

**Safford**   
**Regional Airport**  
**Master Plan**  
**Update 2000**  
Safford, Arizona

**Environmental Evaluation** 

**6.1 INTRODUCTION**

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The purpose of this environmental evaluation is to identify any potential adverse environmental impacts related to the continued operation, maintenance, and improvement of the Safford Regional Airport as set forth in the 1999 Airport Master Plan Update. In accordance with FAA guidelines, this environmental evaluation considers twenty specific impact categories, ranging from noise to construction impacts. These categories, outlined in FAA Order 5050.4A, *Airport Environmental Handbook* (FAA, 1985), must be addressed for any project that involves any of the following:

- Airport location
- New runway
- Major runway extension
- Runway strengthening creating specific noise conditions within specified boundaries
- Major change of entrance or access roads
- Land acquisition
- Establishment or relocation of an instrument landing system, or an approach lighting system
- Development involving historic sites, Section 4(f) land, farmland, wetlands, coastal zones, floodplains, or endangered or threatened species

The *Airport Environmental Handbook* describes actions for which either no environmental documentation is required or for which the preparation of an Environmental Impact Statement (EIS) is mandatory. Only a small number of projects qualify in either category.

For all others, an Environmental Assessment (EA) is required. An EA is basically a significance testing process. If a project produces an impact greater than some established threshold level, then preparation of an EIS is required. If the impact is less than the threshold, a Finding of no Significant Impact (FONSI) results, unless some compelling reason for further investigation exists.

The Safford Regional Airport Master Plan Update proposes the following future development projects:

- relocation of the airport access road
- land acquisition for expansion of the runway protection zones (RPZs) and object free areas (OFAs)
- new Precision Approach Path Indicator (PAPI) light systems
- terminal building development
- expansion of helicopter facilities
- new hangar construction.

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## **6.2 ENVIRONMENTAL EVALUATION CATEGORIES**

### **6.2.1 Noise**

The Safford Regional Airport is a general aviation airport facility that currently bases 28 aircraft primarily belonging to Airplane Design Groups I and II. Annual operations estimated for 1997 totaled 14,100. By the year 2020, the number of based aircraft is projected to grow to 39 and annual operations are expected to increase to nearly 20,000.

According to FAA Order 5050.4A (Airport Environmental Handbook, p. 28), no noise analysis is needed for proposals involving Design Group I and II airplanes on utility (small GA aircraft) or transport type airports whose forecast operations in the period covered by the environmental assessment do not exceed 90,000 adjusted propeller operations or 700 annual adjusted jet operations. These numbers of propeller aircraft operations result in cumulative noise levels, which do not exceed 60 day-night average sound level (DNL) more than 5,500 feet from, start of takeoff roll or 65 DNL on the runway itself.

However, for the purpose of identifying current and future noise impacts, this study performed a noise analysis for the existing and forecast operating conditions at the airport. Noise contours were prepared for the 55, 60, 65 and 75 DNL. Details of the noise analysis assumptions are contained in Chapter 7, Land Use, with illustrations of the noise contours on the Off-Airport Land Use Plan/Noise Map contained in Chapter 8, Airport Plans.

### **6.2.2 Compatible Land Use**

The compatibility of existing and planned land uses in the vicinity of an airport is generally associated with the level of noise impact related to the airport. The FAA has developed guidelines for land-use compatibility based on noise levels and the nature of the land use being impacted. Commercial, industrial, and most public uses are considered compatible with airport operations, as long as they are consistent with performance standards of Federal Aviation Regulation (FAR) Part 77 relative to height and safety. The FAA has identified the 65 DNL noise level as the threshold of incompatibility with residential land uses.

The Safford Regional Airport is sited approximately four miles northeast of the City of Safford on the Gila Mountains' bajada at an elevation of 3,160 feet above mean sea level. The airport facilities are the only occupants of the area within a radius of one mile. The closest residential structure to the airport is located approximately 1.15 miles to the southeast at an elevation of 2,980 feet. The primary runway of the Safford Regional Airport (12-30) is oriented northwest southeast. The secondary (crosswind) runway (8-26) is oriented east west. Airplanes approaching or departing in either direction within the traffic pattern do not fly over any residential developments.

No noise abatement procedures are planned for use at the Safford Regional Airport. This is because the noise levels do not exceed noise compatibility standards contained in Federal Aviation Regulation (FAR), Part 150, Airport Noise Compatibility Planning.

