



# REPI

## READINESS AND ENVIRONMENTAL PROTECTION INTEGRATION PROGRAM STATE PROFILE | ARIZONA



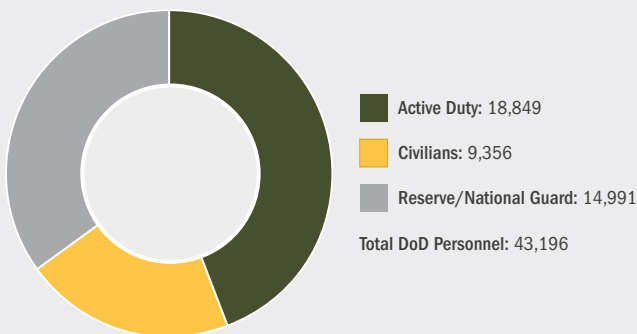
### OVERVIEW

Arizona received \$15 billion in Defense spending in Fiscal Year (FY) 2018 which provides direct funding for DoD personnel salaries, defense contracts, and construction of military facilities in the state. This spending by DoD personnel, contractors, and their families creates significant economic activity, attracts related industries and investment, and generates important state and local government tax revenues.

The Readiness and Environmental Protection Integration (REPI) Program is a key tool used by DoD and its partners to protect the military's ability to train, test, and operate in the state. DoD created the REPI Program in response to the development of lands and loss of habitat in the vicinity of or affecting its installations, ranges, and airspace that can lead to restrictions or costly and inadequate training and testing alternatives. Through REPI, DoD works with state and local governments, conservation organizations, and willing private landowners to address these challenges to the military mission and the viability of DoD installations and ranges. The REPI Program has enjoyed broad bipartisan support both in the U.S. Congress and among groups representing state and local officials. Through FY 2019, DoD and its partners have spent over \$34 million on REPI projects at 4 installations in Arizona.

### DOD IN ARIZONA

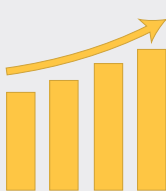
#### DoD Personnel (as of 30 Sep 2018)



### Federal Defense Spending and Economic Impact (in FY 2018)

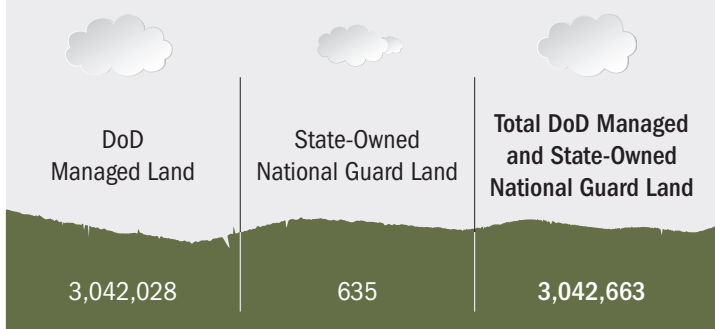


\$15.2 billion in Federal Defense spending



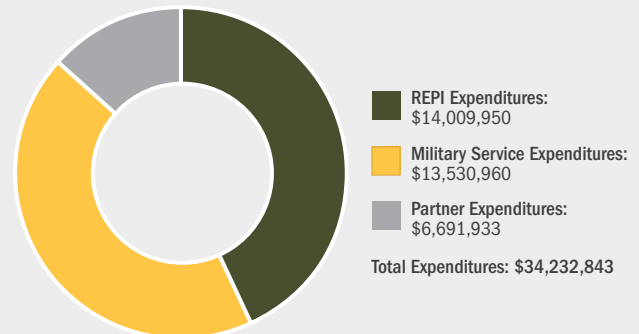
\$2.0 billion in payroll contributed  
\$13.2 billion in contracts awarded

### Acres of DoD Managed and State-Owned National Guard Land (as of 30 Sep 2017)



### REPI PROJECTS\* IN ARIZONA

#### Funding Summary (through FY 2019)



\* REPI projects refer to any action authorized by 10 USC §2684(a) to include the acquisition of interests in land from willing landowners to prevent incompatible development and protect habitat or any other natural resources management. REPI projects involving the Army or Army National Guard are also termed Army Compatible Use Buffer (ACUB) partnerships. Those involving the Navy, Marine Corps, or Air Force, are also termed encroachment partnering agreements. Eligible partners include conservation organizations and state and local governments.

