Airport Strategic Business Plan

September 2017

Airport Strategic Business Plan

Prepared for:

The City of Douglas, Arizona

By:
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In Association With
Kimley-Horn and Associates, Inc.

August 2017

ADOT No._____

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SECTION 1 – OVERVIEW OF AIRPORT STRATEGIC BUSINESS PLAN

1.1 Introduction

Douglas Municipal Airport (Airport) is updating their Airport Master Plan, which was last prepared in 1994. The City of Douglas (City) has undertaken a measured and comprehensive approach to improve the planning process and focus on future development efforts. This method will assist the Airport with the development of an effective and relevant transportation resource for the long-term benefit of the City and surrounding communities. To ensure the Airport's future growth is maximized to its full potential, the City elected to complete a Strategic Business Plan. This Airport Strategic Business Plan (ASBP) identifies and equates the long-term Mission, Vision, Values, and Goals of the facility and incorporates them into future planning and development efforts.

1.2 Purpose

The ASBP serves as a resource document for the Airport, which utilizes a logical and disciplined structure to set out goals, objectives, and action plans that will drive the day-to-day operation, management, and economic development of the Airport. The purpose in implementing a business plan is to address questions such as:

- What should the "primary" function or role of the Airport be in the future?
- How will the community obtain maximum benefit from the Airport's operation?
- How should the Airport be improved to include additional pursuits such as increased charter, corporate, and other air services?
- How does the Airport maximize revenue and development potential?

The critical elements necessary to address these and other questions will be identified and developed as part of this process. The goal of the ASBP is to produce a viable plan to improve the business and operational standing of the Airport as it grows in the future.

1.3 Airport Background and History

The Airport is owned and operated by the City of Douglas. The Airport is located in the southeast corner of Arizona, east of the center of the City at an elevation of approximately 4,173 feet. The Airport is located immediately north and adjacent to the U.S. – Mexico border.

The Airport has been witness to many historical events over the years. First Lady Eleanor Roosevelt, wife of President Franklin Delano Roosevelt, dedicated the Douglas International Airport (DGL) as the first international airport in the United States. Designed by J.P. Sexton, DGL began operations in 1929 as the first and only truly international airport in the Americas (see **Exhibit 1-1**). The Douglas Airfield originally was connected to Mexico by a common north-south runway. Today the closest airfield on the Mexico side of the border is a private facility called the

Agua Prieta South Airport (MM65), located several miles southwest of the Douglas Municipal Airport.

Exhibit 1-1 Douglas Airport 1929

Source: Department of the Interior, National Register of Historic Places, Douglas Airport 1929

Early air travel between the United States and Mexico required planes to be cleared for entry and exit of their respective countries. In other border cities that meant a very short flight from one country's airport to the other country's airport, sometimes just over a fence. With this setting, planes could land in one country, pull back the wide gate on the barbed wire fence on the border, and taxi across to the other country; pilots and passengers could resume their flight to their destination after clearing customs.

In 1929, the first Women's Air Derby, a transcontinental air race for women pilots (Amelia Earhart among them), included Douglas as one of its stops. In October 1930, Douglas was a stop on the first transcontinental airmail route. DGL became a successful commercial airport with regular airline service.

By the late 1940's most regional commercial traffic went through Bisbee-Douglas International Airport, about nine miles north of the City. DGL lost its international designation and became Douglas Municipal Airport.

On December 30, 1975, DGL was added to the National Register of Historic Places.

Located near the north entrance of the Airport is the Border Air Museum, which is dedicated to the history of aviation at the Airport. The Museum was donated to the City, by the late Richard

Westbrook and his wife Irma in 2002 and contains photographic records and equipment depicting the evolution of the Airport from its inception until present day.

1.4 Future Development

Appropriate planning is critical to the Airport's future development and must include evaluations of the facility's infrastructure, capabilities, and services. The City of Douglas is currently updating its Airport Master Plan, which includes an inventory of existing facilities and conditions on the airport, and an evaluation of current design standards, providing a basis for updated guidelines necessary to a safe, efficient, and economic airport system.