The object free area (OFA) of Runway 8-26 does not comply with FAA standards. Part of the OFA is outside the airport boundary. The runway protection zones (RPZs) of Runway 12-30 should be widened. It will be necessary for the airport to acquire additional area and expand its boundaries to comply with the FAA standards for OFA for Runway 8-26. The airport may add additional RPZ area to Runway 12-30 by acquiring additional easement or through the purchase of additional land.

Currently, the land uses adjacent to the Safford Regional Airport are compatible with airport operations. However, an Environmental Assessment will be required to assess the impacts of future land acquisition by the airport to comply with FAA requirements for the OFAs and increase the size of the RPZs. Further, the City of Safford has adopted an Airport Influence Area (AIA) in support of the effort to maintain compatible land uses

around the airport. The AIA and other land use issues are described in detail in Chapter 7, Land Use.

### **6.2.3 Social Impacts**

The continued operation of the Safford Regional Airport will not require relocation of residences or businesses. No adverse social impacts or community disruptions are anticipated. The overall effect of the proposed continued operation of the airport will be the continued availability of air access to the Safford area for private and corporate aircraft.

Any modification of airport access roads outside of the airport property which alter surface transportation patterns will require an Environmental Assessment to determine the social impacts of access modification.

### **6.2.4 Induced Socioeconomic Impacts**

This category refers to impacts such as shifts in business and economic activity, demands on public services, or patterns of population growth associated with major airport development proposals.

The City of Safford and the Safford Regional Airport Authority continue to promote the development of the Airport to improve the economy of the area and to generate revenue from airport activity.

### **6.2.5 Air Quality**

National Ambient Air Quality Standards (NAAQS) have been established by the Environmental Protection Agency (EPA) for seven criteria pollutants; carbon monoxide, lead, nitrogen dioxide, ozone, PM2.5, PM10 and sulfur dioxide. For each of these (except carbon monoxide), the EPA has adopted Primary standards to protect public health and Secondary standards to protect public welfare. Each state must adopt standards at least as strict as the federal standards. The standards adopted by Arizona are the same as those utilized by EPA. The Safford Regional Airport is located within an area that complies with all NAAQ Standards.

Arizona does not have indirect source review (ISR) requirements. Because the Safford Regional Airport has less than 180,000 operations forecast annually, it is not subject to air quality analysis (FAA Order 5050.4A, Airport Environmental Handbook, p. 33).

### **6.2.6 Water Quality**

The Safford Regional Airport property drains southward to an unnamed pond and small wash that flows southward to the Gila River at the foot of the Gila Mountains bajada. Normal contaminants from airport operations are petroleum products. The Safford Regional Airport contains one fixed base operator (FBO) which provides aircraft fueling and maintenance services. Two aboveground storage tanks containing airplane fuel are present at the airport. The sizes and contents are 10,000 gallons grade 100LL aircraft fuel and 12,000 gallons grade A jet fuel. The tanks were newly installed in 1998, are in excellent condition, are owned by the City of Safford and maintained by the Safford Airport Authority. There are no plans for the expansion or relocation of the fuel storage system within the planning period. Waste petroleum from servicing of aircraft is collected and disposed by the FBO and the City of Safford. The potential for degradation of local water quality resulting from the continued operation of the Safford Regional Airport is very small.

### **6.2.7 Special Land Uses, Dot Section 4(F)**

Section 4(f) of the Department of Transportation (DOT) Act specifies that no project will be approved that requires use of any publicly owned land from a public park, recreation area, or wildlife refuge. Currently, there are no special land uses, as defined by the Department of Transportation, which exist within the potential impact area of the Safford Regional Airport. However, if special land uses are identified in the future, an Environmental Assessment will be required.

### **6.2.8 Cultural Resources**

Research was conducted at the State Historic Preservation Officer (SHPO) for information regarding the proposed improvements. In addition, a record search was conducted at the Arizona State Museum for information regarding significant cultural resources in or near the project area. The project area has not been surveyed for cultural resources and

a survey will be required under the National Historic Preservation Act if an Environmental Assessment is prepared.

### **6.2.9 Biotic Communities**

The Safford Regional Airport is surrounded by undeveloped grazing land. Potential impacts to the surrounding biotic communities must be addressed in any Environmental Assessment(s) prepared for future airport land acquisitions, expansions, major lighting modifications, or access modifications.