### Total Acres Protected (through FY 2019): 13,912



## MILITARY PRESENCE

- The Arizona Commerce Authority reported that military related activities directly or indirectly generated over **76,000 jobs** and **\$11.5 billion in annual economic output** in FY 2017.
- Home to 20 military installations, including the **largest Unmanned Aircraft Systems training base in the world**; the second-largest military installation in the world; and the third-largest tactical aviation range in the U.S.
- Contains Luke Air Force Base, home to the 56th Fighter Wing, which is the **largest fighter wing in the world** and the only active-duty Air Force F-16 training wing.
- Fort Huachuca contains the largest UAV training facility in the world with **10 simulators in 25,000 sq. ft., all valued at \$10,000,000.**
- **Davis-Monthan AFB is the home of the 355th Fighter Wing** and is used by other federal agencies including the Federal Aviation Administration, the U.S. Customs Service Air Service Branch and a detachment of the Naval Air Systems Command.
- Tucson, AZ is one of the **top 10 locations for military spending** on personnel and contracts.
- Home to Marine Corps Air Station Yuma where **80% of the Corps' aviation training** occurs.

## REPI PROJECTS

Project Installation	County	Congressional District
<i>Camp Navajo</i>	Coconino County	1st
<i>Davis-Monthan Air Force Base</i>	Pima	2nd
<i>Fort Huachuca</i>	Cochise	2nd
<i>Naval Observatory Flagstaff</i>	Coconino	1st

For all REPI Project Profiles visit: <http://www.repi.mil/BufferProjects/ProjectList.aspx>



Soldiers training at the Joint Center of Excellence for Human Intelligence Training at Fort Huachuca.

## Western Regional Partnership (WRP)

- The REPI Program supports regional partnerships such as WRP to identify common issues and solutions for mutual benefit.
- WRP partners work to protect natural resources, while promoting sustainability, homeland security, and military readiness. For more information, visit [www.wrpinfo.org](http://www.wrpinfo.org).
- Arizona is a member of WRP, along with the states of California, Nevada, New Mexico, Colorado, and Utah.

## Key REPI Partners

- Arizona Department of Game and Fish
- Arizona Land and Water Trust
- Arizona Military Installation Trust Fund
- Arizona State Forestry Department
- Bonneville Environmental Foundation
- Bureau of Land Management
- Central Arizona Land Trust
- City of Flagstaff
- City of Tucson
- Cochise County
- Coconino County
- Compatible Lands Foundation
- Ecosystem Services, LLC
- National Fish and Wildlife Foundation
- National Park Service Land and Water Conservation Fund
- The Nature Conservancy
- Northern Arizona University
- Pima County
- The Walton Family Foundation
- U.S. Fish and Wildlife Service

## Data Sources

- **For Economic Impact Information:** AZ Department of Emergency and Military Affairs web site, January 2018: <https://azgovernor.gov/sites/default/files/related-docs/militarystudyoptimized.pdf>
- **For Federal Spending and personnel Information:** Office of Economic Adjustment: "Defense Spending By State Fiscal Year 2018": [https://www.oea.gov/sites/default/files/defense-spending-rpts/FY2018-Defense-Spending-by-State-Report\\_0\\_0.pdf](https://www.oea.gov/sites/default/files/defense-spending-rpts/FY2018-Defense-Spending-by-State-Report_0_0.pdf)
- **For Land Information:** Department of Defense: "Base Structure Report — Fiscal Year 2018 Baseline": <https://www.acq.osd.mil/eie/Downloads/BSI/Base%20Structure%20Report%20FY18.pdf>
- **For REPI Projects Information:** "2020 REPI Report to Congress": [https://www.repi.mil/Portals/44/Documents/Reports\\_to\\_Congress/REPI2020RTC.pdf](https://www.repi.mil/Portals/44/Documents/Reports_to_Congress/REPI2020RTC.pdf)

