

Arizona Airports 2018 ANNUAL REVIEW



introduction

The Arizona Airports Association (AzAA) was founded in 1979 as a 501(c)3 non-profit organization dedicated to bringing aviation industry professionals together for the purpose of exchanging aeronautical information, assisting in the development of the air transportation system in Arizona, as well as fostering public recognition of airports throughout the state. Arizona is home to more than 80 public use airports serving every corner throughout the state. It is very likely that there is an airport in your district.

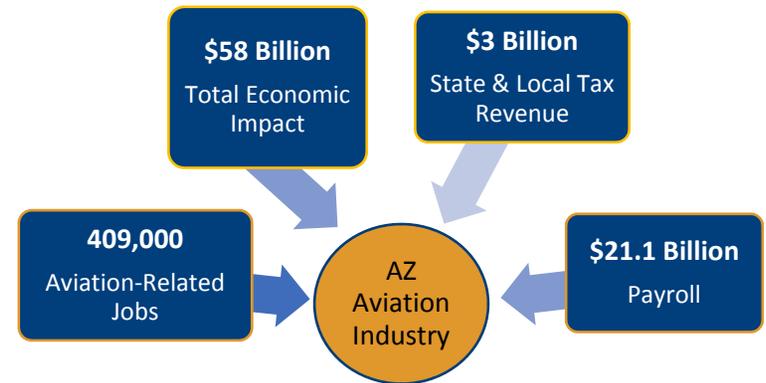
Arizona's airports are economic hubs with more than 43 million people traveling to or through the state on an annual basis. Additionally, roughly 700 tons of cargo are moved annually from Arizona's airports. This results in staggering economic contributions to the state! Undeniably, the aviation industry is a vital and proven asset of our growing economy.

The Arizona State Aviation Fund was established in 1979 to provide funding for planning, design, development, acquisition of land, construction, and improvement of publicly owned and operated airport facilities in counties and incorporated cities and towns in the State of Arizona. The sources of revenue for this fund consist of the following: flight property tax; aircraft license (lieu) tax; aviation fuel tax; Grand Canyon Airport revenue; investment interest on the aviation fund balance; and miscellaneous revenue sources such as lieu tax penalties and interest on tax collections. These aviation sources were developed and dedicated to meet the state's aviation funding needs, creating a type of "user fund" where the users benefit from their contributions.

Unfortunately, since 1998, more than \$115M has been transferred from the State Aviation Fund to the State General Fund. The most recent transfer occurred in Fiscal Year 2016. These transfers have had significant impacts on Arizona's airports as most of them rely on the State Aviation Fund as a primary funding source to accomplish airport improvement projects. It is critically important that the State Aviation Fund be preserved for its intended purpose to ensure that airports can maintain their infrastructure in a safe and operable condition, and so that the aviation industry continues to be the largest economic contributor in the state.

The intent of this book is to provide insight into significant airport improvement projects that were partially funded by grants that were made possible by the State Aviation Fund. Thank you for your commitment to our industry. Together we can continue to improve it!

Ed Faron, A.A.E.
Arizona Airports Association
Immediate Past President



Arizona's Airport System

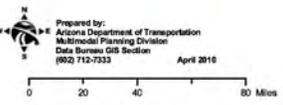
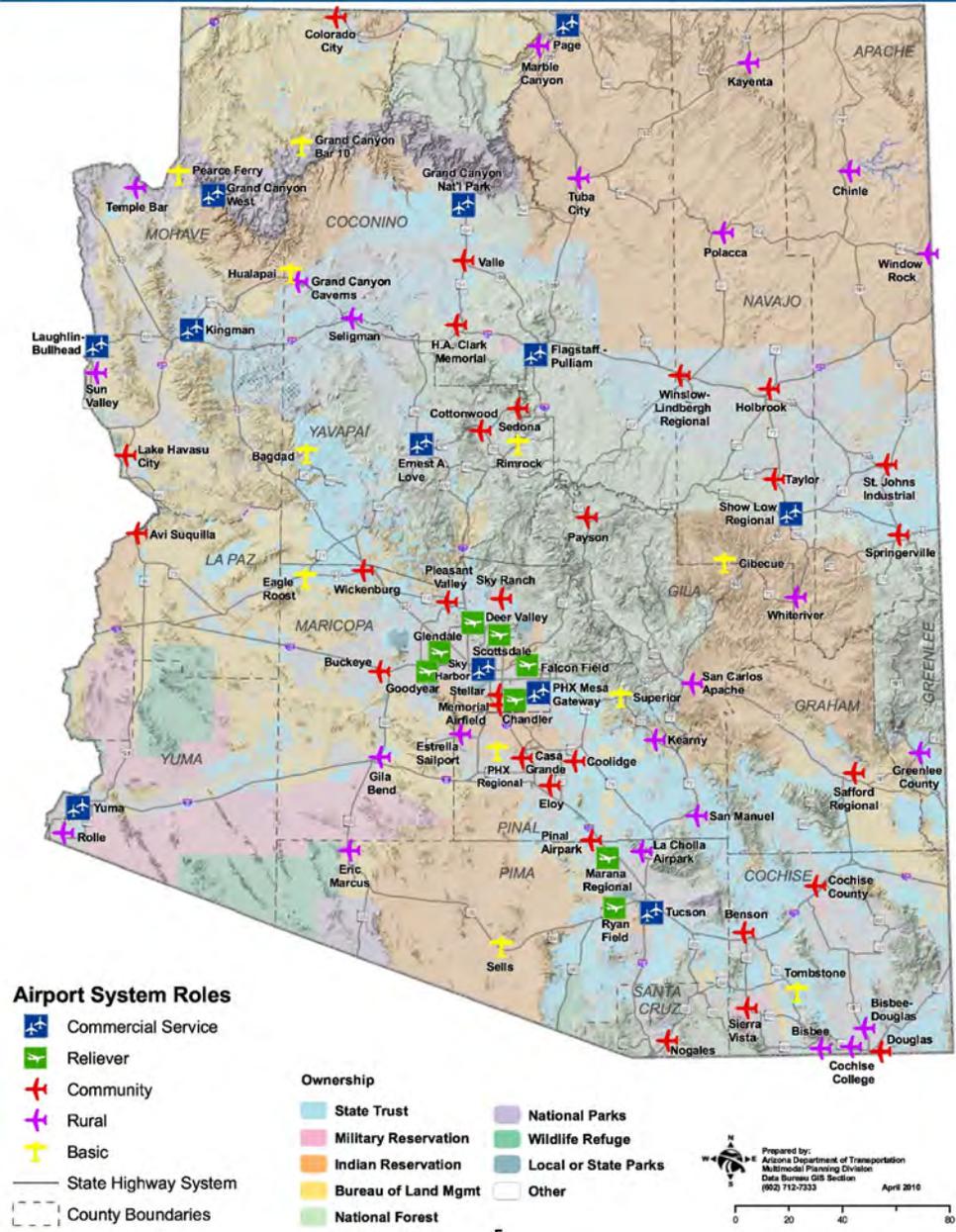


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Chandler Municipal Airport (CHD)

City of Chandler

District 17



Airport Storm Drainage & Grading Improvements

Dibble Engineering (Consultant)

Blucor Contracting (Contractor)

\$2,047,000 (Total Cost)

\$1,842,300 (State)

\$204,700 (Local)

Project Description:

This project improved the infield areas of the Chandler Municipal Airport to remove standing water from areas adjacent to the two runways and multiple taxiway surfaces. Work included regrading the infields between the pavement and constructing new drainage pipes under select taxiways. This project connects to an existing low-flow channel that removes storm water to an off-airport, regional retention basin. The project benefits include an increased level of safety by eliminating a water source for birds and prey species.

