

## *Chapter One:* **INVENTORY**

The initial step in the preparation of the master plan for Scottsdale Airport (SDL) is the collection of information that directly pertains to or influences the airport and the area it serves. The information summarized in this chapter will be used in subsequent analyses within this study, including the following:

- Background information related to the City of Scottsdale, Maricopa County, and the service area region, including descriptions of the local geography, regional climate, and surface transportation systems
- Physical inventories and descriptions of current facilities and services offered at SDL; the analysis includes airfield and landside infrastructure and services, local and regional airspace, competing airport facilities, air traffic control, and aircraft operating procedures
- SDL's role in regional, state, and national aviation systems; development at the airport since the completion of the previous master plan (2015) will also be discussed

Socioeconomic data will be analyzed, including population, employment, and income activity sectors. These sectors typically offer an indication of future trends that could influence aviation activity at SDL. The inventory analysis also includes the following:

- A review of existing local and regional plans and studies, which will be utilized later in the process to determine their potential influence on the development and implementation of this sustainable airport master plan
- A review of existing environmental conditions and sensitivities on or near SDL to be factored into the recommended development plan

The information outlined in this chapter provides a foundation for all subsequent chapters. Much of the information was obtained through on-site inspections of SDL and interviews with airport staff, control tower staff, commercial operators, and other tenants. Information was also obtained from outside resources, including documents prepared by the Federal Aviation Administration (FAA), Arizona Department of Transportation (ADOT), City of Scottsdale, Maricopa County, and other pertinent regional planning and economic development agencies.

### **REGIONAL SETTING**

The City of Scottsdale is a suburb of Phoenix, Arizona. As of 2024, Scottsdale is home to 244,000 people and the greater Phoenix region contains 5.1 million people. Scottsdale is situated to the north and east of downtown Phoenix. The city encompasses 184 square miles and is bordered by Phoenix to the west, Tonto National Forest to the north, the McDowell Mountains to the east, and the Salt River to the south. Scottsdale is a desert city known for its spa resorts, golf courses, and outdoor activities, as well as the relatively high wealth of its residents. **Exhibit 1A** presents the regional setting for Scottsdale.

## REGIONAL ECONOMY

The tourism industry is Scottsdale’s primary employment sector and accounts for 39 percent of the city’s workforce. Scottsdale is home to more than 60 hotels and resorts with a combined total of more than 12,000 rooms. The region’s year-round warm weather and abundant sunshine are major factors in Scottsdale’s tourism appeal. Scottsdale has a diverse economy with significant employment in healthcare, manufacturing, retail, financial and professional service sectors. **Table 1A** shows the top 10 employers in Scottsdale as of 2024.

**TABLE 1A: City of Scottsdale Top 10 Employers**

Employer	Number of Employees
HonorHealth	6,323
Vanguard	3,365
CVS	2,978
City of Scottsdale	2,694
Scottsdale Unified School District	2,668
General Dynamics	2,403
Mayo Clinic	2,011
Nationwide	1,240
Yelp	1,200
Go Daddy	882

Table Source: [www.AZCentral.com](http://www.AZCentral.com)

## AIRPORT/AIRPARK ECONOMIC IMPACT

Airports are a significant economic engine for any region. SDL is especially impactful because it does not only provide aviation services but also supports area businesses. In 2021, the ADOT Aeronautics Department commissioned a statewide airport economic impact study, which documented that the Scottsdale Airport/Airpark accounted for more than \$1.0 billion in annual economic impact, as shown in **Figure 1-1**.



**Figure 1-1: Airport/Airpark Economic Impact 2021**

## AIRPORT TENANTS

**Table 1B** lists the major tenants that operate from the airport. There are three full-service fixed base operators at SDL.

**TABLE 1B: Airport Businesses (Current as of February 14, 2025)**

Business Name	Type
Atlantic Aviation	Fixed Base Operator
Jet Aviation	Fixed Base Operator
Signature Aviation	Fixed Base Operator
Elevage Flight Travel; Elite Flight Jets; Legacy Jets; PrismJet; Jet Pros, Jet Linx; Alpha Jet; Pinnacle Air Charter; M&N Aviation; JSX; GrandView Aviation; NetJets; Western Sky Helicopters; AD ASTRA; Fly House; All Access Jets; H5 Helicopters	Aircraft Charter Services
Cirrus Aircraft; GGR Aviation; Universal Helicopters; Sierra Charlie Aviation; Flightworks; Leopard Aviation; Scottsdale Executive Flight Training; Legacy Flight Training; ATP; American Flyers; Plus Five	Aircraft Maintenance and Repair
Arizona Aircraft Interior Design	Specialized Aircraft Repair
Duncan Aviation	Avionics Sales/Repair
Cirrus Aircraft; GGR Aviation; Universal Helicopters; Sierra Charlie Aviation; Flightworks; Leopard Aviation; Scottsdale Executive Flight Training; Legacy Flight Training; ATP; American Flyers; Plus Five	Flight Training and Aircraft Rentals
Great American Hangar; 7689 LLC; Building D LLC; CWIE Management Resources; Jon Vesely Revocable Trust; Astor Airpark Holdings; Sky Harbor Leasing; Aire Lane; Hangar Three; Larry Coffey; Scottsdale Hangar One; Signature Aviation Private Hangars; BCO; Development Services; Graystar Corp; Visionmakers Intl.; Pacific Marine Management; Southwest Jet Center; CC Office LLC; Wallace Holdings; Watts Investments LLC	Hangar Leasing
Lake Chef Services; Emily's Events; Volanti Private Jet Catering; Square One Concepts; Air Culinaire Worldwide; Cater AZ Jets; AtYourJet; GAT Airline Ground Support	In-Flight Catering
Hertz; Avis; Enterprise; Go Rentals; Alamo/National	Rental Car/Transportation
American Flight Support; C Wright Aviation, LLC; WC Aviation; Southwest Aero; Mackin Aviation; Luxury Aero Collection; ACE Aircraft Sales; Jet Fleet	Aircraft Sales
Bradley Mack Aviation; Executive Jet Management; J&S Aviation; Siglo Aviation; Business Aircraft Management	Aircraft Management
Prime Appearance; Aero Panache; West Coast Wash Station; JB's Executive Detailing; SkyLuxe Aircraft Detailing; Sparrowhawk Mobile Detailing; Time for Sale	Aircraft Cleaning and Detailing
SunState Helicopters	Tours/Photo Flights

## SURFACE ROAD ACCESS

The airport is the central feature of land that is zoned for industrial use. East Butherus Drive is the main airport entrance road and extends from an intersection with Scottsdale Road to the west of the airport. Frank Lloyd Wright Boulevard extends on the north side of the airport and Arizona State Route 101 passes to the east of the airport.

## AIRPORT ADMINISTRATION

The Aviation Department of the City of Scottsdale operates Scottsdale Airport. The department is run by professional airport staff that manages day-to-day operations and capital development projects for SDL. The Airport Director supervises a staff of 14 people. **Exhibit 1B** shows the airport organization chart.

An airport advisory commission has been established to advise the city council on policy matters relating to the operation of the airport, proposals for development, airport area land use, fees, and safety concerns. The city council appoints seven commission members to serve three-year terms. The airport advisory commission acts in an advisory capacity and any recommendations made are considered by the city council. The commission meets with airport staff on the third Wednesday of every month.

The airport is operated strictly as an enterprise fund. It does not accept, utilize, or compete for revenues or other financial resources of the City of Scottsdale’s general fund. As such, the airport is not financially supported by local sales tax, property tax, or other special assessment taxes for its operation, maintenance, or capital improvement. All operating revenue and capital funding for the airport are derived from operating and lease revenues and federal and state grants.

### REGIONAL CLIMATE

Weather conditions are important to the planning and development of an airport. Temperature is an important factor in determining runway length requirements, while wind direction and speed are used to determine optimum and adequate runway orientation. The need for navigational aids and lighting is determined by the percentage of time visibility is impaired due to cloud coverage or other conditions.

In Scottsdale, the summers are sweltering and dry, the winters are cool, and it is mostly clear year-round. Over the course of the year, the temperature typically varies from 44 degrees Fahrenheit (°F) to 106°F and is rarely below 36°F or above 111°F. The highest average monthly high temperature is 104.1°F, which occurs in July. **Table 1C** summarizes 30 years of climate data sourced from the on-airport weather sensor.

**TABLE 1C: Three-Year Climate Data Averages**

Period	Average Precipitation	Average Daily High Temperature	Average Daily Low Temperature
January	1.11 inches	66.5°F	43.4°F
February	1.24 inches	68.7°F	46.0°F
March	1.10 inches	75.7°F	51.7°F
April	0.34 inches	82.8°F	58.3°F
May	0.16 inches	91.8°F	66.7°F
June	0.05 inches	102.0°F	76.2°F
July	0.90 inches	104.1°F	82.6°F
August	0.83 inches	102.9°F	81.8°F
September	0.60 inches	98.2°F	75.3°F
October	0.62 inches	87.3°F	62.7°F
November	0.79 inches	74.8°F	50.6°F
December	0.99 inches	64.6°F	42.5°F

*Table Source: National Oceanic and Atmospheric Administration, Climatology of the U.S., No. 81, 30 years of data from 1991 to 2020, as sourced from the on-airport automated surface observation system*

### VICINITY AIRPORTS

The greater Phoenix area is rich in aviation services. The year-round good weather is a significant benefit to aviation in the region. Every quadrant of the region is served by a general aviation airport and Phoenix Sky Harbor International Airport (PHX) is the centrally located anchor commercial service airport. Mesa Gateway Airport has emerged in recent decades as a viable additional commercial service airport in the southeast quadrant of the region.

It is important to consider the capabilities and limitations of these airports when planning for future improvements at Scottsdale Airport. In an urban setting, airports within 30 nautical miles (nm) of each other can have some influence on the activity of the other airport.

**Exhibit 1C** provides information about the airports within 30 nm of SDL, including the facilities available, the services they provide, and the operational levels they experience. Information pertaining to each airport was obtained from FAA Form 5010-1, *Airport Master Record*.

From this analysis of public-use airports in the region, it is evident several facilities serve the needs of all types of aviation activity. Phoenix Sky Harbor International Airport and Mesa Gateway Airport primarily cater to scheduled commercial airline activity and large corporate jets. Mesa Gateway Airport also provides facilities and services that accommodate smaller general aviation aircraft. Except Stellar Airpark, the other airports provide an array of services that cater to general aviation needs, including some business jets. The available runway lengths of Falcon Field Airport, Stellar Airpark, and Chandler Municipal Airport are limiting factors for larger general aviation aircraft, including business jets.

Despite the nearby presence of several aviation facilities, Scottsdale Airport is well-positioned due to the full range of services offered at the airport and in the community. In addition, SDL has one of the longest runways in the region, which allows it to support general aviation activity ranging from small single-engine piston-powered aircraft up to large corporate jets. Each vicinity airport has unique qualities that may serve a specific segment of aviation; these factors must be carefully considered in determining the service area for Scottsdale Airport, which will be discussed in the next chapter.

## **AIRPORT HISTORY AND BACKGROUND**

### **AIRPORT HISTORY**

Scottsdale Airport opened on June 22, 1942, as Thunderbird Field II, a basic training facility for World War II (WWII) U.S. Army Air Corps pilots. Thunderbird Field II graduated more than 5,500 students and was deactivated in October 1944.

After the war, the Arizona State Teachers College (now Arizona State University in Tempe, Arizona), acquired the airport to implement an aviation and flight training program. The distance from the college campus and the cost of operating an aviation program led the college to abandon its plans.

The Arizona Conference of Seventh Day Adventists purchased the airport in 1953 and established Thunderbird Academy. Former barracks became dormitories and hangars were adapted to house a wood products industry and a vocation education center that offered training in mechanics, woodworking, and welding. The airfield itself became a training field for missionary pilots. In 1963, an industrial park was established surrounding the airport.

The City of Scottsdale acquired the airfield portion of the academy's property in 1966 and has continued to own and operate it since that time. The first fixed base operator began operation at SDL in April 1967. The first airpark tenant, Casa Precision, broke ground for its first building unit in August 1968. By December 1969, 127 aircraft and 20 helicopters were based at Scottsdale Airport.



*Scottsdale Airport Circa 1990*

The Aviation Business Center at SDL was built in 2018 and features a Stearman (a historic aircraft similar to those flown during WWII), which is the centerpiece of the Thunderbird Field II Veterans Memorial.

Approximately 166,000 takeoffs and landings occurred at SDL in 2024, making it one of the premier single-runway general aviation airports in the country and one of the busiest corporate jet facilities in the state.

### **GREATER SCOTTSDALE AIRPARK AREA**

The Scottsdale Airpark area is one of the largest employment centers in the State of Arizona. It is the headquarters for a multitude of national and regional corporations, includes a variety of smaller and locally owned businesses, contains the largest employment and industrial-zoned area within Scottsdale, and is home to Scottsdale Airport. The Greater Airpark Growth Area is the location of some of the largest signature special events in the city, such as the Waste Management Phoenix Open golf event, the Barrett-Jackson collector car auction, and the Scottsdale Arabian Horse Show. **Figure 1-2** shows the greater Scottsdale Airpark area.

In 1980, the Scottsdale Airpark area accounted for 3,320 employees, 1.5 million square feet of buildings, and 268 companies. By 2023, the Scottsdale Airpark area had  $\pm 66,000$  employees,  $\pm 48.0$  million square feet of buildings, and  $\pm 3,339$  companies, according to a report published annually by Colliers International, a commercial real estate firm. By 2030, the Scottsdale Airpark is projected to contain more than 70,000 employees, 50 million square feet of building space, and upwards of 3,600 companies.

The Scottsdale Airpark, the 2,600-acre commercial/industrial area surrounding the airport, has become a national model for airport-based business parks. The Scottsdale Airpark is the second largest employment center in the state and supports approximately 59,000 jobs. Approximately 140 properties within the Scottsdale Airpark have taxilane access to the airfield (shown on **Exhibit 1D**). Six controlled-access gates provide access to and from the Scottsdale Airpark; an airpark tenant can apply for a gate access device and pay a fee for the ability to access the airfield.

### AIRPORT GRANT HISTORY

The federal government makes significant levels of funding available for eligible capital improvements to airports across the country. The primary funding mechanism is through the Airport Improvement Program (AIP). The AIP is funded through the Aviation Trust Fund, which was established in 1970 to provide funding for aeronautical capital investment programs (i.e., aviation development, facilities and equipment, and research and development). The Aviation Trust Fund also finances a portion of FAA operations. The AIP is funded by user fees, such as taxes on airline tickets, aviation fuel taxes, and taxes on the sales of various aircraft parts and equipment.

The AIP provides entitlement funding to general aviation airports and airports with passenger service based on annual passenger enplanements (boardings). The AIP also has a pool of discretionary funding that is distributed based on the priority rankings of proposed projects.

Airports have recently been eligible for additional funding through several programs passed by U.S. Congress to blunt the negative impact of the COVID-19 pandemic. The *CARES Act* provided immediate funding to airports, which temporarily increased the federal share of AIP projects from 90 percent to 100 percent in 2020; this was a one-time program. U.S. Congress then passed the *Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA)* (Public Law 116-260), which provided additional funding for airports, and the *Infrastructure Investment and Jobs Act* (Public Law 117-58; also referred to as the *Bipartisan Infrastructure Law [BIL]*), which invests an additional \$25 billion into airport infrastructure.

The State of Arizona has long recognized the value and importance of the airports in the state and has established several funding mechanisms to support capital improvements for airports in the state. The ADOT Aeronautics Department is responsible for prioritizing and distributing funds for airport projects through the State Aviation Fund. The State Aviation Fund received approximately \$23.4 million in 2022 from aviation fuel taxes, flight property taxes, aircraft registration fees, airport loan payments, and investment interest.

**Exhibit 1E** summarizes capital improvement funding SDL has received from federal and state sources. SDL has received more than \$45 million from the federal government and \$3.5 million from the state.

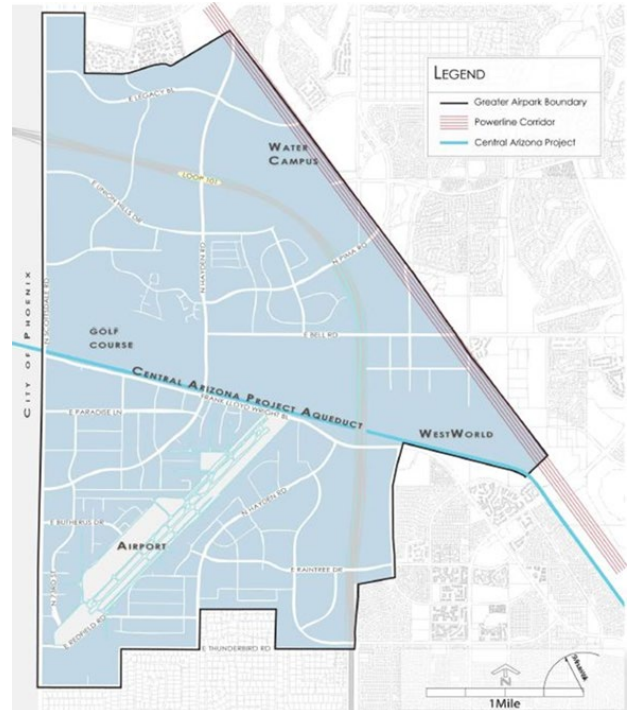


Figure 1-2: Greater Scottsdale Airpark Area

## HISTORICAL AERONAUTICAL ACTIVITY

The number of based aircraft and annual operations (takeoffs and landings) in aggregate and by aircraft type are important aeronautical activity measures to factor. These indicators will be used in subsequent analyses to project future aeronautical activity and determine future facility needs for SDL. Each activity segment is briefly described below. **Exhibit 1F** summarizes the last 10 years of these activity statistics.

### AIRCRAFT OPERATIONS

Aircraft operations are classified as either local or itinerant. Local operations mostly consist of training flights conducted in the airport traffic pattern, such as touch-and-go training and practice instrument approaches. Itinerant operations are conducted by arriving or departing aircraft with origins or destinations away from the airport.

Aircraft operations are further classified into four general categories: air carrier, air taxi, general aviation, and military. There are no air carrier operations at SDL. Air taxi operations can include charter service aircraft operations, as well as general aviation-type aircraft for the on-demand commercial transport of persons and property in accordance with Title 14 Code of Federal Regulations (CFR) Part 135 and Subchapter K of 14 CFR Part 91. General aviation operations are all non-military operations including private, business, and charter aviation.

**Table 1D** shows the range of operational levels at SDL since 2010. There were 166,585 operations at SDL in 2024.

**TABLE 1D: Airport Operations**

Year	Itinerant Operations: Air Taxi	Itinerant Operations: General Aviation	Itinerant Operations: Military	Itinerant Operations: Subtotal	Local Operations: General Aviation	Local Operations: Military	Local Operations: Subtotal	Total Operations
2010	12,250	69,767	365	82,382	51,055	78	51,133	133,515
2011	12,974	73,304	580	86,858	54,620	162	54,782	141,640
2012	14,531	70,719	530	85,780	60,234	78	60,312	146,092
2013	14,902	75,045	802	90,749	51,567	44	51,611	142,360
2014	15,594	74,710	1,115	91,419	58,830	170	59,000	150,419
2015	15,362	77,281	824	93,467	54,158	128	54,286	147,753
2016	15,404	83,950	593	99,947	58,270	78	58,348	158,295
2017	15,000	93,124	577	108,701	59,368	62	59,430	168,131
2018	15,304	87,810	731	103,845	62,245	101	62,346	166,191
2019	16,513	89,634	606	106,753	79,743	18	79,761	186,514
2020	23,150	87,161	316	110,627	85,160	65	85,225	195,852
2021	35,805	78,906	436	115,147	48,880	24	48,904	164,051
2022	47,734	84,200	481	132,415	40,298	34	40,332	172,747
2023	55,587	74,486	541	130,614	45,204	8	45,212	175,826
2024	66,178	64,608	320	131,106	35,478	4	35,482	166,588

Table Source: FAA Operations Network (OPSNET)

### BASED AIRCRAFT

Identifying the current number of based aircraft is vital to the master plan analysis but can be challenging because of the transient nature of aircraft storage. The FAA requires airports to report based aircraft to the National Based Aircraft Inventory database. That information is then cross-referenced with records from other airports. A validated based aircraft figure represents the aircraft that are based at the airport at least six months of the year. There are currently 333 validated based aircraft at SDL in the FAA’s database. Per the FAA, this database is to account for aircraft that are located on airport property and specifically states that aircraft located off airport property, but afforded through-the-fence access, shall not be included as based at the airport. It is important to note that there are more than 400 combined based aircraft on airport property and in the adjacent Scottsdale Airpark (through-the-fence); however, only 333 are validated in the FAA’s system likely due to the number of aircraft based off airport property. Of these 333 aircraft, the fleet mix is comprised of 115 single-engine piston aircraft, 21 multi-engine aircraft, 157 turbine aircraft, and 40 helicopters.

**Table 1E** summarizes historical based aircraft counts at SDL, as sourced from the FAA *Terminal Area Forecast* (TAF) published in January 2025.

**TABLE 1E: Based Aircraft**

Year	Aircraft
2010	341
2011	341
2012	306
2013	306
2014	306
2015	330
2016	320
2017	374
2018	378
2019	349
2020	356
2021	356
2022	356
2023	364
2024*	333

Table Sources: \*BasedAircraft.com; FAA TAF, 2025

### PASSENGER ENPLANEMENTS

The FAA uses passenger enplanement numbers to determine what level of entitlement grant funding airports can receive. Airports with more than 10,000 annual enplanements are eligible to receive at least \$1.3 million for use on eligible capital projects.



*Charter Passenger Aircraft*



While passenger enplanements are more commonly associated with commercial service activities, paying passengers on charter flights or other flights operating under 14 CFR Parts 135 and 91 are also counted as enplanements. Because there is frequent activity at SDL operating under these conditions, the airport has enplanements. It is the responsibility of the operator to report those enplanements to FAA. In 2024, 43,765 passenger enplanements were reported at SDL.

## **AIRPORT SYSTEM PLANNING ROLE**

Airport planning occurs at the national, state, and local levels. Each level has a different emphasis and purpose. At the national level, SDL is included in the *National Plan of Integrated Airport Systems* (NPIAS). At the state level, the airport is included in the *Arizona State Aviation System Plan* (SASP). Locally, the primary planning document is the airport master plan. The previous airport master plan for SDL was completed in 2015 and had a base forecast year of 2012.

## **NATIONAL AIRPORT PLANNING**

The nationwide system of airports that exists today is a direct result of federal policy that promotes the development of civil aviation. Most of the existing airports within the national network were initially constructed by the federal government, and (in most cases) their maintenance and development are still funded primarily through various federal grant programs that aid communities in the care of their prospective airfields.

The NPIAS is published every two years, as required by Title 49 United States Code (USC) § 47103, as part of the continuing effort to maintain a thriving national airport system. The FAA maintains the NPIAS, which identifies the amounts and types of airport development eligible for federal funding under the AIP and the BIL over the next five years. The BIL establishes formulas and competitive grants for airport terminal projects, on-airport rail access projects, and airport-owned airport traffic control towers (ATCTs), which have historically received little or no AIP funding.

There are more than 19,000 airports and landing strips in the U.S. The NPIAS identifies 3,287 of these as public-use facilities that are important to the national airport system and are thus eligible for federal development grants. NPIAS airports are grouped as either primary airports (of which there are 390) or nonprimary airports (of which there are 2,897). Primary airports are those with 10,000 or more annual passenger enplanements. Nonprimary airports are general aviation airports.

SDL is classified in the current NPIAS (2025–2029) as a national general aviation (GA) reliever airport. SDL is one of only 122 national general aviation airports. These airports are critical to the National Airspace System because they are intended to be maintained to accommodate the entire general aviation fleet of aircraft. The reliever status is also important because relievers are meant to attract general aviation aircraft that might otherwise use congested commercial service airports, like PHX. **Table 1F** outlines and describes the different categories of airports included in the NPIAS.

