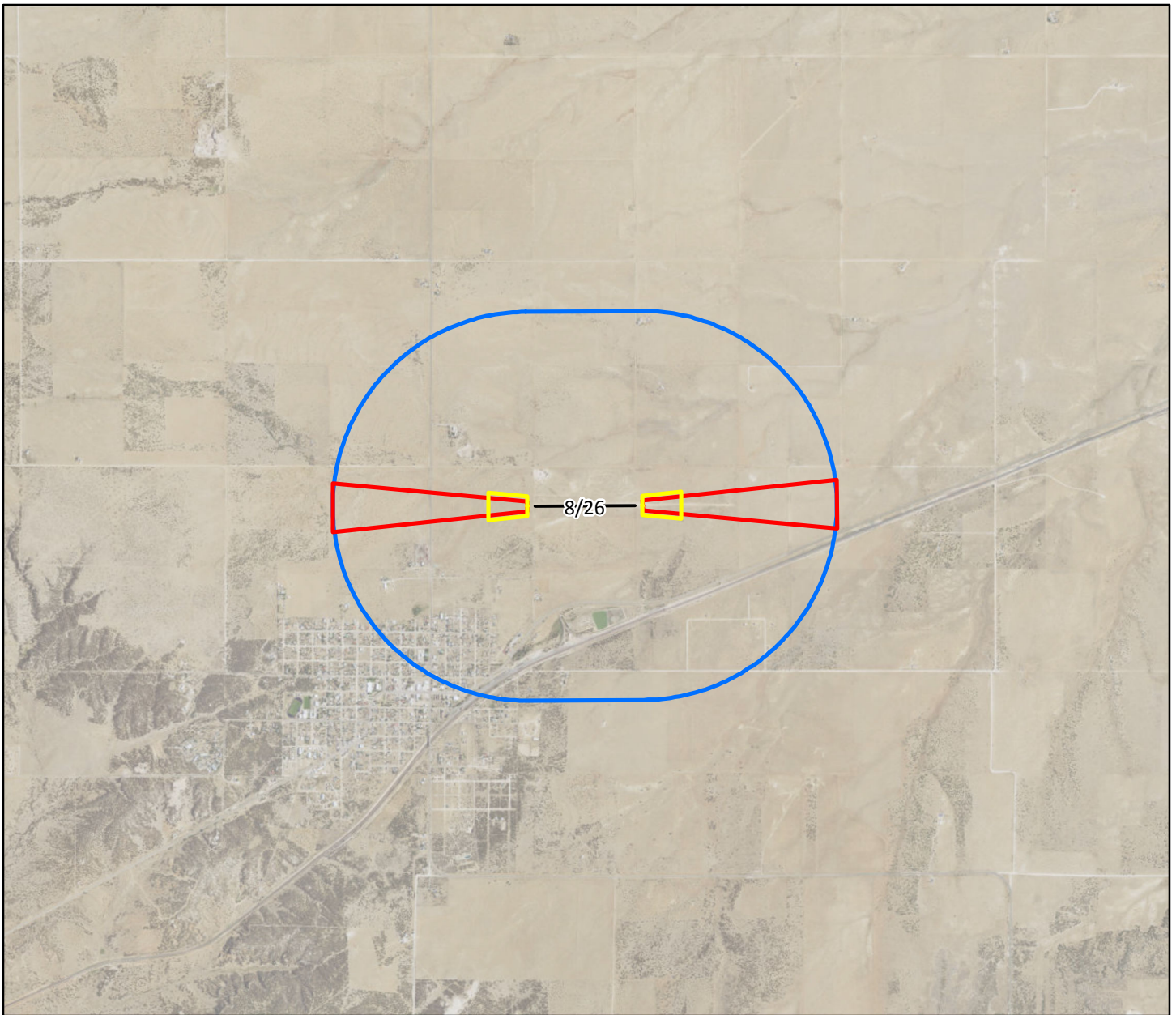


**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.





## Mountainair Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

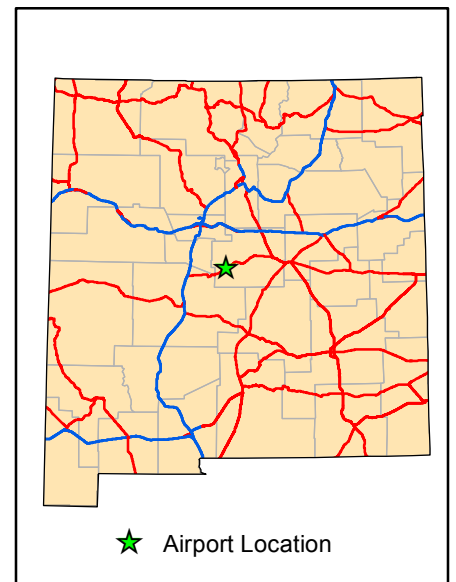
1 inch = 4,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

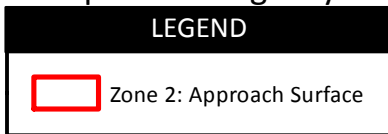
**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Mosquero Emergency Services Heliport



0 1,500 3,000

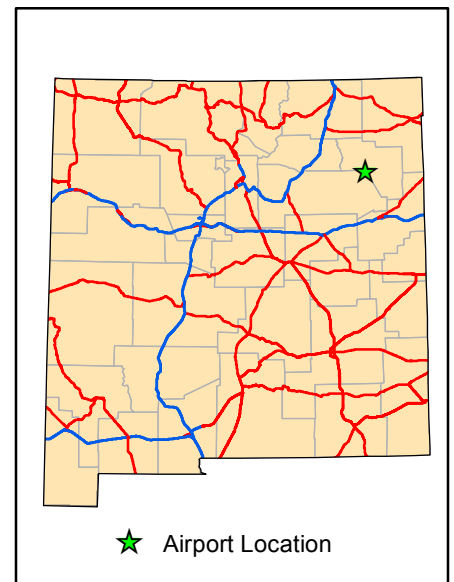
1 inch = 1,500 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.








## Red River Heliport

### LEGEND

 Zone 2: Approach Surface

0 1,500 3,000

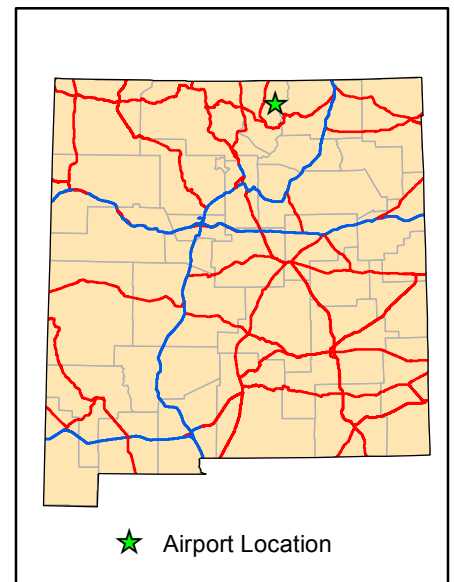
1 inch = 1,500 feet



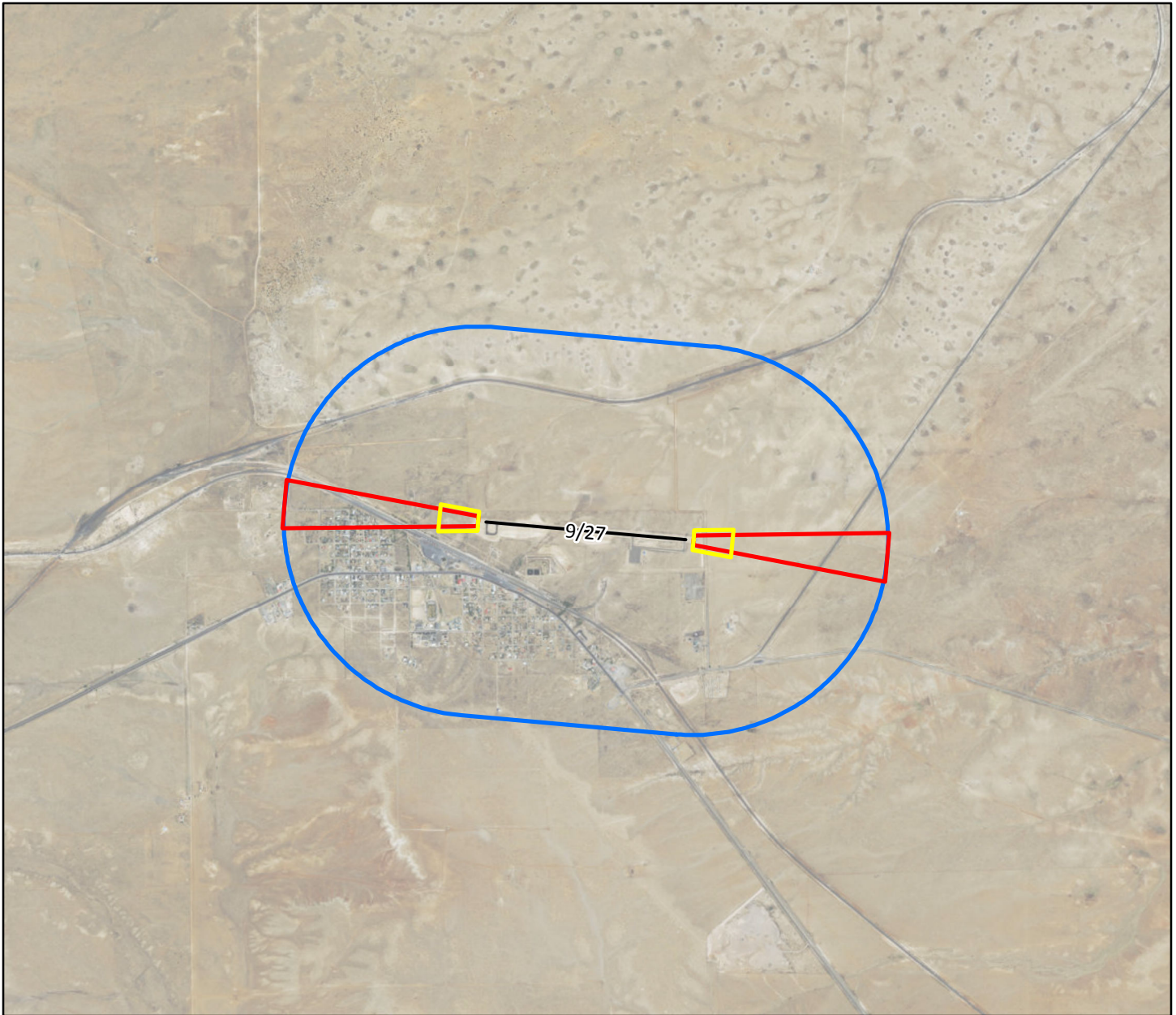
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.