Chandler Municipal Airport (CHD)

City of Chandler

District 17



Runway Safety Area Drainage Improvements

Dibble Engineering (Consultant)

Talis Construction (Contractor)

\$1,386,375 Total Cost

\$1,262,433 (Federal)

\$ 67,971 (State)

\$ 67,971 (Local)

Project Description:

This project improved the southwestern portion of the Chandler Municipal Airport to remove standing storm water at the threshold and in the approach area of Runway 4L. For years, storm water was retained on the airport, and this retention was a significant concern due to the potential for aircraft bird-strikes. After larger storm events, storm water stored at the end of the runway would remain for days or even weeks, and became a reliable water source for birds. The City and design team worked diligently through a comprehensive environmental clearance process, expedited the design process, and safely constructed a system that now provides reliable positive drainage under a major arterial roadway and into a major regional retention basin. The safety of the flying public at CHD is significantly increased because of this project.

Chandler Municipal Airport (CHD)

City of Chandler

District 17



Runway/Taxiway Erosion Control Improvements

Dibble Engineering (Consultant)

SDB, Inc. (Contractor)

\$1,386,375 (Total Cost)

\$1,262,433 (State)

\$67,971 (Local)

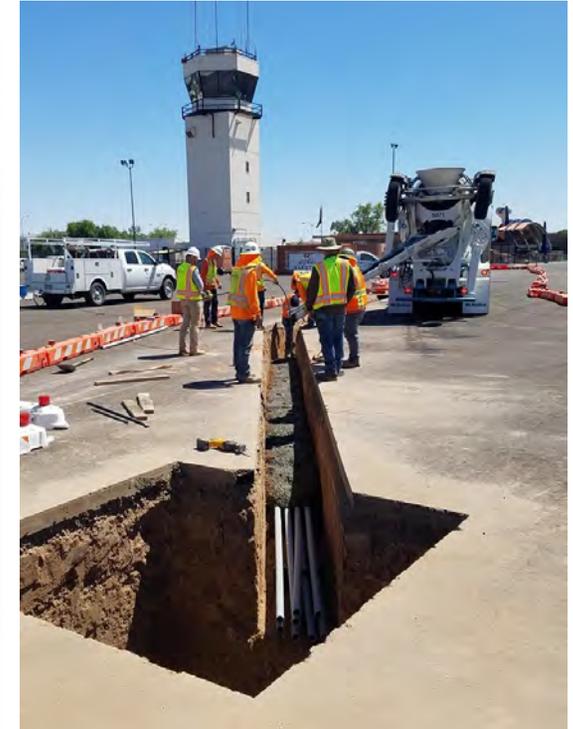
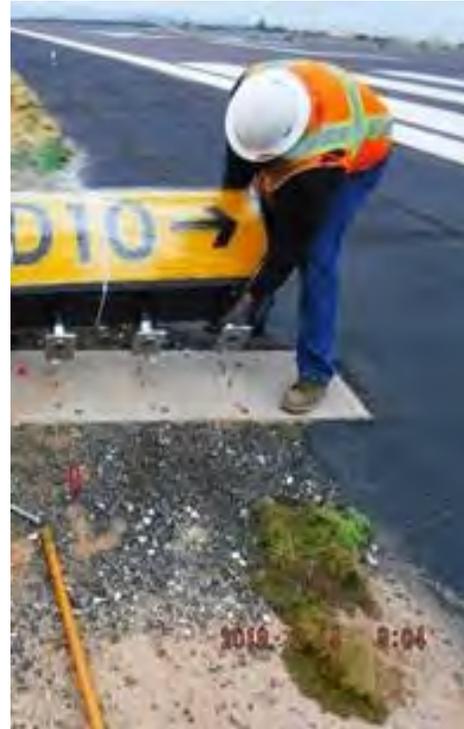
Project Description:

This project primarily included the application of an acrylic polymer material along the runway and taxiway shoulders in order to stabilize and protect the soils from rutting and cutting due to drainage runoff. Also, some drainage improvements included regrading safety areas and installing new storm drain pipes. Prior to this project, airport staff were regularly repairing the shoulders along the airport pavements in order to maintain the required smoothness and slopes per FAA safety area standards, thereby taking their attention away from other critical operations at CHD. Now, with stabilized shoulders, CHD staff can focus on other important aspects of the airfield.

Falcon Field Airport (FFZ)

City of Mesa

District 25



Airfield Lighting/Signage Upgrade

Rural Electric (Consultant)

Rural Electric (Contractor)

\$1.8 million (Total Cost)

\$1,017,235 (Federal)

\$49,934 (State)

\$49,934 (Local)

Project Description:

The Federal Aviation Administration (FAA) and the Arizona Department of Transportation (ADOT) awarded Falcon Field Airport nearly \$2 million in grant funding for upgrades to airfield lighting and signage. The former lighting and wiring were more than 30 years old. Improvements included LED upgrades to the edge lighting on both runways, taxiway edge lights, and all guidance signs. These improvements required runway and taxiway closures. Project construction began in January 2018 and was completed July 2018.

Glendale Municipal Airport (GEU)

City of Glendale

District 29



Apron Rehabilitation and Lighting Improvements

C&S Engineers, Inc. (Consultant)

Combs Construction Company, Inc. (Contractor)

\$2,522,410 (Total Cost)

\$2,296,906 (Federal)

\$112,752 (State)

\$112,752 (Local)

Project Description:

The purpose of the project was to rehabilitate approximately 59,000 square yards of aircraft parking apron and associated taxi lanes in the center ramp area immediately adjacent to the terminal building. The project included cold milling of the existing apron area, removal of the existing aircraft tie-down anchors, and asphalt pavement reconstruction using FAA P-401 AC Pavement, FAA P-209 base course, and prepared subgrade. Also included was the pouring of new concrete aircraft tie-down anchors, installation of new tie-down anchor chain assemblies, FAA compliant pavement markings, and the reconfiguration of the existing apron lighting system.

Greenlee County Airport (CFT)

County of Greenlee, Arizona

District 14



Environmental Study (EA/CATEX)

C & S / Coffman Associates (Consultant)

\$175,968 (Total Cost)

\$160,236 (Federal)

\$7,866 (State)

\$7,866 (Local)

Project Description:

This project consisted of an Environmental Assessment/CATEX for Land Acquisition/Avigation Easement, Airport Entrance Road Relocation, and approval of an Obstruction Removal project which removes and relocates a power line on the airport. The obstruction removal project is currently under construction with an ADOT/local grant and the County has an application for Right-of Way pending with the Arizona State Lands Department. Future Drainage improvements are also part of the approved improvements.