**TABLE 1F: Activity and Development at NPIAS Airports**

Airport Category	Number of Airports	Percent of 2023 Enplanements	Percent of Based Aircraft	Percent of NPIAS Cost
Large Hub	31	71%	1%	36%
Medium Hub	33	17%	2%	14%
Small Hub	74	8%	4%	10%
Nonhub	252	3%	9%	12%
<b>Primary Subtotal:</b>	<b>390</b>	<b>99%</b>	<b>16%</b>	<b>72%</b>
National	122	–	14%	5%
Regional	586	–	25%	9%
Local	1,220	–	18%	9%
Basic	778	–	3%	5%
Unclassified	191	–	1%	0%
<b>Nonprimary Subtotal:</b>	<b>2,897</b>	<b>0.07%</b>	<b>61%</b>	<b>28%</b>
<b>Total NPIAS Airports:</b>	<b>3,287</b>	<b>100%</b>	<b>77%</b>	<b>100%</b>

Table Source: NPIAS, 2025–2029

## STATE AIRPORT PLANNING

The primary planning document for the State of Arizona is the Arizona State Aviation System Plan (SASP), which was last updated in October 2018. The SASP focuses on keeping Arizona’s airports highly advanced, safe, and responsive to the public’s needs today and through the 20-year planning horizon. There are five categories of airports in the SASP:

1. Commercial Service: publicly owned airports that enplane 2,500 or more passengers and receive scheduled passenger air service
2. Reliever: FAA-designated airports that relieve congestion at commercial service airports
3. GA-Community: airports that serve regional economies, connect to state and national economies, and serve all types of general aviation aircraft
4. GA-Rural: airports that serve supplemental roles in local economies and primarily serve small business, recreational, and personal flying
5. GA-Basic: airports that serve limited roles in the local economy and primarily serve recreational and personal flying

Scottsdale Airport is classified as a reliever airport in the SASP. These airports serve to relieve congestion at busy commercial service airports (e.g., PHX). Reliever airports support the NAS and provide access to markets across the U.S. (and internationally, in some cases). High levels of activity by business jets and turboprops are typical of reliever airports.

The Arizona SASP presents development objectives for airports based on their classifications in the SASP. **Table 1G** summarizes the development objectives for reliever airports like SDL. Several airside objectives are not met at SDL. The preferred minimum airport reference code is C-III, which encompasses large business jets. The design standard for runway-to-taxiway separation for C-III airports is 400 feet.

At SDL, the separation distance from the runway centerline to the centerlines of Taxiways A and B is only 250 feet. The recommended taxiway width is 50 feet; several taxiways at SDL are 40 feet wide. An approach lighting system is preferred for reliever airports, depending on the instrument approach capability, but is not required. SDL does not require an approach lighting system.

For landside facilities, SDL does not meet the objectives for adequate apron area and tiedown positions. The airport needs more hangars to accommodate demand and available public automobile parking is lacking. The airport provides all landside service objectives outlined in the SASP.

**TABLE 1G: SASP Service Objectives for Reliever Airports**

Objective Category	Objective Criteria	Minimum Objective	SDL Status
Airside Facility	Airport Reference Code	C-III	Does not meet objective
Airside Facility	Runway Length	Accommodate 75% of large aircraft at 90% useful load	Meets objective
Airside Facility	Runway Width	100 feet	Meets objective
Airside Facility	Runway Surface	Paved	Meets objective
Airside Facility	Taxiway Type	Full parallel and connectors	Meets objective
Airside Facility	Taxiway Width	50 feet minimum	Does not meet objective
Airside Facility	Instrument Approach Procedures	Non-precision	Meets objective
Airside Facility	Visual Aids	Beacon, lighted windsock, segmented circle, REILs, PAPIs	Meets objective
Airside Facility	Runway and Taxiway Lighting	MIRL/MITL	Meets objective
Airside Facility	Approach Lighting Systems	Desired	N/A
Landside Facility	Airport Fencing	Full perimeter fencing and controlled access	Meets objective
Landside Facility	Aprons and Tiedowns	Accommodate 25% of based fleet and 75% of transient fleet	Does not meet objective
Landside Facility	Hangars	Accommodate 75% of based fleet and 25% of overnight	Does not meet objective
Landside Facility	Terminal Facilities	Terminal with pilot lounge	Meets objective*
Landside Facility	Auto Parking	Enough to accommodate activity	Does not meet objective
Landside Service	Automated Weather Reporting	Yes	Meets objective
Landside Service	Fixed Base Operator (FBO)	Yes	Meets objective
Landside Service	Air Taxi/Charter	Yes	Meets objective
Landside Service	Aircraft Rental	Yes	Meets objective
Landside Service	Aircraft Maintenance	Yes	Meets objective
Landside Service	Avionics Sales and Service	Yes	Meets objective
Landside Service	Aircraft Fuel	Yes	Meets objective
Landside Service	Deicing	N/A	N/A
Landside Service	Oxygen	Yes	Meets objective
Landside Service	Snow Removal	N/A	N/A
Landside Service	Ground Transportation	Yes	Meets objective
Landside Service	On-Site Car Rental	Yes	Meets objective
Landside Service	Internet Access	Yes	Meets objective
Landside Service	Phone Access	Yes	Meets objective
Landside Service	Restrooms	Yes	Meets objective
Landside Service	U.S. Customs	Yes	Meets objective

Table Source: Arizona SASP Update, 2018

\*Combination of FBOs and Aviation Business Center meets this objective

## LOCAL AIRPORT PLANNING

The airport master plan and airport layout plan (ALP) are the primary local planning documents. Guidelines for the development of an airport master plan and ALP are provided in FAA Advisory Circular (AC) 150/5070-6B, *Airport Master Plans*. The AC identifies the following functions of a master planning study:

- The airport master plan is the sponsor’s conceptual design for the long-term development of the airport. Master plans are prepared to support the modernization or expansion of existing airports and the creation of new airports.
- The goal of a master plan is to provide the framework needed to guide future airport development that will cost-effectively satisfy aviation demand while addressing relevant environmental and socioeconomic issues.
- Each master plan should meet the following objectives:
  - Justify the plan through technical, economic, and environmental investigation of concepts and alternatives.
  - Provide an effective graphic presentation of the future development of the airport and anticipated land use in the vicinity of the airport.
  - Establish a realistic schedule for the implementation of the development proposed in the plan, particularly the short-term capital improvement program.
  - Propose an achievable financial plan to support the implementation schedule.
  - Provide sufficient project definitions and details for subsequent environmental evaluations that may be required before the project is approved.
  - Present a plan that adequately addresses the issues at the airport and satisfies local, state, and federal regulations.
  - Document policies and future aeronautical demand to support municipal or local deliberations regarding spending, debt, land use controls, and other policies necessary to preserve the integrity of the airport and its surroundings.
  - Set the stage and establish the framework for a continuing planning process. Such a process should monitor key conditions and permit changes in plan recommendations, as required.

The products of a master planning process vary with the complexity of the study and may include a variety of supporting studies and appendices; however, all products fall within one of two basic types: airport master plans or ALP updates.

## Master Plan Reviews by the FAA

The recommendations contained in an airport master plan represent the views, policies, and development plans of the airport sponsor and do not necessarily represent the views of the FAA. Acceptance of the master plan by the FAA does not constitute a commitment on the part of the United States to participate in any development depicted in the plan, nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public law. The FAA reviews all elements of the master plan to ensure sound planning techniques have been applied; however, the FAA only approves the following elements of airport master plans:

- *Forecasts of Aviation Demand:* The master plan forecast should be reviewed to ensure the underlying assumptions and forecast methodologies are appropriate. Paragraph 704.h of FAA AC 150/5070-6B, *Airport Master Plans*, should be used to determine consistency of the master plan forecast with the FAA TAF. Inconsistencies between the master plan forecast and TAF must be resolved, and the forecast must be approved before subsequent planning work proceeds.
- *Critical Aircraft:* The current critical aircraft is an airplane (or group of airplanes with similar characteristics) that operates at least 500 times annually at the airport. The future critical aircraft is the airplane (or group of airplanes with similar characteristics) that is projected to account for at least 500 annual operations at the airport in the future. The future critical aircraft may be the same as the current critical aircraft or may be different. The future critical aircraft must be reasonable and based on historical trends or reasonably assumed changes in aircraft usage.
- *Airport Layout Plan:* All airport development at federally obligated airports must be done in accordance with an FAA-approved ALP. Furthermore, proposed development must be shown on an approved ALP to be eligible for AIP funding. FAA approval of the ALP indicates that the existing facilities and proposed development depicted on the ALP conform to the FAA airport design standards in effect at the time of the approval, or that an approved modification to standard has been issued. Such approval also indicates that the FAA finds the proposed development to be safe and efficient.

In many regards, an airport master plan can be considered a feasibility study of what may be possible or desired as part of the long-term vision for an airport. Multiple alternative development scenarios that may be feasible are included in a master plan; however, implementation of any of these will require FAA approval. While a single long-term vision is included in a master plan, it can be revised in the future by updating the ALP or the master plan.

## AIRFIELD FACILITIES

Airfield facilities facilitate aircraft movements between the air and ground. Generally, these facilities include runways, taxiways, airport lighting and markings, and navigational aids. **Exhibit 1G** depicts airfield facility information atop an aerial photograph for visual reference.

**RUNWAY 3-21**

SDL has one runway, which is designated as Runway 3-21. Runway 3-21 is 8,249 feet long by 100 feet wide and is oriented in a northeast to southwest manner. The asphalt pavement has a grooved surface treatment and is reported as being in good condition by official FAA publications. The runway underwent a significant \$10 million rehabilitation in 2020. Runway 3-21 has non-precision markings on both ends. The runway slopes generally from northeast to southwest; the north end is the high point of the runway and is approximately 68 feet higher than the south end. The runway gradient is 0.98 percent (effective gradient of 0.81 percent). There are blast pads at the end of each runway that measure 150 feet long by 120 feet wide and are marked with chevrons. The landing thresholds to both runway ends are displaced for obstacle clearance. The landing threshold to Runway 3 is displaced by 739 feet and the landing threshold to Runway 21 is displaced by 400 feet. **Table 1H** summarizes the runway data.

**TABLE 1H: Runway Data**

Runway Characteristic	Runway 3	Runway 21
Field Elevation	1510.1' Above Sea Level	1510.1' Above Sea Level
Runway Length	8,249'	8,249'
Runway Width	100'	100'
Blast Pad Dimensions	150' x 120'	150' x 120'
Pavement Type	Asphalt	Asphalt
Pavement Condition (FAA Reported)	Good	Good
Gradient	0.81%	0.81%
Landing Threshold Displacement	739'	400'
Runway Load-Bearing Strength (S)	45,000 lbs.	45,000 lbs.
Runway Load-Bearing Strength (D)	75,000 lbs.	75,000 lbs.
Runway Load-Bearing Strength (2S)	95,000 lbs.	95,000 lbs.
Runway Markings/Condition	Non-Precision/Good	Non-Precision/Good
Touchdown Point Marking/Lighting	Yes/No Lights	Yes/No Lights
Runway Edge Lights	Medium Intensity (MIRL)	Medium Intensity (MIRL)
Runway End Identifier Lights	Yes	Yes
Distance-Remaining Signs	Yes (Lighted)	Yes (Lighted)
Visual Glidepath Indicator/Slope	PAPI-2L (4.00°)	PAPI-2L (4.00°)
Traffic Pattern	Left	Right
Traffic Pattern Altitude: Piston/Turboprop	990' AGL	990' AGL
Traffic Pattern Altitude: Jet	1,490' AGL	1,490' AGL
Traffic Pattern Altitude: Helicopter	490' AGL	490' AGL
Calm Wind Runway	Yes	No

Table Sources: Airport/Facility Directory, Southwest U.S., Effective December 26, 2024; SDL Records

\*Prior permission required for aircraft between 75,001-100,000 lbs.; aircraft above 100,000 lbs. are prohibited

2S = two single wheels in tandem

AGL = above ground level

D = dual wheel

MIRL = medium intensity runway lighting

PAPI = precision approach path indicator

S = single wheel

## RUNWAY MARKINGS

Various runway markings are used to provide information to pilots. Runways intended for use by only small aircraft typically have basic markings, while runways available for larger transport aircraft have more complex markings that provide more information. Runways that support instrument approach procedures with both horizontal and vertical guidance (precision or Category I approaches) have additional markings. Runway markings are described in further detail as follows.

### Threshold Bars

The threshold bar is a 10-foot-wide white stripe at the end of each runway that visually designates the runway landing threshold and the end of the runway. Threshold bars are typically associated with precision markings and/or displaced landing thresholds.

### Threshold Stripes

Runway threshold stripes are a series of white stripes that are 150 feet long by six feet wide. These markings provide a visual grid that alerts pilots to the location of the landing threshold. The total number of threshold stripes indicates the width of the runway to pilots. There are eight threshold stripes on each end of the runway, which is the standard for showing that the runway is 100 feet wide.

### Runway Designators

The end of each runway at SDL is marked with a number and/or a number and letter combination that indicates the approximate magnetic azimuth of the direction of operation. Runway designators are white with a height of 60 feet.

### Aiming Point Markings

Aiming point markings are used to provide enhanced visual guidance to pilots when landing. At SDL, these markings consist of two white stripes that are 150 feet long, 20 feet wide, and spaced 50 feet apart about the runway centerline. The aiming point markings are placed approximately 1,000 feet from the landing threshold for each end.

### Centerline and Edge Stripes

The runway centerline is a dashed white line positioned on the centerline of the runway. Runway edge stripes are solid white lines that designate the edges of the runway.

## PAVEMENT STRENGTH

Pavement strength ratings have traditionally been measured in terms of the number of wheels on each landing gear strut of an aircraft. Additional wheels on each landing gear provide greater dispersal of an aircraft's weight, enabling the pavement to withstand heavier aircraft. The strength rating, which is expressed in pounds, indicates that the pavement can withstand repeated usage by aircraft within that

weight limitation and experience normal wear and tear. Repeated usage of the runway by aircraft that are heavier than the strength rating will cause greater wear and tear and will shorten the useful life of the pavement.

Aircraft with a single wheel on each landing gear strut are classified as single wheel (S). Aircraft with two wheels on each landing gear strut are classified as double wheel (D) and aircraft with two single wheels in tandem are classified as (2S). The following are the published weight-bearing capacities for Runway 3-21 at SDL:

- 45,000 lbs. (S); Examples include small/medium business jets such as the Cessna Citation V
- 75,000 lbs. (D); Examples include large business jets such as Gulfstream V
- 95,000 lbs. (2S); Example includes the C-130

The airport publishes local rules regarding operations by heavier aircraft. Prior permission is required by operators using aircraft with maximum takeoff weights between 75,001-100,000 pounds. Aircraft above 100,000 pounds are prohibited.

In 2014, the FAA moved to implement the International Civil Aviation Organization (ICAO) pavement classification number (PCN) for identifying the strength of airport pavements. The PCN is a five-part code and is described as follows:

1. **PCN numerical value** indicates the load-carrying capacity of the pavement, expressed as a whole number; the value is calculated based on several engineering factors, such as aircraft geometry and pavement usage
2. **Pavement type** is expressed as either R for rigid pavement (typically concrete) or F for flexible pavement (typically asphalt)
3. **Subgrade strength** is expressed as A (high), B (medium), C (low), or D (ultra low); a subgrade of A would be considered very strong, like concrete-stabilized clay, and a subgrade of D would be very weak, similar to uncompacted soil
4. **Maximum tire pressure** is expressed as W (unlimited/no pressure limit), X (high/254 pounds per square inch [PSI]), Y (medium/181 PSI), or Z (low/72 PSI); indicates the maximum tire pressure the pavement can support (concrete surfaces are usually rated W)
5. **Process of determination** is expressed as either T (technical evaluation) or U (physical evaluation) and indicates the method of pavement testing

The runway does not have a published PCN value as of this writing (January 2025). In 2014, the airport received a draft PCN report, which indicated that the PCN was 7/F/D/Y/T; however, that PCN was never published for pilot reference. The runway was rehabilitated in 2021, so the PCN from 2014 is likely out of date.

FAA AC 150/5335-5D, *Standardized Method of Reporting Airport Pavement Strength – PCR*, provides guidance on a new method for reporting airport pavement strengths. The new reporting method is the Aircraft Classification Rating–Pavement Classification Rating (ACR-PCR) method. There is no mathematical

correlation between the ACN-PCN method and the new ACR-PCR method. This new method provides the benefit of expressing the effect of an individual aircraft on different pavements with a single unique number, the ACN. CAN varies according to aircraft weight and configuration (e.g. tire pressure, gear geometry, etc.), pavement type, and subgrade strength. Conversely, the load-carrying capacity of a pavement can be expressed by a single unique number, the PCR, without specifying a particular aircraft or detailed information about the pavement structure.

For general aviation airports, reporting pavement strength with the ACR-PCR method is voluntary and is typically completed when the airport undertakes various pavement maintenance projects. Currently, pavement strength at SDL is not classified under the ACR-PCR methodology.

## PAVEMENT CONDITION

Airport sponsors are required to maintain airport pavement surfaces in suitable condition, as outlined in Federal Grant Assurance No. 11 and Public Law 103-305. To this end, airport sponsors must implement effective airport pavement maintenance/management programs. Essentially, airport sponsors must continually assess the conditions of airport pavements and provide preventative maintenance to preserve the useful life of the pavements.

The ADOT Aeronautics Division funds pavement inspections for approximately 80 airports in the state every five years through the Arizona Pavement Preservation Program (APPP). A pavement condition survey for SDL was completed in 2022.

The survey was conducted using the pavement condition index (PCI) procedure documented in the following publications:

- FAA AC 150/5380-6B, *Guidelines and Procedures for Maintenance of Airport Pavements*
- American Society for Testing and Materials (ASTM) D-5340, *Standard Test Method for Airport Pavement Condition Index Surveys*

The PCI procedure is the standard used by the aviation industry to visually assess pavement conditions. It was developed to provide engineers with a consistent, objective, and repeatable tool to represent overall pavement condition. During a PCI survey, visible signs of deterioration within a selected sample area are identified, recorded, and analyzed.

The results of a PCI evaluation provide an indication of the structural integrity and functional capabilities of the pavement. It should be noted that only the top layer of the pavement is examined during a PCI inspection and no direct measure is made of the structural capacity of the pavement system; nevertheless, the PCI provides an objective basis for determining maintenance and repair needs and establishing rehabilitation priorities in consideration of constrained resources. Furthermore, the results of repeated PCI monitoring over time can be used to determine the rate of pavement deterioration and estimate the time(s) at which certain rehabilitation measures can be implemented.

The PCI scale ranges from 0 to 100. A PCI rating between 0 and 10 indicates a failed pavement condition and a PCI rating between 85 and 100 indicates good condition. In general, pavements with PCI ratings above 85 may only need spot repairs. Pavements with PCI ratings between 40 and 70 are more likely

to be candidates for major rehabilitation, such as structural overlays or concrete section replacement. Reconstruction is often the most viable option when the PCI rating is below 40. Thresholds for maintenance, rehabilitation, or reconstruction will vary based on operational priority and other considerations.

**Exhibit 1H** shows the pavement condition index map from the 2022 inspections. In 2022, the aircraft run-up areas and the north portion of Taxiway A were under construction. The new pavement in this area is shown with an estimated PCI of 98. The 2022 pavement condition report is timely, as its publication can inform this master plan. When considering the future condition of the pavements, a general rule of thumb is to subtract one to two PCI points for each year removed from the survey date.

Generally, the pavements at SDL are in very good condition. The runway was recently rehabilitated and has a PCI value of 100. Parallel Taxiway A has a PCI value of 93 (very good condition). Taxiway B has a PCI rating of 82, which means it is in good condition but would benefit from ongoing maintenance to extend its useful life. Several sections of the west side apron areas have lower PCI values that range from 68-76. These areas will also need ongoing maintenance.

### TAXIWAYS/TAXILANES

The taxiway/taxilane system at SDL is extensive and includes parallel taxiways, connector taxiways, and entrance/exit taxiways. Taxiways are associated with movement to or from runways and are typified by higher aircraft movement speeds. Taxilanes are movement surfaces that provide access to hangar areas and are typified by slower aircraft movement speeds.

The width of each taxiway varies based on aircraft design and usage. Each taxiway/taxilane at SDL is listed on **Table 1J**. Taxiways and taxilanes have protected object free areas and safety areas that are centered on the taxiway/taxilane to protect aircraft. Objects (other than those necessary for navigation, such as edge lights) must not penetrate the ground elevation of these surfaces. Certain taxilanes are not part of the movement areas controlled by tower controllers; therefore, pilots on the non-movement areas do not have to be in contact with the tower controllers. All taxiways/taxilanes have medium intensity taxiway edge lights.

**TABLE 1J: Taxiway Details**

Taxiway Designation	Width	Safety Area Width	Object Free Area Width
Taxiway A (Parallel)	40'	79'	124'
Taxiway B (Parallel)	40'	79'	124'
Taxiway A1 (Runway 3 Threshold)	40'	79'	124'
Taxiways A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15	40'–50'	79'	124'
Taxiway A16 (Runway 21 Threshold)	40'	79'	124'
Taxiway B1 (Runway 3 Threshold)	40'	79'	124'
Taxiways B2, B3, B5, B6, B7, B10, B11, B12, B13	40'–50'	79'	124'
Taxiway B16 (Runway 21 Threshold)	50'	79'	124'

Table Source: SDL ALP

## Taxiway and Apron Markings

Taxiway and taxilane centerline markings are provided to assist pilots in maintaining proper clearance from pavement edges and objects near the taxiway/taxilane edges. Enhanced taxiway centerline markings lead from all runway hold positions to the parallel taxiways. Other taxiway markings include leadoff lines on normally used exits and continuous-type edge markings along paved shoulders. Aircraft movement areas on various aprons are identified with centerline markings. Aircraft tiedown positions are identified on various apron surfaces. There are aircraft holding position markings on each taxiway that leads to the runway. The holding position markings are 152 feet from the runway centerline.



*Taxiway Markings at SDL*

## AIRFIELD LIGHTING

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

### Identification Lighting

The location of the airport at night is universally identified by a rotating beacon, which projects two beams of light (one white and one green) 180 degrees apart. The rotating beacon at SDL is located on the west side of the airport, atop the airport operations center building. The beacon is owned by the airport.

### Runway and Taxiway Lighting/Signage

Runway and taxiway edge lighting utilize light fixtures placed near the edges 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.

The runway is equipped with standard medium intensity runway edge lights (MIRL). All runway edge light lenses are split (white/yellow) to mark the caution zone on the last 2,000 feet of each runway end. All taxiways are equipped with medium intensity taxiway edge lighting (MITL).

The airport also has a runway/taxiway signage system. The presence of runway/taxiway signage is an essential component of a surface movement guidance control system and is necessary for the safe and efficient operation of the airport. The signage system installed at SDL includes runway and taxiway designations, holding positions, critical areas, routing/directional indication, and runway ends and exits. All edge lighting and signs at SDL are owned and maintained by the airport.

### Distance-Remaining Signs

The runway is equipped with lighted distance-remaining signs placed at 1,000-foot intervals to one side of the runway. These signs alert pilots to the number of feet remaining before the end of the runway. The distance-remaining signs are owned and maintained by the airport.

### Visual Glideslope Approach Aids

Visual glideslope approach aids provide visual cues to pilots, alerting them to whether they are on the correct glide path to landing. The approaches to both ends of Runway 3-21 are equipped with two-light precision approach path indicator (PAPI) lights on the left side of the runway (PAPI-4L). Both PAPIs are set to a 4.0-degree glide path (standard glide path is 3.0 degrees). The PAPIs are owned by the airport.

### Runway End Identification Lighting

Runway end identifier lights (REILs) are strobe lights placed at the edges of the landing thresholds to provide rapid identification of the landing threshold for up to 20 miles. The approaches to both ends of Runway 3-21 are equipped with a REIL system.

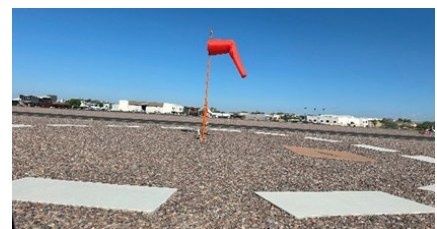
### Pilot-Controlled Lighting

The airport's lighting system is connected to a pilot-controlled lighting (PCL) system. When the ATCT is closed, the PCL system allows a pilot to activate the PAPIs, REILs, and MIRL system on Runway 3-21 through a series of clicks with their transmitter on the common traffic advisory frequency (CTAF) 119.9 megahertz (MHz).