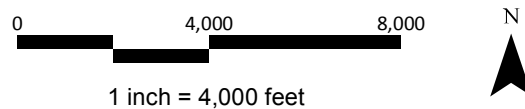






## Vaughn Municipal Airport

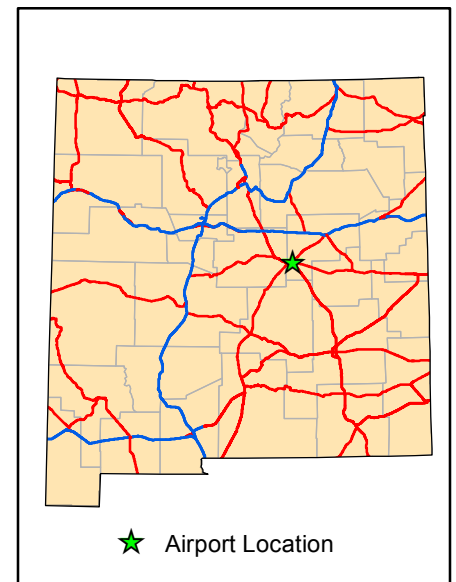
LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface



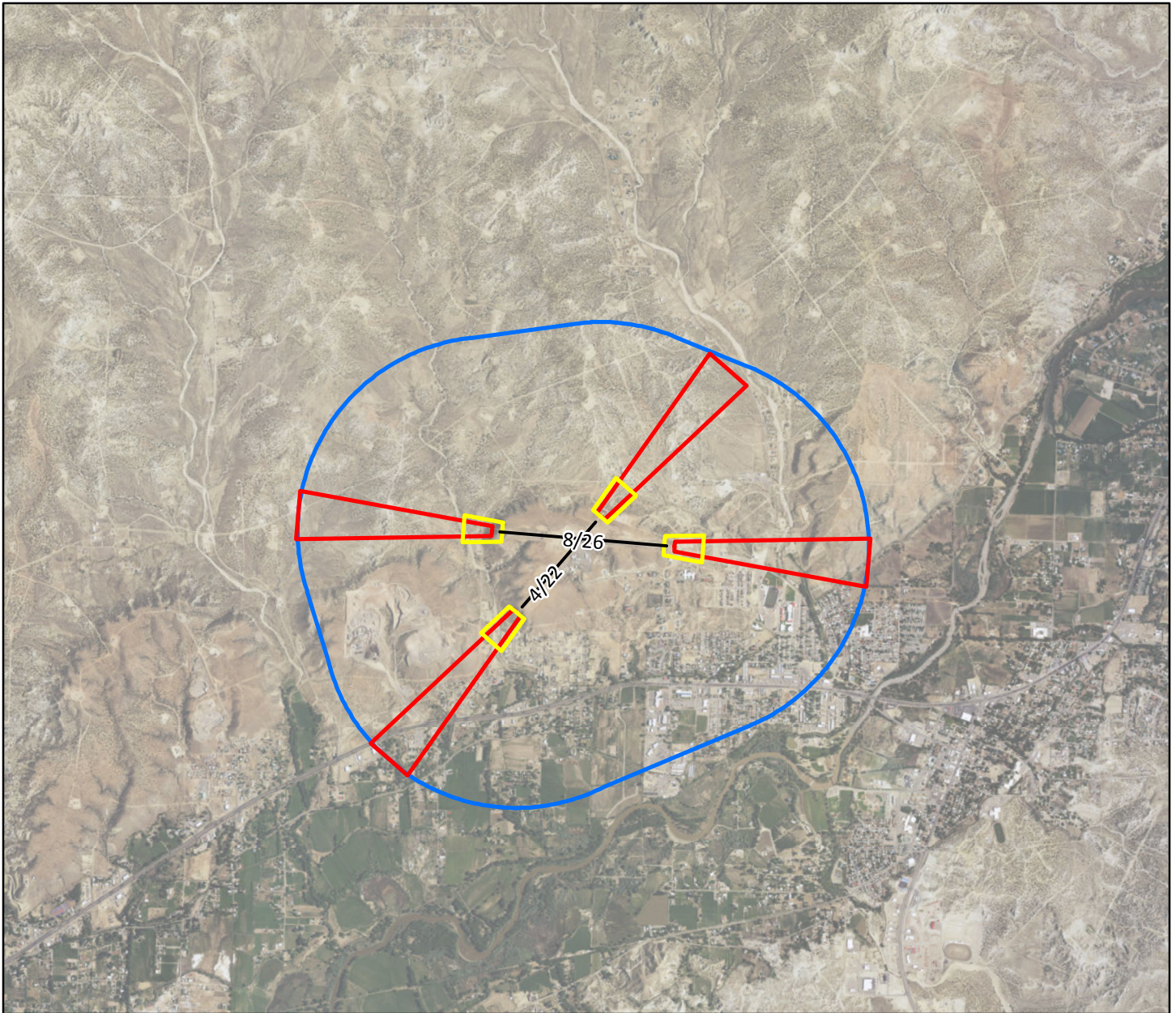
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Aztec Municipal

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

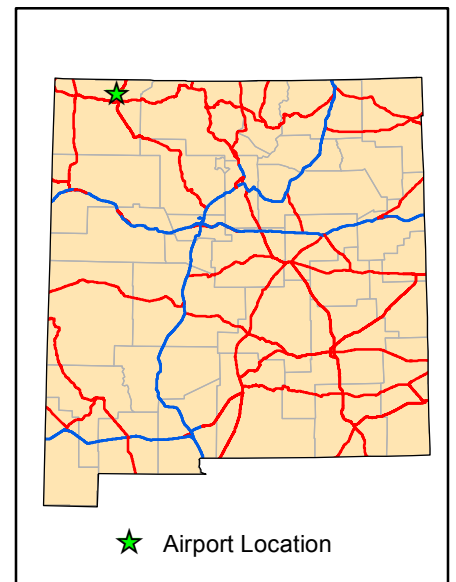
1 inch = 4,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

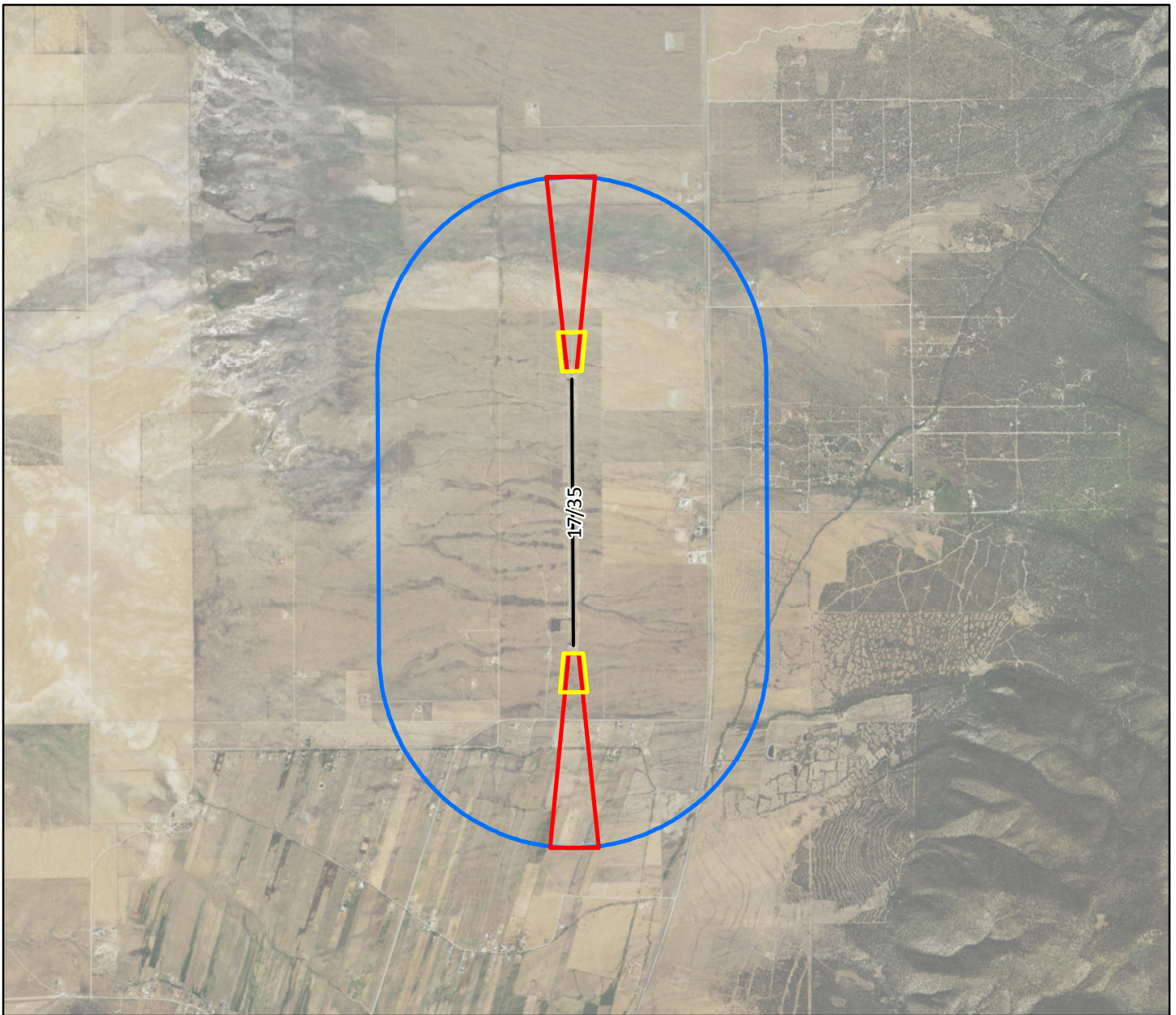
**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.



★ Airport Location





## Questa Municipal Nr 2

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

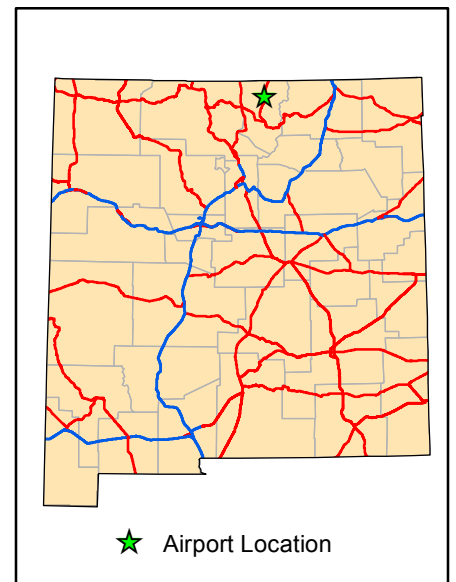
1 inch = 4,000 feet



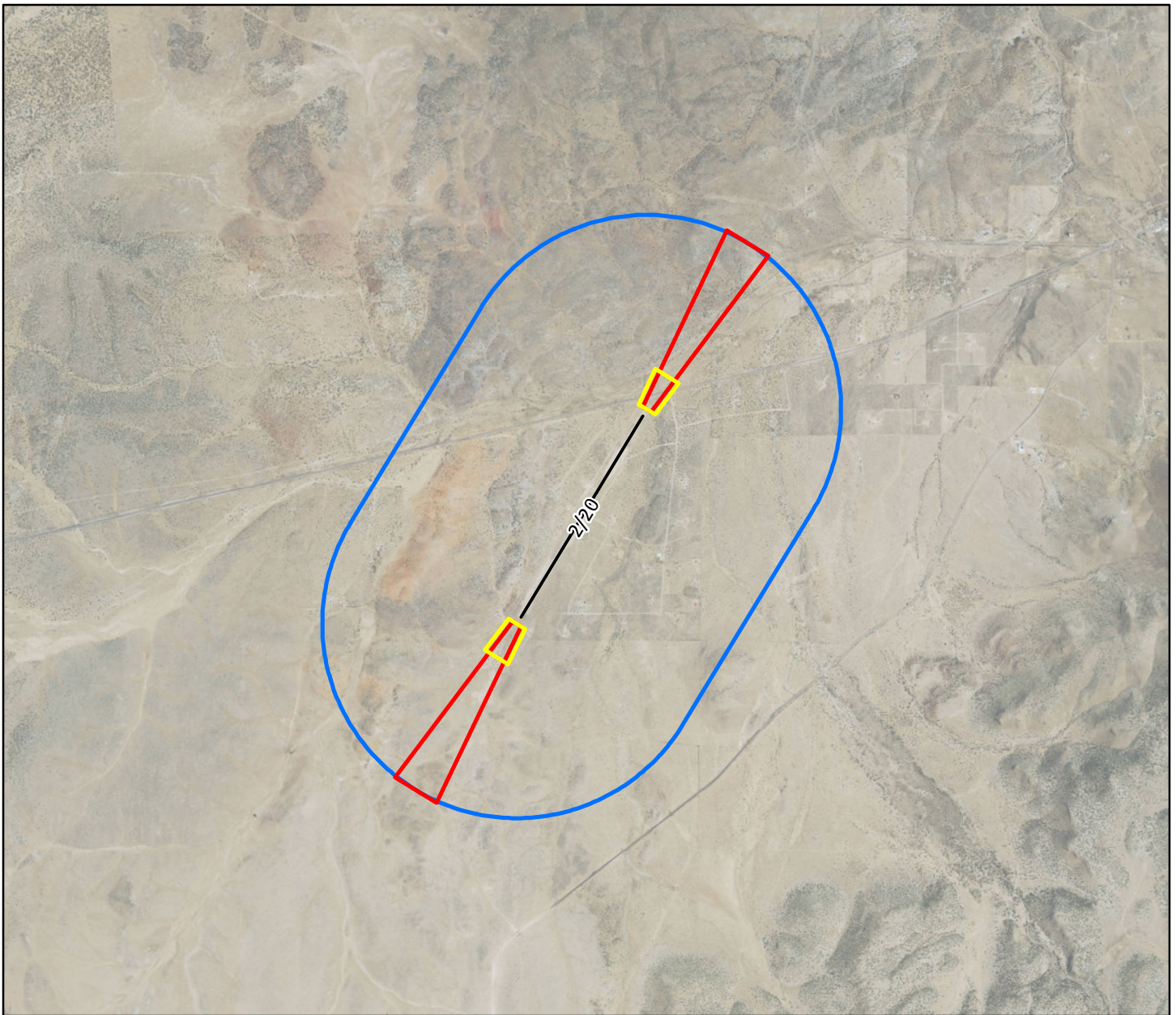
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Magdalena Airport