Greenlee County Airport (CFT)

County of Greenlee

District 14



Runway & Exit TW Preservation

Kimley-Horn (ADOT Aeronautics Consultant)

Cactus Transport, Inc. (Contractor)

\$595,326 (Total Cost)

\$535,793 (State)

\$59,533 (Local)

Project Description:

This project was part of the 2014 ADOT Airport Pavement Management System (APMS) and consisted of crack sealing, a 1" asphalt overlay and slurry seal on Runway 7-25 and the exit taxiways. Slurry Seal subcontractor was Southwest Slurry Seal, Inc. In the 2017 PCI Survey the Runway and Exit Taxiways PCI's varied from 68 to 75. The 2017 PCI Report's pavement repair program with an ADOT unlimited budget scenario calls for the Runway and Exit Taxiways to receive a 1-inch mill and 1-inch AC Overlay and the easterly segment of Taxiway A an 1-inch AC Overlay in 2019. None of these repairs are in the current ADOT budget; the repairs are being deferred and it is unknown when they will be scheduled.

Greenlee County Airport (CFT)

County of Greenlee

District 14



Drainage & Erosion Control

C&S Engineers, Inc. (Consultant)

Greenlee County Public Works (Contractor)

\$494,180 (Total Cost)

\$450,000 (Federal)

\$22,090 (State)

\$22,090 (Local)

Project Description:

This project consisted of drainage and erosion control improvements including 13-feet of runway shoulder edge treatment with pipe underdrains from the runway pavement, construction of sediment barriers in infield areas, miscellaneous storm drain improvements, and improvements to the storm water detention basin next to Runway 7. Areas adjacent to useable pavement were graded to comply with current FAA standards. The Greenlee County Public Works Department constructed the entire project on a force account basis. The County's workforce was flexible enough to accommodate expected aircraft traffic. This flexibility would not have been available if a contractor performed the work. However, additional time was required to complete project due to the accommodation of expected aircraft traffic.

HA Clark Memorial Field Airport (CMR)

City of Williams

District 6



Runway 18-36 Rehabilitation

Kimley-Horn & Assoc. / CEI (Consultant)

Combs Construction Co., Inc. (Contractor)

\$778,270 (Total Cost)

\$700,443 (State)

\$77,827 (Local)

Project Description:

This Airport Pavement Management System (APMS) project consisted of milling and overlaying asphalt on HA Clark Memorial Field Airport's Runway 18-36, to rehabilitate existing pavements and pavement markings that were identified during a recent pavement management program as being in need of repair. The 60-day project work included application of an herbicide, milling 1-inch of existing asphalt, crack seal, crack repair, asphalt overlay, and new pavement markings.

Lake Havasu City Municipal Airport (HII)

Lake Havasu City

District 5



Electrical Vault Building and Back-Up Generator Update

C&S Engineers, Inc. (Consultant)

Scenic Electric, LLC (Contractor)

\$440,797 (Total Cost)

\$400,024 (Federal)

\$19,637 (State)

\$21,137 (Local)

Project Description:

This project included replacing the existing vault building which was sub-standard and did not meet electrical codes with a new pre-cast electrical vault building. Also included in the project was the excavation and construction of forms, placement of steel and pouring concrete for the foundation of the precast electrical equipment shelter, new airfield regulators, a new pilot control system, new vault circuitry, a new primary service connection, and an emergency back-up generator.

Laughlin/Bullhead International Airport (IFP)

Mohave County Airport Authority
District 2



Runway 16-34 & Taxiway "A" Extension

Stantec Consulting Services Inc. (Consultant)

FNF Construction, Inc. – Phase 1(Contractor)

McCormick Construction Company – Phase 2 (Contractor)

\$16.659 Million (Total Cost)

\$15,378,476 (Federal)

\$640,262 (State)

\$640,262 (Local)

Project Description:

The phased project consisted of construction of a 1,000-foot extension of Runway 16-34 and Parallel Taxiway A. Phase 1 construction included site preparation, grading, and drainage improvement work. Phase 2 construction included construction of the extension of the runway and Taxiway A, new runway and taxiway LED edge lighting, signage and markings, construction of two connector taxiways, relocation/replacement of Runway 34 Runway End Identifier Lights (REIL), relocation of Runway 34 Precision Approach Path Indicators (PAPI), and a new airfield electrical vault. The project also required an AGIS survey for development of a revised Instrument Approach Procedure and associated commissioning flight checks.

Marana Regional Airport (AVQ)

Town of Marana

District 11



Airfield Guidance Sign/Taxiway Lights, and REIL Upgrades

DOWL

Pavex Corporation

\$460,000 (Total Cost)

\$414,000 (State)

\$46,000 (Local)

Project Description:

This project included the design and replacement of 72 taxiway and runway incandescent guidance signs with LED signs, the replacement of 40 incandescent in ground taxiway lights with LED lights, and the replacement of two pairs of incandescent REILs with LED models.

Marana Regional Airport (AVQ)

Town of Marana

District 11



APMS Runways/Taxiway Surface Treatment

Kimley-Horn and Associates, Inc. (Consultant)

Cactus Asphalt (Contractor)

\$1,536,361 (Total Cost)

\$1,382,725 (State)

\$153,636 (Local)

Project Description (2016):

The project included the surface treatment of Runways 12-30, 3-21, and Taxiway B.

Marana Regional Airport (AVQ)

Town of Marana

District 11



Master Plan Update, New Strategic Business Plan

Armstrong Consultants

Genesis Consulting Group

\$515,000 (Total Cost)

\$463,500 (State)

\$51,500 (Local)

Project Description (2017):

The project included an updated 2007 Airport Master Plan, created a new Airport Strategic Business Plan, and conducted AGIS survey.



Marana Regional Airport (AVQ)

Town of Marana

District 11



Ramp/Taxiway Reconstruction Design

DOWL

\$424,000 (Total Cost)

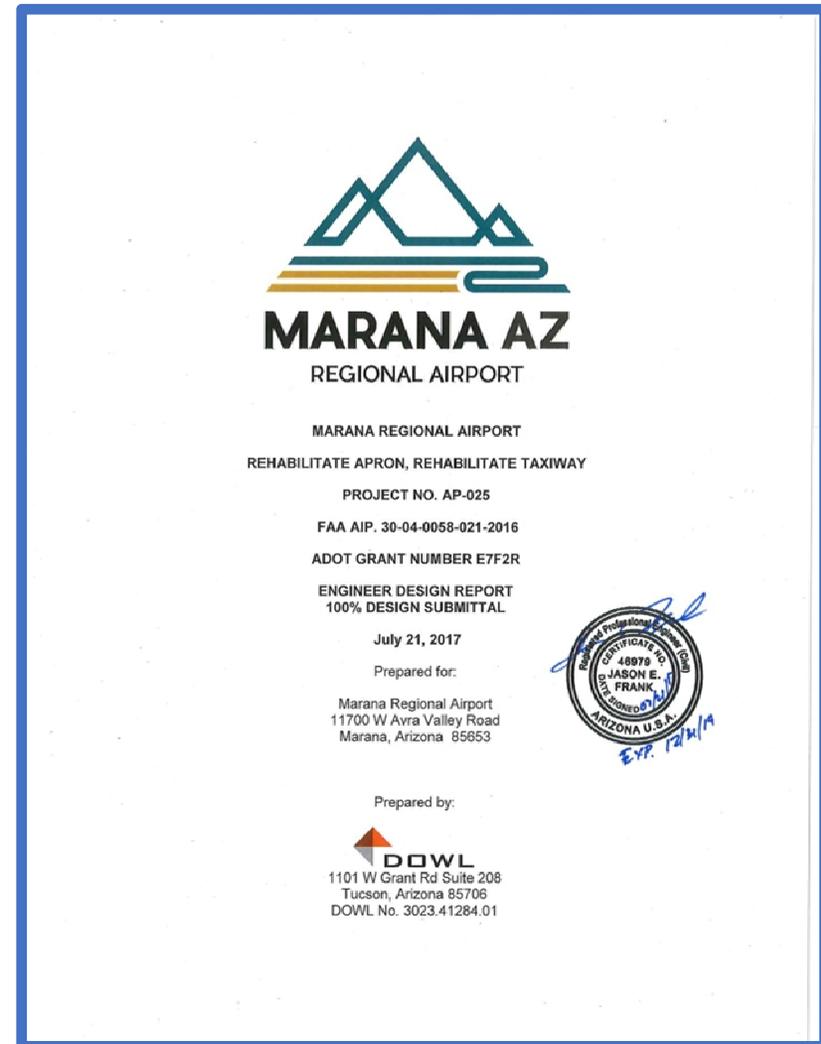
\$368,000 (FAA)