## COMMUNICATION AND WEATHER REPORTING FACILITIES

### Windsocks

There are two windsocks in proximity to the runway system at SDL. The primary lighted windsock is located within the segmented circle on the east side of the runway. A second windsock is situated on the west side of the runway near Gate 5 and the Kilo GA hangars.



*Windsock and Segmented Circle*

### Automated Surface Observation System

The SDL automated surface observation system (ASOS) is located at the south end of the airfield. The ASOS automatically records weather conditions, such as temperature, dew point, wind speed, altimeter setting, visibility, sky condition, and precipitation. The ASOS updates observations each minute, 24 hours a day, and this information is transmitted to pilots in the airport vicinity via an FAA very high frequency (VHF) ground-to-air radio transmitter. Pilots can receive these broadcasts on the automated terminal information service



*ASOS Weather Equipment*

(ATIS) frequency or via a dedicated ASOS local telephone number (480-483-3049), through which a computer-generated voice presents airport weather information. ATIS broadcasts are updated hourly and provide arriving and departing pilots with the current surface weather conditions, communication frequencies, and other important airport-specific information. The ATIS frequency at SDL is 118.6 MHz.

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

### **Segmented Circle**

A segmented circle provides information related to the traffic pattern to pilots in the vicinity of the airport. The segmented circle is centrally located on the airfield, immediately east of Taxiway B. The segmented circle markings indicate that the Runway 3 traffic pattern is to the left and the Runway 21 traffic pattern is to the right.

### **Remote Communications Outlet**

The remote communications outlet (RCO) is an unmanned remote aviation radio transceiver station that is used to extend the communication range of air traffic control (ATC) facilities, allowing communication with aircraft farther from the main control tower. The Prescott Radio RCO frequency is 122.2 MHz (Phoenix RCO).

## **AREA AIRSPACE AND AIR TRAFFIC CONTROL**

The *Federal Aviation Act of 1958* established the FAA as the responsible agency for the control and use of navigable airspace within the United States. The FAA has established the National Airspace 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. The system also includes components shared jointly with the military.

### **AIRSPACE STRUCTURE**

Airspace within the United States is broadly classified as either controlled or uncontrolled. The difference 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, as shown on **Exhibit 1J**. Airspace designated as Class A, B, C, D, or E is considered controlled airspace. Aircraft operating within controlled airspace are subject to varying requirements for positive air traffic control.

## **Class A Airspace**

Class A airspace includes all airspace from 18,000 feet mean sea level (MSL) to flight level (FL) 600 (60,000 feet MSL). This airspace is designated in Federal Aviation Regulation (FAR) Part 71.193 for positive control of aircraft. The positive control area (PCA) allows only flights governed under instrument flight rules (IFR). An aircraft must have appropriate radio and navigation equipment and its pilot must obtain clearance from an ATC facility to enter Class A airspace. In addition, the pilot must possess an instrument rating.

## **Class B Airspace**

Class B airspace has been designated around some of the country's busiest commercial service airports, such as Phoenix Sky Harbor International Airport (PHX). Class B airspace is designed to regulate the flow of uncontrolled traffic above, around, and below the arrival and departure airspace required for high-performance passenger-carrying aircraft at busy commercial service airports. This airspace is the most restrictive controlled airspace encountered by pilots operating under visual flight rules (VFR).

To fly within Class B airspace, an aircraft must be equipped with special radio and navigation equipment and must obtain clearance from ATC. Its pilot must have at least a private pilot's certificate or be a student pilot who has met the requirements of FAR Part 61.95, which requires special ground and flight training for Class B airspace. Aircraft are also required to have and utilize Mode C transponders within a 30-nm range of the center of Class B airspace; a Mode C transponder allows the ATCT to track the altitude of the aircraft. A helicopter does not need special navigation equipment or a transponder if it operates at or below 1,000 feet and has made a prior arrangement in the form of a Letter of Agreement with the FAA controlling agency.

SDL is located under the PHX Class B airspace; however, the Class B airspace over SDL is from 6,000 feet to 9,000 feet.

## **Class C Airspace**

The FAA has established Class C airspace at 122 airports around the country as a means of regulating air traffic in these areas. Class C airspace is designed to regulate the flow of uncontrolled traffic above, around, and below the arrival and departure airspace required for high-performance passenger-carrying aircraft at some commercial service airports.

To fly inside Class C airspace, an aircraft must have a two-way radio and an encoding transponder and must have established communication with the ATCT. Aircraft may fly below the floor of the Class C airspace or above the Class C airspace ceiling without establishing communication with ATC. The closest Class C airspace surrounds Tucson International Airport (TUC).

## **Class D Airspace**

Class D airspace is controlled airspace surrounding airports with ATCTs. The Class D airspace at an airport typically constitutes a cylinder with a horizontal radius of up to five miles from the airport, extending from the surface up to a designated vertical limit, which is typically set at approximately 2,500 feet above the airport elevation. If an airport has an instrument approach or departure, the Class D airspace

sometimes extends along the approach or departure path. During periods when the airport's ATCT is closed, the Class D airspace typically reverts to Class E airspace. SDL is in Class D airspace, as are many other Phoenix area airports, such as Phoenix-Deer Valley Airport (DVT), Falcon Field Airport (FFZ), and Glendale Regional Airport (GEU).

### **Class E Airspace**

Class E airspace is controlled airspace designed to contain IFR operations near an airport and while aircraft are transitioning between the airport and en-route environments. Unless otherwise specified, Class E airspace terminates at the base of the overlying airspace. Only aircraft operating under IFR are required to be in contact with ATC when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio communication with ATC facilities, visual flight can only be conducted if minimum visibility and cloud ceilings exist. Class E airspace encompasses the Scottsdale area, except where it is superseded by Class B or D airspace.

### **Class G Airspace**

Airspace not designated as Class A, B, C, D, or E is considered uncontrolled, or Class G, airspace. ATC does not have the authority or responsibility to exercise control over air traffic within this airspace. Class G airspace lies between the surface and the overlying airspace.

**Exhibit 1K** shows the Class D airspace surrounding SDL. FAA Order JO 7400.11J, *Airspace Designations and Reporting Points* (dated July 31, 2024), describes the Scottsdale Class D airspace as follows:

*“That airspace extending upward from the surface to but not including 4,000 feet MSL within a 4.3-mile radius of the Scottsdale Municipal Airport. This Class D airspace is in effect during the specific dates and times established in advance by a Notice to Airmen. The effective date and time will therefore be continuously published in the Airport/Facility Directory.”*

(Note: The referenced FAA Order refers to the previous name of the airport.)

### **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 such activity from other fliers, and allows charting to keep airspace users informed. These areas are depicted on **Exhibit 1K**.

### **Restricted Areas**

No person may operate an aircraft within a restricted area between the designated altitudes and during the times of designation unless they have the advanced permission of the using agency. Restricted areas R2310-A, -B, and -C are in the southeast portion of the Phoenix region, approximately 50 miles from SDL.

R2310-A extends from the surface to 10,000 feet MSL. R2310-B extends from 10,000 to 17,000 feet MSL. R2310-C extends from 17,000 to 35,000 feet MSL. These areas are restricted when published by Notice to Air Missions (NOTAM) at least 48 hours in advance. The Arizona Air National Guard is the primary using agency.

### **Alert Areas**

An airspace alert area is a designated area in which pilots are made aware of unusual aerial activity or a large volume of pilot training. Pilots are advised to be alert when flying in these areas. Alert area A-231 is west of Phoenix and is associated with Luke Air Force Base (AFB) activity. FAA Order JO 7400.10F, *Special Use Airspace* (dated February 16, 2024), states that A-231 extends from 500 feet above ground level (AGL) to and including 6,500 feet MSL, excluding the airspace below 4,000 feet AGL within the Luke AFB Class D airspace.

### **Military Operations Areas**

A military operations area (MOA) is special use airspace established outside positive control areas to separate/segregate certain nonhazardous military activities from IFR traffic and to identify them for VFR traffic where these activities are conducted. MOAs are established to contain certain military activities (such as air combat maneuvers, air intercepts, acrobatics, etc.). The Outlaw MOA is located approximately 30 miles to the east of SDL. The Outlaw MOA extends from the surface to 8,000 feet MSL or 3,000 feet AGL (whichever is higher but not including FL 18,000 feet MSL), exclusive of restricted areas R-2310A, -B, and -C, when activated. The using agency is the Arizona Air National Guard 162<sup>nd</sup> Wing fighter pilot group.

### **Military Training Routes**

A military training route (MTR) is designated airspace generally established for use by high-performance military aircraft to train below 10,000 feet AGL and in excess of 250 knots. There are VR (visual) and IR (instrument) designated MTRs. MTRs with no segment above 1,500 feet AGL are designated with VR or IR followed by a four-digit number. MTRs with one or more segments above 1,500 feet AGL are identified by the route designation followed by a three-digit number (e.g., VR152). The arrows on the route show the direction of travel. VR244, VR241, and VR239 are approximately 25 miles to the north of SDL. General aviation aircraft should be alert when in proximity to an MTR.

### **Victor Airways**

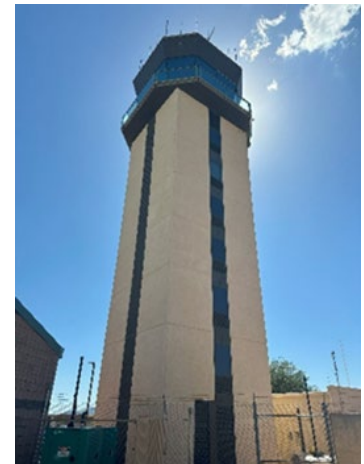
Victor airways are a system of federal airways established for aircraft arriving or departing regional areas using very high frequency omni-directional range (VOR) facilities. Victor airways are eight-mile-wide corridors of airspace that extend upward from 1,200 feet AGL to 18,000 feet MSL and extend between VOR navigational facilities. Numerous Victor airways pass in the vicinity of SDL, including V327, V562, and V567, which pass directly over SDL.

## Wind Farms/Wilderness Areas

While not specifically considered part of the U.S. airspace structure, the boundaries of certain ground-based features are included on airspace sectional charts, including wind farms, national parks, wildlife areas, wilderness areas, and primitive areas. Aircraft operations are not specifically restricted over these areas; however, pilots should maintain a minimum altitude of 2,000 feet above the surface. There are several wilderness areas to the east of SDL, including the Verde River and Salt River Bald Eagle Breeding Areas and the Superstition Wilderness Area.

## AIRSPACE CONTROL

The approximately 90-foot-tall ATCT at SDL was constructed in 1989 by the FAA and is staffed by FAA-certified controllers. The ATCT is located on the east side of the airfield, east of Taxiway B and near the midpoint of the runway. The height from the ground to the cab floor is 77 feet 10 inches. The tower operates from 6:00 a.m. to 9:00 p.m. seven days a week. SDL controllers are responsible for the Class D airspace surrounding SDL.



*SDL Control Tower*

The following frequencies are used at SDL:

- Scottsdale Ground: 121.6 MHz
- Scottsdale Tower: 119.9 MHz
- Phoenix Approach/Departure: 120.7 MHz
- Clearance Delivery: 124.8 MHz
- Clearance Delivery when ATCT is closed: 127.45 MHz
- Automated Terminal Information System (ATIS): 118.6 MHz
- Common Traffic Advisory Frequency (CTAF): 119.9 Mhz
- Prescott Radio Remote Communications Outlet (RCO): 122.2 Mhz

## ELECTRONIC NAVIGATIONAL AIDS

Navigational aids are electronic devices that transmit radio frequencies, which pilots of properly equipped aircraft can translate into point-to-point guidance and position information. The types of electronic navigational aids available for aircraft flying to or from SDL include a VOR facility and global positioning system (GPS).

In general, a VOR facility provides azimuth readings to pilots of properly equipped aircraft by transmitting a radio signal at every degree to provide 360 individual navigational courses. Distance measuring equipment (DME) is frequently combined with a VOR facility (VOR-DME) to provide distance (as well as direction) information to pilots. Military tactical air navigation (TACAN) aids and civil VORs are commonly combined to form VORTACs, which provide distance and direction information to both civil and military pilots. The Phoenix VORTAC is located on the airfield at PHX.

GPS was initially developed by the United States Department of Defense for military navigation around the world. GPS differs from VOR in that it does not require pilots to navigate using specific facilities. GPS uses satellites placed in orbit around the earth to transmit electronic radio signals, which pilots of properly equipped aircraft can use to determine altitude, speed, and other navigational information. With GPS, a pilot can navigate directly to any airport in the country and is not required to navigate to a specific ground-based navigation facility.

## 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 airports, especially during instrument flight conditions. There are currently six published instrument approach procedures at SDL; three are circling-only approaches, two lead to Runway 3, and one leads to Runway 21.

The capability of an instrument approach procedure is defined by the visibility and cloud ceiling minimums associated with the approach. Visibility minimums define the horizontal distance a pilot must be able to see to complete the approach. Cloud ceilings define the lowest elevation a cloud layer (defined as feet above the ground) can be situated for the pilot to complete the approach. If the observed visibility or cloud ceilings are below the minimums prescribed for the approach, the pilot cannot complete the instrument approach. **Exhibit 1L** shows the FAA-approved and published approach plates. The table on the exhibit summarizes the lowest approach minimums available by runway end.

Instrument approaches based on GPS have become common across the country. GPS does not require a significant investment in ground-based systems by the airport or the FAA. The runway ends at SDL are served by specialized GPS approaches. A variant of GPS, required navigation performance (RNP), is an instrument approach that supports the operation of the airport along a precise flight path with a high level of accuracy and the ability to determine aircraft position. RNP offers safety benefits by means of its precision and accuracy and it reduces the cost of operational efficiencies associated with traditional step-down non-precision and circling approaches; however, the RNP instrument approaches require special training and FAA authorization for each operator. As a result, the RNP instrument approaches are seldom used.

It should be noted that the close proximity of Phoenix Deer Valley Airport (DVT), which has a similar runway configuration, requires the two airports to be considered as one for purposes of arrival and departure by Phoenix Approach (P50). When conditions are below VFR minimums, P50 must balance the operations at both airports, which often causes delays and flow restrictions.

## STANDARD TERMINAL ARRIVAL PROCEDURES

Standard terminal arrival (STAR) procedures provide a predetermined flight path for pilots operating under IFR to follow so they can smoothly transition from the en-route phase of a flight to the final approach phase. STAR procedures aid efficient and safe arrival management by coordinating aircraft movements around busy airports. There are four published STAR procedures for those heading to SDL.

## TERMINAL DEPARTURE PROCEDURES

Departure procedures are published flight procedures followed by pilots on IFR flight plans immediately after takeoff from an airport. Departure procedures have been developed to optimize the route of flight when considering a variety of factors, such as terrain, obstacles, noise abatement, and overall airspace management. Departure procedures are most common for airports located in complex airspace environments, like the greater Phoenix area. There are 12 published departure procedures for SDL.

## LOCAL OPERATING PROCEDURES

SDL is situated at 1,510.1 feet MSL. The airport has published notices to pilots to make them aware of certain special circumstances at the airport. Local operating procedures of note are as follows:

- There may be wildlife in the vicinity of the runway.
- For clearance delivery when the ATCT is closed, contact Phoenix Approach at 602-306-2565.
- Maintenance run-ups are prohibited between 10:00 p.m. and 7:00 a.m.
- 24-hour prior permission is required for military operations.
- There is a voluntary noise abatement curfew from 10:00 p.m. to 6:00 a.m.
- Prior permission required for aircraft with a maximum certified takeoff weight (MTOW) between 75,001 and 100,000 lbs. Aircraft above 100,000 lbs. MTOW are prohibited.
- Obstructions: There are 58-foot-tall trees located 1,695 feet from the Runway 3 end, 390 feet to the right of the centerline. A 25:1 slope is required to clear the trees.
- Obstructions: There is a 25-foot-tall hill located 850 feet from the Runway 21 end, 375 feet to the right of the centerline. A 26:1 slope is required to clear the hill.
- Midfield departures and stop-and-go landings are not allowed. Touch-and-go operations are not permitted between 9:30 p.m. and 6:00 a.m.
- The airport has a voluntary noise abatement policy.

## LANDSIDE FACILITIES

Landside facilities are airport elements that support aircraft and pilot/passenger handling functions and are not directly related to the airfield system. Landside elements include the terminal functions, general aviation facilities, aircraft storage facilities, aviation and non-aviation businesses located at the airport, and support facilities, such as fuel storage, airport maintenance, and aircraft rescue and firefighting. A generalized map of landside facilities at SDL is shown on **Exhibit 1M**. The exhibit also documents the footprint/square footage of those facilities, as well as the space potentially available for aircraft storage, where applicable.

## GENERAL AVIATION FACILITIES

General aviation facilities are intended to support private and corporate aviation and typically include aircraft hangars and aircraft parking aprons. Since the 2015 master plan, the airport has undergone a transformation as older hangar facilities have been replaced with new modern, sustainable facilities. Four new hangar structures, the Aviation Business Center, and the Airport Operations Center have been constructed along the main terminal apron on the west side, encompassing approximately 186,000 square feet of hangar space (not including the associated office space). Numerous other hangars have been constructed in the Scottsdale Airpark area.

### Hangars

There are numerous buildings and hangars at SDL. Approximately 500,000 square feet of hangar space on airport property is able to accommodate aircraft and there is an additional 190,000 square feet of building/office space. If calculating a general industry standard of 2,500 square feet of space per aircraft, enclosed aircraft parking is available for 200 aircraft. Each hangar will likely have a different utilization ratio; nevertheless, this calculation provides a reasonable indication of the aircraft storage capacity on airport property. The Scottsdale Airpark has the capability to accommodate many more aircraft, as it contains 140 parcels with taxilane access to the airfield.



*Atlantic Conventional Hangars*



*Signature Private Conventional Hangars*



*Jet Aviation Hangars*



*Connected Box Hangars*

## Aircraft Aprons

The main public terminal area aircraft apron on the west side of the airfield encompasses approximately 131,000 square yards of pavement. Much of the terminal apron is unmarked to allow for greater flexibility in the movement and parking of aircraft during busy times. Approximately 24 tiedown positions for small aircraft are marked on the northern portion of the terminal apron. The northern portion of the apron, north of the Aviation Business Center, is primarily intended for transient visitors to the airport. There are 21 additional tiedown positions for small aircraft on the west side of Taxiway A. It is estimated that the main terminal apron (exclusive of the marked tiedown positions) can accommodate approximately 100 business jets, depending on size.



*Main Terminal Apron*

The airport's rules and regulations stipulate the following:

*"Airport-owned apron areas (e.g., the main terminal apron), are primarily intended to facilitate movement and operations of hangars, terminals, buildings or other structures associated with the apron space. All users shall conduct their operations in a manner that promotes the efficient use of the apron space near their facilities and avoids unnecessary use of apron space near others."*

There are three additional aircraft parking aprons, which are under private leasehold. The NetJets apron is approximately 20,000 square yards, the Signature West apron is approximately 14,000 square yards, and the Signature East apron is approximately 24,000 square yards.

## Vehicle Parking Lots

Interviews with the managers of the fixed base operators (FBOs) indicated a significant vehicle parking deficit at the airport, which became especially acute during the COVID-19 pandemic in 2020 with the significant growth of charter and fractional activities. All conventional hangars have associated vehicle parking lots. The Aviation Business Center parking lot across the street has 63 uncovered spots and 54 covered spots.

## Aviation Business Center

The Scottsdale Airport Aviation Business Center opened in 2018 as a Leadership in Energy and Environmental Design (LEED)-certified new construction building. The Aviation Business Center is focused on hospitality and features high-end, modern amenities and breathtaking vistas, with the goal of creating a welcoming experience for users and the Scottsdale community. The 23,781-square-foot facility was designed to be the beacon for the aviation campus and consolidates the airport's landside administration offices, customs operations, and existing tenant spaces. A 3,200-square-foot multi-use space located on the second floor can be reserved for training, meetings, and social events with full catering services by Volanti, the new 2,400-square-foot farm-to-table restaurant and bar. Both spaces feature full glass façades and outdoor patios that overlook the active runway and McDowell Mountains.

Upon arrival, an impressive public art installation of a WWII-era Stearman biplane aircraft is suspended above the park-like plaza as a point of pride. The aircraft serves as a memorial for those who trained at the airfield during WWII and all who have served the country since then. Inside, public art integrated into the lobbies depicts Scottsdale’s regional aviation history and the surrounding desert landscape. Visitors to the airport can also listen in on a live feed of airport communications between pilots and tower control, which creates an authentic and engaging experience.

A primary goal was to promote sensitive and sustainable design throughout the building and regional environment. To achieve this, the site design responds to the surroundings and takes advantage of the solar orientation. The main glass facade faces north to control heat gain and integrated shade screens provide additional protection from the south and west exposures. The building’s massing is subdivided into smaller elements that express small-scale details and provide the protection of glazing. On-site renewable energy was incorporated through the installation of photovoltaic panels mounted on the roof top of the building. The energy use intensity (EUI), including on-site renewable energy contribution, is 105.00 kBtu (kilo-British thermal units) per square foot per year. According to Energy Star Target Finder, the regional energy reduction is 22 percent. Water-efficient landscaping was incorporated to reduce usage and demand on city water supply, resulting in a 50 percent reduction of potable water consumption. During construction, 10 percent of materials introduced to the project were processed and manufactured within 500 miles of the project site. Low-emitting materials in paints, carpet systems, and composite wood were measured to reduce the quantity of indoor air contaminants that are odorous, irritant, and/or harmful to the comfort and well-being of installers and occupants.

### FBO Facilities

The airport has three nationally prominent fixed base operators on the airfield. Each FBO has made significant investments in airport facilities over the years and provides full line services, fueling, overnight hangarage and ramp parking, lavatory and cleaning services, concierge services, and catering. Each FBO also provides all expected amenities, including first-class executive terminal facilities, passenger and crew lounges, conference rooms, Wi-Fi, flight planning stations, and restrooms.



*Aviation Business Center: Landside*



*Aviation Business Center: Airside*



*Aviation Business Center: Lobby*



*Volanti Restaurant*



*NetJets Office/Hangar Complex*

Atlantic Aviation occupies several hangars at the midfield of the airport. Most recently, Atlantic Aviation constructed a large hangar, office, and ramp area, which is leased to NetJets. Atlantic Aviation also leases passenger processing space for various charter operators.



*Atlantic FBO*

Jet Aviation began operating in 2020 and is the newest FBO to serve SDL. Jet Aviation occupies several hangar buildings on the southwest end of the airfield. Jet Aviation recently constructed a large hangar, office, and ramp area, which is leased to NetJets. Jet Aviation additionally provides aircraft maintenance, aircraft interior design, aircraft sales, aircraft management, and charters.



*Jet Aviation FBO*

Signature Aviation established operations in 1992 and has a long history serving customers at SDL. Signature Aviation occupies a hangar and apron complex at the northeast end of the airfield and occupies space on the west side of the airfield. Signature Aviation recently constructed two conventional hangars (SA Private Hangars) encompassing approximately 60,000 square feet of space.

### **Airport Operations Center Building**

The 10,000-square-foot Airport Operations Center at Scottsdale Airport opened in 2017 and is the hub for monitoring daily operations, such as safety, security, and maintenance of the airfield. This building is a state-of-the-art facility and is also environmentally friendly. The U.S. Green Building Council recognized the Scottsdale Airport Operations Center with the LEED Silver certification; this award recognizes the Scottsdale Airport Operations Center project for its sustainable, green building qualities.



*Signature Aviation FBO*



*Airport Operations Center Looking North*



*Airport Operations Center Looking West*

## AIRPORT SUPPORT FACILITIES

### Aircraft Rescue and Firefighting

Commercial service airports are required to have on-field aircraft rescue and firefighting (ARFF) services available. SDL is not a commercial service airport and is not required to have ARFF services; however, the City of Scottsdale owns and maintains an ARFF-certified fire station at the airport to provide an additional level of safety to airport users. Fire Station 609 is 8,636 square feet in size and is located on the east side of the airfield immediately north of the ATCT. The facility is designed to provide emergency and rescue services to the airport and surrounding area. At least five full-time firefighters are present at the facility 24 hours per day. In the event of an emergency call outside the airport, at least one ARFF-certified firefighter will remain on duty at the airport.