As shown in **Exhibit 1-2**, Douglas Municipal Airport currently has a single active runway, 03–21, that is 5,760 feet in length, and 75 feet wide. An older dirt runway 18–36 also exists immediately to the east, but is in poor shape, and is currently closed. The Airport also supports a combination of three conventional and T- Hangar complexes, along with three small buildings and a trailer owned by the City of Douglas, that are occasionally utilized as a Terminal, maintenance facility, or offices. An onsite fuel facility is also available to service based and transient aircraft. The ASBP utilizes the base information contained in the Master Plan Update to evaluate the Airport's basic capabilities and future needs necessary to accomplish its future business objectives.

The Federal Aviation Administration (FAA) design standards for the development of an airport are primarily based on the size and performance characteristics of aircraft that are using or anticipated to use an airport over the course of a 20-year planning period. Furthermore, various elements of an airport's infrastructure and functions are based on these standards. The identification of this planning criteria, known as the airport reference code (ARC) is a crucial component of the master plan. The ARC is determined by the critical design aircraft approach category (AAC) and airplane design group (ADG). DGL is currently an Airport Reference Code (ARC) B-II facility. B-II facilities serve aircraft with an approach speed between 91 and 120 knots as well as a wingspan between 49 and 78 feet. Some examples of B-II ARC aircraft are but not limited to: Cessna Citation V, Beech King Air F90, etc. The current design aircraft for Douglas is the Beechcraft King Air 200.

It is important to note that the Douglas Municipal Airport is not a National Plan of Integrated Airport System (NPIAS) facility, and subsequently is not required to meet FAA standards. This may prove to be a beneficial factor in the City's ability to develop the airport in the future, as they will not be tied to FAA assurances. However, ADOT grant requirements still apply. Future development projects should be planned to meet these requirements. It is important to note that a significant change in the type of aircraft using an airport may necessitate a modification to the standards.

Exhibit 1-2 Douglas Municipal Airport Current Facilities

Source: Kimley-Horn & Associates 2017 Douglas Airport Master Plan Update.

SECTION 2 – SITUATIONAL ANALYSIS

2.1 Introduction

An ASBP must be developed within the context of national, state, regional, and local historic, fiscal, and economic factors. An airport's future development plan is dependent on the comprehension and application of economic factors, both positive and negative, to successfully plan a sound business course. A review of economic indicators from national, regional, and local levels is necessary to provide a comprehensive macro to micro view of the development environment for the Airport. The following sections describe the economic trends and indicators from a national level, down to a regional and local level, utilized to structure a picture of the current economic climate for the Douglas Municipal Airport.

2.2 National Overview

Information derived from the FAA Aerospace Forecasts for FY 2016 through 2036 indicates that from a national perspective, the long-term outlook for general aviation is favorable, led by gains in turbine aircraft activity.[1] The active general aviation fleet is forecast to increase 0.2 percent a year between 2015 and 2036, equating to an absolute increase in the fleet of about 7,000 units. While steady growth in both the Gross Domestic Product (GDP) and corporate profits results are anticipated to result in continued growth of the turbine and rotorcraft fleets, the largest segment of the fleet – fixed wing piston aircraft continues to shrink over the forecast period. Although fleet growth is projected to be minimal, the number of general aviation hours flown is projected to increase an average of 1.2 percent per year through 2036, as growth in turbine, rotorcraft, and experimental hours could more than offset a decline in fixed wing piston hours.