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 4,000 8,000

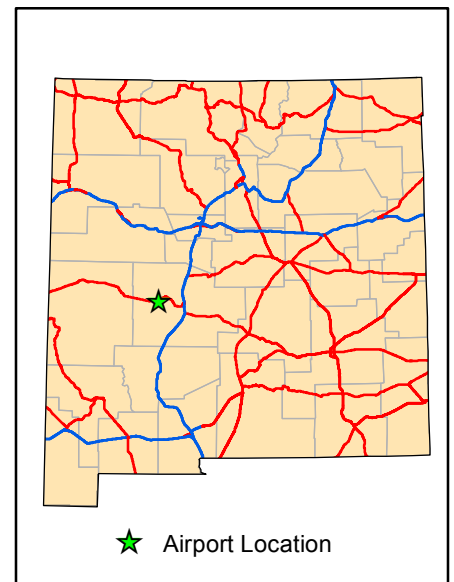
1 inch = 4,000 feet



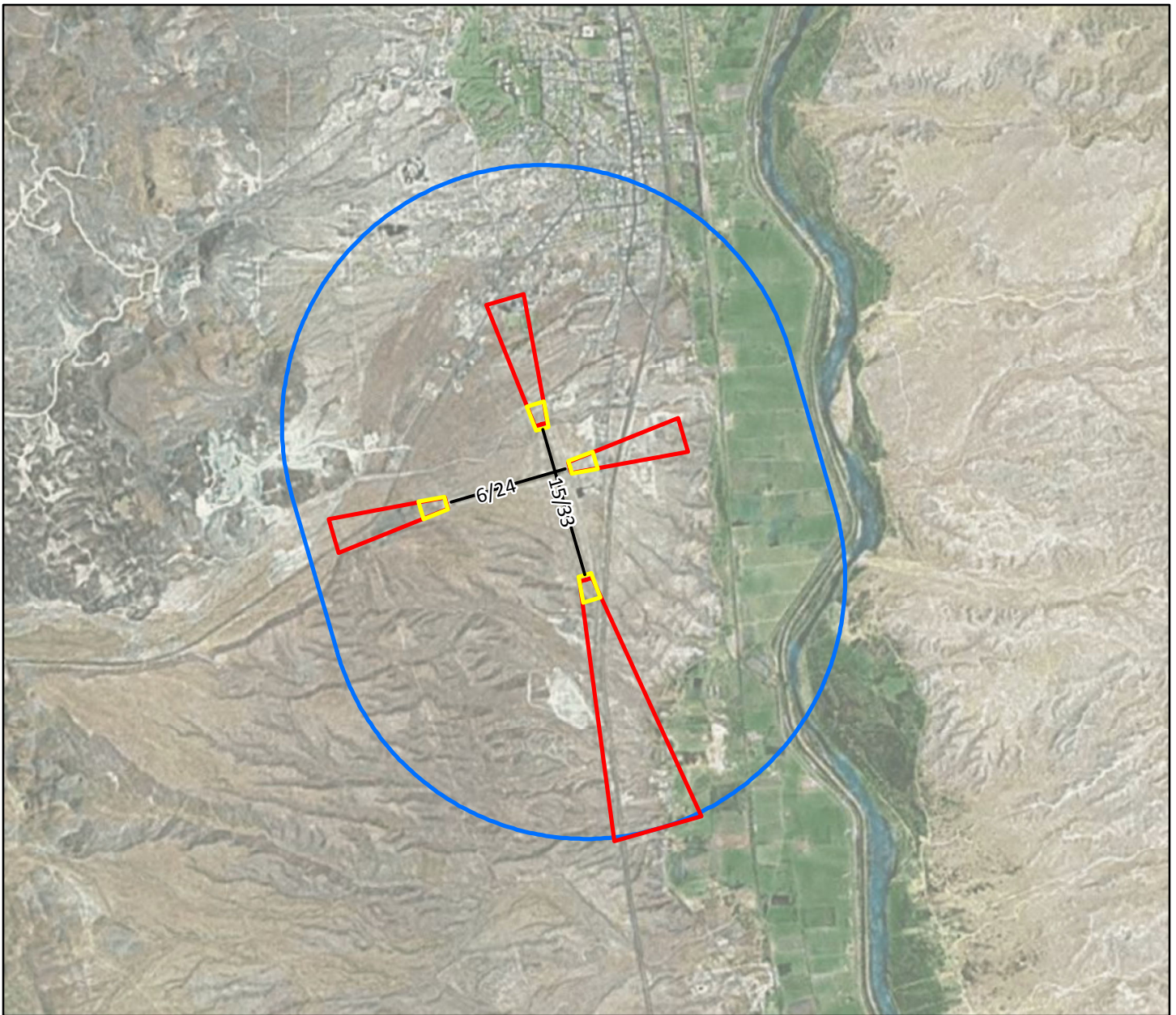
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.

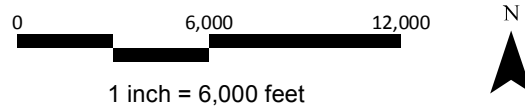






## Socorro Municipal Airport

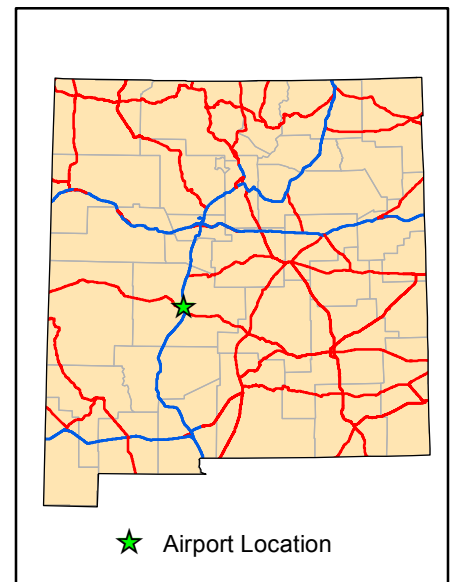
LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface



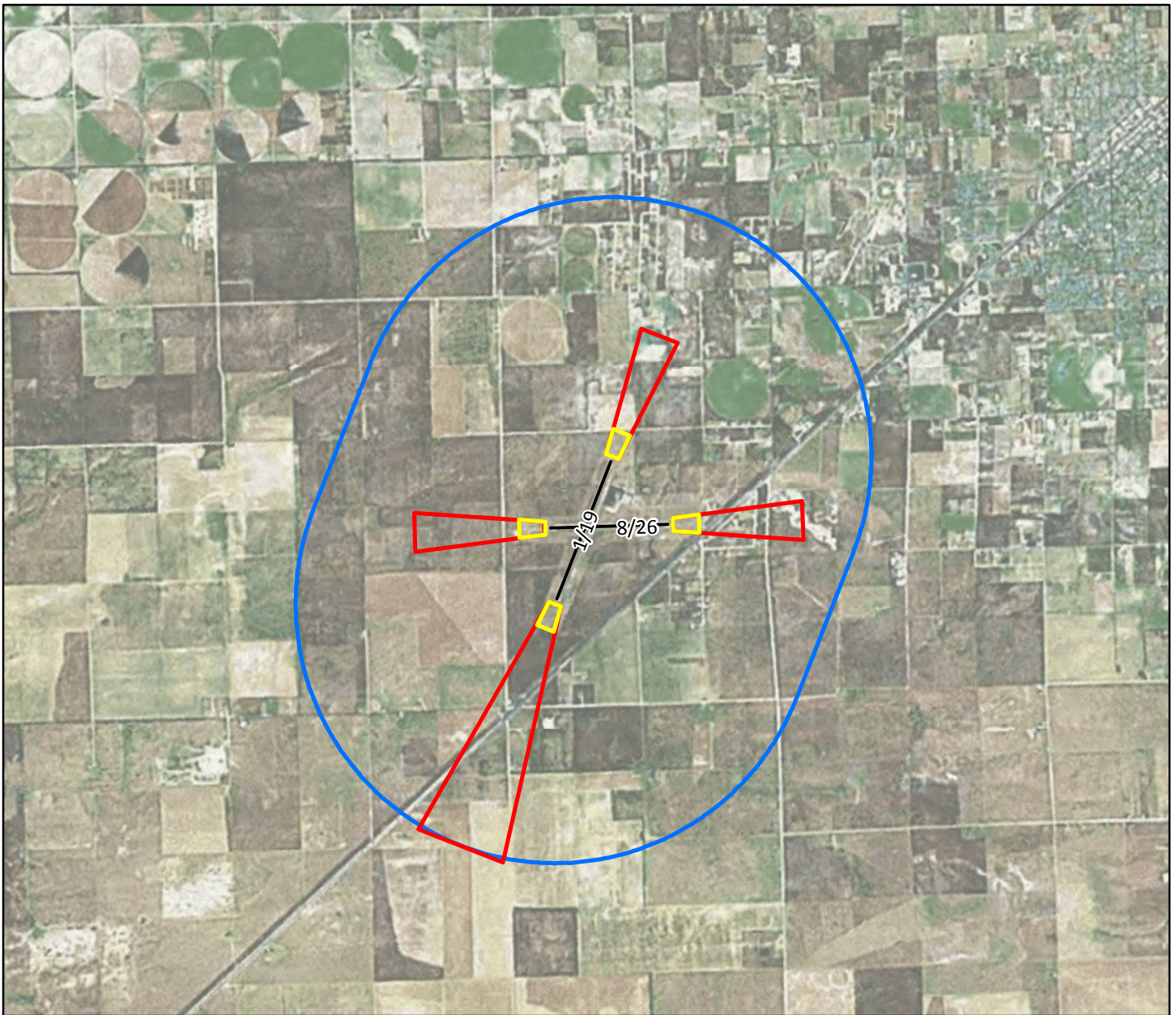
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Portales Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