The station houses two ARFF crash trucks. The primary truck is a 2021 Oshkosh Striker 1500. The secondary truck is a 2018 International 7400. Both ARFF trucks have capacities of 1,500 gallons of water, 210 gallons of aqueous film-forming foam (AFFF), and 450 pounds of dry chemical (Purple K).



*Fire Station 609 at SDL: Airside View*



*2021 Oshkosh ARFF Truck Stationed at SDL*

## SUPPORT FACILITIES

### Fuel Storage

Fueling services are primarily provided by the three fixed base operators. Each FBO pays a fuel flowage fee to the airport for the right to sell aviation fuel on the airfield. The FBOs also sell sustainable aviation fuel (SAF). The following combined total fuel capacity is available at the airport from the FBOs:

- Jet A fuel: 135,000 gallons of static storage and 79,000 gallons of fuel truck storage
- AvGas fuel: 55,000 gallons of static storage and 5,000 gallons of fuel truck storage



*Jet A Fuel Trucks*

In addition, private individual leaseholders can obtain permits to fuel their own aircraft. Including the airpark, there are currently 27 permits for self-fueling.

### Utilities

Utility companies serving SDL include Arizona Public Service (APS), the electric company that supplies bulk electricity to the airport. Scottsdale Water provides water and sewer service in Scottsdale. Gas services are provided by Southwest Gas. Various communications companies provide fiber and cellular services.

## U.S. Customs

Scottsdale Airport is designated as a *landing rights* airport by U.S. Customs and Border Protection. The U.S. Customs office is located in the Aviation Business Center building. An aircraft arriving from an international location must pass through customs procedures and must request arrival and customs inspection at least 60 minutes prior to departure from its foreign port or place of origin. An inbound international flight must also pay the customs user fee to the airport in advance of its arrival. Regular business hours are from 9:00 a.m. to 7:00 p.m. After-hours appointments will incur an additional fee.



*U.S. Customs Facility*

## Transit Station

To diversify the City of Scottsdale's transportation system, a park-and-ride transit facility has been constructed at the southeast corner of the intersection of Scottsdale Road and Thunderbird Road on airport property. This property is physically separated from the airfield by Thunderbird Road. The facility is designed to serve express bus routes that travel on Loop 101, local bus routes on Scottsdale Road and Thunderbird Road, and planned bus rapid transit on Scottsdale Road. Other transportation sources, such as carpools and vanpools, can also use the facility.

The park-and-ride facility includes approximately 275 parking spaces (including 173 covered spaces), a designated walkway to guide people from the parking areas to the passenger pick-up platform, fare vending machines, an information kiosk, pedestrian amenities, lighting, display boards showing real-time bus information, and a maintenance/storage building.

## Airport Fencing and Gate Access

The airport operations area is completely enclosed with a chain-link fence topped by three-strand barbed wire to prevent inadvertent access of the airport by vehicles and pedestrians. The fence does not always follow the legal airport property boundary due to the layout of physical features and infrastructure development. Several controlled-access gates serve different areas on the airfield. In addition, there are manual gates on airport property that are controlled by airport personnel and private airport tenants. Six controlled-access gates provide aircraft access to and from the Scottsdale Airpark.

## Aircraft Wash Racks

A designated aircraft wash rack is located on the west side of the airport, adjacent to the Kilo connected box hangars. This facility allows aircraft owners to wash their aircraft and was constructed to ensure proper drainage of run-off water and cleaners. Atlantic Aviation also has a wash rack next to the Atlantic South hangar.

## **AIRPORT REGULATORY DOCUMENTS**

Scottsdale Airport and the Scottsdale Airpark maintain numerous regulatory and operating documents for easy access by current or future airport uses. Each of these documents may be accessed via the Scottsdale Airport website.

### **Scottsdale Revised Code, Chapter 5, *Aviation Code***

This document provides the foundation for the airport regulatory program. The information in the revised code applies to all persons conducting any activity at SDL or within the Scottsdale Airpark.

### **Airport Minimum Operating Standards**

This document identifies the minimum operating standards for conducting commercial aeronautical activity on the airport. This document includes the minimum insurance requirements and associated fee structure for specific aeronautical business types and is only applicable to persons interested in conducting commercial aeronautical activity on Scottsdale Airport.

### **Airport Rules and Regulations**

This document contains the general rules and regulations associated with the operating environment of the airport. All persons accessing Scottsdale Airport property should become familiar with this document.

### **Airpark Minimum Operating Standards**

This document identifies the minimum operating standards for conducting commercial aeronautical activity in the approved areas of the Scottsdale Airpark. This document includes the minimum insurance requirements and associated fee structure for specific aeronautical business types and is only applicable to persons interested in conducting commercial aeronautical activity in the approved areas of the Scottsdale Airpark.

### **Airpark Rules and Regulations**

This document contains the general rules and regulations for the operating environment of the properties associated with taxilanes in the Scottsdale Airpark. All persons with access to the taxilanes within the Scottsdale Airpark should become familiar with this document.

### **Rates and Fees Schedule**

This document identifies all general rates and fees related to the use of Scottsdale Airport and the Scottsdale Airpark.

### **Permits and Forms**

These documents are needed in conjunction with the use of Scottsdale Airport and the Scottsdale Airpark.

### **Airport Vicinity Development Guidelines and Checklist – Short Form**

This packet is required to be completed for proposed development plans for projects located within 20,000 feet of Scottsdale Airport that *are not* located on an airpark taxilane or adjacent to airport property.

### **Airport Vicinity Development Guidelines and Checklist – Long Form**

This packet is required to be completed for proposed development plans for projects within 20,000 feet of Scottsdale Airport that *are* located on an airpark taxilane or adjacent to airport property.

## **AREA LAND USE AND ZONING**

Existing and planned land uses surrounding airports can impact airport operations and growth. Understanding the land use issues surrounding SDL will assist decision-makers in making appropriate recommendations for the future sustainability of the airport regarding environmental compatibility and economic development.

Arizona state law (ARS 9-461.05A) requires each city to adopt a comprehensive, long-range general plan to guide the physical development of its community. The Scottsdale City Charter also requires its adoption. The general plan is the primary tool for guiding the future of the city and contains the community's goals and policies on character and design, land use, open space and the natural environment, business and economics, community services, neighborhood vitality, transportation, and growth. The general plan covers a period of 20 years and Arizona state law requires readoption and voter ratification of the general plan every 10 years.

The *City of Scottsdale General Plan 2035* was adopted by the Scottsdale City Council on June 8, 2021, via Resolution No. 12177. It was ratified by the citizens of Scottsdale on November 2, 2021, via Proposition 463. The *City of Scottsdale General Plan 2035* was amended on November 21, 2022, via Resolution 12655 to comply with House Bill 2482.

## **FEDERAL LAWS AND REGULATIONS**

There are numerous federal laws and regulations related to airport land use compatibility. Airports that accept federal development grants are required to make every reasonable effort to comply with the laws and regulations. The following is a summary of the federal laws and regulations related to land use compatibility and zoning surrounding airports and a list of the primary FAA guidance documents that support airport-compatible land use planning and detail the responsibilities of airports.

### **FAA AC 150/5190-4B, *Airport Land Use Compatibility Planning***

This advisory circular is intended to help a broad audience understand the effects of land use on the safety and utility of airport operations and identify compatible land use development tools, resources, and techniques to protect surrounding communities from adverse effects associated with airport operations.

This AC describes the major incompatible land uses that conflict with or are impacted by operations at local public-use airports, including the following:

- Residential use within airport noise contours
- Airspace obstructions and hazards to safe navigation to and from the airport, such as tall structures, light, glare, electronic/radio interference, smoke, steam, or other atmospheric interference emanating from nearby land uses
- Land uses that attract birds and other wildlife hazards to the airport and its immediate environs
- Land uses with concentrations of people or property within airport runway protection zones

Airport-compatible land uses are defined as uses that can coexist with a nearby airport without constraining the safe and efficient operation of the airport or exposing people living or working nearby to potential negative environmental or safety impacts.

The intent of this document is to inform, educate, and increase awareness about land use compatibility issues related to airports and community development. This AC provides broad, general guidance to communities across the country on airport-compatible land use planning. Because the FAA does not have the authority to directly control off-airport land uses, and because land use decisions are often made at the local level, it is important for local land use planners to understand the implications of land use compatibility between airports and their local communities. The guidance in this AC does not replace any local land use regulations that may be in place.

Through federal grant assurances, airport sponsors and owners are obligated to pursue all reasonable and appropriate actions to secure and promote compatible land use and development within their local areas. An airport that is owned and operated by the same jurisdiction that is the land use authority (e.g., a city- or county-owned airport) is expected to adequately control land use near the airport and prevent new incompatible development. An airport located within multiple jurisdictions or that has no land use authority is expected to remain vigilant of incompatible development proposals within the airport environs and take reasonable and appropriate action to mitigate incompatible land use and promote compatible development.

This AC does not constitute a regulation and is not legally binding in its own right. Conformity with this AC is voluntary and noncompliance will not affect right and obligations under existing statutes and regulations, except for projects funded through the Airport Improvement Program or the Passenger Facility Charge Program.

#### ***Airport and Airway Improvement Act of 1982 (Title 49 USC)***

Upon acceptance of federal funds, this act obligates an airport owner to operate and maintain the airport and comply with specific grant assurances, including maintenance of compatible land uses around the airport. The implementation of this act is handled through stipulations outlined in the grant documents signed by airport owners when they accept federal funds for projects.

Pursuant to the provisions of Title 49 USC, Subtitle VII (as amended), assurances are required to be submitted as part of a project application by a sponsor requesting funds. Upon acceptance of the grant offer by the sponsor, these assurances are incorporated in and become part of the grant agreement. There are 39 grant assurances, several of which address airport planning. The following are the primary land use compatibility grant assurances:

- Grant Assurance 20 relates to an airport sponsor's obligation for hazard removal and mitigation to address potential obstructions to the airspace around the airport. Grant Assurance 20 states that the airport sponsor *"will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards."*
- Grant Assurance 21 requires, in part, that the sponsor *"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."*

#### **Title 14 CFR Part 77, Objects Affecting Navigable Airspace**

This federal regulation establishes standards for determining obstructions in navigable airspace. It sets forth requirements for the construction and alteration of structures (i.e., buildings, towers, etc.). Any penetration of the Part 77 surfaces is considered an obstruction by the FAA. The guidance provides for the FAA to conduct airspace studies of any obstructions to determine if they are hazards to the safe and efficient use of airspace. Some mitigating action must be implemented if a hazard exists. Mitigating action may include alteration of the flight path and instrument capabilities, shortening of the runway, or removal of the hazard.

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.

The imaginary surfaces defined in Part 77 include the primary surface, transitional surface, approach surface, horizontal surface, and conical surface. **Exhibit 1N** depicts the Part 77 drawing for SDL that was produced for the 2015 master plan. The surfaces depicted are as follows.

#### *Primary Surface*

The primary surface is an imaginary surface that is longitudinally centered on the runway and extends 200 feet beyond each runway end. The elevation of any point on the primary surface is the same as the elevation along the nearest associated point on the runway centerline. The width of the primary surface is a function of the planned runway classification and the most capable instrument approach procedure planned for the runway, regardless of which end supports the approach. The width of the primary surface is 500 feet.

### *Approach Surface*

An approach surface is established for each runway end. The approach surface begins at the end of the primary surface and is the same width as the primary surface at this point. It extends upward and outward at a slope of 34:1 from the primary surface end and is centered along an extended runway centerline. The approach surface leading to each runway is based on the type of instrument approach planned (instrument or visual). The approach surface has an inner width of 500 feet, outer width of 3,500 feet, and length of 10,000 feet.

### *Transitional Surface*

The runway has a transitional surface that begins at the outside edge of the primary surface at the same elevation as the runway. The surface rises at a slope of 7:1 to a height of 150 feet above the highest runway elevation. At that point, the transitional surface ends at the horizontal surface.

### *Horizontal Surface*

The horizontal surface is established at 150 feet above the highest elevation of the runway surface. The horizontal surface has no slope and connects the transitional and approach surfaces to the conical surface at 10,000 feet from the end of the primary surface of each runway.

### *Conical Surface*

The conical surface begins at the outer edge of the horizontal surface and continues for an additional 4,000 feet horizontally at a slope of 20:1; therefore, at 4,000 feet from the horizontal surface, the elevation of the conical surface is 350 feet above the highest airport elevation.

### **Title 14 CFR Part 150, *Airport Noise Compatibility Planning***

This federal regulation provides guidance on planning for aviation noise compatibility on and around airports. These procedures and standards are used by airports to prepare noise exposure maps and noise compatibility programs. The Part 150 process enables communities to plan for compatible land use around airports to minimize impacts from incompatible on-airport land uses.

The noise compatibility planning process is the only regulatory avenue available to local airport operators for addressing airport noise issues; however, the City of Scottsdale uses the Part 150 study process to raise awareness of aircraft noise issues and educate pilots on recommended noise abatement procedures.

### **FAA AC 150/5070-6B, *Airport Master Plans***

This document guides the development of airport master plans. The guiding principle of the airport planning process is to develop a safe and efficient airport through the use of acceptable standards. While there are many steps in the planning process, none of these steps should be treated in a piecemeal manner. The airside and landside issues must be equally evaluated to create a plan that provides for compatible airport and community development, where possible.

### **FAA AC 150/5300-13B, *Airport Design***

This document provides the basic standards and recommendations for airport design. Topics include various runway and taxiway safety areas, runway protection zones, threshold siting surfaces, runway length, and facility separation standards.

### ***Airport Noise and Compatibility Act of 1990 (ANCA) (S-3094)***

This law established a national aviation noise policy for the first time. It gave the FAA greater authority to regulate aircraft noise levels around airports, including the power to restrict the use of older, noisier aircraft (e.g., Stage 2 aircraft) and require airports to implement noise compatibility programs to mitigate noise impacts on nearby communities. While the ANCA gives the FAA greater authority to regulate noise issues associated with airports and aircraft types, it does not authorize the FAA to compromise safety. The ANCA was a landmark act; one result was that local airport operators no longer had the authority to restrict aircraft operations by type or frequency because of the overall goal of making the NAS safer. Local airports were no longer allowed to implement various restrictions on aviation; therefore, many airports (including SDL) have grandfathered restrictions. The remaining aviation prohibitions for SDL are:

- Prohibition of intersection takeoffs, stop-and-go operations, formation flying, simulated engine failure departures, and simulated go-arounds;
- Prohibition of touch-and-go operations between 9:30 p.m. and 6:00 a.m.; and
- Prohibition of engine maintenance run-ups between 10:00 p.m. and 7:00 a.m., except in emergencies.

### **EXISTING LAND USE**

**Exhibit 1P** presents the current (2025) land uses in the Scottsdale Airpark area. Most of the land surrounding Scottsdale Airport is under the jurisdiction of the City of Scottsdale. The land west of Scottsdale Road is within the City of Phoenix. The airport is primarily surrounded by commercial land, which encompasses areas that comprise the Scottsdale Airpark, as well as property immediately adjacent to Scottsdale Road west of the airport, Frank Lloyd Wright Boulevard north of the airport, and Loop 101 east of the airport. A Central Arizona Project (CAP) canal, which is managed and operated by the Central Arizona Water Conservation District, is located adjacent to Frank Lloyd Wright Boulevard immediately northeast of the airport. To the north of the CAP canal is the TPC Scottsdale Champions Golf Course. Pockets of commercial, residential, and open space uses are located farther north. Land to the south and west of the airport is predominantly residential in nature.

### **FUTURE LAND USE**

The *City of Scottsdale General Plan 2035* identifies preferred future land uses and includes the map on **Exhibit 1Q**. The future land use map shows that land immediately surrounding the airport is intended for light industrial/office space use, which is a compatible land use; the land is almost entirely developed with compatible land uses. Farther away from the airport is planned mixed use, and even farther away is planned residential land use.

Ideally, future development immediately surrounding the airport would be limited to compatible land uses, as outlined in the general plan. Compatible uses would include light and heavy industrial and commercial development. Land use zoning is the most common land use control method. The City of Scottsdale has a detailed zoning plan in place for all areas adjacent to Scottsdale Airport. Property immediately surrounding the airport contains a number of zoning designations, including Industrial Park, Central Business District, General Commercial, Commercial Office, and Open Space designations.

### SOCIOECONOMIC CHARACTERISTICS

Socioeconomic information related to the approximate airport service area is an important consideration in the master planning process because it provides an understanding of the demographic dynamics of the area. The historical demographic trends in population, employment, and income provide insight into the long-term socioeconomic conditions of the region. This information is essential in determining aviation service level requirements and forecasting aviation demand elements for airports. Aviation forecasts are typically related to the population base and economic strength of the region, as well as the ability of the region to sustain a strong economic base over an extended period of time.

Socioeconomic baseline information was obtained from Woods & Poole Economics' 2024 *Complete Economic and Demographic Data Source* (CEDDS). Woods & Poole is an FAA-approved source for socioeconomic data and utilizes information from the U.S. Census Bureau, as well as other national and state organizations, for historical data and future projections. The historical socioeconomic information is presented on **Table 1K**.

**TABLE 1K: Socioeconomic Data**

Year	State of Arizona Population	State of Arizona Employment	State of Arizona Income	Maricopa County Population	Maricopa County Employment	Maricopa County Income
2015	6,716,074	3,547,646	\$40,932	4,106,807	2,439,527	\$44,129
2016	6,803,119	3,644,792	\$41,831	4,176,050	2,517,630	\$45,074
2017	6,880,741	3,740,745	\$43,202	4,232,574	2,597,415	\$46,390
2018	6,970,505	3,854,741	\$44,348	4,293,298	2,690,527	\$47,791
2019	7,070,808	3,929,946	\$46,072	4,364,459	2,756,810	\$49,834
2020	7,186,683	3,920,031	\$49,777	4,445,059	2,755,090	\$53,484
2021	7,272,487	4,086,801	\$51,707	4,499,438	2,884,525	\$55,911
2022	7,365,684	4,287,594	\$50,318	4,555,833	3,038,704	\$54,635
2023	7,431,344	4,369,756	\$51,789	4,585,871	3,106,741	\$56,955
2024	7,525,596	4,439,367	\$52,498	4,649,484	3,163,334	\$57,729
<b>CAGR 2015–2024:</b>	<b>1.14%</b>	<b>2.27%</b>	<b>2.52%</b>	<b>1.25%</b>	<b>2.63%</b>	<b>2.72%</b>

Table Source: Woods & Poole, CEDDS 2024

CAGR = compound annual growth rate

The Maricopa County population has increased by 1.25 percent annually since 2015, which is an increase of more than 542,000 residents. Employment has increased by 2.63 percent annually and income has increased by 2.72 percent. The county has seen greater growth in each socioeconomic indicator than that of the State of Arizona over the same time period. While increasing population relates to growth in aviation activity, increases in employment and income often relate to increases in aviation demand to a greater degree.

## **ENVIRONMENTAL INVENTORY**

The purpose of the following environmental inventory is to identify potential environmental sensitivities that should be considered when planning future improvements at the airport. Research was performed for each of the 13 impact categories within FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures* (§1.2(b)(1)). When considering the effects to the impact categories listed below, the FAA may examine both the short and long-term effects, beneficial and adverse effects, effects on public health and safety, economic effects, and the effects on the quality of life to American people.

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

## **AVIATION EMISSIONS AND AIR QUALITY**

The concentration of various pollutants in the atmosphere defines the local air quality. The significance of a pollutant’s concentration is determined by comparing it to the state and federal air quality standards. In 1971, the U.S. Environmental Protection Agency (EPA) established standards that specify the maximum permissible short-and long-term concentrations of various air contaminants. The National Ambient Air Quality Standards (NAAQS) consist of primary and secondary standards for criteria pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead (Pb).

Based on federal air quality standards, a specific geographic area can be classified as an attainment, maintenance, or nonattainment area for each pollutant. The threshold for nonattainment designation varies by pollutant.

The airport is in Maricopa County, Arizona, located nine miles north of downtown Scottsdale. Maricopa County is designated as a nonattainment area for PM<sub>10</sub> (serious), eight-hour O<sub>3</sub> (2008) (moderate), and eight-hour O<sub>3</sub> (2015) (marginal) standards. Maricopa County is also classified as an area of maintenance for CO (1971). (Reference: U.S. EPA, Arizona Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants, September 30, 2024)

## BIOLOGICAL RESOURCES

Biological resources include the various types of plants and animals that are present in an area. The term also applies to rivers, lakes, wetlands, forests, and other habitat types that support plants and animals.

The U.S. Fish and Wildlife Service (USFWS) is charged with overseeing the *Endangered Species Act* (ESA), specifically Section 7, which sets forth requirements for a consultation to determine if a proposed project may affect a federally endangered or threatened species. If an agency determines that an action may affect a federally protected species, Section 7(a)(2) requires the agency to consult with the USFWS. Significant impacts occur when a proposed action could jeopardize the continued existence of the species or result in the destruction or adverse modification of federally designated critical habitat in the area.

The USFWS Information for Planning and Consultation (IPaC) resource list describes species and habitats protected under the ESA within the vicinity of the airport (**Table 1L**); however, as noted in the table, due to a lack of habitat, none of these species are likely to occur at the airport.

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

USFWS Status Definitions:

- **Proposed Threatened:** an animal or plant species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and has been proposed to be listed as threatened; proposed threatened species are not protected by the take prohibition of Section 9 of the ESA.
- **Threatened:** any animal or plant species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its habitat range; species that fall under this listing are protected by the take prohibitions of Section 9, consistent with any protective regulations finalized under Section 4(d) of the ESA
- **Endangered:** any animal or plant species that is in danger of extinction throughout all or a significant portion of its habitat range; endangered species are protected by the take prohibitions of Section 9 under the ESA

**TABLE 1L: Species Protected Under ESA Section 7 with Potential to Occur Near the Airport**

Species Category	Common Name (Scientific Name)	Federal Status	Habitat and Range	Potential for Occurrence
Bird	cactus ferruginous pygmy-owl ( <i>Glaucidium brasilianum cactorum</i> )	Threatened	This species is found in the desert habitat of southern Arizona and in northwestern Mexico. The pygmy owl is found inhabiting areas along desert rivers, washes, and in Sonoran Desert habitats at elevations below 4,000 feet above mean sea level (amsl). This species roosts and nests in desert scrub thickets, trees, and large cacti and often inhabits ironwood, mesquite, acacia, saguaro, and organ pipe cacti.	<b>Unlikely to occur.</b> Suitable habitat is not present at the airport.
Bird	California least tern ( <i>Sternula antillarum browni</i> )	Endangered	This species nests in both natural and human-made areas near beaches close to river mouths, estuaries, and coastal embayments. These nests are situated in areas that are removed from potential disturbance and predators.	<b>Unlikely to occur.</b> No perennial bodies of water are located at the airport.
Bird	southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	Endangered	This species is observed in moist microclimatic and vegetative conditions, requires dense riparian vegetation near surface water or saturated soil to breed, and frequently builds nests in nonnative tamarisk ( <i>Tamarix</i> spp.) and native willow ( <i>Salix</i> spp.). During the winter, southwestern willow flycatchers use a variety of habitats but appear to prefer semi-open brushy areas near water.	<b>Unlikely to occur.</b> No perennial water is present at the airport or in the adjacent vicinity.
Bird	yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	Threatened	The yellow-billed cuckoo is typically found in riparian woodland vegetation (cottonwood, willow, or salt cedar) at elevations below 6,600 feet amsl. Dense understory foliage is an important factor in nest site selection. The highest concentrations in Arizona are along the Agua Fria, San Pedro, upper Santa Cruz, and Verde River drainages, and Cienega and Sonoita Creeks.	<b>Unlikely to occur.</b> No suitable habitat is present within airport property boundaries.
Fish	desert pupfish ( <i>Cyprinodon macularius</i> )	Endangered	This species has been observed in the Salton Sea, shoreline pools, freshwater ponds, and irrigation drains, as well as in creeks/washes, below 5,000 feet amsl. One natural population still occurs in Quitobaquito Spring and Quitobaquito Pond in Pima County, and reintroductions of this species have been made in Pima, Pinal, Maricopa, Graham, Cochise, La Paz, and Yavapai Counties.	<b>Unlikely to occur.</b> The airport does not contain perennial water sources.
Fish	Gila topminnow (incl. <i>Yaqui</i> ) ( <i>Poeciliopsis occidentalis</i> )	Endangered	This species prefers shallow warm waters, including ponds, cienegas, tanks, pools, springs, small streams, and the margins of larger streams at elevations below 4,500 feet amsl. Dense mats of algae and debris along habitats are an important habitat component for cover and foraging. In Arizona, most remaining native populations are in the Santa Cruz River system.	<b>Unlikely to occur.</b> The airport does not contain aquatic habitat.