### **6.2.10 Threatened and Endangered Species**

The U.S. Fish & Wildlife Service (USFWS) Threatened and Endangered Species List for Graham County, Arizona was reviewed and the Arizona Game & Fish Department (AG&FD) was contacted for information regarding threatened, endangered, candidate, or special status species in the project area (see response in Appendix F). Although a number of species are listed as Threatened or Endangered on a county basis, it is unlikely that habitat utilized by these species is contained within the Safford Regional Airport area. Potential impacts to threatened and endangered species must be addressed in any Environmental Assessment(s) prepared for future airport land acquisitions, expansions, major lighting modifications, or access modifications.

### **6.2.11 Wetlands**

No wetlands are located within or adjacent to the Safford Regional Airport. There will be no impacts to wetlands resulting from the continued operation of the airport under the Master Plan.

### **6.2.12 Floodplains**

Safford Regional Airport is sited on the bajada of the Gila Mountains at an elevation of approximately 3,160 feet. It is not located within or adjacent to a floodplain. Continued operation of the Safford Regional Airport will not indirectly support secondary development within a floodplain. There will be no floodplain impacts.

### **6.2.13 Shoreline Management**

A shoreline management program does not cover the vicinity of Safford; thus, evaluation under this category is not applicable.

### **6.2.14 Coastal Barriers**

This impact category refers exclusively to islands on the Atlantic and Gulf coasts; thus, it is not applicable to development at the Safford Regional Airport.

### **6.2.15 Wild and Scenic Rivers**

There are no wild or scenic rivers in the vicinity of the Safford Regional Airport which could be impacted by its continued operation or any future modification or expansion.

### **6.2.16 Farmland**

The Farmland Protection Policy Act (FPPA) directs federal agencies to take into account the adverse effects of federal programs on the preservation of Prime or Unique Farmland. The Act protects such farmland from being converted, directly or indirectly, to nonagricultural uses. Farmland adjoins the Safford Regional Airport on its west and south sides and it is currently utilized for grazing. Previous contacts with the U.S. Department of Agriculture, Natural Resource Conservation Service, for activities under the previous Master Plan indicated that there are no prime or unique farmlands located adjacent to the Safford Regional Airport. Environmental evaluations prepared for expansion and modifications of the Safford Regional Airport under the proposed Master Plan should assess impacts to prime and/or unique farmland.

### **6.2.17 Energy Supply and Natural Resources**

The proposed Master Plan for the operation of the Safford Regional Airport contains plans to modify and improve airport lighting, specifically new Precision Approach Path Indicators (PAPI) and Runway End Marker Lights (REML). The power requirements for these improvements with respect to current power availability should be assessed in the Environmental Assessments prepared for them.

### **6.2.18 Light Emissions**

The runways of the Safford Regional Airport are currently lighted by medium intensity runway lighting (MIRL) systems that can be changed by radio control to variable intensity lighting for both runways and taxiways. Runway 12-30 has visual approach slope indicator (VASI) system and Runway 8-26 has a precision approach path indicator (PAPI) system. Environmental Assessment(s) prepared for the modification and improvement of the airport lighting systems which are a part of the proposed Master Plan should address potential light emission impacts.

### **6.2.19 Solid Waste Impacts**

The activity generated by the continued operation of the Safford Regional Airport is not expected to create an increase in solid waste sufficient to cause an adverse impact on disposal facilities.

The FAA and EPA regulations indicate that solid waste sites should not be located within 5,000 feet of an airport utilized by smaller piston-engine aircraft nor within 10,000 feet for turbine-powered aircraft. No landfills have been identified within these distances from the Safford Regional Airport.

### **6.2.20 Construction**

The proposed Master Plan contemplates modification of the airport access. Environmental Assessment(s) prepared for the construction activities contained in the proposed Master Plan should address construction impacts.

## **6.3 CONCLUSIONS**

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Although there are no significant environmental impacts anticipated for Safford Regional Airport which would prevent the development of proposed projects, further evaluation is required.

No development actions described in this Master Plan Update categorically require preparation of an Environmental Impact Statement. However, three actions may require the preparation of an Environmental Assessment (EA). These are:

- Land Acquisition
- Relocation of the main airport entrance
- Major lighting improvements

While the land acquisition proposed is primarily for the runway protection zones (RPZs) and object free areas (OFAs) in support of the existing and future (20-year planning period) development, it is important to note that the City is currently pursuing the acquisition of land beyond this need. This additional land is currently sought to ensure that the airport is protected from incompatible development, such as residential, and to protect for proposed airport development, such as the Runway 8-26 extension described in Section 5.4 of the previous chapter.