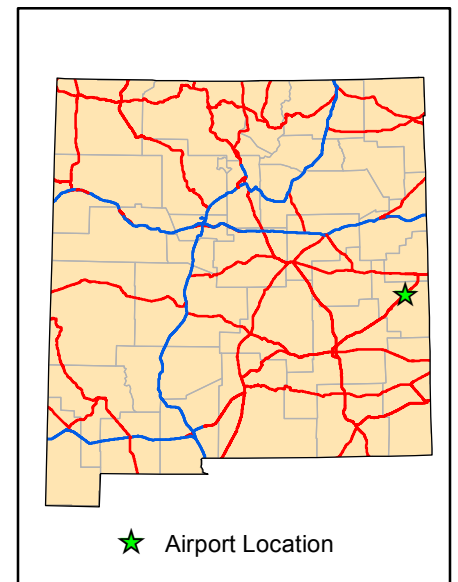
0 6,000 12,000  
1 inch = 6,000 feet



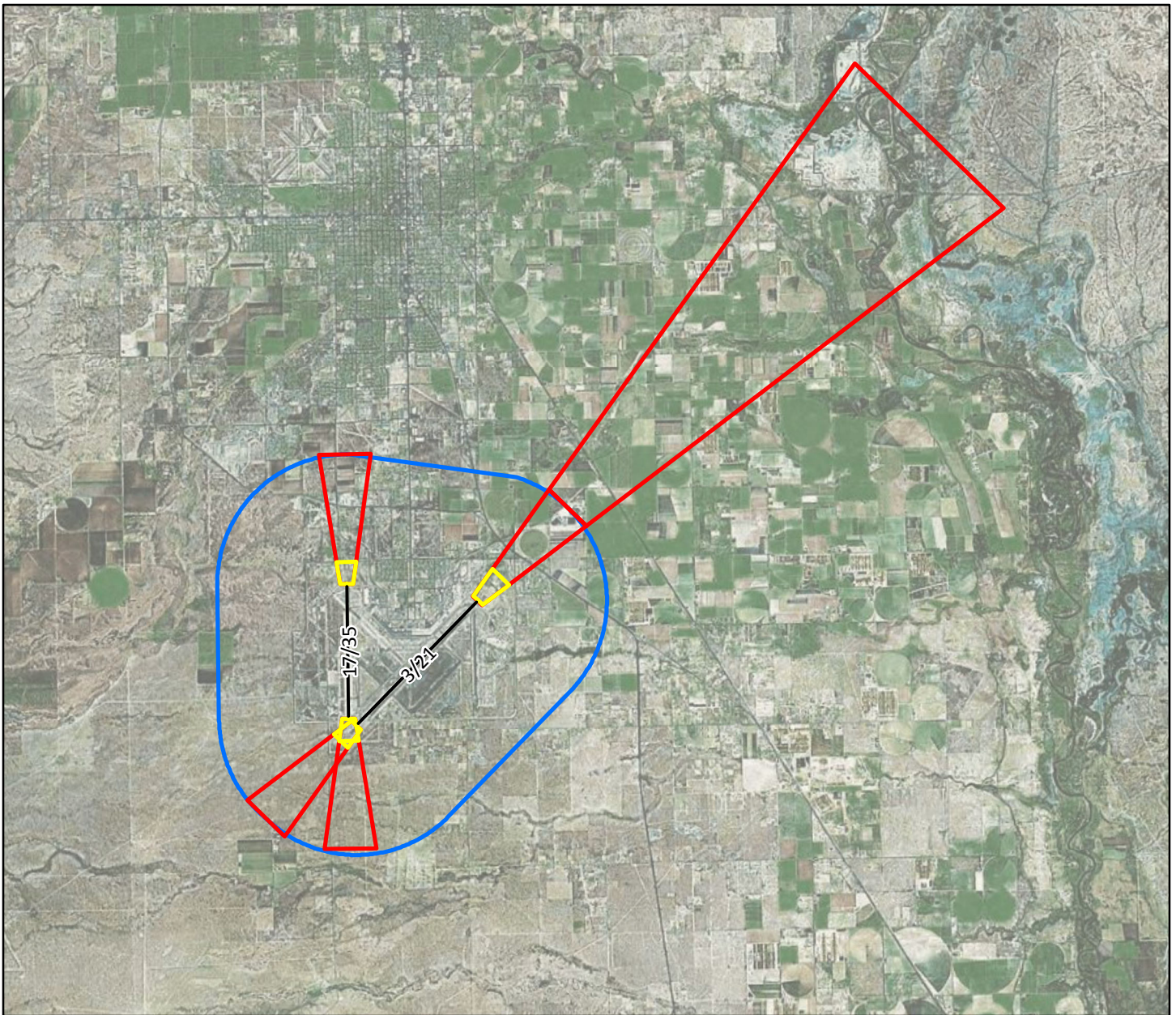
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Aviation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Roswell Intl Air Center

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 12,000 24,000

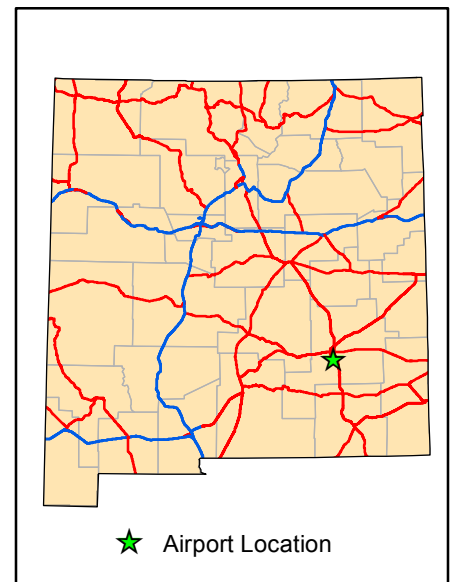
1 inch = 12,000 feet



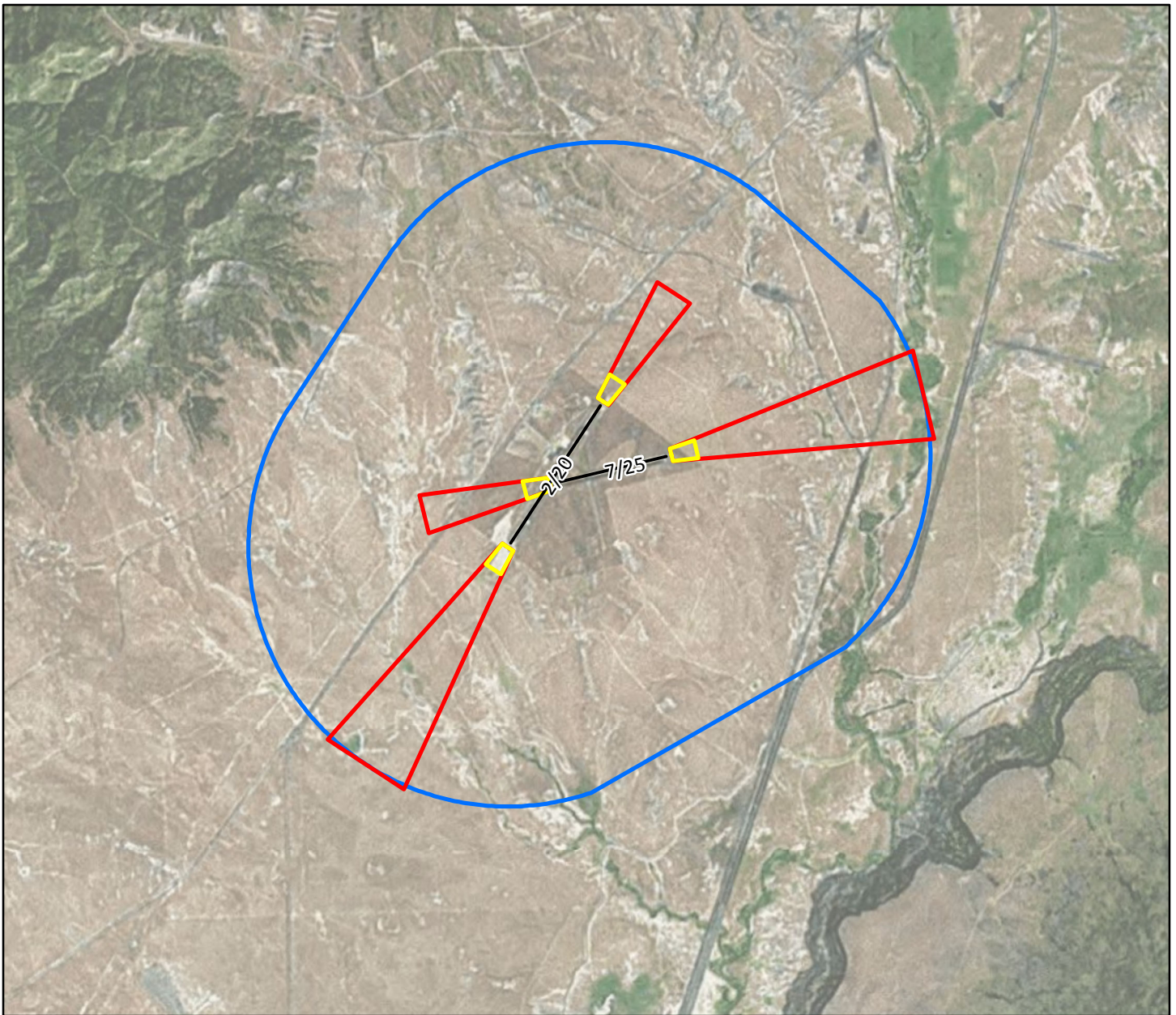
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.

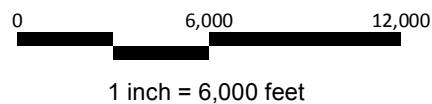






## Raton Municipal/Crews Field

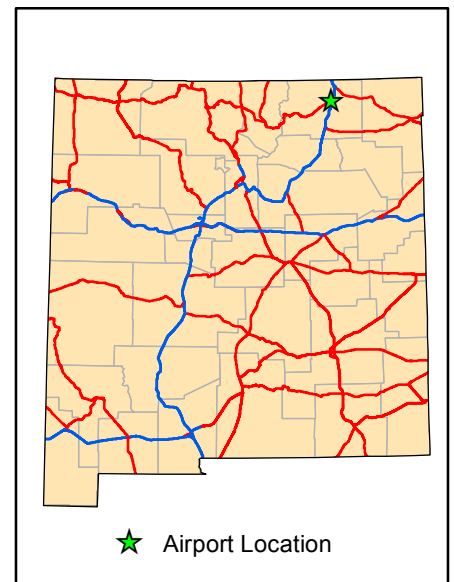
LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

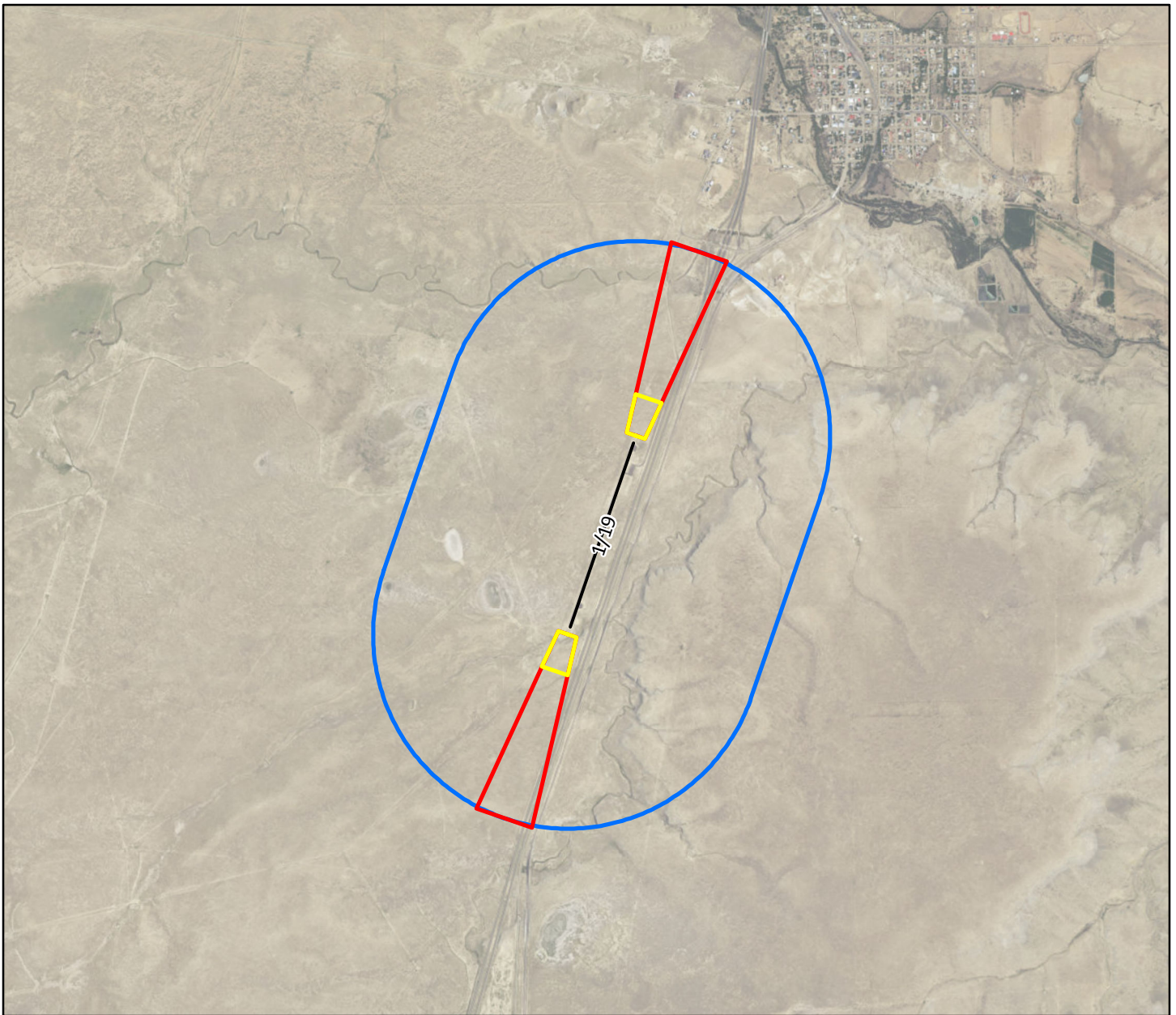
**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.



