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AIRPORT MASTER PLAN EXECUTIVE SUMMARY

BISBEE DOUGLAS INTERNATIONAL AIRPORT

DOUGLAS, ARIZONA | MAY 2015

ARMSTRONG

Bisbee Douglas International Airport (the Airport) is a general aviation airport located in southeastern Arizona, approximately ten miles north of Douglas, Arizona and 24 miles east of Bisbee, Arizona in Cochise County. The Airport was initially constructed during 1941-1943 by the United States Army Corps of Engineers (through the War Department) as the Douglas Army Airfield, to become a major bomber training facility.

On May 13, 1949, the U.S. government, acting through the War Assets Administration deeded the Douglas Army Airfield to Cochise County. The airfield was named Bisbee Douglas International Airport. The existing airport property encompasses approximately 3,000 acres which is owned and operated by Cochise County. The operation and maintenance of the airport is the responsibility of the County's Facilities Management Department. The County Board of Supervisors is responsible for the administrative and financial oversight of the airport.

The Airport is located adjacent to Highway 191, which if taken north will connect to Interstate 10 (I-10). The Airport is also within close proximity to Arizona Highways 80 and 92; Highway 80 can be used to access the community of Bisbee and Highway 90 to access the community of Sierra Vista. A variety of attractions surround both Bisbee and Douglas, such as the rich mining history and several wildlife preserves and conservation areas.

There are two active runways at Bisbee Douglas International Airport: Runway 17-35 and Runway 8-26. Runway 17-35 is 6,430 feet long, 100 feet wide, and serves as the primary runway. Runway 8-26 is 4,966 feet long, 60 feet wide, and serves as the crosswind runway.

A 6,250 square foot terminal building is located on the southeast portion of the airfield, along the east side of the aircraft parking apron. Within the terminal building, visitors to the airfield are offered various amenities: Services provided by Cochise County include aircraft fueling, weather briefing and flight planning, a pilot lounge, and restrooms. Aircraft tie-down space and hangar rentals are also available.

In 2011, Cochise County published its first ever Strategic Plan in order to provide the most efficient and effective delivery of services to its community. Consequently, Cochise County continues to move forward with its progressive community-wide planning efforts with its decision to update the Airport Master Plan for Bisbee Douglas International Airport. The airport is located in Douglas, Arizona, and is a valuable resource to both the surrounding community and the County as a whole. The Airport Master Plan will ensure future airport development is designed to enhance air and ground operations and enhance safety and airport services for the County, as well as the public users of the airport.

The primary objectives of an airport master plan are to produce an attainable phased development plan that will satisfy the airport needs in a safe, efficient, economical, and environmentally sound manner. The plan also serves as a guide to decision makers, airport users, and the general public for implementing airport development actions while considering County goals and objectives. This Airport Master Plan updates and replaces the 1997 Airport Master Plan.

Airport master plans are prepared by the operators of individual airports and are usually completed with the assistance of consultants. Cochise County completed this Airport Master Plan with the assistance of Armstrong Consultants, Inc.

As a part of the master plan process, Cochise County recognized the importance of input from public and private entities, and a Technical Advisory Committee (TAC) was established to seek the direct involvement of local officials, government representatives, airport users, and private citizens. The Bisbee Douglas International Airport TAC consisted of members representing various interests in and around the airport. Their involvement throughout this Airport Master Plan process helped to keep interested parties informed and fostered consensus for future development actions.

PLAN DEVELOPMENT AND IMPLEMENTATION

Airport planning is a continuous process that does not end with the completion of a major capital project. Periodic updates of the Airport Layout Plan, Capital Improvement Plan, and Airport Master Plan are recommended to document physical changes to the Airport, review changes in aviation activity, and to update improvement plans for the Airport. The continuous airport planning process is a valuable tool in achieving the strategic plans and goals for the Airport.

This Airport Master Plan has documented the existing and anticipated aviation demand based on existing conditions, as well as provided a practical and implementable development plan for improving the Bisbee Douglas International Airport over the 20-year planning period based on input and guidance from the Technical Advisory Committee (TAC), FAA, and ADOT. The development plan is represented graphically on the Airport Layout Plan (ALP). The development plan, as presented on the ALP as well as the Capital Improvement Plan (CIP), is considered feasible, and Cochise County should be able to construct the necessary aviation facilities as recommended within the Master Plan for Bisbee Douglas International Airport.