(Table continues)

**TABLE 1L (continued): Species Protected Under ESA Section 7 with Potential to Occur Near the Airport**

Species Category	Common Name (Scientific Name)	Federal Status	Habitat and Range	Potential for Occurrence
Insect	monarch butterfly ( <i>Danaus plexippus</i> )	Proposed Threatened	The monarch butterfly is a migratory species found in a variety of habitats and requires milkweed ( <i>Asclepias</i> spp.) for breeding. During fall migration in Arizona, monarch butterflies favor nectar from native plants, including sunflowers ( <i>Helianthus</i> spp.), rabbitbrush ( <i>Ericameria</i> spp.), desertbroom ( <i>Baccharis sarothroides</i> ), sweetbush ( <i>Bebbia juncea</i> ), milkweeds, and a variety of other native and garden plants. Populations in Arizona can migrate to California or Mexico for winter or may overwinter in the low deserts in California or Arizona. In the southwestern United States, migrating monarch butterflies often occur near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, and irrigated gardens). In the low deserts of Arizona, monarch butterflies breed in late August to early September.	<b>Unlikely to occur.</b> The entire airport has been developed and does not contain suitable habitat or foraging areas for this species.

Table Sources: USFWS, IPaC; USFWS, Center for Biological Diversity, Species

Additional federal laws that may be applicable to the airport are the *Bald and Golden Eagle Protection Act* (BGEPA) and the *Migratory Bird Treaty Act* (MBTA), which prohibit activities that would harm eagles and other migratory birds, their eggs, or their nests. For birds protected under the BGEPA or MBTA, all project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project; however, given the lack of vegetation at the airport, eagles and migratory birds are not expected to be present.

## COASTAL RESOURCES

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

The airport is not located within a coastal zone. The closest National Marine Sanctuary is the Channel Islands National Marine Sanctuary, which is located 271 miles away.

## DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F)

Section 4(f) of the *Department of Transportation Act*, which was recodified and renumbered as Section 303(c) of Title 49 United States Code, provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly or privately owned historic sites, public parks or recreation areas, or waterfowl and wildlife refuges of national, state, regional, or local importance, unless there is no feasible and prudent alternative to the use of such land and the project includes all possible planning to minimize harm resulting from the use. (Reference: Title 49 U.S. Code § 303, Policy on Lands, Wildlife and Waterfowl Refuges, and Historic Sites)

**Table 1M** and **Exhibit 1R** identify potential Section 4(f) resources within one mile of the airport. School playgrounds or athletic fields may be considered Section 4(f) resources if the recreational facilities at the school are readily available to the public. There are no National Register of Historic Places (NRHP)-listed resources within one mile of the airport. There are also no waterfowl and wildlife refuges within one mile of the airport. The nearest wilderness and national recreation areas are listed below.

- Nearest wilderness area: Four Peaks Wilderness (located 25 miles from SDL)
- Nearest national recreation area: Lake Mead National Recreation Area (located 175 miles from SDL)

**TABLE 1M: U.S. Department of Transportation Section 4(f) Resources Within One Mile of the Vicinity of the Airport**

Resource Category	Place	Location	Distance from the Airport	Direction from the Airport
Public Recreational Facility	Kierland Park	6502 E Monte Cristo Avenue	1.0 mile	Northwest
Public Recreational Facility	Northsight Park	8400 E Thunderbird Road	0.90 miles	South
Public Recreational Facility	Sandpiper Park	6530 E Hearn Road	0.80 miles	West
Public Recreational Facility	Cactus Park	7202 E Cactus Road	0.80 miles	South
Public Recreational Facility	Kierland Villas Country Club	15620 N Clubgate Drive	0.50 miles	Northeast
Public School	Sandpiper Elementary	6724 E Hearn Road	0.65 miles	West
Public School	Sonoran Sky Elementary	12990 N 75 <sup>th</sup> Street	0.55 miles	South

Table Source: U.S. Google Earth Aerial Imagery

## FARMLANDS

Under the *Farmland Protection Policy Act (FPPA)*, federal agencies are directed to identify and consider the adverse effects of federal programs on the preservation of farmland; consider appropriate alternative actions that could reduce adverse effects; and ensure such federal are compatible with state or local government programs and policies to protect farmland, to the extent practicable. The FPPA guidelines were developed by the U.S. Department of Agriculture (USDA) and apply to farmland classified as prime, unique, or of state or local importance, as determined by the appropriate government agency with concurrence by the Secretary of Agriculture.

The USDA Natural Resources Conservation Service (NRCS) Web Soil Survey shows the types of soils and their farmland classifications on and adjacent to the airport. The airport is within an urbanized area boundary and is entirely covered with pavement, buildings, or landscape materials; therefore, even though soils at the airport (which are comprised of Gilman loams) are classified as prime farmland if irrigated, the FPPA would not be applicable to airport property and coordination with the USDA would not be needed.

## HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

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

According to the U.S. EPA's *NEPAssist* online tool, there are no Superfund or brownfield sites within one mile of the airport. The closest landfill is the Scottsdale Transfer Facility, which is located more than three miles from the airport boundaries.

National Pollutant Discharge Elimination System (NPDES) permits outline the regulatory requirements of municipal stormwater management programs and establish requirements to help protect the beneficial uses of the receiving waters. NPDES permits require permittees to develop and implement best management practices (BMPs) to control/reduce the discharge of pollutants to waters of the United States, to the maximum extent practicable (MEP). The NPDES program manages wastewater, construction, stormwater, and pretreatment.

In Arizona, there is a state-specific permit called the Arizona Pollutant Discharge Elimination System (AZPDES) permit. (Reference: State of Arizona Department of Environmental Quality [ADEQ]) AZPDES permits are required for all stormwater discharges that enter Arizona surface waters or municipal separate storm sewer systems (MS4s) leading to Arizona surface waters. These permits are also associated with construction activities that disturb one or more acres of land, and support activities from temporary plants or operations set up to produce concrete, asphalt, or other materials exclusively for permitted construction projects. (Reference: ADEQ)

### **HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES**

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

A cultural resource record search was conducted in preparation for the master plan and identified seven archaeological sites within a one-mile radius of the airport; however, none of these sites are located on airport property. Of the seven identified archaeological sites, two sites are historic-era artifact scatters, two are prehistoric artifact scatters, two are of unknown cultural or temporal affiliation, and one is newly recorded and has yet to be affiliated with a known cultural or temporal connection. The report concluded that no further cultural resource work is recommended for the current SDL property, as the airport is entirely developed and there are no undisturbed native soils at SDL. (Reference: SWCA Environmental Consultants, Cultural Resources Archival Research for the Scottsdale Airport Master Plan Update Project, City of Scottsdale, Maricopa County, Arizona, prepared by David M.R. Barr, October 2024)

The airport was opened in March 1943 and buildings or structures of historic age (i.e., 50 years or older) may still be present within airport property. Based on historic aerial imagery of the area, one current executive hangar (south of Airport Drive) and one current structure (the runway system) were built in

the late 1960s and are of historic age; however, the runway system has routinely received pavement maintenance over the years and is unlikely to contain any of its initial pavement from the 1960s. Two additional hangars at SDL will reach historic age within the next 10 years.

The nearest tribal land to Scottsdale Airport is the Salt River Reservation, which is located three and half miles south of airport. (Reference: U.S. EPA, EJScreen, accessed November 2024)

## LAND USE

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

Based on the City of Scottsdale's interactive maps, the airport is zoned as I-1 (Industrial Park). The city's unified development code defines the I-1 zoning designation as land uses intended to provide light manufacturing, aeronautical, light industrial, office, and other development that sustains and enhances employment opportunities. This zoning classification is also intended to provide flexibility in development that remains consistent with standard design principles and allows for transition areas adjacent to residential districts. (Reference: Municode Codification, Scottsdale, Arizona, Code of Ordinances, Section 5.1801)

According to the *City of Scottsdale General Plan 2035* (adopted in November 2021), the Future Land Use Map classifies the airport as a Cultural/Institutional or Public land use. The land uses immediately surrounding the airport boundary have been primarily classified as Employment: Light Industrial/Office and Mixed-Use Neighborhoods, with developed open space to the northeast and northwest of the airport. The *City of Scottsdale General Plan 2035* affirms the airport's role as both an integral transportation hub and an economic engine. The plan further maintains the importance of enhancing and protecting the airport when considering future land use development.

The airport is designated as Aviation in the city's Greater Airpark Character Area Plan land use plan, which was last amended November 10, 2020. Areas immediately surrounding the airport are designated as Employment to the northwest and south, Airpark Mixed Use to the east, west, and northwest, and Airpark Mixed Use-Residential to the northwest and southwest. Chapter Three of the Greater Airpark Character Area Plan further outlines goals and policies for SDL to promote a safe, sustainable, and self-sustaining airport.

The airport is currently surrounded by a mixture of industrial and commercial land uses that comprise the Scottsdale Airpark, which is a two-mile by three-mile corridor anchored by and adjacent to SDL that offers an array of aviation and non-aviation services. State Route 101 is located to the east and north of the airport. General land uses within one mile of the airport, including those that could be sensitive to airport noise or other effects, are identified on **Exhibit 1R**.

## NATURAL RESOURCES AND ENERGY SUPPLY

Natural resources and energy supply provide an evaluation of a project's consumption of natural resources. It is the policy of FAA Order 1053.1C, *Energy and Water Management Program for FAA Buildings and Facilities*, to encourage the development of facilities that exemplify the highest standards of design, including principles of sustainability.

Under the *Environmental Quality Act of 1986*, the Arizona State Legislature created the Arizona Department of Environmental Quality (ADEQ) in 1987 as the state's cabinet-level environmental agency. (Reference: ADEQ) ADEQ's main goal is to protect the state's public health and environment, and the department consists of three primary environmental programs: Air Quality, Water Quality, and Waste. Each program operates units responsible for technical, operational, and policy support. ADEQ administers the state's environmental laws and delegates federal programs to prevent air, water, and land pollution and ensure cleanup. ADEQ is responsible for a series of core functions: planning, permitting, compliance management, monitoring, assessment, cleanups, and outreach.

Chapter Six of the *Greater Airpark Character Area Plan* outlines goals and initiatives to act as a framework for any development or redevelopment within the airpark. The goals outlined in Chapter Six are listed below.

- Goal 1: Reduce energy consumption.
- Goal 2: Promote energy efficiency and sustainable design.
- Goal 3: Reduce the urban heat island effect.
- Goal 4: Promote a sustainable balance between environmental stewardship and development/redevelopment of land uses in the airpark.
- Goal 5: Improve existing water conservation efforts and increase the amount of graywater reuse.
- Goal 6: Manage and improve stormwater drainageways.

The City of Scottsdale relies on the Central Arizona Project (CAP) for approximately two thirds of its water supply. (Reference: City of Scottsdale, Water Supply) The water campus in north Scottsdale treats 70 million gallons of water per day.

## NOISE AND NOISE-COMPATIBLE LAND USE

Federal land use compatibility guidelines are established under Title 14 Code of Federal Regulations (14 CFR) Part 150, *Airport Noise Compatibility Planning*. According to 14 CFR Part 150, residential land and schools are noise-sensitive land uses that are not considered compatible if impacted by a 65-decibel (dB) or higher day-night average sound level (Ldn or DNL). (Note: DNL accounts for the increased sensitivity to noise at night (10:00 p.m. to 7:00 a.m.) and is the metric preferred by the FAA, U.S. EPA, and U.S. Department of Housing and Urban Development as an appropriate measure of cumulative noise exposure.)

Other noise-sensitive land uses (such as religious facilities, hospitals, or nursing homes), if located within a 65 dB DNL contour, are generally compatible if a minimum interior noise level reduction of 25 dB is incorporated into the design and construction of structures. Special consideration should also be given to noise-sensitive areas within Section 4(f) properties where the land use compatibility guidelines in 14 CFR Part 150 do not account for the value, significance, and enjoyment of the area in question. (Reference: Title 49 U.S. Code § 47141, Compatible Land Use Planning and Projects by State and Local Governments) A Part 150 study was conducted for SDL in the early 2000s to depict aircraft noise impacts through the use of noise exposure maps.

The closest residential areas to the airport are single-family residential units located 0.15 miles to the east across from N 71<sup>st</sup> Street and 0.22 miles to the south across from E Thunderbird Road. **Table 1N** and **Exhibit 1R** identify other noise-sensitive land uses within one mile of the airport.

**TABLE 1N: Noise-Sensitive Land Uses Within One Mile of the Airport**

Land Use Category	Facility	Location	Direction from the Airport	Distance from Airport Boundary
Medical Facility	One Medical	15000 N Airport Drive	Northwest	0.65 miles
School	Scottsdale Preparatory Academy	16537 N 92 <sup>nd</sup> Street	East	0.95 miles
School	Sandpiper Elementary	6724 E Hearn Road	West	0.65 miles
School	Penrose Academy	13402 N Scottsdale Road	Southwest	0.15 miles
School	Pardes Jewish Day School	12753 N Scottsdale Road	South	0.60 miles
School	Sonoran Sky Elementary	12990 N 75 <sup>th</sup> Street	South	0.55 miles
School	Thunderbird Academy	7410 E Sutton Drive	South	0.30 miles
Place of Worship	Illuminate Community Church	17800 N Perimeter Drive	North	1 mile
Place of Worship	North Bible Church	15678 N Greenway	North	0.35 miles
Place of Worship	Pillar Church	15020 Hayden Road	South	0.10 miles
Place of Worship	Impact Church	13802 N Scottsdale Road	West	0.15 miles

Table Source: Google Earth Aerial Imagery, November 2024

## SOCIOECONOMICS AND CHILDREN’S ENVIRONMENTAL HEALTH AND SAFETY RISKS

### Socioeconomics

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment (such as population, employment, housing, and public services) might be affected by the proposed action and alternative(s).

The FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts, including whether the proposed action would:

- Directly or indirectly induce substantial economic growth in an area;
- Disrupt or divide the physical arrangement of an established community;
- Cause extensive relocation when sufficient replacement housing is unavailable;

- Cause extensive relocation of community business that would cause severe economic hardship for affected communities;
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; or
- Produce a substantial change in the community tax base.

### **Children’s Environmental Health and Safety**

Per E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, federal agencies are directed to prioritize identifying and assessing environmental health and safety risks that may disproportionately impact children, including those attributable to products or substances children are likely to encounter or ingest (i.e., air, food, and water, including drinking water) or to which they may be exposed.

See **Table 1N** for a list of schools near the airport.

### **VISUAL EFFECTS**

Visual effects include the extent to which a proposed action or alternative(s) would (1) produce light emissions that create an annoyance or interfere with activities or (2) contrast with or detract from the visual resources and/or visual character of the existing environment. Each jurisdiction will typically address outdoor lighting, scenic vistas, and scenic corridors in zoning ordinances and its general plan.

#### **Light Emissions**

These impacts typically relate to the extent to which any light or glare results from a source that could create an annoyance for people or would interfere with normal activities. Generally, a local jurisdiction will include ordinances in its local code that address outdoor illumination to reduce the impact of light on surrounding properties. The City of Scottsdale’s municipal code states that exterior lights should be designed to minimize glare and light trespass, conserve energy, and maintain dark skies. (Reference: Scottsdale, Arizona, Code of Ordinances, Section 7.600, Outdoor Lighting)

Airfield lighting at the airport includes a rotating beacon, medium intensity runway lighting (MIRL) serving Runway 3-21, medium intensity taxiway lighting (MITL), runway end identifier lights (REILs) at each runway end, and two-light precision approach path indicator (PAPI) lights at each runway end. The airfield lights utilize pilot-controlled lighting (PCL); thus, the airfield lights are only illuminated when activated by pilots using the airport. (See the section on airfield lighting, signage, and markings earlier in this chapter for further discussion regarding the types of airfield lighting and visual approach aids at SDL.)



## Visual Resources and Visual Character

Visual character refers to the overall visual conditions of the existing environment where a proposed action or its alternative(s) would be located. For example, environments near densely populated areas generally exhibit a visual character that could be defined as urban, whereas a less developed area may have a visual character defined as suburban or rural, based on the surrounding pattern and density of development, as well as topographical and landscape features (e.g., open grass fields, forests, mountains, deserts, etc.).

Visual resources include buildings, sites, traditional cultural properties, and other natural or human-made landscape features that are visually important or have unique characteristics. In addition, visual resources can include the cohesive collection of various individual resource components that can be viewed at once or together from the area surrounding the site of the proposed action or alternative(s).

Scottsdale Airport is located within an urban area that is visually characterized by densely populated buildings and landscape. Partial views of the airfield are accessible along nearby roadways (i.e., E Redfield Road, N 76<sup>th</sup> Place, N 78<sup>th</sup> Way, and E Frank Lloyd Wright Boulevard) on the airport's southern and eastern boundaries due to a lack of vegetation along the airport's perimeter fence. Long-range views of the airport are not readily available due to the relatively flat topography of the airport environs.

ADOT administers the state-designated scenic roads program, while the Federal Highway Administration (FHWA) administers the byways program. In Arizona, a scenic road is a general term that is often used to identify state-designated and federally designated scenic roads. (Reference: ADOT, Types of Scenic Roads) At present, there are 26 total state-designated scenic roads in Arizona, three of which are state-designated historic roads and four of which are state-designated parkways. There are no state-designated scenic roads within one mile of the airport.

There are five federally designated byways in the state. Of the five byways in Arizona, three are National Scenic Byways and two are classified as All-American Roads. There are no byway routes within the City of Scottsdale; therefore, there are no federal or national scenic byways near the airport. No scenic routes in Scottsdale are identified in the *City of Scottsdale General Plan 2035*.

## WATER RESOURCES

### Wetlands

The U.S. Army Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the United States, including adjacent wetlands, under Section 404 of the *Clean Water Act* (CWA). Wetlands are defined in E.O. 11990, *Protection of Wetlands*, as "those areas that are inundated by surface or groundwater with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction." Wetlands can include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mudflats, natural ponds, estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Wetlands exhibit three characteristics: the soil is inundated or saturated to the surface at some time during the growing season (hydrology), has a population of plants able to tolerate various degrees of floodings or frequent saturation (hydrophytes), and has soils that are saturated enough to develop anaerobic (absent of air or oxygen) conditions during the growing season (hydric).

The USFWS manages the National Wetlands Inventory on behalf of all federal agencies. The National Wetlands Inventory identifies surface waters and wetlands in the nation. The NWI map denotes the presence of riverines that traverse the airport; however, these riverines are drainage features at the airport. (Reference: National Wetlands Inventory, Surface Waters and Wetlands) A review of the USDA-NRCS Web Soil Survey further indicates that no hydric soils are located on airport property.

## Floodplains

E.O. 11988, *Floodplain Management*, directs federal agencies to take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by the floodplains.

According to the Federal Emergency Management Agency's Flood Insurance Rate Map No. 04013C1320L (October 16, 2013), the airport and its surrounding environs are mapped as Zone X (shaded), 0.2 percent annual chance flood hazard; therefore, the airport is within the 500-year floodplain (**Exhibit 1S**). (Reference: FEMA, Flood Map) The airport is protected from the 100-year floodplain to the north by the CAP canal and berms.

## Surface Waters

The CWA establishes water quality standards, controls discharges, develops waste treatment management plans and practices, prevents or minimizes the loss of wetlands, and regulates other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc. Additionally, U.S. Congress has mandated the NPDES under the CWA.

Scottsdale Airport is located within two watersheds: Upper Indian Bend Wash and Lower Indian Bend Wash. Two waterbodies are located within these watersheds: Indian Bend Wash (headwaters to Salt River) and Chaparral Park Lake. (Reference: U.S. EPA, How's My Waterway) Indian Bend Wash has been identified as a waterbody with an unknown water condition, meaning this waterbody has been identified for a specific use but has not been properly assessed for that use. Chaparral Park Lake is classified as a waterbody with a good water condition; the water conditions within this waterbody fully support its designated use under the CWA. There are no Outstanding Arizona Waters within or near the project area. (Reference: Arizona Administrative Code A.A.C.R18-11-112(G), Outstanding Arizona Waters [OAWs])

## Groundwater

Groundwater is subsurface water that occupies the space between sand, clay, and rock formations. The term *aquifer* is used to describe the geologic layers that store or transmit groundwater, such as wells, springs, and other water sources. Examples of direct impacts to groundwater could include withdrawal of groundwater for operational purposes or reduction of infiltration or recharge area due to new impervious surfaces. (Reference: United States Geological Survey, What is Groundwater?)

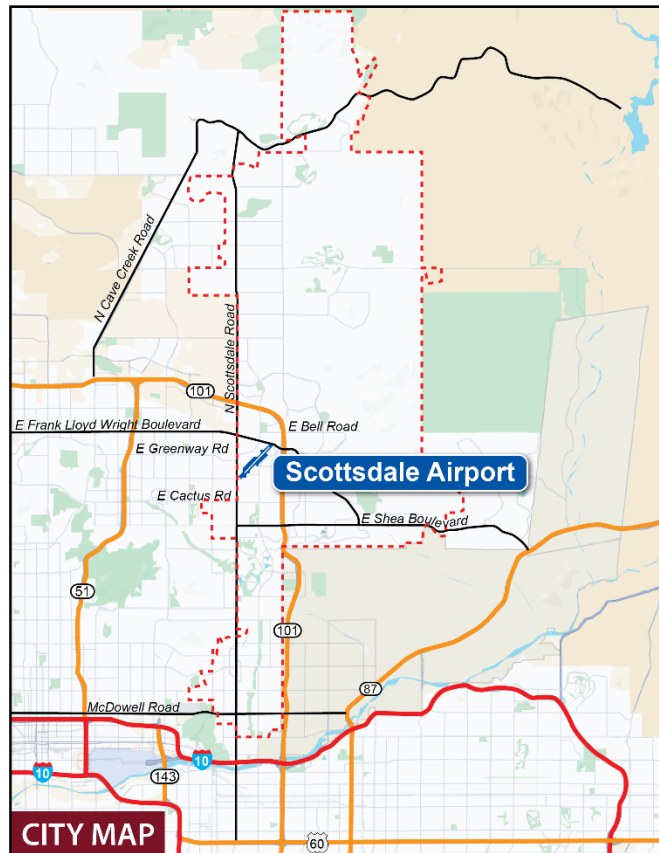
The U.S. EPA's Sole Source Aquifer (SSA) program was established under Section 1424(e) of the *Safe Drinking Water Act* (SDWA) (Public Law 93-523, 42 U.S.C. 300 et. seq). Since 1977, the SSA program has been used by communities to help prevent contamination of groundwater from federally funded projects and has increased public awareness of the vulnerability of groundwater resources.