★ Airport Location





## Springer Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

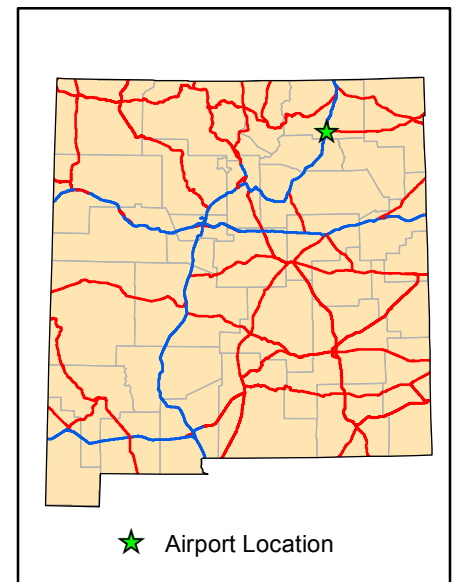
1 inch = 4,000 feet



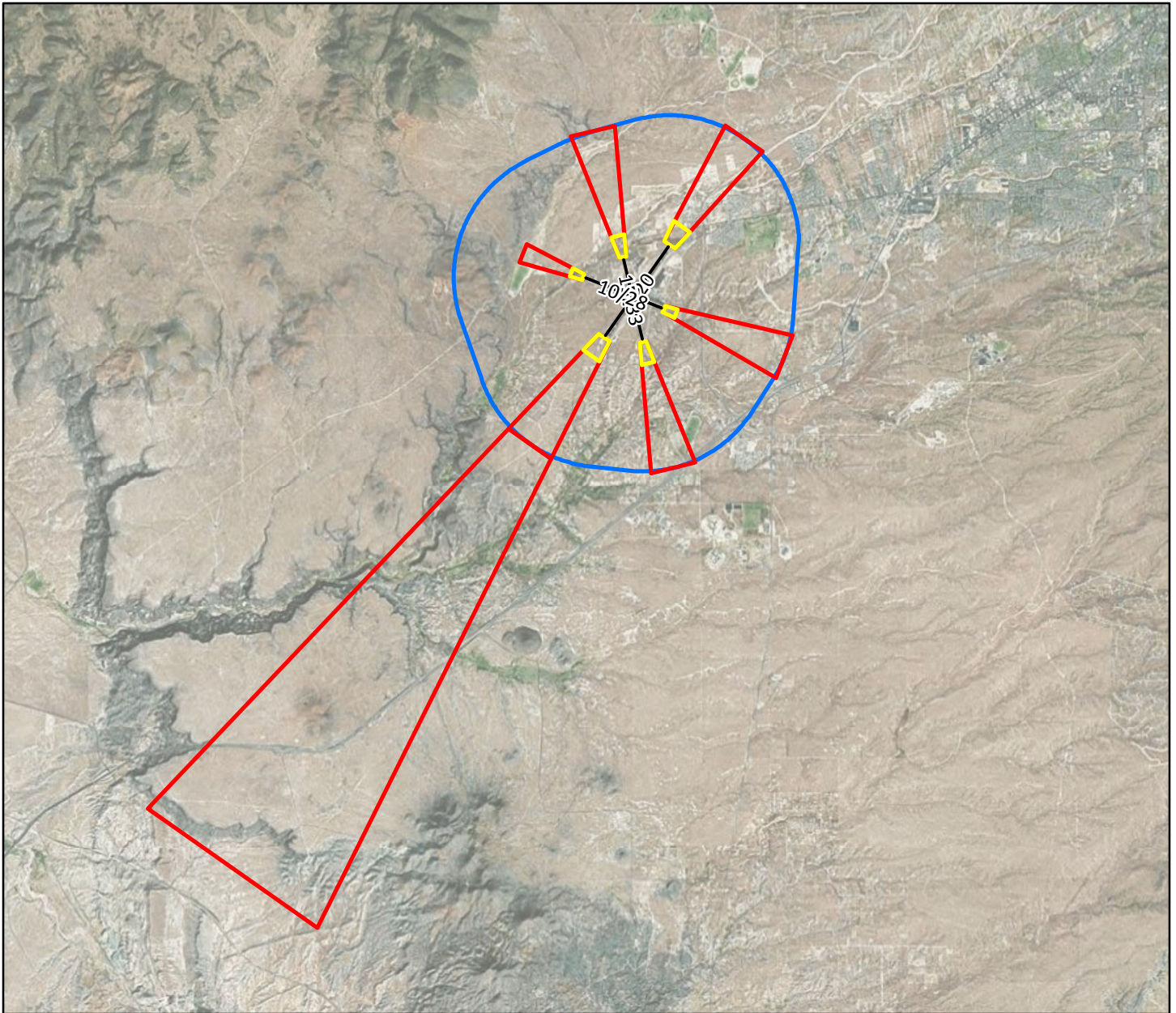
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.




**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Santa Fe Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 12,000 24,000

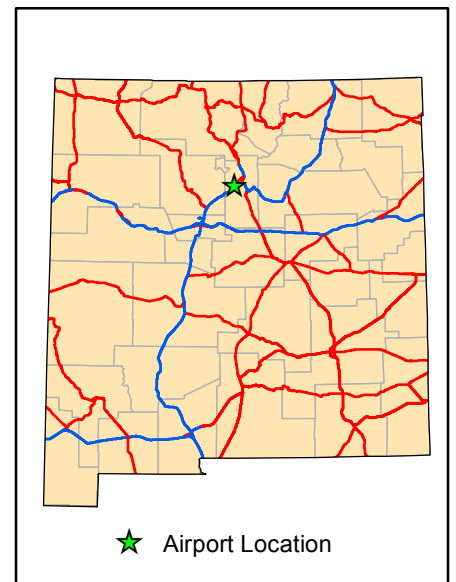
1 inch = 12,000 feet



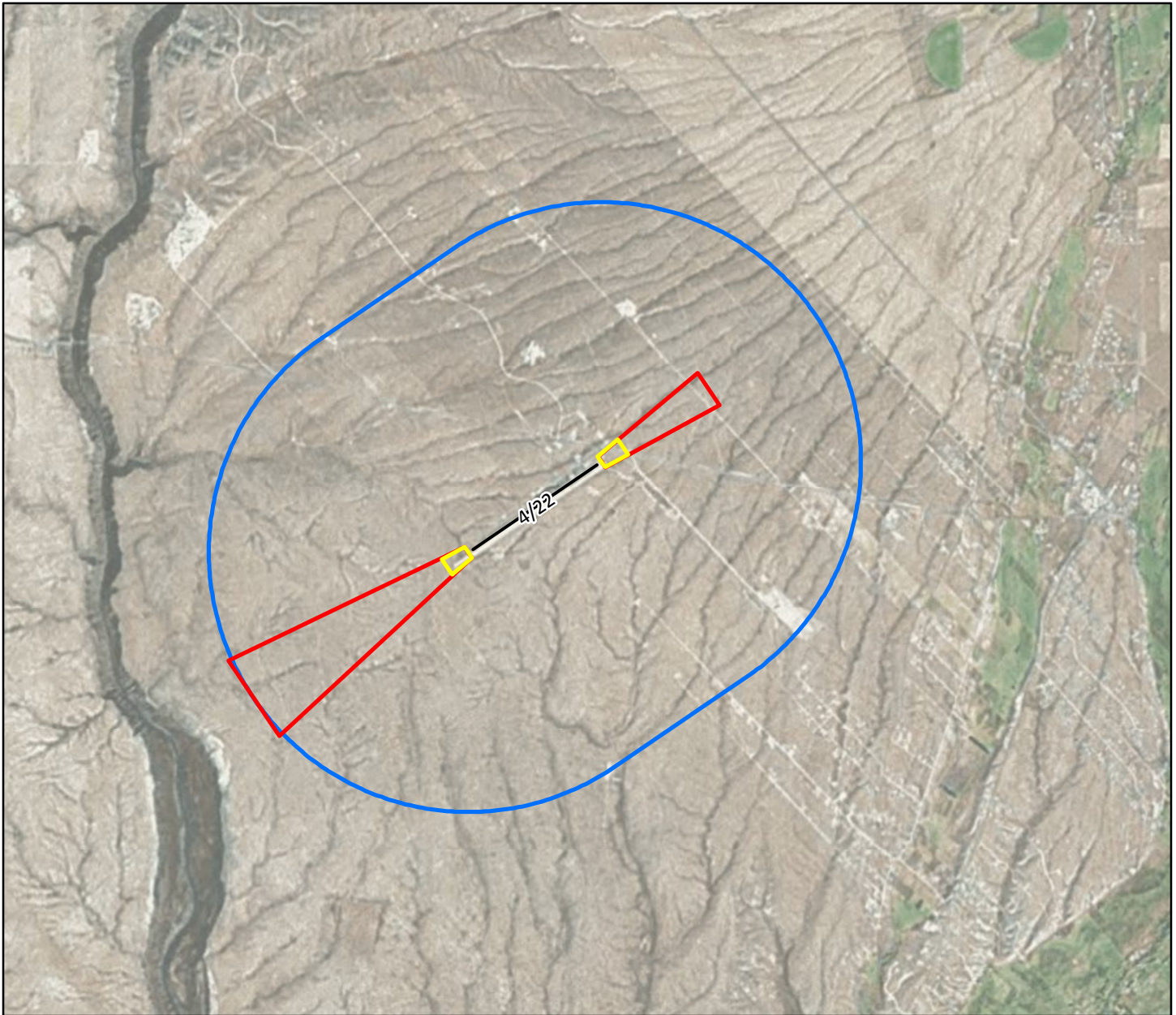
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.