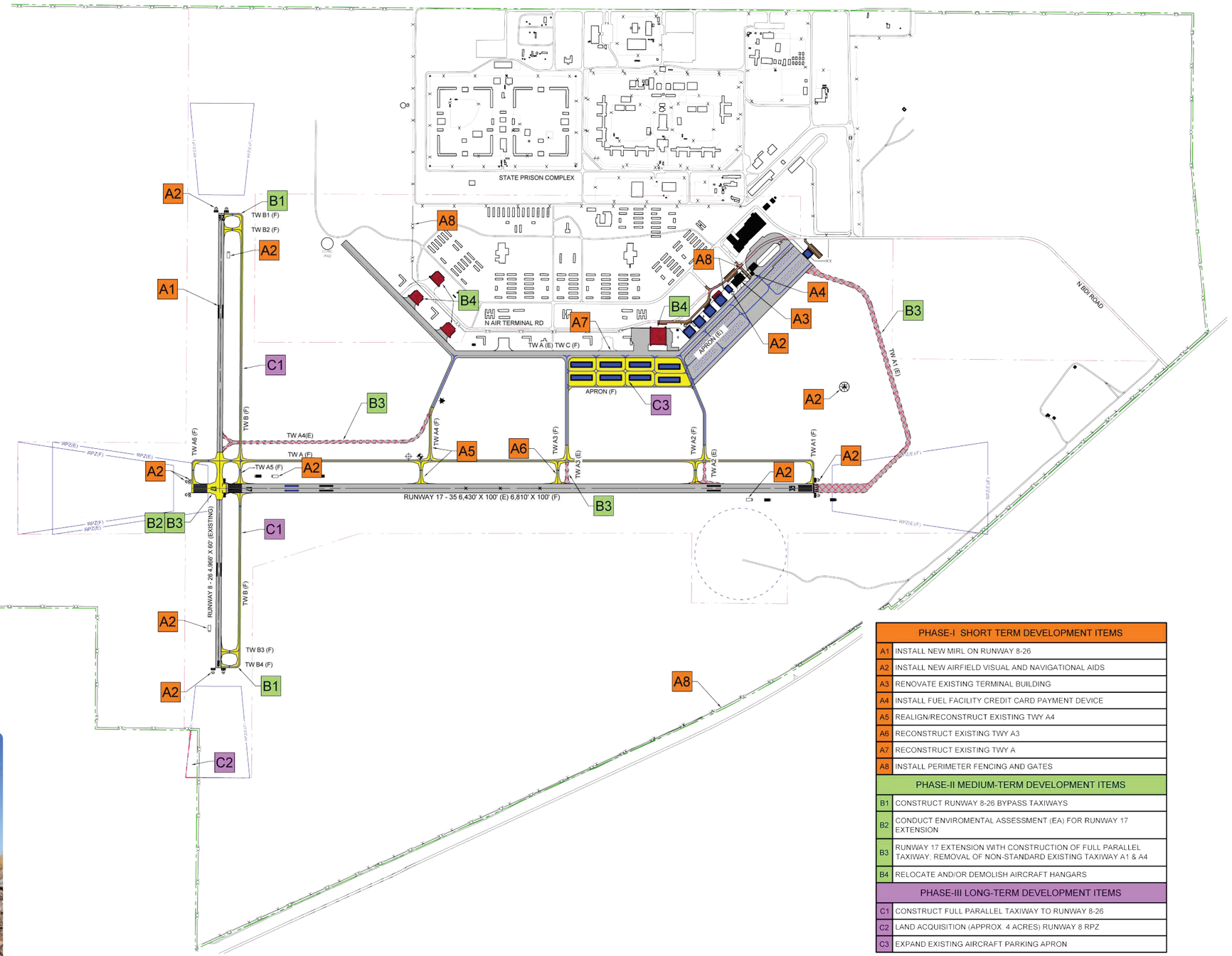
RECOMMENDED DEVELOPMENT PLAN

Future airport development at Bisbee Douglas International Airport is included in this Airport Master Plan and covers a 20-year planning period. Development items are grouped into three phases:

- Phase I, Short-term (1-5 years)
- Phase II, Medium-term (6-10 years)
- Phase III, Long-term (11-20 years)

A combination of effective airside and landside planning is essential to the successful development of the airport. Airside components for the most part include areas of the airfield where aircraft takeoff or land, taxi, and park. Landside components generally consist of a system of buildings, fueling facilities, roadways, and vehicle parking areas.

Development alternatives presented in the Master Plan addressed both airside and landside needs for the planning period. Airside alternatives include a proposed extension to Runway 17-35 in order to meet design standards and to satisfy runway length recommendations presented in the Facility Requirements chapter. Additionally, taxiway and runway lighting alternatives are suggested in order to enhance safety on the airfield, along with several other airside improvements. Landside alternatives include proposed hangar and land development locations and enhancements to the existing terminal building, fueling facility, and airfield fencing.



PHASE-I SHORT TERM DEVELOPMENT ITEMS	
A1	INSTALL NEW MIRL ON RUNWAY 8-26
A2	INSTALL NEW AIRFIELD VISUAL AND NAVIGATIONAL AIDS
A3	RENOVATE EXISTING TERMINAL BUILDING
A4	INSTALL FUEL FACILITY CREDIT CARD PAYMENT DEVICE
A5	REALIGN/RECONSTRUCT EXISTING TWY A4
A6	RECONSTRUCT EXISTING TWY A3
A7	RECONSTRUCT EXISTING TWY A
A8	INSTALL PERIMETER FENCING AND GATES
PHASE-II MEDIUM-TERM DEVELOPMENT ITEMS	
B1	CONSTRUCT RUNWAY 8-26 BYPASS TAXIWAYS
B2	CONDUCT ENVIROMENTAL ASSESSMENT (EA) FOR RUNWAY 17 EXTENSION
B3	RUNWAY 17 EXTENSION WITH CONSTRUCTION OF FULL PARALLEL TAXIWAY; REMOVAL OF NON-STANDARD EXISTING TAXIWAY A1 & A4
B4	RELOCATE AND/OR DEMOLISH AIRCRAFT HANGARS
PHASE-III LONG-TERM DEVELOPMENT ITEMS	
C1	CONSTRUCT FULL PARALLEL TAXIWAY TO RUNWAY 8-26
C2	LAND ACQUISITION (APPROX. 4 ACRES) RUNWAY 8 RPZ
C3	EXPAND EXISTING AIRCRAFT PARKING APRON