\$18,000 (State)

\$38,000 (Local)

Project Description (2017):

The project included the design for reconstruction of 1.6 million square feet of ramp and taxiway pavement.



Nogales International Airport (OLS)

County of Santa Cruz

District 2



Apron Reconstruction Phase 1 & 2

C&S Engineers, Inc. (Consultant)

Pavex Corp., Inc. (Contractor)

\$1,838,154 (Total Cost)

\$1,673,823 (Federal)

\$75,083 (State)

\$89,248 (Local)

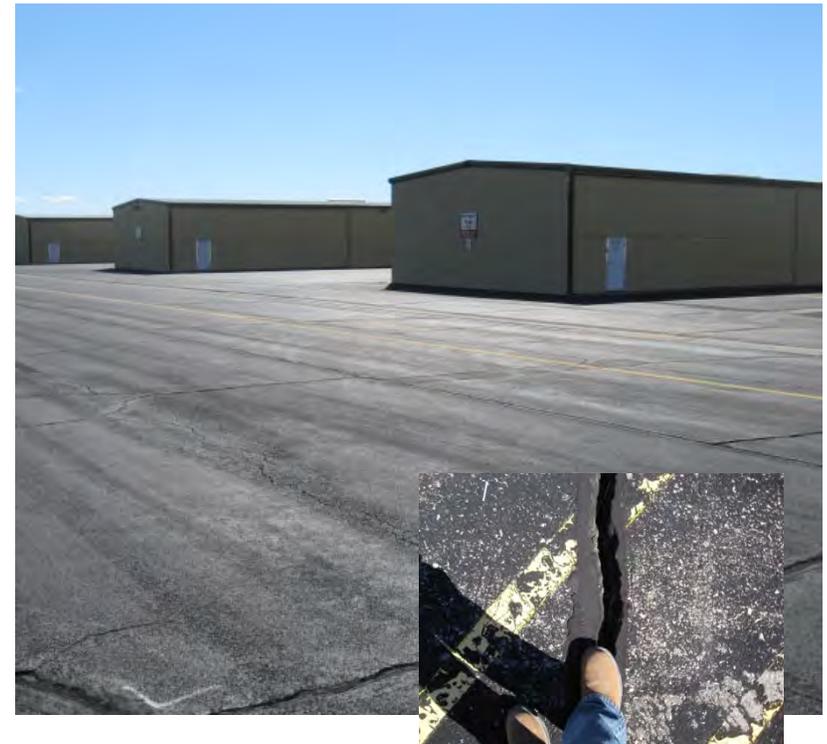
Project Description:

The project consisted of removing approximately 22,000 square yards of the existing asphalt concrete apron pavement structural section and replacing it with a new pavement section consisting of P-209 aggregate base course and P-501 Portland cement concrete pavement (PCCP). New pavement markings were applied and new tie-down anchors were installed.

Phoenix Deer Valley Airport (DVT)

City of Phoenix

District 15



North Ramp Reconstruction

C&S Engineers, Inc. (Consultant)

J. Banicki Construction, Inc. (Plan Set A Contractor)

Combs Construction Company, Inc. (Plan Set B Contractor)

\$10,148,400 (Total Cost)

\$9,241,133 (Federal)

\$453,633 (State)

\$453,634 (Local)

Project Description:

Reconstruction of the pavement for Deer Valley Airport's North Ramp hangar area was to correct significant cracking and age-related deterioration of the existing asphalt pavement structural section. The project included the removal and reconstruction of 251,500 square yards (52 acres) of the existing pavement structural section. An extensive phasing plan was developed to minimize disruption to airport users and the 468 hangar tenants in the area. The project was divided into two plan sets with each covering about half the project area. The construction of the first plan set was completed in July 2016, ahead of schedule and well under budget. The second was completed in 2017 also ahead of schedule and under budget.

Phoenix Goodyear Airport (GYR)

City of Phoenix

District 4



South T-Hangar Reconstruction & New Connector Taxiway Project

C&S Engineers, Inc. (Consultant)

Combs Construction Company, Inc. (Contractor)

\$2,501,269 (Total Cost)

\$2,277,655 (Federal)

\$111,807 (State)

\$111,807 (Local)

Project Description:

The purpose of this project was to reconstruct the pavement of approximately 40,000 square yards of the South T-Hangars Apron due to significant cracking and deterioration of the existing asphalt pavement structural section. This project also included the demolition of the existing connector taxiway between the South T-Hangar Apron and Taxiway A to eliminate the direct access from the apron to the runway. A new connector taxiway was constructed with a revised alignment to eliminate the direct access and bring it into compliance with the newly published FAA guidelines.

Phoenix Goodyear Airport (GYR)

City of Phoenix

District 4



RW 3 Before

RW 3 After

RW 21 Before

RW 21 After



Runway Shift

Morrison-Maierle, Inc. (Consultant)

CSW (Contractor)

\$4,538,155 (Total Cost)

\$4,084,340 (State)

\$453,815 (Local)

Project Description:

The Runway 3-21 shift project, funded by multiple ADOT grants, involved a 300-foot concrete extension south of Runway 3 and the relocation of the Runway 21 threshold 1,800 feet north. The relocation of the Runway threshold placed it 300 feet south of its original Naval Air Station location. This project improved safety at the airport by removing all declared distances, resulting in a total runway length of 8,500 feet available for landings and takeoffs in each direction. Along with the 300-foot shift, this project included the construction of a new Runway 3 blast pad, new PCCP Connector Taxiways A1 and A10, new 4-Box LED PAPIs, relocation and installation of new LED runway lights, new LED REILS, new LED signs, and new LED taxiway lights for Taxiways A1 and A10.