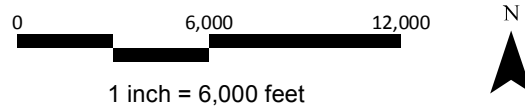






## Taos Regional Airport

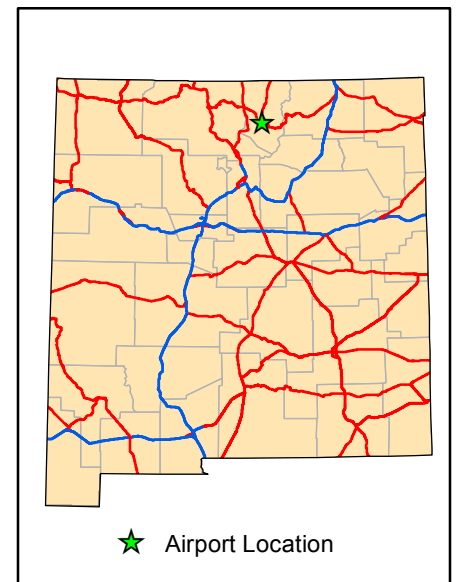
LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface



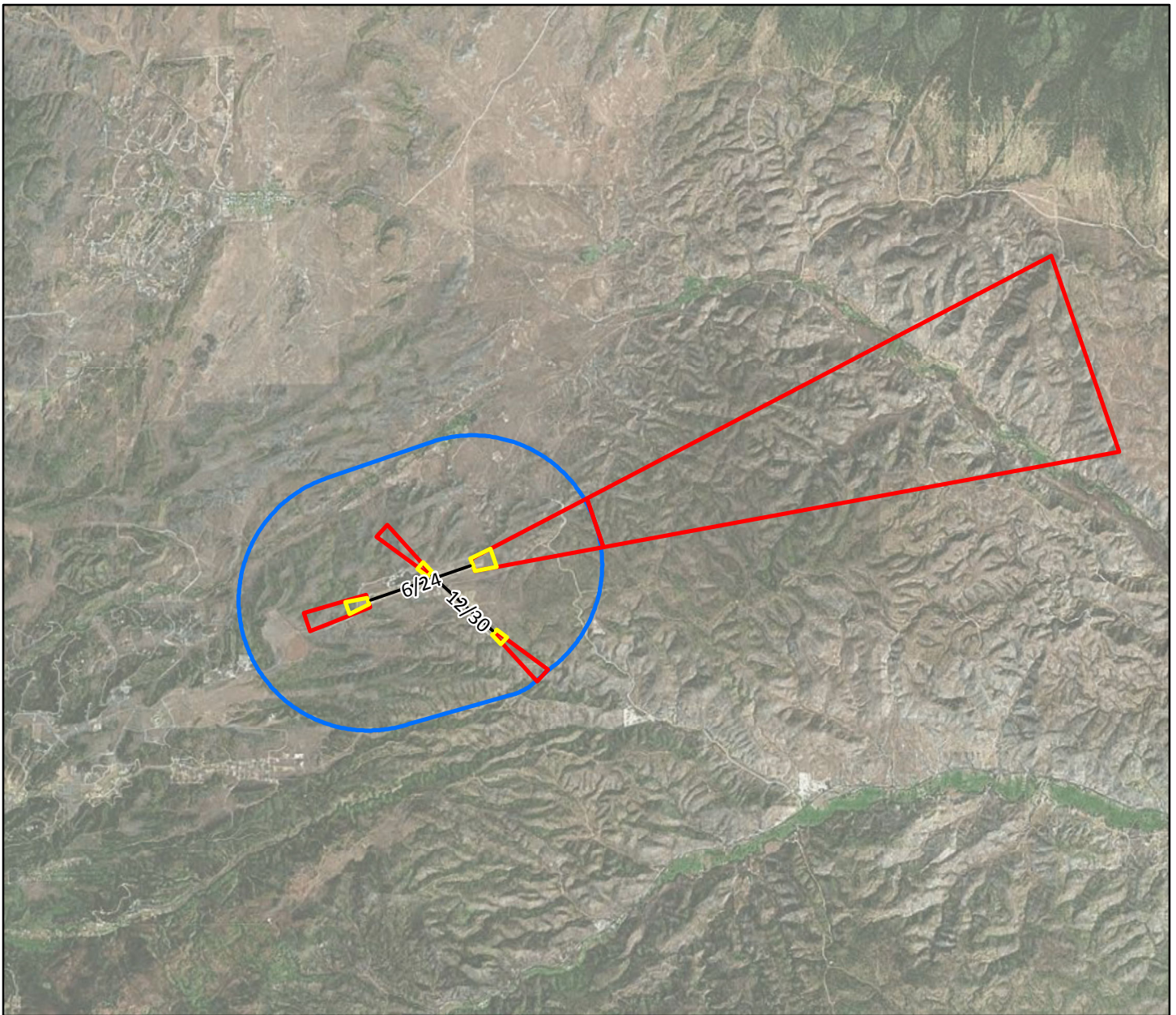
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Sierra Blanca Regional Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 12,000 24,000

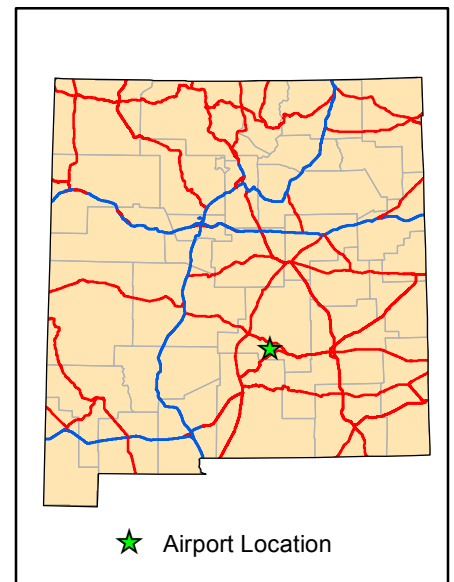
1 inch = 12,000 feet



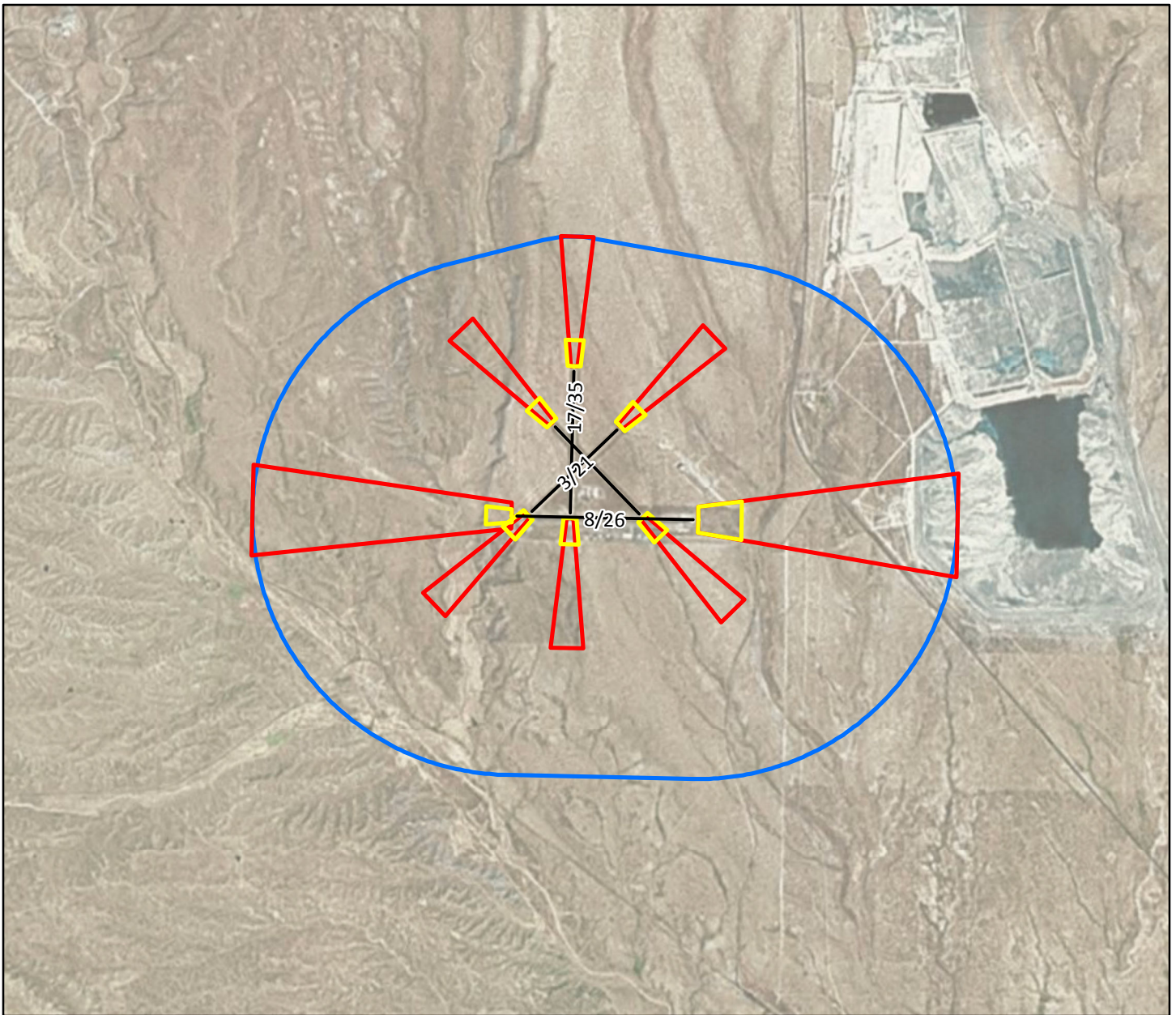
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Grant County

### LEGEND

- Zone 1: Approach RPZ
- Zone 2: Approach Surface
- Zone 3: Horizontal Surface

0 6,000 12,000

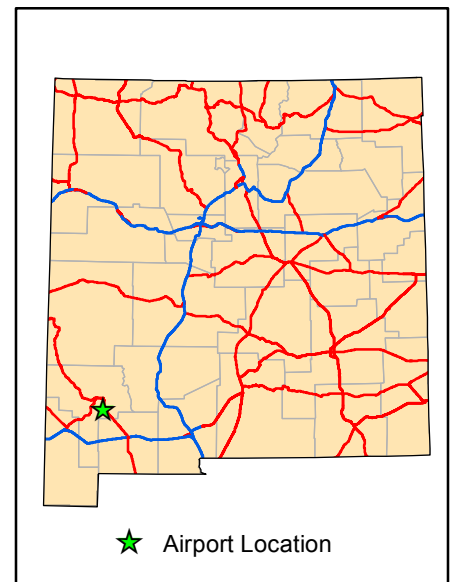
1 inch = 6,000 feet



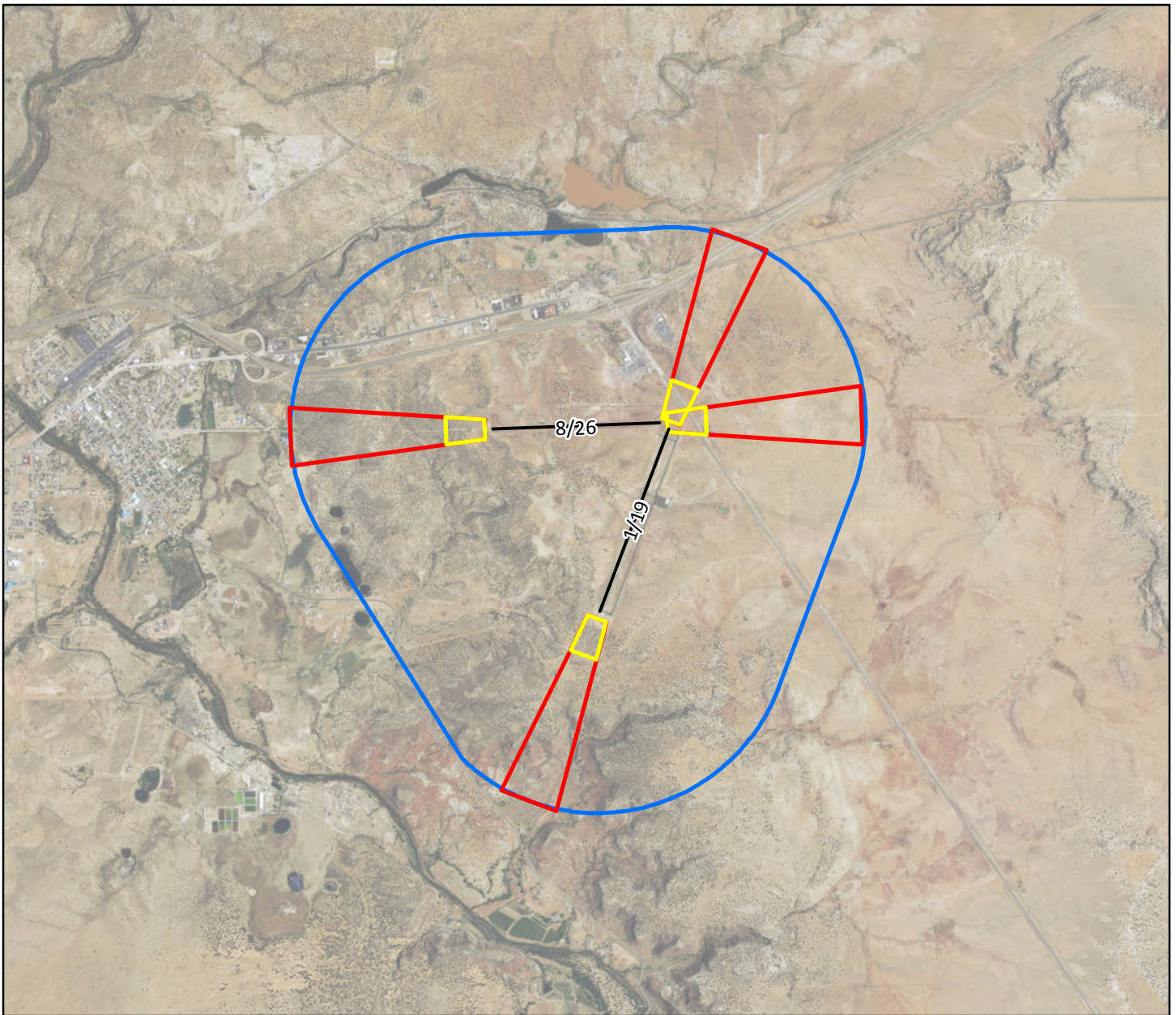
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Santa Rosa Route 66 Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