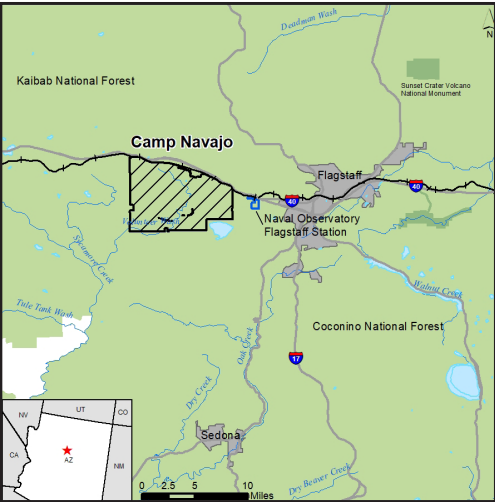
For more information about the REPI Program, visit [www.repi.mil](http://www.repi.mil)



U.S. ARMY :  
**CAMP NAVAJO** : ARIZONA



Camp Navajo’s versatile operating area provides maneuver, chemical, biological, radiological, nuclear, air mobile, and drop zone training to the Air Force, Army, and Navy. It is also tasked with storing Navy and Air Force nuclear missile rocket motors. With over \$5 billion worth of rocket motors and munitions assets in storage, Camp Navajo plays a key role in national defense operations.



Training ranges are distributed along the border of Camp Navajo, making them more susceptible to encroachment challenges. Their location increases the likelihood of trespassing, light pollution, noise concerns, and the spread of wildland fires off-installation—challenges that would be exacerbated by the growth of incompatible development in the area. Camp Navajo has also experienced training and operational

restrictions during the 6-month breeding season of the threatened Mexican spotted owl due to the decrease in its habitat. By acquiring surrounding land and establishing conservation easements, the installation can create a buffer between its operations and the surrounding area, while also protecting critical habitat for the owl.

In addition to protecting the installation’s mission, this REPI project will protect local wildlife, recreation, and water resources. Much of the surrounding area serves as a foraging habitat for not just the endangered Mexican spotted owl, but also more common species such as pronghorn, deer, turkey, and elk. By maintaining this area, the likelihood that these animals will seek shelter on the installation decreases and recreational hunting of local game can continue. Preserving this land in its natural state will also maintain it as an aquifer recharge zone, serving the aquifer which the surrounding area depends upon.

BENEFIT SUMMARY

COMMUNITY

- Provides habitat for endangered species and connects to a wildlife corridor
- Protects water supply
- Provides recreational activity

MILITARY

- Protects live-fire training capabilities
- Protects training capabilities that generate significant amounts of noise
- Prevents workarounds that would have otherwise limited training capacity



The threatened Mexican spotted owl is found throughout Camp Navajo (top). Thousands of Soldiers train at Camp Navajo every year; Commanders from all DoD Components value the realistic training environment and world-class facilities Camp Navajo offers (bottom).

KEY PARTNERS

- Coconino County, AZ
- Northern Arizona University
- Arizona Game and Fish Department
- Central Arizona Land Trust

FAST FACTS THROUGH 30 SEP 2019

- » Acres preserved:  
**0**
- » Transactions conducted:  
**0**
- » Total funds expended:  
**\$560.1 Thousand**
- » Project status:  
**In Progress**

CONTACT

AZ National Guard Public Affairs Office  
 (602) 267-2550



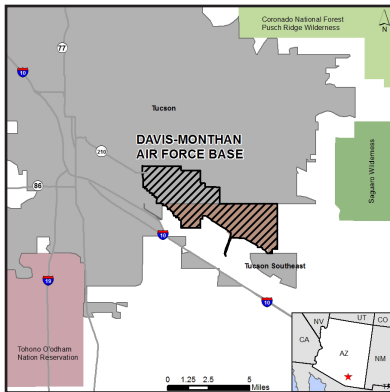


U.S. AIR FORCE :

## DAVIS-MONTHAN AFB : ARIZONA



**D**avis-Monthan AFB (DMAFB), located in Tucson, Arizona, is home to the 12th Air Force, the 214th Reconnaissance Group, and the 309th Aerospace Maintenance and Regeneration Group (AMARG), better known as the “Boneyard”, which manages more than 4,500 aircraft that have been sent for storage or retrofitting. AMARG and other missions leverage the base’s 13,645-foot runway—one of the longest in the Air Force—which can accommodate any aircraft



in the Air Force inventory. DMAFB also hosts the Arizona Air National Guard, which stands alert 24/7 to ensure aerospace control over a 225,000-square mile area that reaches across six states.