Phoenix Goodyear Airport (GYR)

City of Phoenix

District 4



Runway Rehabilitation

Morrison-Maierle, Inc. (Consultant)

CSW (Contractor)

\$3,117,625 (Total Cost)

\$2,838,909 (Federal)

\$139,358 (State)

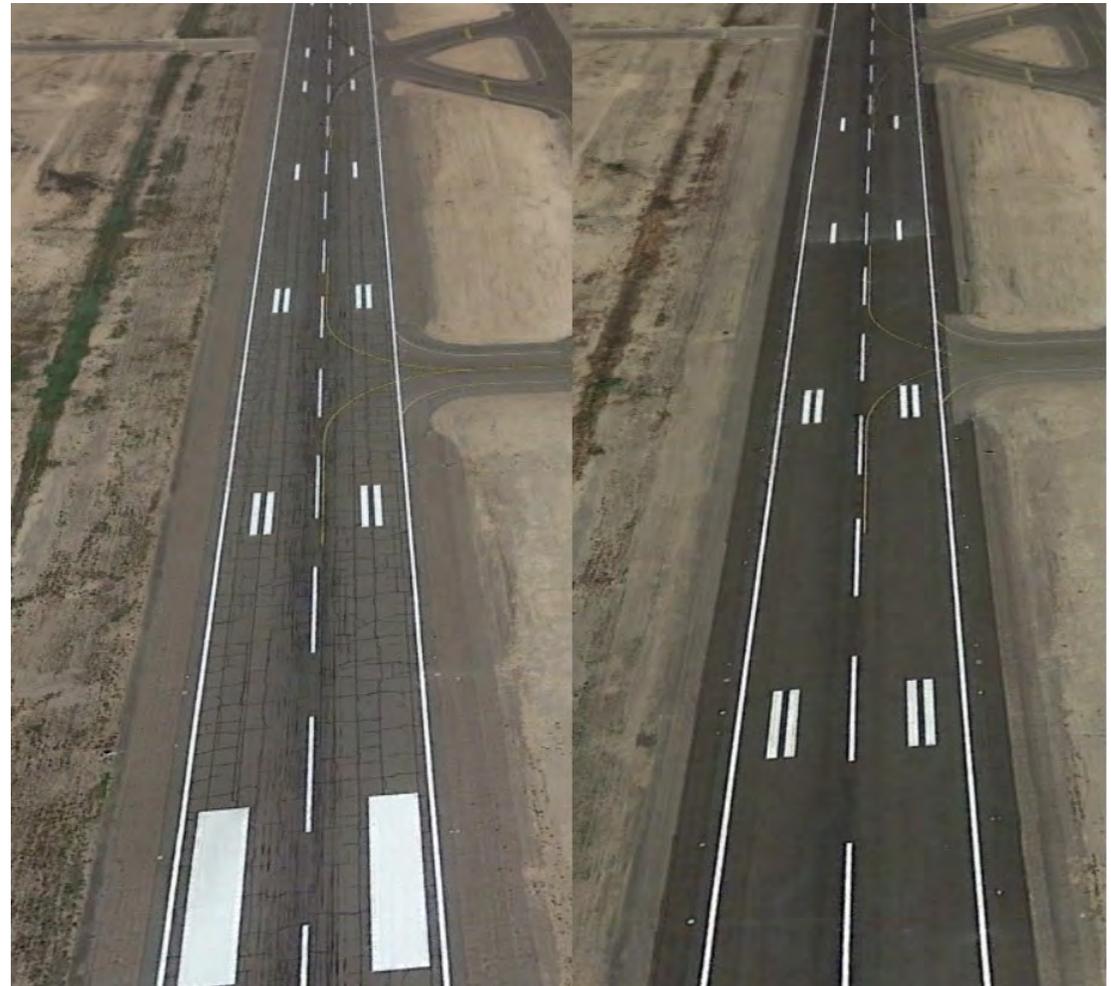
\$139,358 (Local)

Project Description:

The Runway 3-21 Rehabilitation project, funded by a FAA Grant, involved the rehabilitation of approximately 7,500 feet of 150-foot wide runway (125,000 SY) of asphalt concrete and included the rehabilitation of approximately 18,000 SY of shoulder pavement. The asphalt pavement, was rehabilitated by milling 3 inches of the existing Porous Friction Course and replacing it with a 3-inch mat of P-401 Dense Graded asphalt. Outside of the paved shoulders and runway light line was approximately 40 feet of deteriorated asphalt concrete pavement the entire length of the runway. During the project, the interior 15 feet of the deteriorated pavement was overlaid with 2 inches of asphalt concrete to provide a 25-foot wide shoulder in accordance with FAA design standards.

Before

After



Phoenix-Mesa Gateway Airport (IWA)

Phoenix Mesa Gateway Airport Authority
District 16



General Aviation Apron Expansion

Dibble Engineering (Consultant)

Nesbitt Contracting (General Contractor)

\$947,536 (Total Cost)

\$829,234 (State)

\$118,302 (Local)

Project Description:

This project included the design and construction of an additional 4,000 SY of general aviation aircraft parking adjacent to the FBO. Work included the removal of existing landscaping, relocation of FBO sign, subgrade preparation, and placement of aggregate base material and Portland Cement Concrete Pavement.

Phoenix-Mesa Gateway Airport (IWA)

Phoenix Mesa Gateway Airport Authority

District 16



Runway 30L Threshold Reconstruction

Kimley-Horn & Associates (Consultant)

Parsons-Brinkerhoff (Construction Administration)

Banicki Construction (General Contractor)

\$6,376,697 (Total Cost)

\$5,804,026 (Federal)

\$284,911 (State)

\$287,759 (Local)

Project Description:

This project included the design and reconstruction of the first 3,000 feet of Runway 30L due to failing pavement that was constructed in 1958. The project was funded by FY 13 FAA grant with ADOT and PMGAA matching funds for the reconstruction work including demolition of existing concrete and asphalt shoulder areas, reconstruction of subgrade, cement treated base, and new concrete.

Phoenix-Mesa Gateway Airport (IWA)

Phoenix Mesa Gateway Airport Authority
District 16



Taxiway V Reconstruction

Kimley-Horn & Associates (Consultant)

Parsons-Brinkerhoff (Construction Administration)

FNF Construction (General Contractor)

\$3,423,618 (Total Cost)

\$3,117,546 (Federal)

\$153,036 (State)

\$153,036 (Local)

Project Description:

This project included the design and reconstruction of approximately 13,000 square yards of Taxiway V due to low Pavement Condition Index values and failing pavement. The project included demolition of multiple layers of concrete, constructing new concrete with new edge lighting and shoulders, and improvements to area drainage



Phoenix-Mesa Gateway Airport (IWA)

Phoenix Mesa Gateway Airport Authority

District 16



Runway 12R Threshold & Taxiway G Reconstruction

Dibble Engineering (Consultant)

Parsons-Brinkerhoff (Construction Administration)

CSW Contractors (General Contractor)

\$3,787,875 (Total Cost)

\$3,449,239 (Federal)

\$169,318 (State)

\$169,318 (Local)

Project Description:

This project included the design and reconstruction of the first 1,000 feet of Runway 12R and the Taxiway G Hammerhead intersection. The project replaces failing pavement on Runway 12R and brings the Taxiway G entrance to the runway into compliance with FAA design standards. Work included the demolition of existing concrete, reconstruction of subgrade, cement treated base, lighting, and asphalt shoulder areas.

Phoenix Sky Harbor International Airport (PHX)

City of Phoenix

District 27



Utility Vaults & Infield Upgrade and Paving

Trace Consulting (Consultant)

Kiewit (Contractor)

\$7,400,000 (Total Cost)

\$6,275,000 (State)

\$1,125,000 (Local)

Project Description:

The Utility Vault and Infield Upgrade and Paving project involves upgrading utility manholes across Phoenix Sky Harbor's airfield by raising the vaults and then grading and paving the immediate area around them to improve drainage. With the new elevations and corrected drainage, water runoff is diverted around the utility structures to minimize, if not completely eliminate, water intrusion within each vault. The infields affected are adjacent to Taxiways A, E, and F. The total area affected is approximately 515,000 square yards. The construction around Taxiway A is complete. Future grants will be used to complete the infields adjacent to Taxiways E and F.