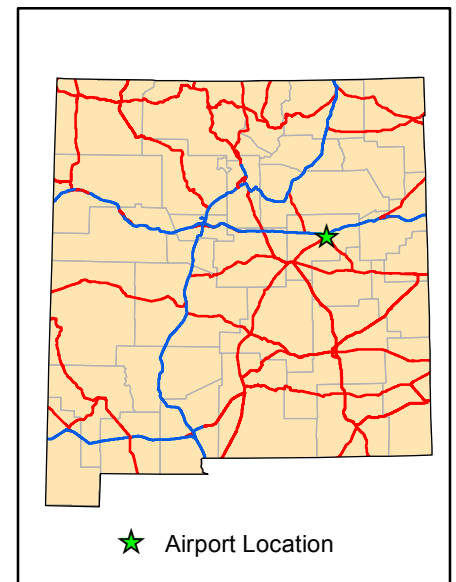
1 inch = 4,000 feet



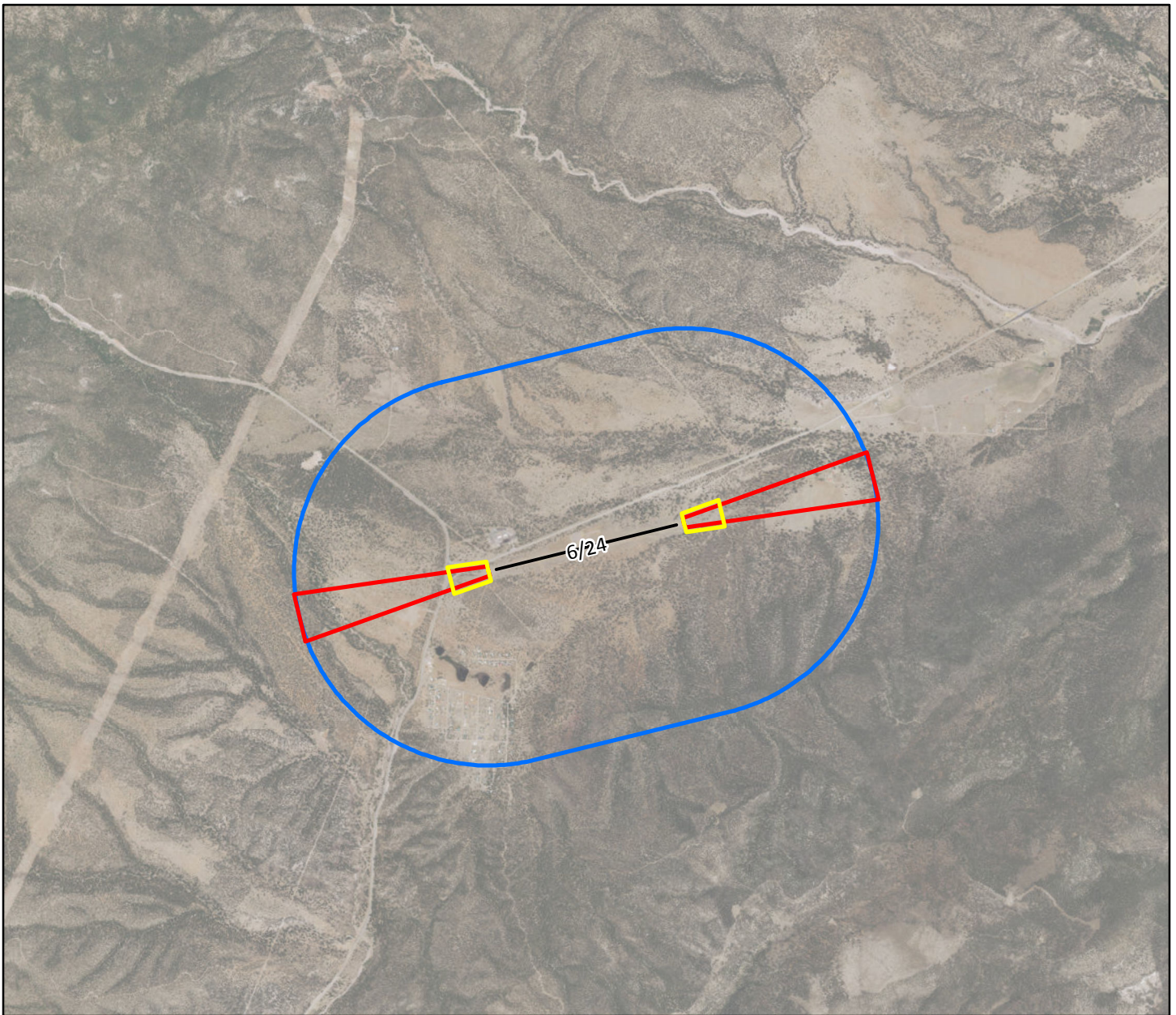
Zone 1 - Runway Protection Zone (RPZ): As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

Zone 2 - Part 77 Approach Surface: Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

Zone 3 - Part 77 Horizontal Surface: Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Reserve Catron County Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

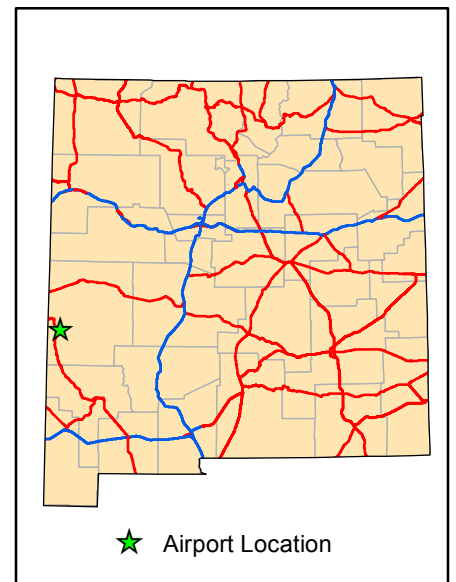
1 inch = 4,000 feet



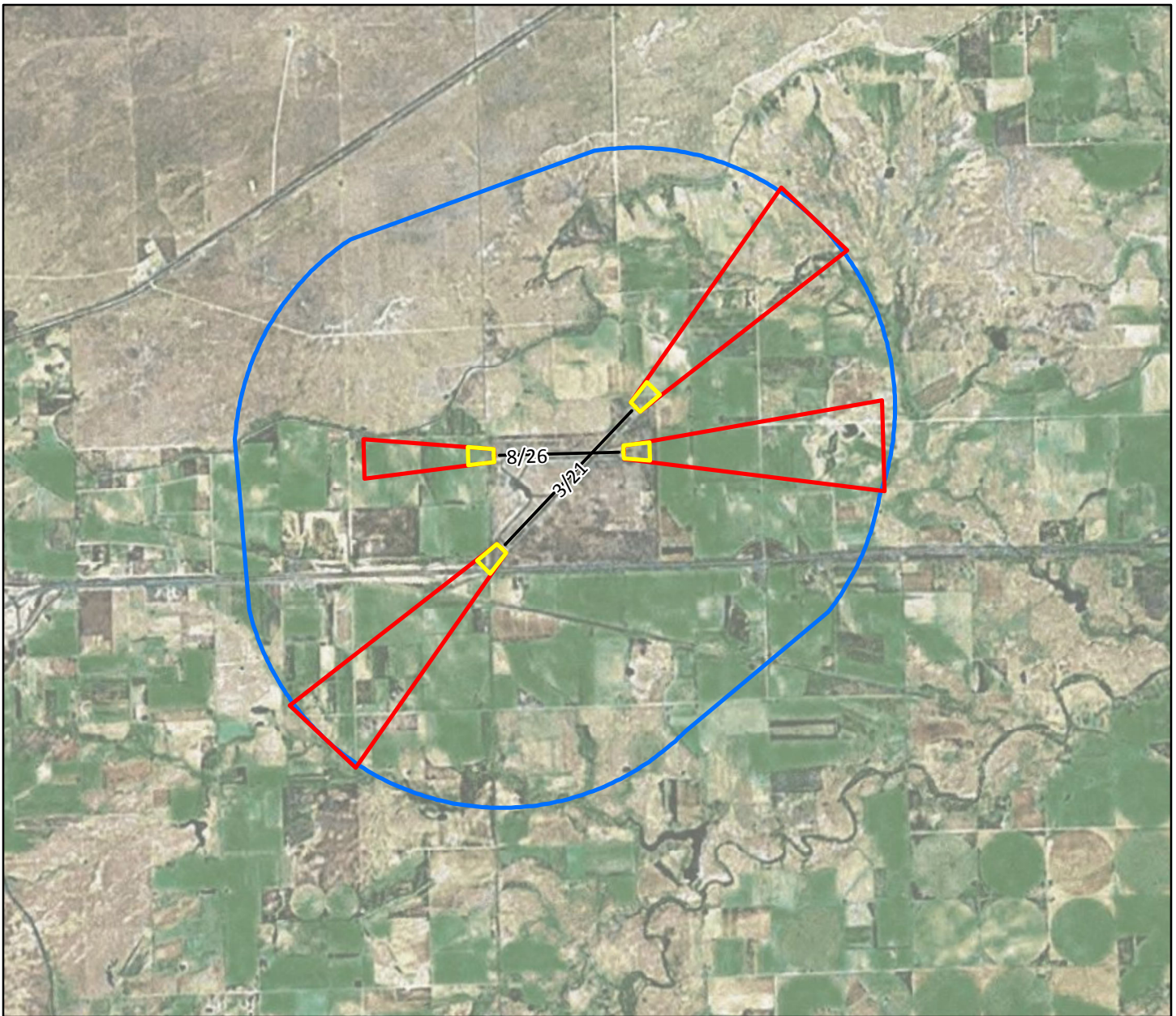
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Aviation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Tucumcari Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 6,000 12,000