According to the U.S. EPA's *Sole Source Aquifers for Drinking Water* website, there are no sole source aquifers located within (or within one mile of) airport boundaries. The nearest sole source aquifer is the Upper Santa Cruz and Avra Basin SSA, located 63 miles south of the airport. (Reference: U.S. EPA, Sole Source Aquifers)

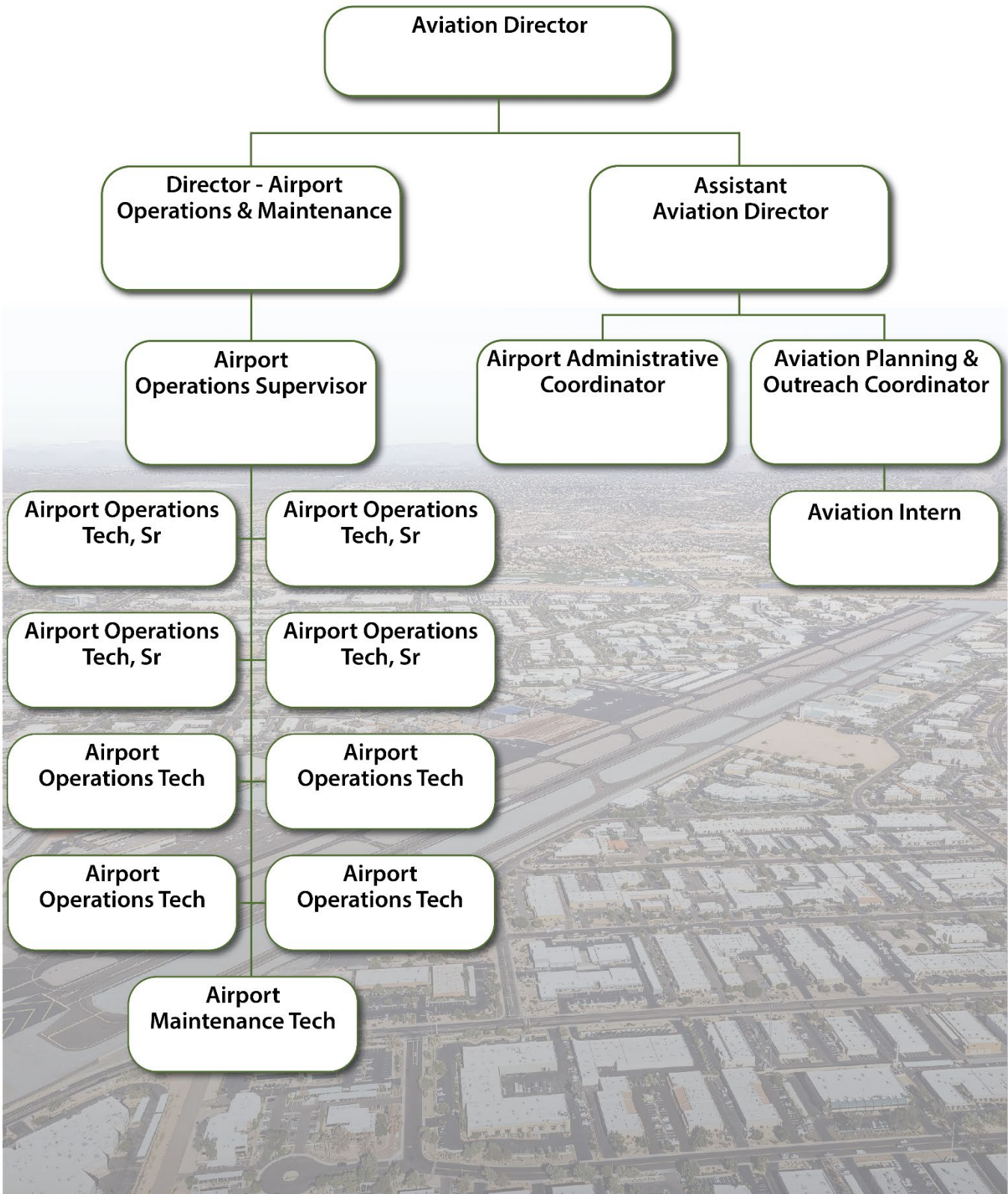
### **Wild and Scenic Rivers**

The *National Wild and Scenic Rivers Act of 1968* was established to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Nationwide Rivers Inventory (NRI) is a list of over 3,400 rivers or river segments that appear to meet the minimum *Wild and Scenic Rivers Act* eligibility requirements, based on free-flowing status and resource values. The development of the NRI resulted from Section 5(d)(1) of the *Wild and Scenic Rivers Act*, which directs federal agencies to consider potential wild and scenic rivers in the comprehensive planning process.

The closest designated national wild and scenic river identified is a segment of the Verde River that is located 38 miles from the airport. (Reference: National Wild and Scenic Rivers System, Arizona) The nearest NRI feature is a segment of the Verde River that is located 30 miles from the airport. (Reference: National Park Service, Nationwide Rivers Inventory)

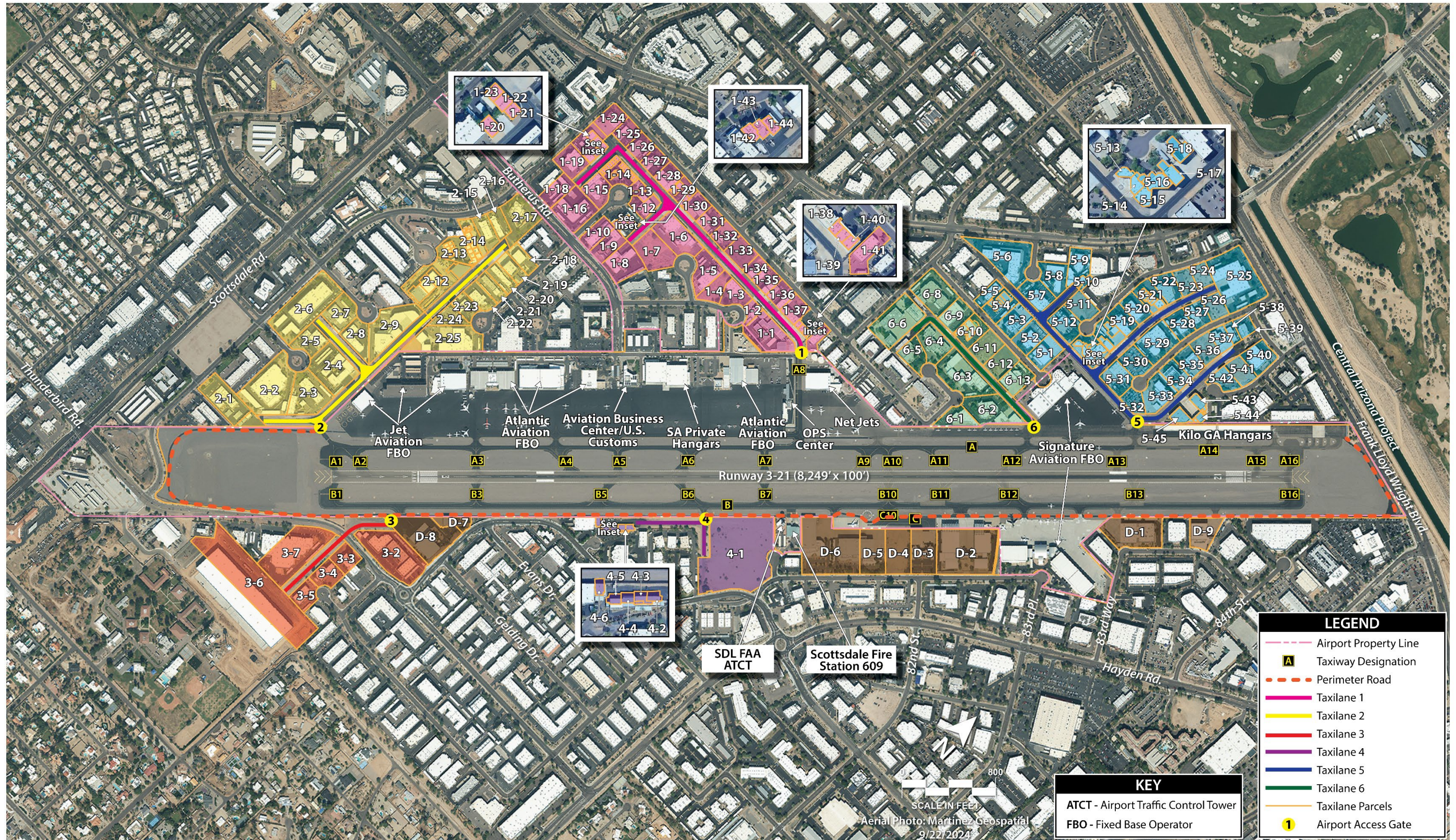


City of Scottsdale  
Aviation Department - Scottsdale Airport



Phoenix Deer Valley Airport (DVT)	Phoenix Sky Harbor International Airport (PHX)	Mesa-Falcon Field Airport (FFZ)	Stellar Airpark (P19)
<p><b>Airport Sponsor:</b> City of Phoenix</p> <p><b>Distance from SDL:</b> 9 nm Northwest</p> <p><b>NPIAS Classification:</b> Reliever</p> <p><b>GA Asset Classification:</b> National</p> <p><b>Primary Runway:</b> 7R-25L <i>Length:</i> 8,196' <i>Width:</i> 100'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> 20,000 lbs. SWL; 91,000 lbs. DWL; 255,000 lbs. DTWL <b>Marking:</b> Non-precision <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-2; REILs <b>Based Aircraft:</b> 995 <b>Annual Operations:</b> 365,432 <b>Services Provided:</b> Fuel (100LL &amp; Jet A), Maintenance, Hangars, Tiedowns, Air Ambulance, Avionics, Charter, Instruction, Rental, Sales <b>Instrument Approaches:</b> RNAV (GPS) Rwy 7R RNAV (GPS) Rwy 25L RNAV (GPS)-B RNAV (GPS)-C</p>	<p><b>Airport Sponsor:</b> City of Phoenix</p> <p><b>Distance from SDL:</b> 12 nm Southwest</p> <p><b>NPIAS Classification:</b> Primary Commercial Service</p> <p><b>GA Asset Classification:</b> None</p> <p><b>Primary Runway:</b> 8-26 <i>Length:</i> 11,489' <i>Width:</i> 150'</p>  <p><b>Surface Type / Condition:</b> Concrete / Good <b>Strength Rating:</b> 30,000 lbs. SWL; 200,000 DWL; 400,000 lbs. DTWL; 620,000 lbs. DDTWL <b>Marking:</b> Precision <b>Runway Lighting:</b> HIRL <b>Nav aids:</b> PAPI-4; REILs; MALSR; MALSF <b>Based Aircraft:</b> 68 <b>Annual Operations:</b> 450,204 <b>Annual Enplanements:</b> 18,439,079 (domestic) <b>Services Provided:</b> Scheduled Airlines, Fuel (100LL &amp; Jet A), Hangars, Maintenance, Tiedowns, Air Ambulance, Avionics, Cargo, Charter, Sales <b>Instrument Approaches:</b> Multiple ILS or LOC Multiple RNAV (GPS)</p>	<p><b>Airport Sponsor:</b> City of Mesa</p> <p><b>Distance from SDL:</b> 13 nm Southeast</p> <p><b>NPIAS Classification:</b> Reliever</p> <p><b>GA Asset Classification:</b> Regional</p> <p><b>Primary Runway:</b> 4R-22L <i>Length:</i> 5,101' <i>Width:</i> 100'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> 38,000 lbs. SWL; 60,000 lbs. DWL; 90,000 lbs. DTWL <b>Marking:</b> Non-precision <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-2; REILs <b>Based Aircraft:</b> 611 <b>Annual Operations:</b> 190,605 <b>Services Provided:</b> Fuel (100LL and Jet A), Maintenance, Air Ambulance, Avionics, Charter, Instruction, Rental, Sales <b>Instrument Approaches:</b> RNAV (GPS) Rwy 4L RNAV (GPS) Rwy 4R RNAV (GPS)-B</p>	<p><b>Airport Sponsor:</b> Private</p> <p><b>Distance from SDL:</b> 19 nm South</p> <p><b>NPIAS Classification:</b> None</p> <p><b>GA Asset Classification:</b> None</p> <p><b>Primary Runway:</b> 17-35 <i>Length:</i> 3,913' <i>Width:</i> 60'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> N/A <b>Marking:</b> Basic <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-2 ; REILs <b>Based Aircraft:</b> 161 <b>Annual Operations:</b> 39,000 (estimated) <b>Services Provided:</b> Aircraft fuel (100LL), Tiedowns <b>Instrument Approaches:</b> VOR or GPS-A</p>
Glendale Municipal Airport (GEU)	Chandler Municipal Airport (CHD)	Mesa-Gateway Airport (IWA)	Phoenix Goodyear Airport (GYR)
<p><b>Airport Sponsor:</b> City of Glendale</p> <p><b>Distance from SDL:</b> 20 nm Southwest</p> <p><b>NPIAS Classification:</b> Reliever</p> <p><b>GA Asset Classification:</b> Regional</p> <p><b>Primary Runway:</b> 1-19 <i>Length:</i> 7,150' <i>Width:</i> 100'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> 40,000 lbs. SWL; 60,000 lbs. DWL <b>Marking:</b> Non-precision <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-2; REILs <b>Based Aircraft:</b> 289 <b>Annual Operations:</b> 76,127 <b>Services Provided:</b> Fuel (100LL &amp; Jet A), Maintenance, Hangars, Tiedowns, Air Ambulance, Avionics, Charter, Instruction, Rental, Sales <b>Instrument Approaches:</b> RNAV (GPS) Rwy 1 RNAV (GPS) Rwy 19</p>	<p><b>Airport Sponsor:</b> City of Chandler</p> <p><b>Distance from SDL:</b> 22 nm Southeast</p> <p><b>NPIAS Classification:</b> Reliever</p> <p><b>GA Asset Classification:</b> Regional</p> <p><b>Primary Runway:</b> 4R-22L <i>Length:</i> 4,870' <i>Width:</i> 75'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> 30,000 lbs. SWL <b>Marking:</b> Non-precision (4R); Basic (22L) <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-4; REILs <b>Based Aircraft:</b> 333 <b>Annual Operations:</b> 197,427 <b>Services Provided:</b> Fuel (100LL &amp; Jet A), Maintenance, Hangars, Tiedowns, Agriculture, Avionics, Charter, Instruction, Rental, Sales <b>Instrument Approaches:</b> RNAV (GPS) Rwy 4R VOR Rwy 4R NDB Rwy 4R</p>	<p><b>Airport Sponsor:</b> Phoenix-Mesa Gateway Airport Authority</p> <p><b>Distance from SDL:</b> 23 nm Southeast</p> <p><b>Airport Classification:</b> Primary Commercial Service</p> <p><b>GA Asset Classification:</b> None</p> <p><b>Primary Runway:</b> 12R-30L <i>Length:</i> 10,401' <i>Width:</i> 150'</p>  <p><b>Surface Type / Condition:</b> Concrete / Good <b>Strength Rating:</b> 55,000 lbs. SWL; 95,000 lbs. DWL; 185,000 lbs. DTWL; 550,000 lbs. DDTWL <b>Marking:</b> Precision <b>Runway Lighting:</b> HIRL <b>Nav aids:</b> PAPI-4; REILs <b>Based Aircraft:</b> 128 <b>Annual Operations:</b> 157,915 <b>Annual Enplanements:</b> 693,543 <b>Services Provided:</b> Scheduled Airlines, Fuel (100LL &amp; Jet A), Hangars, Maintenance, Tiedowns; Air Ambulance, Cargo, Charter, Instruction, Rental <b>Instrument Approaches:</b> ILS or LOC Rwy 30C Multiple RNAV (GPS) VOR or TACAN Rwy 30C</p>	<p><b>Airport Sponsor:</b> City of Phoenix</p> <p><b>Distance from SDL:</b> 26 nm Southwest</p> <p><b>NPIAS Classification:</b> Reliever</p> <p><b>GA Asset Classification:</b> Regional</p> <p><b>Primary Runway:</b> 13-21 <i>Length:</i> 8,501' <i>Width:</i> 150'</p>  <p><b>Surface Type / Condition:</b> Asphalt / Good <b>Strength Rating:</b> 75,000 lbs. SWL; 200,000 lbs. DWL; 270,000 lbs. DTWL <b>Marking:</b> Basic <b>Runway Lighting:</b> MIRL <b>Nav aids:</b> PAPI-2; REILs <b>Based Aircraft:</b> 223 <b>Annual Operations:</b> 144,172 <b>Services Provided:</b> Fuel (100LL &amp; Jet A), Maintenance, Hangars, Tiedowns, Instruction <b>Instrument Approaches:</b> RNAV (GPS) Rwy3</p>

<b>KEY</b>	DDTWL - Double Dual Tandem Wheel Loading	GPS - Global Positioning System	LOC - Localizer	MALSFR - Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights	MIRL - Medium Intensity Runway Lighting	NDB - Non-Directional Beacon	PAPI - Precision Approach Path Indicator	REIL - Runway End Identification Lights	RNAV - Area Navigation	SWL - Single Wheel Loading	TACAN - Tactical Air Navigation	VOR - Very High Frequency Omnidirectional Range
	DWL - Dual Wheel Loading	HIRL - High Intensity Runway Lighting	MALSFR - Medium Intensity Approach Lighting System with Sequenced Flashing Lights									
	DWTWL - Dual Tandem Wheel Loading	ILS - Instrument Landing System										



**LEGEND**

- Airport Property Line
- A Taxiway Designation
- Perimeter Road
- Taxilane 1
- Taxilane 2
- Taxilane 3
- Taxilane 4
- Taxilane 5
- Taxilane 6
- Taxilane Parcels
- 1 Airport Access Gate

**KEY**

- ATCT - Airport Traffic Control Tower
- FBO - Fixed Base Operator

SCALE IN FEET  
Aerial Photo: Martinez Geospatial  
9/22/2024

FEDERAL GRANT HISTORY						
Fiscal Year	Project Description	AIP/ Entitlement	AIP/ Discretionary	CARES/CRR-SA/ARPA	BIL/AIG	Grand Total
2006	Construct Taxiway/Access Road	\$394,250	-	-	-	\$394,250
2007	Construct Taxiway/Install Apron Lighting	-	\$3,794,217	-	-	\$3,794,217
2009	Rehabilitate Apron (Design)	\$1,232,693	-	-	-	\$1,232,693
2010	Rehabilitate Apron	\$326,307	\$1,673,693	-	-	\$2,000,000
2010	Conduct Environmental Study	\$273,738	-	-	-	\$273,738
2011	Rehabilitate Apron	\$69,233	\$584,863	-	-	\$654,096
2011	Reconstruction of North Apron (32,680sy)	\$1,892,097	\$23,750	-	-	\$1,915,847
2012	Update Master Plan Study	\$427,500	-	-	-	\$427,500
2013	Rehabilitate Rwy Lighting & Signage	\$318,710	-	-	-	\$318,710
2014	Rehabilitate Taxiway B	\$2,733,759	\$1,000,000	-	-	\$3,733,759
2015	Rehabilitate Taxiway	\$161,595	\$2,121,309	-	-	\$2,282,904
2016	Install Beacon & Misc. Improvements	\$768,546	-	-	-	\$768,546
2017	Rehabilitate Apron	-	\$1,304,159	-	-	\$1,304,159
2017	Rehabilitate Taxiway & Lighting	\$3,150,000	\$1,219,696	-	-	\$4,369,696
2018	Rehabilitate Delta Apron (4,500sy)	\$150,000	\$2,291,345	-	-	\$2,441,345
2019	Rehabilitate Runway Lighting	\$549,845	-	-	-	\$549,845
2020	Reconstruct Apron	\$750,000	-	\$73,632	-	\$823,632
2021	Rehabilitate Runway	\$959,956	\$8,736,515	\$988,628	-	\$10,685,099
2021	CRRSA Act General Funds	-	-	\$57,000	-	\$57,000
2021	General ARPA Funds	-	-	\$148,000	-	\$148,000
2022	Extend Taxiway	\$649,602	\$3,420,000	-	-	\$4,069,602
2022	Reconfigure Existing Taxiway	-	-	-	\$763,000	\$763,000
2023	Apron Lighting, Rehabilitate Taxiway	-	-	-	\$844,000	\$844,000
2024	Update Airport Master Plan	\$910,600	-	-	-	\$910,600
2024	Rehabilitate Apron	-	-	-	\$846,003	\$846,003
<b>TOTAL</b>		<b>\$15,718,431</b>	<b>\$26,169,547</b>	<b>\$1,267,260</b>	<b>\$2,453,003</b>	<b>\$45,608,241</b>

ADOT STATE GRANT HISTORY		
Date	Project Description	Total (\$)
TBD - 2025	Kilo Apron Rehabilitation	\$41,529
11/22/24	Airport Master Plan	\$44,700
2/12/24	Main Apron Lighting Upgrades	\$18,976
1/6/23	Airport Drive Rehabilitation	\$839,736
4/19/22	Reconstruct Perimeter Service Road	\$728,090
11/8/22	Reconstruct 760 LF of TWY A & Associated A13 Apron Connector	\$37,455
11/8/22	Reconstruct Taxiway A to Include Five Aircraft Runup	\$199,771
3/18/21	Upgrade Airport Security Fence	\$301,860
12/7/20	Rehab/Reconst Rwy 3-21 - Design Only	\$50,000
11/13/19	Rehabilitate Runway Lighting	\$26,991
2/1/19	Rehabilitate D Apron	\$119,842
11/30/17	Rehabilitate Apron - Transient Aircraft Parking Apron in Front of the Terminal Building (Matching AIP# 3-04-0032-034-2017)	\$64,019
11/30/17	Rehabilitate Taxiway A and Rehabilitate Taxiway A Lighting (Matching AIP# 3-04-0032-035-2017)	\$214,502
10/3/16	Install Airport Beacons, Misc. Airport Improvements	\$37,727
8/29/16	Runway 3 Approach Area Rock Project	\$360,000
8/11/15	Place Additional Rock in the Approach Area of Rwy 3 (Approx. 70,000 sy)	\$50,000
8/10/15	Rehabilitate Taxiway Bravo	\$112,065
3/30/15	Rehabilitate Parallel Taxiway "B" - Phase 1	\$183,284
10/29/13	Rehabilitate Runway Lighting	\$15,645
11/28/12	Conduct Airport Master Plan Update	\$20,986
1/17/12	Reconstruction of Landmark North Apron (Approximately 32,680 Square Yards), Phase IV	\$50,417
<b>TOTAL</b>		<b>\$3,517,595</b>

Source: Airport records

AIP: Airport Improvement Program

CARES: Coronavirus Aid, Relief, and Economic Security Act, 2020

CRRSA: Coronavirus Response and Relief Supplemental Appropriations Act, 2020

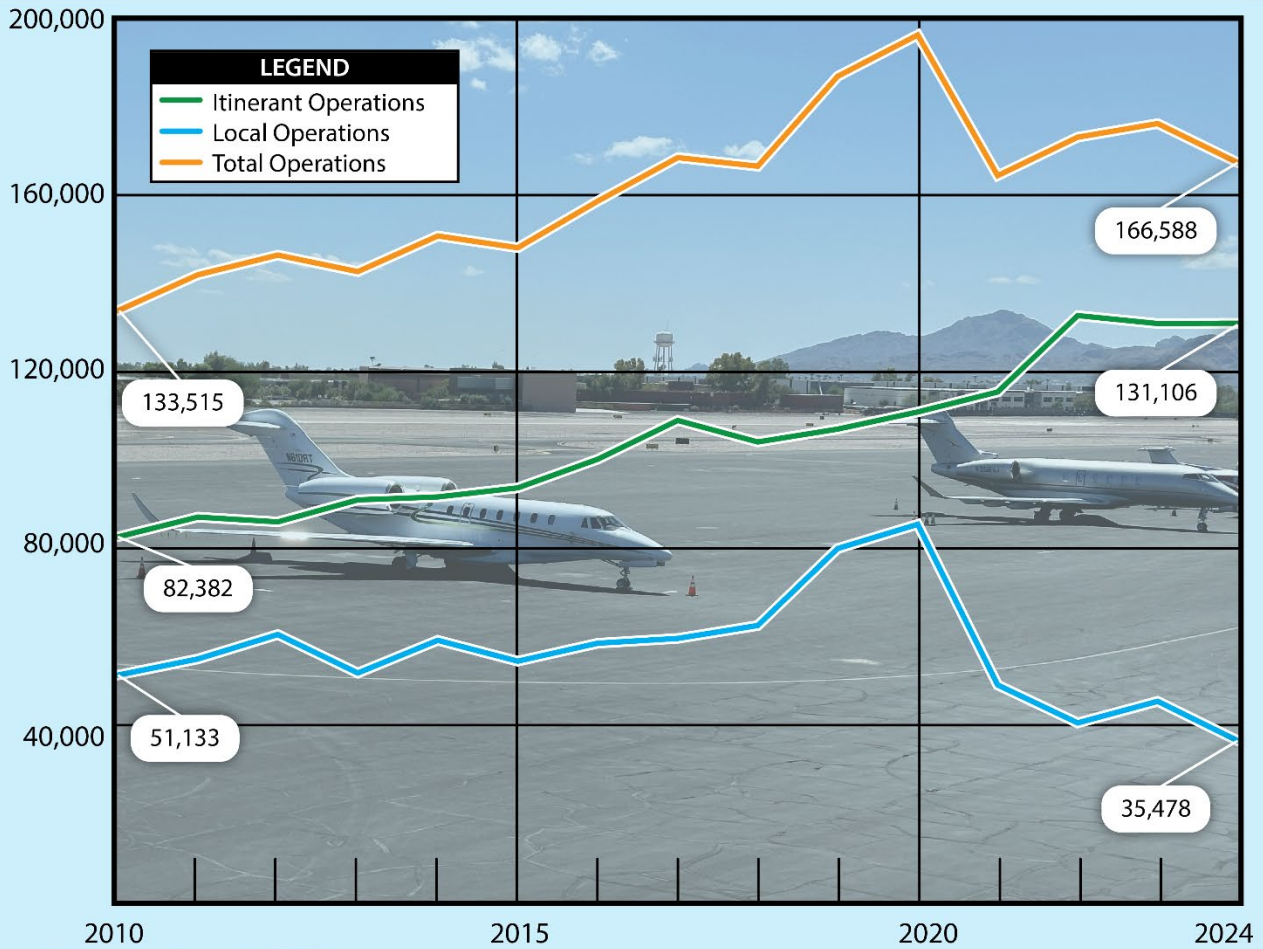
ARPA: American Rescue Plan Act of 2021

BIL/AIG: Bipartisan Infrastructure Law/Airport Infrastructure Grant

Source: FAA Records accessed on 11.10.14. [http://www.faa.gov/airports/aip/grantapportion\\_data/](http://www.faa.gov/airports/aip/grantapportion_data/)