Development on DMAFB’s northwestern boundary has already forced 90% of all approaches and departures to the southeast, and approximately 20% of sorties with live

munitions are impeded by wind shifts that would normally dictate takeoff to the northwest. Areas to the installation’s southeast are developing quickly enough that five to ten more years of incompatible development may severely impact DMAFB flying missions, including night and weekend flying missions. DMAFB is working with state, county, city, and local stakeholders through programs such as the Air Force Community Partnership to reduce, and ultimately eliminate, encroachment. Partner efforts to develop and adopt restrictive land-use and development compatibility policies and acquire restrictive-use easements are ongoing.

Pima County is working with DMAFB to find compatible uses and solutions for undeveloped lands surrounding the base that will also maintain natural desert areas, grasslands, and the natural habitat. Acquiring restrictive-use easements will help ensure the preservation of ranching heritage. These combined efforts will also benefit local residents through reduced noise levels and reduced safety concerns.

### BENEFIT SUMMARY

#### COMMUNITY

- Supports new and existing regional planning objectives
- Preserves habitat

#### MILITARY

- Preserves aviation maneuver and night flying training that produce significant noise or require minimal light pollution
- Supports multiple Service missions

- Preserves training and operations for various tenant units
- Protects the 309th Aerospace Maintenance and Regeneration Group’s unique mission
- Ensures that existing compatible areas remain compatible
- Ensures the ability to conduct operations and training activities



An A-10C Thunderbolt II conducts close-air support training (top). An F-22 Raptor performs a heritage flight during the 2017 Heritage Flight Training Course at Davis-Monthan Air Force Base, Ariz., Feb. 9, 2017. The program was established in 1997, allowing certified civilian pilots and Air Force pilots to perform flights together. (bottom).

### KEY PARTNERS

- Pima County
- City of Tucson

### FAST FACTS THROUGH 30 SEP 2019

- » Acres preserved:  
**55**
- » Transactions conducted:  
**18**
- » Total funds expended:  
**\$1.7 million**
- » Project status:  
**In Progress**

### CONTACT

**Public Affairs:**  
(520) 228-3406

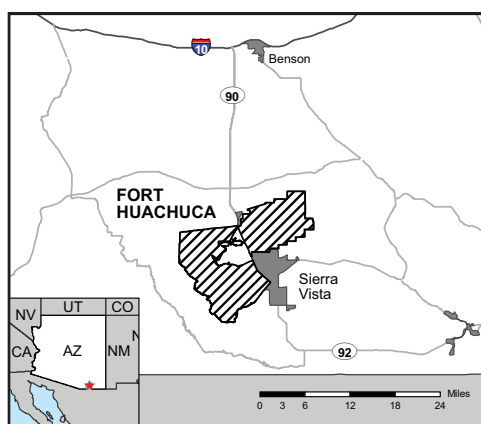


U.S. ARMY :

# FORT HUACHUCA : ARIZONA



**L**ocated in a perfect area for its testing mission of “Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance,” Fort Huachuca is surrounded largely by the Sonoran Desert in southeastern Arizona. This mission includes Unmanned Aerial Systems (UAS) training in heavily used, low-altitude airspace immediately north and west of the installation, an area that also happens to be mostly privately-owned open rangeland. Additionally, this area is used by aircraft from nearby Air Force bases.



Working in a first-of-its-kind partnership with the Bureau of Land Management (BLM) to protect training and preserve land, Fort Huachuca’s partners have purchased easements near the desert for water conservation purposes. The buffers are important for the installation’s UAS training and also reduces electromagnetic interference with electronic testing of sensitive equipment.

Already a leader in water conservation, Fort Huachuca’s partnership with BLM protects groundwater supplies within the watershed of the San Pedro Riparian National Conservation Area. By reducing groundwater pumping, the project protects the future of the San Pedro and Babocomari Rivers. The partnership also reduces development potential in one of the fastest growing states, keeping the land in the hands of local ranchers, while preserving key native grasslands that contain critical habitat for endangered species.