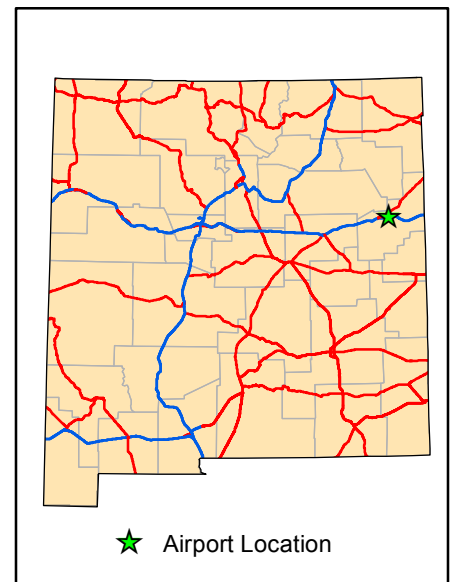
1 inch = 6,000 feet



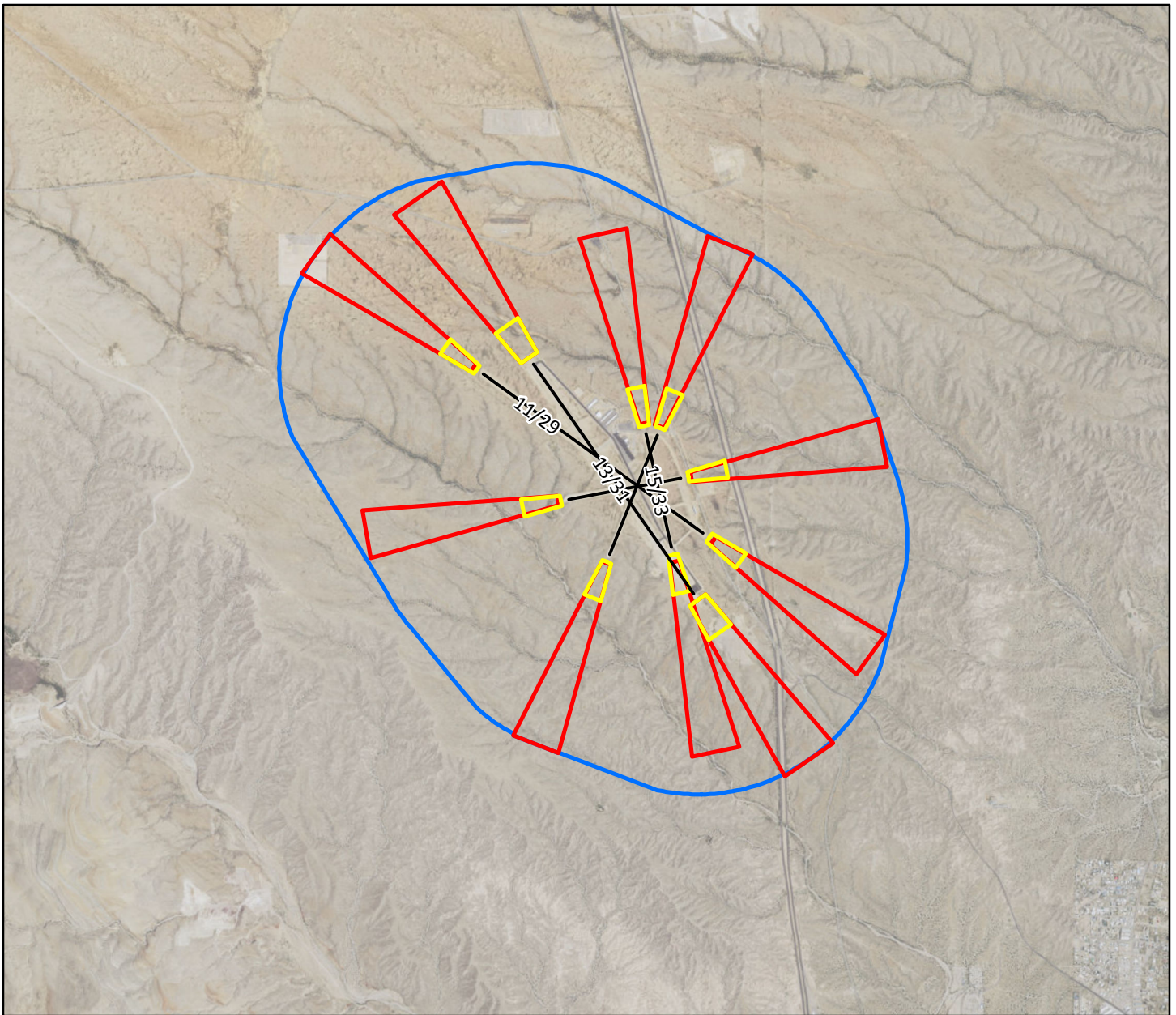
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Truth Or Consequences Municipal Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 4,000 8,000

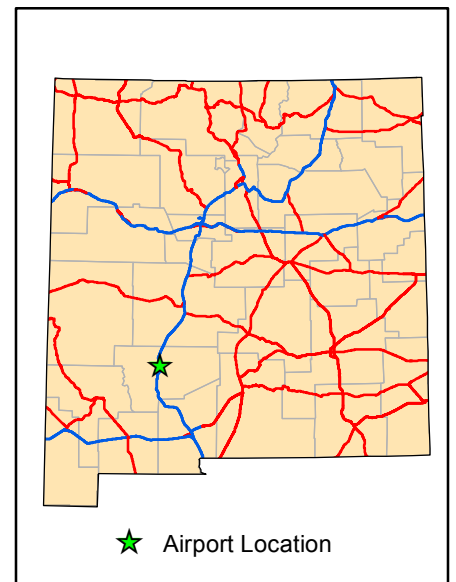
1 inch = 4,000 feet



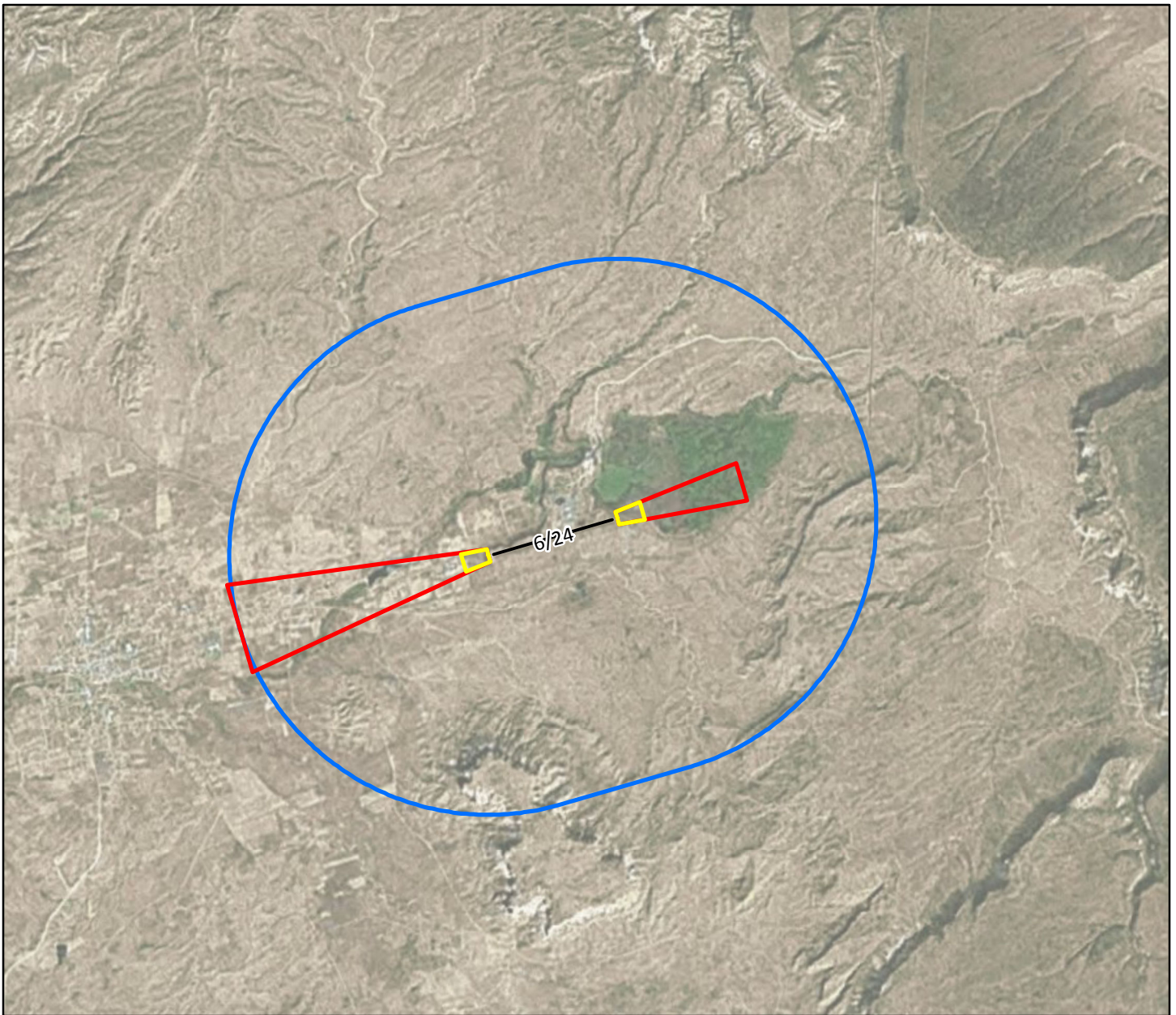
**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Aviation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.







## Zuni / Black Rock Airport

LEGEND	
	Zone 1: Approach RPZ
	Zone 2: Approach Surface
	Zone 3: Horizontal Surface

0 6,000 12,000

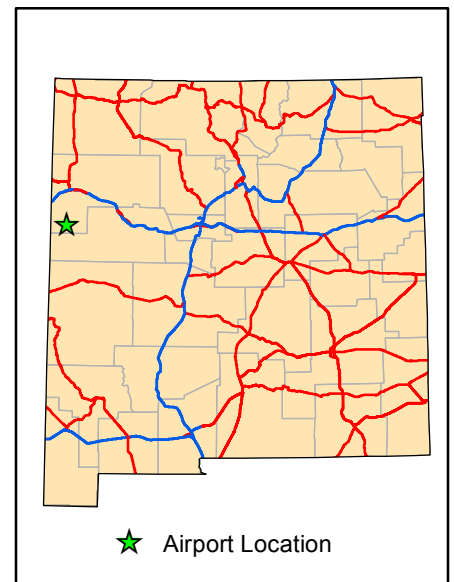
1 inch = 6,000 feet



**Zone 1 - Runway Protection Zone (RPZ):** As outlined in Federal Aviation Administration Advisory Circular 150/5300-13, Airport Design, Paragraph 310, the purpose of the RPZ is best achieved through airport owner control over these areas. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ and includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Where this is impractical, airport owners as a minimum should maintain the RPZ clear of all facilities supporting incompatible activities.

**Zone 2 - Part 77 Approach Surface:** Avigation easements are encouraged within this area and deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall Structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of Proposed Construction or Alteration.

**Zone 3 - Part 77 Horizontal Surface:** Deed notification should be required of those purchasing property that the property falls within this Airport Influence Area. Tall structures should be submitted under the Part 77 airspace review process, using FAA Form 7460-1, Notice of proposed Construction or Alteration.





APPENDIX D

# PLANNING ADVISORY COMMITTEE

## Appendix D

### PLANNING ADVISORY COMMITTEE

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Name	Organization
Stacy Howard	National Business Aviation Association
Joyce Woods	General Aviation Pilot
Yasmina Platt	Aircraft Owners and Pilots Association
Bob Hudson	New Mexico Airport Managers Association
Bill McMillian	New Mexico Aviation Aerospace Association
Andy Velayos	Federal Aviation Administration
Ron Shutiva	NMDOT Tribal Liaison
Claude Morelli	NMDOT Planning
Mike Lewis	Farmington Four Corners Regional Airport
Jennifer Brady	Roswell International Air Center
Jim Talbert	Alamogordo-White Sands Regional Airport
John Thompson	Taos Regional Airport
John Aragon	Las Vegas Municipal Airport
Arlando Teller	Navajo Division of Transportation
Jim Hinde	City of Albuquerque Aviation Department
Sean Parker	Sierra Blanca Regional Airport
Jane Lucero	NMDOTAD





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**(602) 993-6999**

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