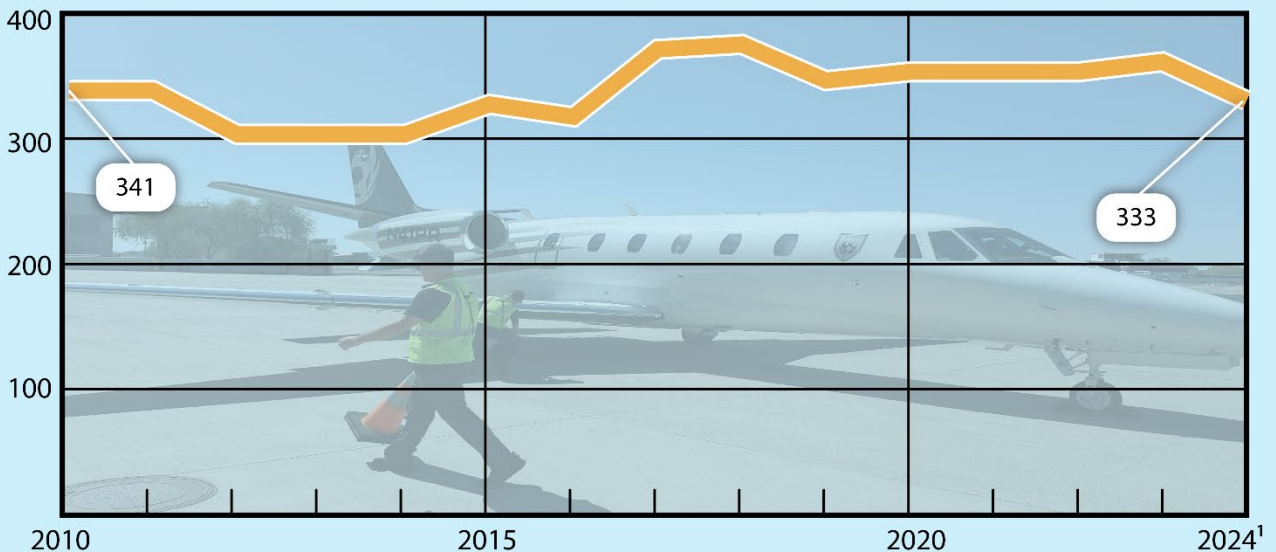
AIRCRAFT OPERATIONS



Source: FAA Operations Network (OPSNET)

2024 CHARTER/AIR TAXI ENPLANEMENTS = 43,765

BASED AIRCRAFT



Source: TAF (2025 pub.)



**LEGEND**

- Airport Property Line
- A Taxiway Designation

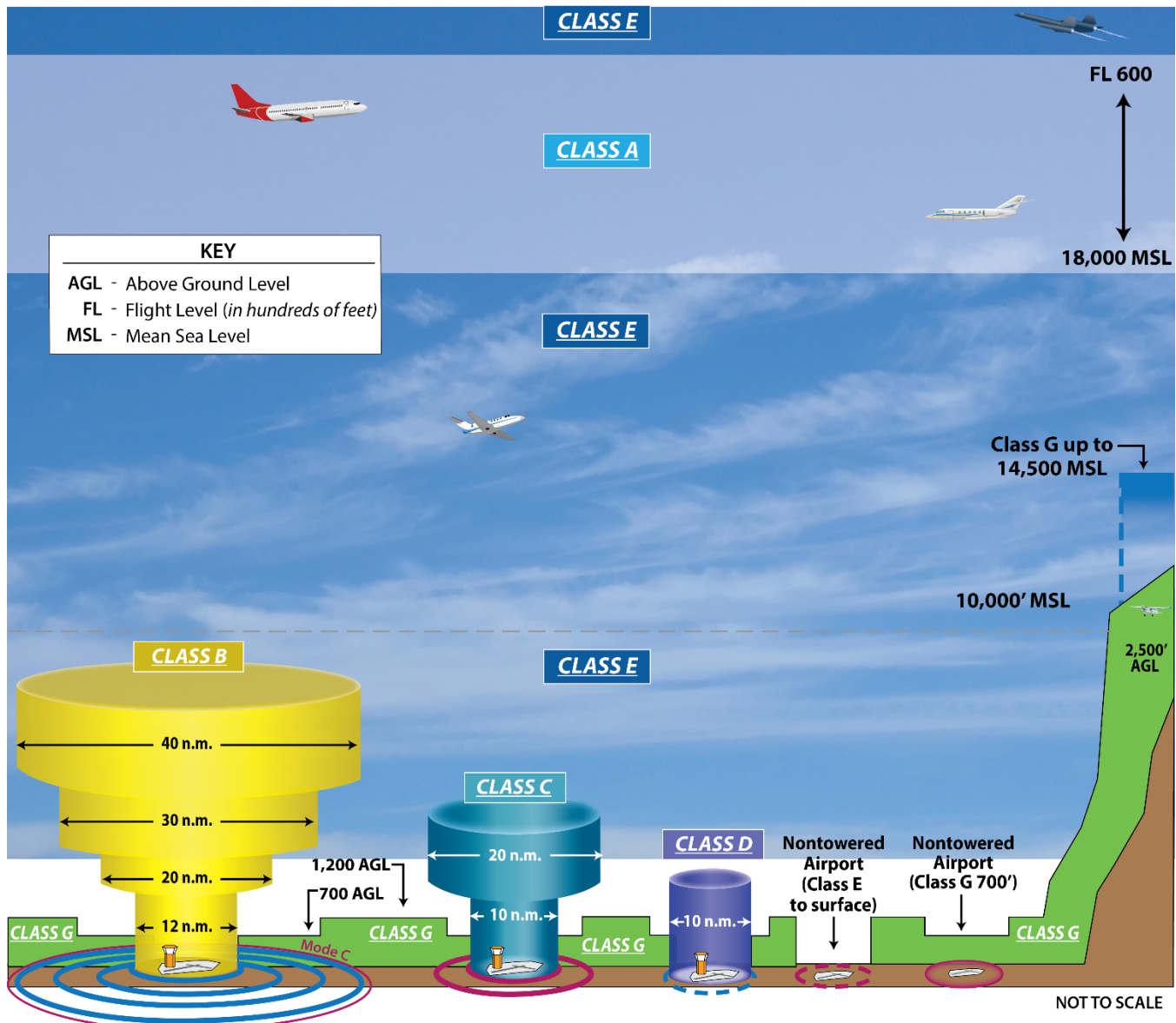
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SCALE IN FEET  
Aerial Photo: Martinez Geospatial  
9/22/2024

Airfield Data		
<b>RUNWAY</b>		
<b>Runway Designation</b>	3	21
Length	8,249'	
Width	100'	
End Elevation	1,444.2'	1,510.1'
Gradient	0.98%	
Surface Material	Asphalt	
Markings/Condition	Non-Precision	Non-Precision
Runway Edge Lighting	MIRL	
Other Lighting	REILs	REILs
Load Bearing Strength	45,000 lbs. SWL, 75,000 lbs. DWL	
Visual Approach Aids	PAPI-2 L	PAPI-2 L
Instrument Approach Procedures	Non-Precision	Non-Precision
Traffic Pattern	Left	Right

Airfield Data	
<b>TAXIWAYS</b>	
Lighting	MITL
Surface Material	Asphalt
Width	40' - 50'
<b>WEATHER AND NAVIGATIONAL AIDS</b>	
Lighted Wind Cone	ASOS
Segmented Circle	ATCT
Airport Beacon	ATIS

KEY	
ASOS	- Automated Weather Observation Station
ATCT	- Airport Traffic Control Tower
ATIS	- Automatic Terminal Information Service
DWL	- Dual Wheel Landing Gear
MIRL	- Medium Intensity Runway Lights
MITL	- Medium Intensity Taxiway Lights
PAPI	- Precision Approach Path Indicator
REIL	- Runway End Identification Lights
SWL	- Single Wheel Landing Gear

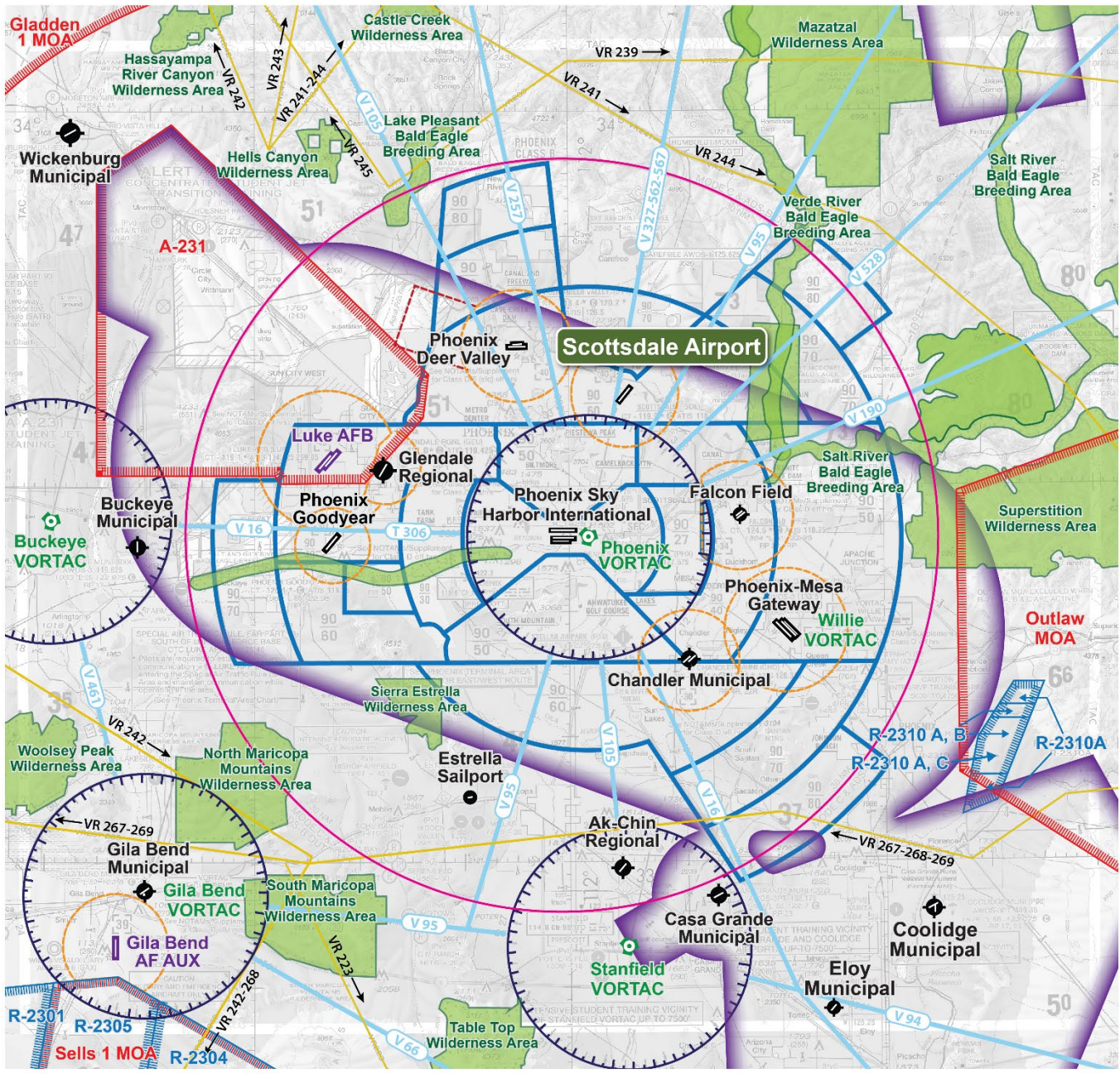
















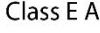

**DEFINITION OF AIRSPACE CLASSIFICATIONS**

- CLASS A** Think A - Altitude. Airspace above 18,000 feet MSL up to and including FL 600. Instrument Flight Rule (IFR) flights only, ADS-B 1090 ES transponder required, ATC clearance required.
- CLASS B** Think B - Busy. Multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports. ADS-B 1090 ES transponder required, ATC clearance required.
- CLASS C** Think C - Mode C. Mode C transponder required. ATC communication required. Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.
- CLASS D** Think D - Dialogue. Pilot must establish dialogue with tower. Generally airspace from the surface to minimum 2,500 feet AGL surrounding towered airports.
- CLASS E** Think E - Everywhere. Controlled airspace that is not designated as any other Class of airspace.
- CLASS G** Think G - Ground. Uncontrolled airspace. From surface to a 1,200 AGL (in mountainous areas 2,500 AGL) Exceptions: near airports it lowers to 700' AGL; some airports have Class E to the surface. Visual Flight Rules (VFR) minimums apply.

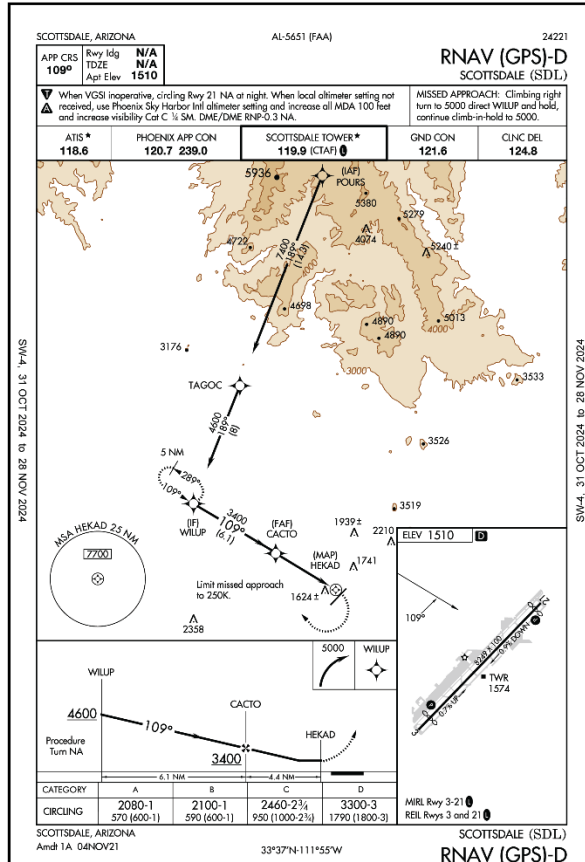
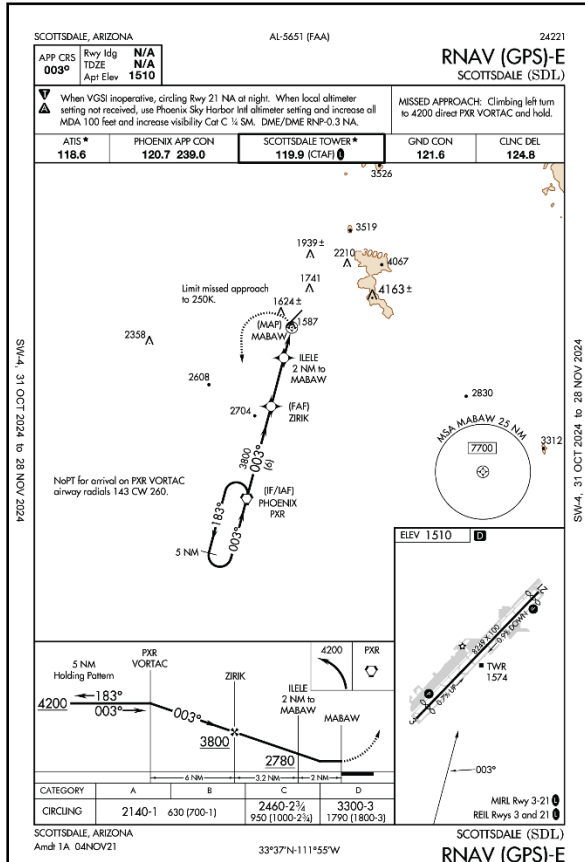
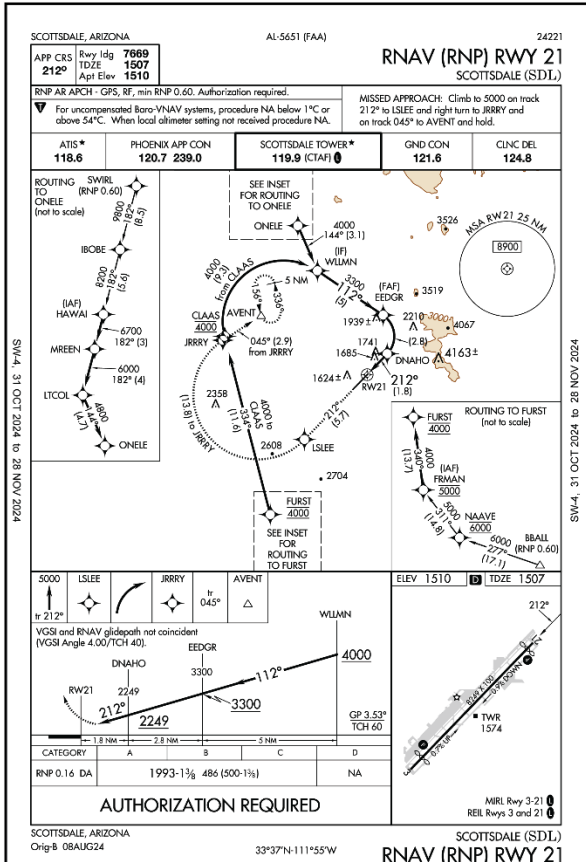
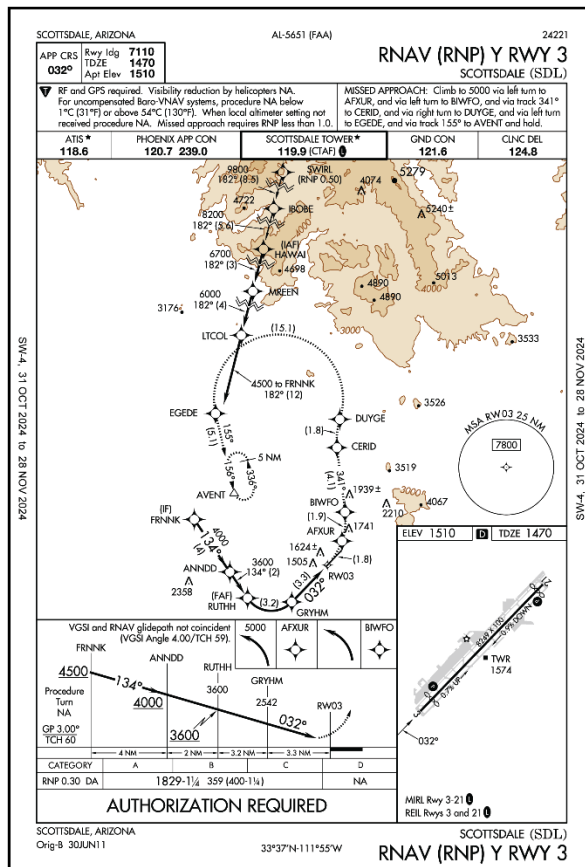
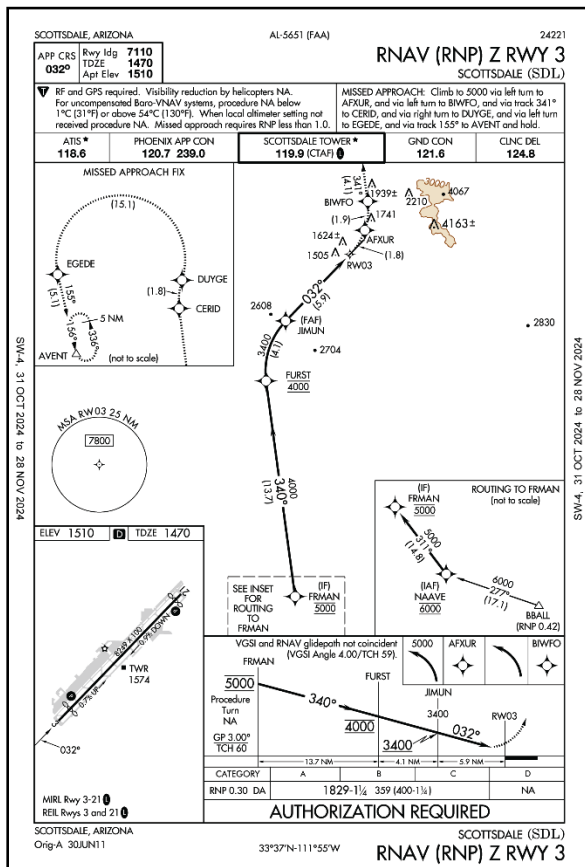
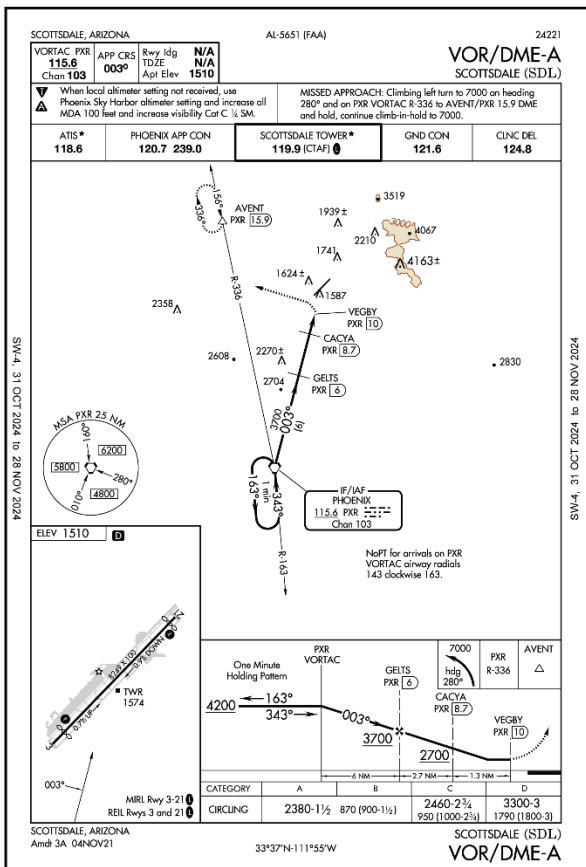
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LEGEND

-  Airport with hard-surfaced runways 1,500' to 8,069' in length
-  Airports with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069' (Military airfields are shown in Purple, public in Black)
-  Compass Rose
-  VORTAC
-  Alert Area and Military Operations Area (MOA)
-  Restricted Areas
-  Class B Airspace
-  Mode C
-  Victor Airways
-  Military Training Routes
-  Wilderness/Monument Area
-  Class D Airspace
-  Class E Airspace
-  Class E (sfc) Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E airspace

Source: Phoenix Sectional Chart, US Department of Commerce, National Oceanic and Atmospheric Administration, 9/19/2024.