Phoenix Sky Harbor International Airport (PHX)

City of Phoenix
District 27



East Air Cargo Reconstruction

Dibble & Associates (Consultant)

J. Banicki construction, Inc.(Contractor)

\$5,685,000 (Total Cost)

\$4,030,000 (Federal)

\$665,000 (State)

\$990,000 (Local)

Project Description:

Reconstruction of PHX's East Air Cargo Apron corrected significant pavement distress and age-related deterioration of the existing asphalt pavement structural section. The project included the removal and reconstruction of 84,000 square yards of the existing pavement structural section. An extensive coordination and phasing plan was developed to minimize disruption to airlines, cargo operations, and the Federal Aviation Administration control tower. The construction of the apron was completed in July 2014, on schedule and well under budget.

Phoenix Sky Harbor International Airport (PHX)

City of Phoenix
District 27



West Hold Bay Reconstruction-Phase II

Trace Consulting (Consultant)

Kiewit (Contractor)

\$8,570,000 (Total Cost)

\$6,155,000 (Federal)

\$1,020,000 (State)

\$1,395,000 (Local)

Project Description:

Reconstruction of PHX's West Hold Bay-Phase II included replacement of existing distressed asphalt pavement with a stronger and thicker concrete structural section. The project included the removal and reconstruction of 46,000 square yards and a mill and overlay of an additional 21,000 square yards of the existing pavement. An extensive phasing plan was developed to minimize disruption to airlines and the Federal Aviation Administration control tower. The construction of the apron was completed in June 2014, on schedule and under budget.

Pinal Airpark(MZJ)

Pinal County

Legislative District 11



Runway 12-30 Rehabilitation

Dibble Engineering (Consultant)

Combs Construction (Contractor)

\$2,039,779 Total Cost

\$1,835,801 (State)

\$203,978 (Local)

Project Description:

This project included the rehabilitation of the single runway at Pinal Airpark. Runway 12-30 was severely deteriorated to the point that crack sealing and seal coating were no longer effective. Aggregate on the surface of the pavement was easily coming loose, and this was of significant concern for the County and the users of the airport due to the potential for the aggregate getting ingested into aircraft engines and causing major damage. Planes coming to Pinal Airpark would have to immediately shut off their engines upon landing and be tugged to their destinations in order to minimize the potential for damage. This project was completed in a 30-day period with one 3-day planned disruption in construction to allow for several critical scheduled aircraft landings and departures. Aircraft can now safely operate on Runway 12-30, and operational efficiency is increased because the need for tugging is greatly reduced. The County's liability is significantly reduced because of this project.

Prescott Regional Airport (PRC)

City of Prescott

District 1



Master Plan

Delta Airport Consultants, Inc. (Consultant)

\$ 921,000 (Total Cost)

\$874,950 (Federal)

\$23,025 (State)

\$23,025 (Local)

Project Description:

Delta is preparing a new Master Plan for the airport. The Master Plan includes updated forecasts for aircraft operations, based aircraft, and passenger enplanements. The forecast, as well as requirements to meet standards, were utilized to determine the facility requirements and alternatives were developed and evaluated. The major elements of the facility requirements focused on a new commercial terminal building, development to support the new building terminal, as well as an extension to the primary runway to accommodate newer commercial service aircraft. A new Airport Layout Plan (ALP) drawing set has been developed for FAA approval.

Prescott Regional Airport (PRC)

City of Prescott
District 1



Airfield Electrical Improvements

Dibble Engineering (Consultant)

Rural Electric, Inc. (Contractor)

\$2.9 Million (Total Cost)

\$2,755,000 (Federal)

\$72,500 (State)

\$72,500 (Local)

Project Description:

The project included upgrading the failing electrical infrastructure and equipment to increase operational safety at the airport. The existing electrical infrastructure was significantly undersized for the anticipated development at the airport. The project included relocating the electrical vault and installing a new emergency generator, Medium Intensity Taxiway Lighting (MITL) edge lights and lighted signs, segmented circle with a lighted windcone, and new Airport Lighting and Monitoring Control System (ALMCS). The new electrical vault is 1,400 square-feet and included an 80 square-foot control room with amenities that make Prescott Regional Airport a state-of-the-art facility.

Prescott Regional Airport (PRC)

City of Prescott

District 1



Runway 3R-21L Rehabilitation

Dibble Engineering (Consultant)

Fann Contracting, Inc. (Contractor)

\$5.9 Million (Total Cost)

\$5,605,000 (Federal)

\$147,500 (State)

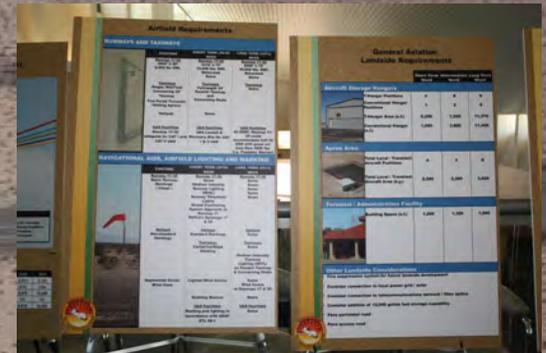
\$147,500 (Local)

Project Description:

The airport recently completed rehabilitation of the main runway which included a 3-inch mill and overlay to address surface cracking and aggregate raveling. In addition the project also included improvements to the first of several Runway Incurion Mitigation (RIM) projects on the airport. The RIM portion of the project included removing and realigning a connector taxiway that has direct access to the commercial service terminal apron. The Airport's staff, consultant, and contractor worked with stakeholders and tenants to develop a schedule to expedite work on the runway to have it reopened in time for new air service scheduled for August 29, 2018.

Rolle Airfield (44A)

Yuma County Airport Authority
District 4



Rolle Airfield Masterplan

Morrison-Maierle, Inc. (Engineer)

\$198,594 (Total Cost)

\$178,735 (State)

\$19,859 (Local)

Project Description:

The scope of services for the development of an Airfield Master Plan for Rolle Airfield was to address key issues, objects, and goals pertinent to the future development of Rolle Airfield.

A key objective of the Master Plan was to provide the community, public officials and the Yuma County Airport Authority with proper guidance for future development to satisfy regional general aviation demands, understand and incorporate potential use by Unmanned Aerial Systems and National Air Space operators, and to be wholly compatible with the environment.

San Carlos Apache Airport (P13)

San Carlos Apache Tribe

District 7



Runway 9-27 Rehabilitation

Kimley-Horn & Assoc. / CEI (Consultant)

Cactus Transport, Inc. (Contractor)

\$653,636 (Total Cost)

\$588,272 (State)

\$65,363 (Local)

Project Description:

This Airport Pavement Management System (APMS) project consisted of milling and overlaying asphalt on San Carlos Apache Airport's Runway 9-27, to rehabilitate existing pavements and pavement markings that were identified during a recent pavement management program as being in need of repair. The 45-day project work included application of an herbicide, milling 1-inch of existing asphalt, crack seal, crack repair, asphalt overlay, and new pavement markings.