DEVELOPMENT FUNDING

The County's ability to fund the recommended projects is a major consideration in preparing the Capital Improvement Plan (CIP). Approximately 15 airport development projects and $14.3 million (2014 dollars) in capital needs over the 20-year planning period has been identified as an outcome of the facility requirements and development alternatives portions of the Master Plan. More than $12 million of the total is eligible for grant funding from the Federal Aviation Administration (FAA), as well as over $600,000 from the Arizona Department of Transportation's (ADOT) - Multimodal Planning Group (Aeronautics). Approximately $1.1 million of the total cost would be the responsibility of Cochise County. It should be noted that some of the County's total cost is for the relocation of hangars and for infrastructure improvements that are not grant eligible. These costs can be recovered over time through lease revenue. The table below outlines the costs associated with the 20-year financial development plan.

Development Cost Summary (2014 dollars)

Development Phase (I-Short, II- Medium, III-Long)	Total	FAA Share	State Share	Local Share
Total Short-term Development Cost (Phase I)	$4,430,000	$4,015,746	$197,127	$217,127
Total Medium-term Development Cost (Phase II)	$4,350,000	$3,505,810	$172,095	$672,095
Total Long-term Development Cost (Phase III)	$5,505,000	$5,012,853	$246,074	$246,073
Total Development Cost	**$14,285,000**	**$12,534,409**	**$615,296**	**$1,135,295**

FORECASTS OF AVIATION ACTIVITY

Forecasts of aviation activity serve as a guideline for the timing required for implementation of airport improvement programs. Activity projections are made based on estimated growth rates, area demographics, industry trends and other indicators. Forecasts are prepared for the short-term (0-5 years), the medium-term (6-10 years) and the long-term (11-20 years) planning periods. Using forecasts within these time frames allows airport improvements to be timed to meet demand.

Bisbee Douglas International Airport serves a mix of single- and multi-engine piston aircraft, along with turboprop, turbojet, and helicopter aircraft. This fleet mix performs such aeronautical activities as business and recreational transport, emergency medical evacuation (medevac), aerial firefighting, flight training, and some military operations.

Some factors that have historically influenced airport activity at Bisbee Douglas International Airport include the use of the airport as a base for the U.S. Forest Service firefighters during wildfire season in Arizona (May through July) and air medevac operations providing essential emergency medical transportation using both fixed-wing aircraft and rotorcrafts. These activities are forecasted to remain at the airport, at least in the short- and medium-term time frame, and will continue to contribute to the overall total annual operations at the airport.

Some factors which may influence aviation demand at the Airport in the future include: 1) the recently executed (September 2013) memorandum of understanding (MOU) between Cochise County and the City of Douglas for non-exclusive use of the non-movement areas on the airport property; 2) the continued growth of the Cochise College Flight Training Program at Cochise College Airport (located just a few miles southwest of Bisbee Douglas International Airport). Flight students currently use Bisbee Douglas International Airport to practice instrument approach procedures. With the projected increase in the number of flight students at Cochise College, annual operations at Bisbee Douglas International Airport may increase to some extent; and lastly 3) the Airport is located in close proximity to the U.S./Mexico border and the Douglas Port of Entry. The Port is one of the busiest ports of entry in the southwest. Likewise, in addition to its close proximity to the Douglas Port of Entry, the Airport is located adjacent to Foreign-Trade Zone 139. Foreign-Trade Zones (FTZ) are designed to encourage companies to maintain and expand their operations in the United States through such benefits as a reduction in tariffs, minimizing processing fees, expediting the transport of goods from the Port of Entry, and providing an 80 percent reduction in state real and personal property taxes. The close proximity of the Airport to FTZ 139 could be advantageous to the County; for example, with the influx of new businesses and workers to the area, and with the continued influx of Mexican visitors into the County and the establishment of manufacturing plants and warehouses on both sides of the border, Bisbee Douglas International Airport has the potential to serve both business and recreational users alike.

Summary of Aviation Activity Forecasts

Year	Based Aircraft	Local Operations	Itinerant Operations	Instrument Operations	Total Operations
2013	5	1,517	403	48	1,920
2018	5	2,125	565	67	2,690
2023	6	2,550	678	81	3,228
2028	6	2,550	678	81	3,228
2033	6	2,550	678	81	3,228

Although annual operations and based aircraft are forecasted to grow modestly over the planning period for Bisbee Douglas International Airport, there are some airport improvements being considered as part of the Master Plan. These improvements appropriately reflect the relatively modest growth forecast at the airport and are believed to be reasonable.