## BENEFIT SUMMARY

### COMMUNITY

- Preserves working lands and local character
- Supports regional planning objectives
- Provides habitat for endangered species
- Protects water supply

### MILITARY

- Preserves on-installation maneuver, helicopter, and night flying training capability that generates noise or requires minimal light pollution
- Reduces electromagnetic interference
- Improves operational safety
- Provides for mission growth



Soldiers training at the Joint Center of Excellence for Human Intelligence Training at Fort Huachuca (top). Test vehicles for the Warfighter Information Network-Tactical (bottom).

## KEY PARTNERS

- Arizona Land and Water Trust
- Arizona Military Installation Fund
- Bonneville Environmental Foundation
- Bureau of Land Management
- Cochise County
- Ecosystem Services, LLC
- National Fish and Wildlife Foundation
- National Park Service Land and Water Conservation Fund
- The Nature Conservancy
- The Walton Family Foundation

## FAST FACTS THROUGH 30 SEP 2019

- » Acres preserved:  
**13,857**
- » Transactions conducted:  
**17**
- » Total funds expended:  
**\$32.0 million**
- » Project status:  
**In Progress**

## CONTACT

Public Affairs Office  
(520) 533-1850



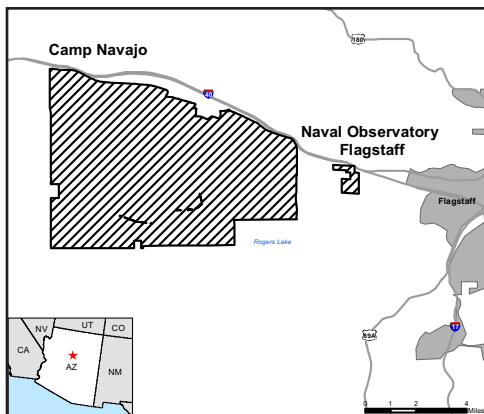
U.S. NAVY :

# NO FLAGSTAFF : ARIZONA



**N**aval Observatory (NO) Flagstaff is the national dark-sky observatory site for the Department of Defense, located in an area of north-central Arizona with the ideal geographic, climatic, and atmospheric conditions for scientific observation and research of the night sky. This observation and research forms the basis of star catalogs and orientation of space systems. NO Flagstaff is also where the Precise Time and Time Intervals used across the DoD are maintained.

Many local government entities promote lighting codes to protect dark night skies in the region in support of the mission at NO Flagstaff, but there continue to be multiple encroachment threats. These threats include residential and commercial incompatible



development, which can still increase light pollution, and smoke from wood burning fireplaces that obstructs clear skies required for sensitive telescopes. The Navy is also seeking easements that require a prescribed fire regime on forest lands to reduce the risk of catastrophic wildfire while also benefiting a healthy native ecosystem.

In addition to protecting the observatory's mission, the NO Flagstaff REPI partnership also supports the mission at Camp Navajo, located a few short miles down the road. Limiting incompatible development protects Camp Navajo's high altitude readiness training from additional lights and noise complaints and safeguards the installation from the risk of trespass into storage areas for munitions and Strategic Arms Reduction Treaty compliant materials. This REPI project also has significant community and environmental benefits, providing habitat for the threatened Mexican spotted owl and protecting water recharge supply for DoD and local communities.

## BENEFIT SUMMARY

### COMMUNITY

- Preserves forest lands
- Protects habitat for notable species
- Provides water supply and recharge protection for the community

### MILITARY

- Provides unique location and conditions for scientific observation and research of the night sky
- Supports military operations at nearby Camp Navajo



A night sky clear of smoke and lights allows Naval Observatory Flagstaff to conduct scientific observation and research for reference frames for celestial navigation and orientation (top). Protected lands in this area also supports buffers for training at Camp Navajo that causes noise and dust (bottom).

## KEY PARTNERS

- Arizona Department of Game and Fish
- Arizona State Forestry Department
- City of Flagstaff
- Coconino County
- Compatible Lands Foundation
- Northern Arizona University
- U.S. Fish and Wildlife Service

## FAST FACTS THROUGH 30 SEP 2019

- » Acres preserved:  
**0**
- » Transactions conducted:  
**0**
- » Total funds expended:  
**\$0**
- » Project status:  
**Initiated**

## CONTACT

Community Plans and Liaison Office  
(760) 339-2224