Scottsdale Airport (SDL)

City of Scottsdale

District 23



Taxiway A Reconstruction and Rehabilitation

Mead & Hunt, Inc. (Consultant)

J Banicki Construction, Inc. (Contractor)

\$3,841,496 (Total Cost)

\$3,498,066 (Federal)

\$171,714 (State)

\$171,714 (Local)

Project Description:

The Taxiway A Reconstruction and Rehabilitation project consisted of more than 40,000-square yards of taxiway pavement reconstruction, 11,000-square yards of taxiway mill and overlay, and 25,000-square yards of asphalt surface treatment. Construction included new fillets on eight runway connector taxiways in order to meet current FAA design standards. Other project features included new pavement markings, drainage improvements, and replacement of Medium Intensity Taxiway Lighting (MITL) and signage with new LED fixtures and signs. This project was completed in five separate and distinct phases that were developed to keep the airport open and fully operational throughout the entire project.



Scottsdale Airport (SDL)

City of Scottsdale

District 23



Transient Apron Reconstruction

Mead & Hunt, Inc (Consultant)

Nesbitt Contracting Co., Inc. (Contractor)

\$1,086,468 (Total Cost)

\$989,337 (Federal)

\$48,565 (State)

\$48,565 (Local)

Project Description:

This project included the reconstruction of over 24,000 square yards of apron pavement. The original pavement was constructed in 1995 and had reached its original design life. The new pavement section consists of embankment using recycled base materials, cement treated subgrade with native soils, new crushed aggregate base course (P-209) and new hot mix asphalt surface course (P-401). Other project features included removal of aircraft tie down anchors, removal of concrete encased duct banks, removal of electrical handholes, relocation of fiber optic ductbank, and installation of new aircraft tie down anchors. The finished apron grade was raised to accommodate future executive box hangars designed to be above the 100-year floodplain.

Scottsdale Airport (SDL)

City of Scottsdale

District 23



Electrical Vault, Homerun, and Rotating Beacon Relocation

Mead & Hunt, Inc (Consultant)

Corbins Electric (Contractor)

\$644,137 (Total Cost)

\$586,551 (Federal)

\$28,792 (State)

\$28,792 (Local)

Project Description:

This project included the relocation of the existing Scottsdale Airport electrical vault building, electrical homerun, and rotating beacon. Project elements included pavement removal and excavation for a new electrical homerun and electrical vault building. Installations included new electrical conduit, a new APS secondary power service connection and new electrical power equipment in a new vault building. The project included construction of a new electrical vault building, relocation of electrical power equipment, and demolition of the existing electrical power vault building and airport beacon pole and foundation.



Sedona Airport (SEZ)

Yavapai County

District 6



Airport Pavement Management System (APMS)

Kimley-Horn & Assoc. / CEI (Consultant)

Cactus Transport, Inc (Contractor)

\$515,592 (Total Cost)

\$464,033 (State)

\$51,559 (Local)

Project Description:

This Airport Pavement Management System (APMS) project consisted of milling and overlaying asphalt on Sedona Airport's Runway 3-21, to rehabilitate existing pavements and pavement markings that were identified during a recent pavement management program as being in need of repair. The 45-day project work included application of an herbicide, milling 1-inch of existing asphalt, crack seal, crack repair, asphalt overlay, and new pavement markings.

Sierra Vista Municipal Airport / Libby Army Airfield (FHU)

City of Sierra Vista
District 14



Taxiways G & J Strengthening

C&S Engineers, Inc. (Consultant)

Granite Construction Company, Inc.

(Contractor)

\$1,601,577 (Total Cost)

\$1,458,396 (Federal)

\$71,590 (State)

\$71,590 (Local)

Project Description:

The project consisted of milling and removing the existing asphalt concrete pavement along Taxiways G and J from the terminal apron to the end of Runway 26. A new asphalt pavement structural section was placed, consisting of 4 inches of P-401 asphalt on 10.5 inches of P-209 base course. A geo-grid fabric was used between the base course and the subgrade to stabilize the section and allow the base course thickness to be reduced. The native subgrade material was cement treated in several areas to allow construction equipment to operate without causing subgrade failure. New pavement markings were then placed on the new pavement surface. The geometry of the taxiways was altered to include pavement tapers at the intersections of Taxiways J and K and Taxiways G and J. As a result of adding these pavement taper areas, edge lights and guidance signs were relocated.

Springerville Municipal Airport (JTC)

Town of Springerville

District 7



Terminal & Hangar Construction

C & S Engineers (Consultant)

Concord General Contracting (Contractor)

\$1,421,053 (Total Cost)

\$1,350,000 (Federal)

\$35,526 (State)

\$35,526 (Local)

Project Description:

This 2013 project included the removal of the old hangar/terminal building that was considered an obstruction within the Runway Visibility Zone (RVZ). A new terminal and hangar were built outside of the RVZ.

Taylor Municipal Airport (TYL)

Town of Taylor

District 6



Chain Link Security Fence and High Tensile Steel Wildlife Control Fence with Barbed Wire

Wildlife Control Fence

Morrison-Maierle, Inc. (Consultant)

Liberty Fence & Supply LLC (Contractor)

\$435,330 (Total Cost)

\$396,410 (Federal)

\$19,460 (State)

\$19,460 (Local)

Project Description:

The project fenced the perimeter of the Taylor Municipal Airport. Chain link security fence was installed in areas of the perimeter that are adjacent to public right of way and subdivided residential property. High tensile steel fabric animal control fencing was installed around the remainder of the airport property that is adjacent to grazing land.

Taylor Municipal Airport (TYL)

Town of Taylor
District 6



Apron & Taxiway Preservation

C&S Engineers (ADOT Aeronautics Consultant)

Combs Construction Co., Inc. (Contractor)

\$245,976 (Total Cost)

\$221,378 (State)

\$24,598 (Local)

Project Description:

This project was part of the 2012 ADOT Airport Pavement Management System (APMS) and consisted of a Thin Asphalt Overlay/PFC on the general aviation apron and northeasterly segment of Taxiway A. In the 2013 Pavement Condition Index (PCI) survey both pavement sections had a PCI of 100. In the 2017 PCI Survey the Apron's PCI was 91 and the Taxiway's 88. The 2017 PCI Report's pavement repair program with an ADOT unlimited budget scenario calls for the runway and apron to receive a P-608 Emulsified Asphalt Seal and the Southwesterly segment of Taxiway A and two T-Hangar taxiways a 1-inch AC Overlay in 2019. Only the Runway seal is currently budgeted, the remaining repairs are being deferred and it is unknown when they will be scheduled.

Taylor Municipal Airport (TYL)

Town of Taylor

District 6



PAPI and REIL Replacement

Morrison-Maierle, Inc. (Consultant)

Pavex Corp (Contractor)

\$367,450 (Total Cost)

\$334,598 (Federal)

\$16,426 (State)

\$16,426 (Local)

Project Description:

This project consisted of replacing 25-year old 2-box Precision Approach Path Indicators (PAPI-2) and Runway End Identifier Lights (REILS) as well as the existing windcone, segmented circle, and power supply to the Automated Weather Observation System (AWOS). The FAA conducted flight tests and commissioned the PAPIs and REILS in January 2018.