Summary of Instrument Approach Data

	Category A	Category B	Category C	Category D
<b>RNAV (RNP) Runway 21</b>				
RNP 0.16 DA		486'/1¾-mile		NA
<b>RNAV (GPS) Y Runway 3</b>				
RNP 0.30 DA		359'/1¼-mile		NA
<b>RNAV (GPS) Z Runway 3</b>				
RNP 0.30 DA		359'/1¼-mile		NA
<b>RNAV (GPS) D</b>				
Circling	570'/1-mile	590'/1-mile	950'/2¾-mile	1790'/3-mile
<b>RNAV (GPS) E</b>				
Circling	630'/1-mile		950'/2¾-mile	1790'/3-mile
<b>VOR/DME-A</b>				
Circling	870'/1½-mile		950'/2¾-mile	1790'/3-mile

Aircraft categories are based on the approach speed of aircraft, which is determined as 1.3 times the stall speed in landing configuration. The approach categories are as follows:

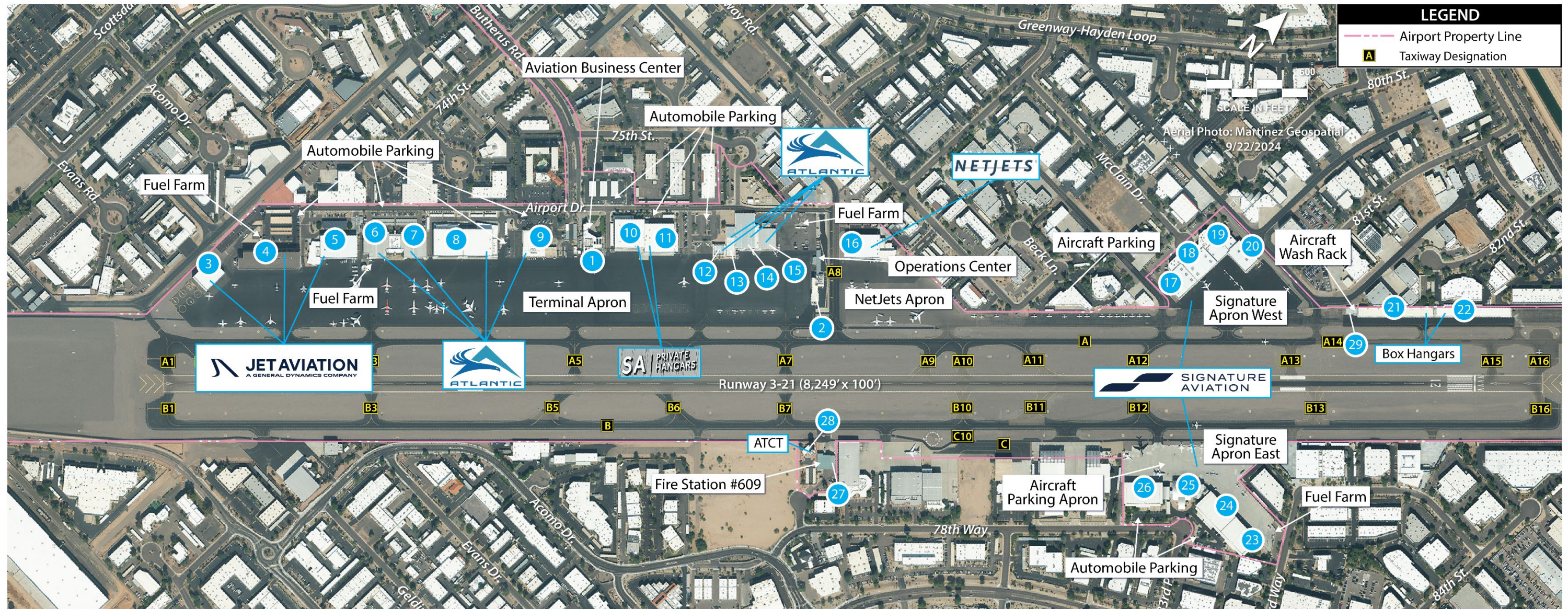
- Category A: 0-90 knots (e.g., Cessna 172)
- Category B: 91-120 knots (e.g., Beechcraft KingAir)
- Category C: 121-140 knots (e.g., B-737, Regional Jets, Canadair Challenger)
- Category D: 141-166 knots (e.g., B-747, Gulfstream IV)
- Category E: Greater than 166 knots (e.g., Certain large military or cargo aircraft)

Abbreviations:

- GPS - Global Positioning System
- RNAV - A technical variant of GPS - area navigation
- RNP - Required navigation performance
- DA - Decision Altitude (Used for vertically guided approaches)
- Note: (xxx' / x-mile) = Visibility (in feet)/Cloud ceiling height (in miles)

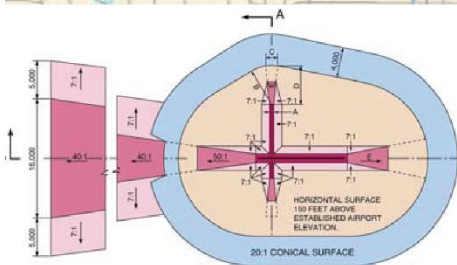
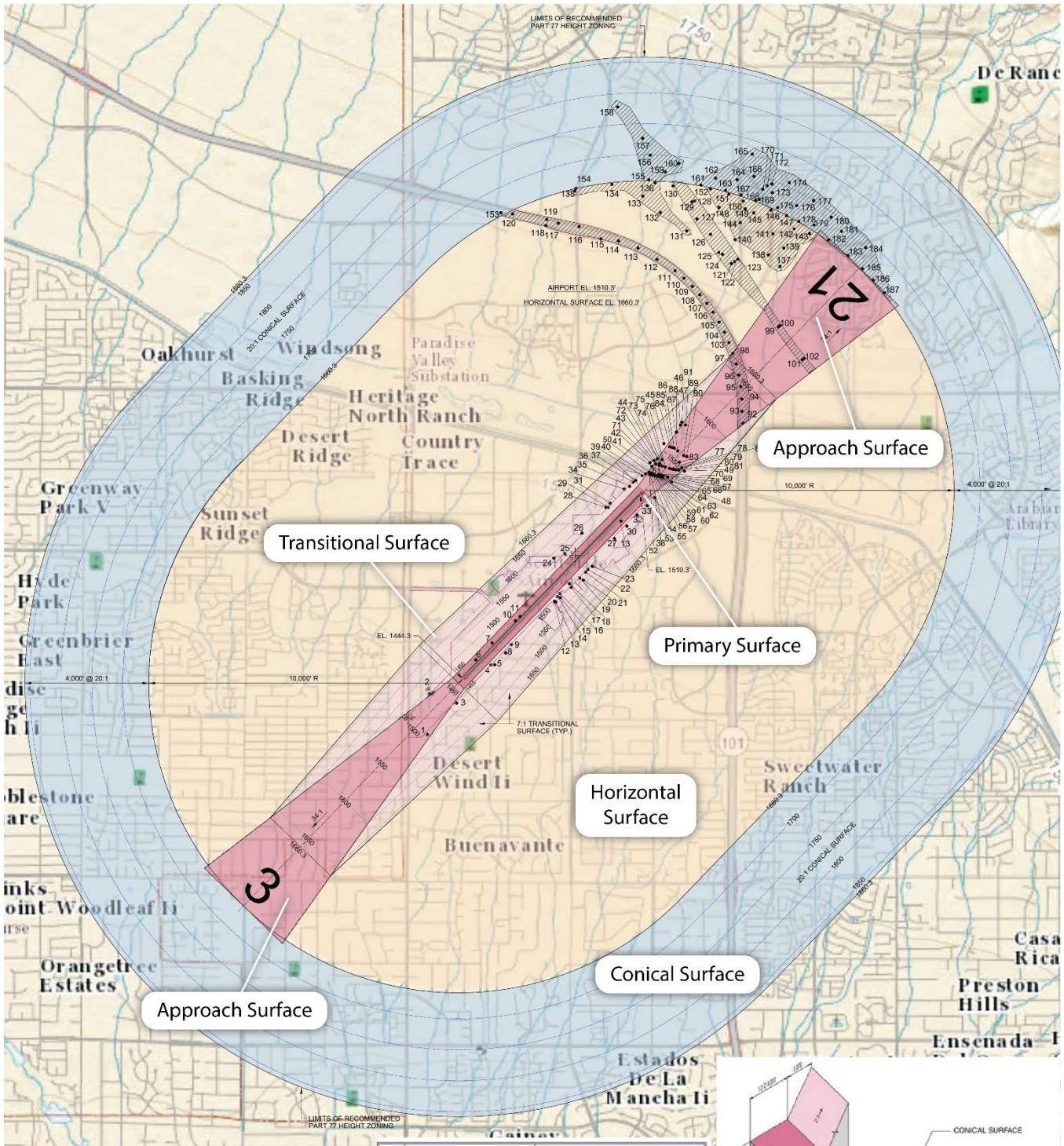
Source: U.S. Terminal Procedures (Effective August 8, 2024)





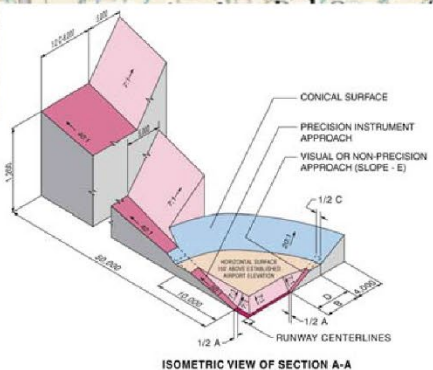
**BUILDING KEY**

#	Hangar Space Footprint (sf)	Office Space Footprint (sf)	Building Type	Operator/Function	#	Hangar Space Footprint (sf)	Office Space Footprint (sf)	Building Type	Operator/Function
1	NA	23,781	Aviation Business Center	Scottsdale Airport	15	12,000	1,500	Conventional Hangar	Atlantic
2	NA	10,000	Operations Center	Scottsdale Airport	16	25,000	7,700	Conventional Hangar	NetJets
3	16,500	1,500	Conventional Hangar	Jet Aviation/Helicopter Flight School	17	22,700	6,000	Conventional Hangar	Signature Flight Support
4	24,700	0	Linear Hangars	Jet Aviation/Air Commerce Center	18	20,000	3,200	Conventional Hangar	Signature Flight Support
4(2nd level)	NA	24,000	Hangar/Office	Jet Aviation/Air Commerce Center	19	10,000	8,000	Conventional Hangar	Signature Flight Support
5	29,000	8,900	Conventional Hangar	Jet Aviation	20	16,800	5,000	Conventional Hangar	Flightworks
6	23,000	3,300	Conventional Hangar	Atlantic South	21	22,200	0	Connected Box Hangars	Private Hangars
7	23,000	3,300	Conventional Hangar	Atlantic South	22	22,200	0	Connected Box Hangars	Private Hangars
8	56,800	9,500	Conventional Hangar	Atlantic	23	23,500	5,200	Conventional Hangars	Signature Flight Support
9	19,500	3,800	Atlantic Main Terminal	Atlantic	24	23,500	5,200	Conventional Hangars	Signature Flight Support
10	28,800	5,000	Conventional Hangar	SA Private Hangars	25	NA	12,400	Signature Terminal	Signature Flight Support
11	28,800	3,300	Conventional Hangar	SA Private Hangars	26	24,400	10,000	Conventional Hangar	Signature Flight Support
12	NA	3,400	Office	Atlantic	27	NA	8,600	Firestation #609	Scottsdale Fire Department
13	NA	8,700	Office	Atlantic	28	NA	5,000	Control Tower	FAA
14	25,600	1,500	Conventional Hangar	Atlantic	29	NA	3,400	Aircraft Wash Rack	Scottsdale Airport



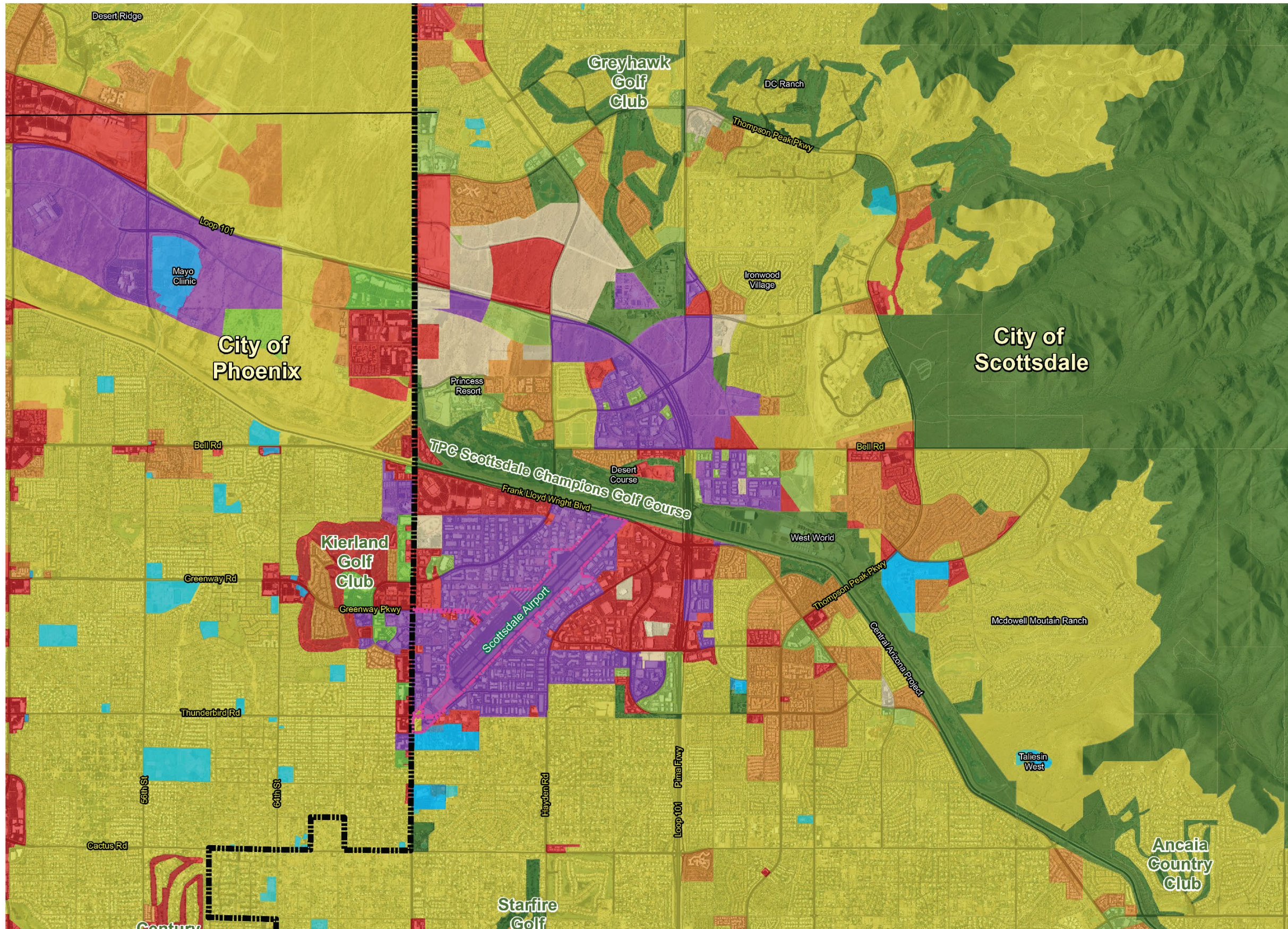
DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY		PRECISION INSTRUMENT RUNWAY	
		A	B	A	B	C	D
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	-
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	-

A - UTILITY RUNWAYS  
 B - RUNWAYS LARGER THAN UTILITY  
 C - VISIBILITY MINIMUMS GREATER THAN 3/4 MILE  
 D - VISIBILITY MINIMUMS AS LOW AS 3/4 MILE  
 E - PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 45:1 FOR AN ADDITIONAL 40,000 FEET



Source: 2015 SDL Master Plan

SOURCE: 14 CFR Part 77, Section 77.25, Civil Airport Imaginary Surfaces.

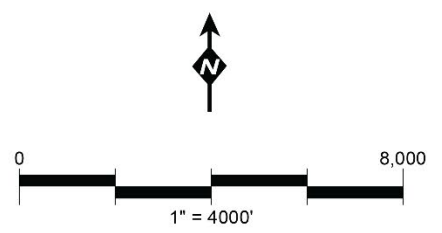


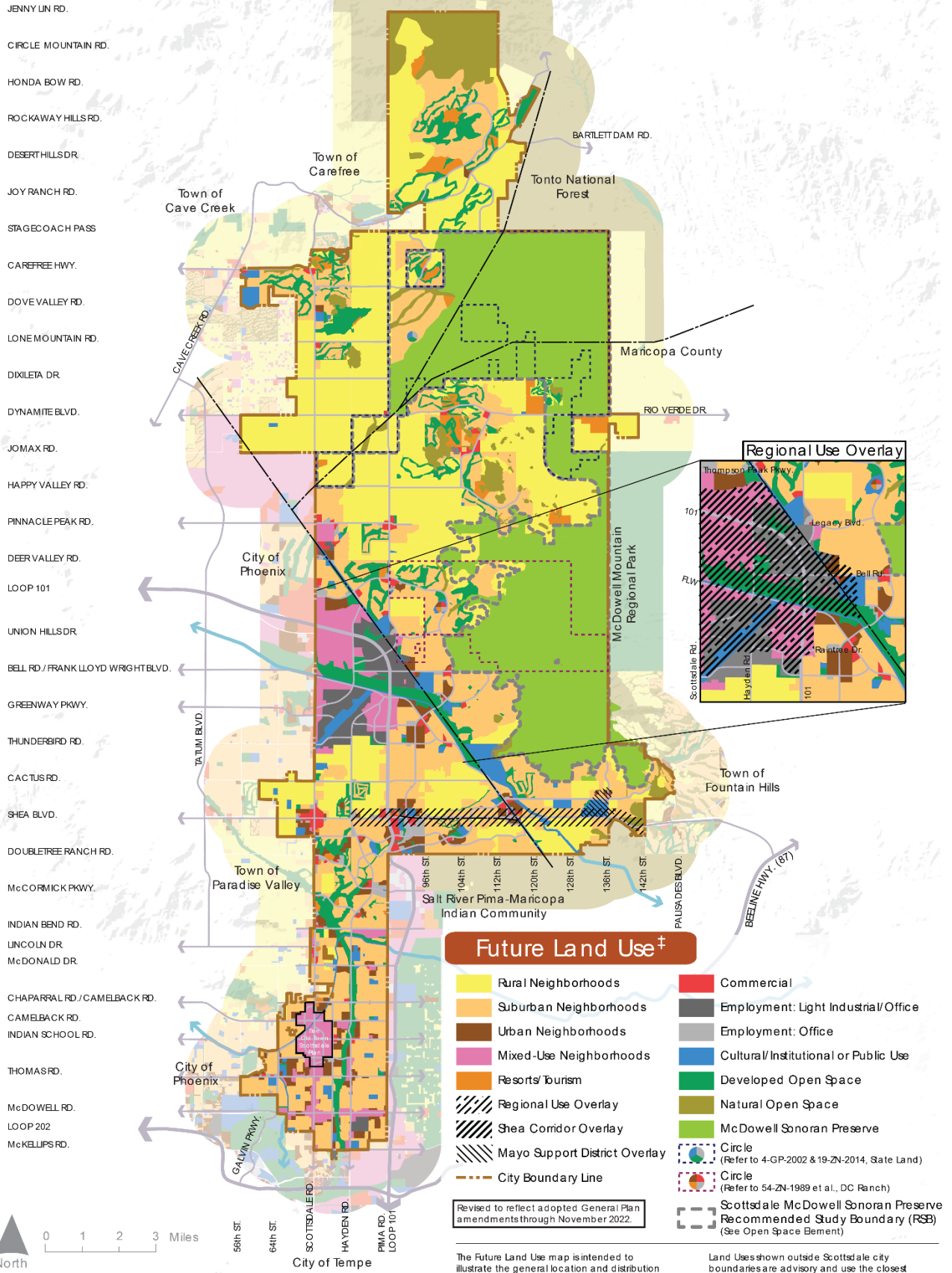
### Legend

- Municipal Boundary
- Airport Property
- Single Family Residential
- Multi Family Residential
- Commercial
- Industrial
- Mixed Use
- Noise Sensitive
- Public
- Parks and Open Space

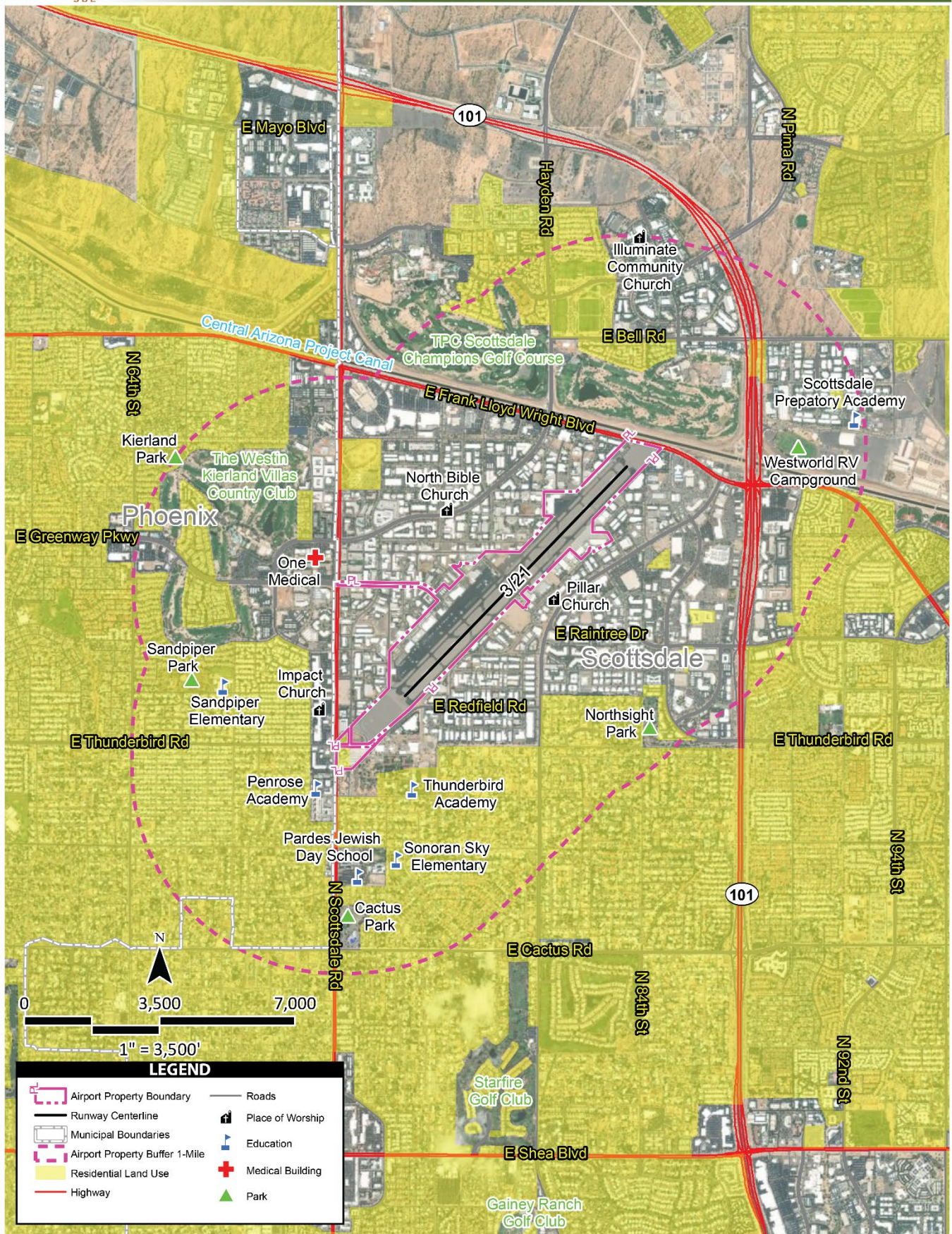
**Source:**

Aerial is from April 2012, Todd Photographic. Base data from the City of Scottsdale Geographic Information System (May 2021). Phoenix Land Use & Noise Sensitive data from City of Phoenix (January 2022) Scottsdale Noise Sensitive data from City of Scottsdale registered businesses.





Source: City of Scottsdale General Plan 2035



Source: ESRI Basemap Imagery (2023), USDA, City of Scottsdale, City of Phoenix