Tuba City Airport (T03)

Navajo Nation

District 1



Rehabilitate Runway 15-33

Kimley-Horn & Assoc. / CEI (Consultant)

Cactus Transport, Inc. (Contractor)

\$253,298 (Total Cost)

\$227,968 (State)

\$25,329 (Local)

Project Description:

This project consisted of milling and overlaying asphalt on Tuba City Airport's Runway 15-33, to rehabilitate existing pavements and pavement markings that were identified during a recent pavement management program as being in need of repair. The 45-day project work included application of an herbicide, milling of existing asphalt, crack seal, crack repair, asphalt overlay, and new pavement markings.

Tuba City Airport (T03)

Navajo Nation

District 1



Runway Reconstruction

Armstrong Consultants, Inc. (Consultant)

Show Low Construction, Inc. (Contractor)

\$2,200,000 (Total Cost)

\$1,980,000 (State)

\$220,000 (Local)

Project Description:

This project involved the reconstruction of 1,550 feet of Runway 15-33. In order to reduce waste, existing pavement materials were recycled in the pavement section and surfaced with new asphalt. 1,500 feet of the reconstruction included a two foot deep undercut to remove clay material and improve stability of the pavement. Edge drains and a water barrier were installed to move the water from the pavement area, improving longevity and performance of the pavement. Future projects will provide continued improvement for the runway environment.

Wickenburg Municipal Airport (E25)

Town of Wickenburg

District 13



Mid-Field Apron and Access Road Construction

C&S Engineers, Inc. (Consultant)

Gray Mountain Construction, LLC (Contractor)

\$2,070,965 (Total Cost)

\$1,885,820 (Federal)

\$92,572 (State)

\$92,572 (Local)

Project Description:

The project consisted of large scale earth moving from an onsite borrow pit to the location of interest to bring the apron, access road, and future building pad subgrades up to their final elevations. Placement of underground utilities including sewer lines, water lines, and electrical conduits, along with all of the necessary components of each such as air release valves, manholes, fire hydrants, and junction boxes. A 4-inch thick P-401 asphalt apron was partially constructed as part of the Base Bid and Bid Alt 1. On-site drainage was improved with new HDPE storm drain systems, placement of rip-rap erosion protection, and a shotcrete channel, along with engineered grading to direct run-off to rip-rap areas at an acceptable velocity. Taxiway and apron lighting and signage was installed and tied into the existing system. An access road was properly graded and had base course placed to reduce future erosion and prepare the road for asphalt. Hydro seeding along engineered embankments and other disturbed locations took place at the end of construction to help with erosion and dust control, as well as to improve the aesthetics of the finished project site.

Window Rock Airport (RQE)

Navajo Nation
District 1



Electrical Improvements

Armstrong Consultants, Inc. (Consultant)

Rural Electric, Inc. (Contractor)

\$1,602,371 (Total Cost)

\$1,459,119 (Federal)(Design & Const.)

\$56,899 (State)(Const. Only)

\$86,353 (Local)

Project Description:

This project includes replacement of the runway lighting, signage, windcone with segmented circle, beacon, runway end identifier lights (REILs), and precision approach path indicators (PAPIs) as well as a new vault for the power supply systems. Reconstruction includes the replacement of aged equipment with up-to-date lighting systems. The PAPI system will be a two box system providing a visual approach aid for safe operations. The beacon tower will be a tip-down style tower so that the beacon can be maintained without climbing a tower which helps to add a level of safety and increases productivity during required maintenance.

The airport will have an entirely new airfield lighting system upon completion of the project.

Window Rock Airport (RQE)

Navajo Nation

District 1



Runway Reconstruction

Armstrong Consultants, Inc. (Consultant)

FNF Construction, Inc. (Contractor)

\$2,790,337 (Total Cost)

\$2,540,881 (Federal)(Design & Const.)

\$105,093 (State)(Const. Only)

\$144,363 (Local)

Project Description:

Runway 2-20 was exhibiting severe signs of deterioration and in need of reconstruction. This project reconstructs 2,650 feet of the runway in asphalt. While the design revised the runway grades to maintain compliance, reconstruction was limited to the runway area to reduce cost. The airport is looking forward to finalizing construction on the runway. Runway 2-20 will be re-designated as Runway 3-21 as part of this project.

Winslow Lindbergh Regional Airport (INW)

City of Winslow

District 7



Runway 4-22 Rehabilitation

C&S Engineers, Inc. (Consultant)

Pavex Corp. (Contractor)

\$5,014,518 (Total Cost)

\$4,390,896 (Federal)

\$212,018 (State)

\$411,604 (Local)

Project Description:

The purpose of this project was to re-construct the center 100-feet of Runway 4-22 and perform pavement preservation on the outer 25 feet of each side of the runway. This project began with the milling and removal of the existing runway's pavement structural section. The existing subgrade material received a cement treatment to remediate the existing unstable saturated soils. Trench drains were installed at 500-foot intervals on each side of the runway to assist in removing infiltrated water below the pavement surface. The removed millings were processed and placed in a 6-inch recycled subbase lift, followed by a 6-inch lift of crushed aggregate base course and 4-inches of new P-401 asphalt. The outer 25-foot edges of the runway were crack filled and seal coated and new pavement markings were placed on the entire runway.

Yuma International Airport (NYL)

Yuma County Airport Authority
District 13



BEFORE



AFTER



Taxiway H1 Rehabilitation

CEI Consultant Engineering, Inc. (Engineer)

DPE Construction (Contractor)

\$5,051,303 (Total Cost)

\$4,469,265 (Federal)

\$219,389 (State)

\$362,649 (Local - PFC)

Project Description:

The scope of services for this project included rehabilitation of 40,000 SY of concrete taxiway and 15,000 SY of asphalt taxiway shoulders, surrounding ramp areas, taxi-lane approaches, access road approaches, pavement markings, taxiway lighting, signage, and drainage system. The project also included upgrades necessary to the lighting vault, management of storm water, and coordination with MCAS Installation and Logistics Department.

Successful completion of the project provides for increased safety through installation of new taxiway lighting to the southwest portion of the property, for future aviation/aerospace support.

Yuma International Airport (NYL)

Yuma County Airport Authority
District 13



BEFORE



AFTER



DCC Apron Blast Shield Rehab

Huitt Zollars (Engineer)

DPE Construction (Contractor)

\$2,363,560 (Total Cost)

\$2,109,907 (State)

\$253,653 (Local - PFC)

Project Description:

The scope of services for this project included rehabilitation and replacement of asphalt and concrete aircraft parking apron, surrounding ramp area, taxi-lane approaches, access road approaches, pavement markings, lighting, signage, and drainage system. The project also included upgrades necessary to the lighting vault, management of storm water and coordination with MCAS Installation and Logistics Department.

Successful completion of the project provides additional aircraft parking necessary for future aviation/aerospace support.

Yuma International Airport (NYL)

Yuma County Airport Authority
District 13



BEFORE



AFTER



DCC Apron Expansion

Nicklaus Engineering, Inc. (Engineer)

Zeller's Excavating & Paving, Inc. (Contractor)

\$3,968,920 (Total Cost)

\$3,614,098 (Federal)

\$177,411 (State)

\$177,411 (Local)

Project Description:

The project site was previously native desert with sparse desert vegetation. The physical objectives for this project included construction of a new 35,500 SY Portland Cement Concrete aircraft parking apron to the west of, and adjacent to, Taxiway H1, resizing of the existing retention basin to facilitate storage of increased storm water flowage.

Successful completion of the project provides additional aircraft parking necessary for future aviation/aerospace support.