Nationally, the aviation component of the business community is recognized to continue to grow, though at a modest pace. Commercial aviation, which encompasses all airline activity and corresponding supporting airports, is still projected to be the focal point of this industry growth. In the long term, the aviation industry should remain profitable reflecting a growing U.S. economy.[2]

2.3 State Overview - Arizona Airport System

Recent FAA data reveals that the state of Arizona ranks fifth in the U.S. in active aircraft and 12th in the number of aircraft per capita. Five airports are ranked by the FAA in the top 25 in the country for general aviation (GA) operations, and three of those airports are listed in the top 10 (Phoenix Deer Valley, Ernest A. Love Field, and Falcon Field). In 2011, Phoenix Deer Valley Airport was ranked as the busiest general aviation airport in the country with over 300,000 annual operations.

[1]https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf Retrieved from https://ebr.eller.arizona.edu/about-us/forecast-update
[2]Ibid.

There are ninety-one active public use airports scattered across the State of Arizona. Sixty-six of those airports are classified as Primary Service, Commercial Service, Reliever, General Aviation, and Native American facilities.[3] There are also twenty-five secondary airports categorized as General Aviation, Government, Native American, and Private. These facilities provide the majority of aeronautical services to Arizona's flying public. Additionally, the network of public-use GA airports provides for the recreational needs of aircraft owners as well as the needs of residents and businesses throughout all parts of the state. Particularly in the rural areas of Arizona, residents are dependent on general aviation for emergency medical transport.

In 2011, based aircraft in the State were estimated at 6,561 aircraft, down from 8,251 based aircraft in 2007, according to the Arizona State Airports System Plan (SASP). Estimated operations were 2.77 million in 2011, a decrease of 27.9 percent from 2007. Similar trends are found throughout the country and reflect the impact of the recession on active aircraft numbers and operations. Even with this slowdown, the impact of general aviation and the associated airports is still positive, contributing substantial numbers of jobs and related revenues into the Arizona economy. It is important to note that statistical information on airport and aircraft performance in the State of Arizona has become somewhat dated since the last SASP was completed in 2008.

2.4 Sierra Vista/Douglas Regional Overview

In February 2013, the Arizona Office of Management and Budget (OMB) announced that the Sierra Vista-Douglas region had been upgraded from a micropolitan area to a metropolitan statistical area (MSA), expanding the State's metropolitan areas to seven. According to the University of Arizona Economic and Business Research Center, this change allowed the Sierra Vista-Douglas region to be recognized as an MSA that has at least one urbanized area of 50,000 or more inhabitants.[4] The new Sierra Vista – Douglas region encompasses all of Cochise County, Arizona, and County population centers are spread across seven cities and towns including, Benson, Sierra Vista, Douglas, Bisbee, Tombstone, Wilcox, and Huachuca City, as well as the many rural areas of the county. The 2010 U.S. Census indicated that County population supported a broad base of ranching and agriculture, commerce centers, military facilities such as Fort Huachuca, mining, and educational facilities such as Cochise Community College.

From an airport perspective, it is important to note that there is significant competition for the existing general aviation market in the immediate area. The Bisbee, Cochise County, Bisbee-Douglas, Sierra Vista, and Tombstone airports all operate within the immediate region of Douglas Municipal Airport. These airports and the competitive advantages offered by each will factor into the future development potential of the Douglas Municipal Airport.

As described in the September 2016 Data Round Up from the Economic and Research Center, the nationally described GDP indicated that only four of the seven MSAs in Arizona reported a positive increase for FY 2015 (Phoenix-Mesa-Scottsdale 1.8%, Yuma 1.5%, Flagstaff 1.4%, and Prescott 1.2%), while the remaining three (Sierra Vista-Douglas -1.7%, Tucson -2.4%, and Lake

[3]https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf
[4]Retrieved from: https://www.azeconomy.org/2014/04/economy/arizona-has-a-new-metropolitan-area-sierra-vista-douglas/

Havasu-Kingman -2.5%) reported downturns.[5] While statistically significant, the Sierra Vista-Douglas area (where the Airport is located) had the lowest decrease, which could be interpreted as a stabilization of economic factors in the immediate area.

2.5 Cochise County Overview

2.5.1 Population Trends

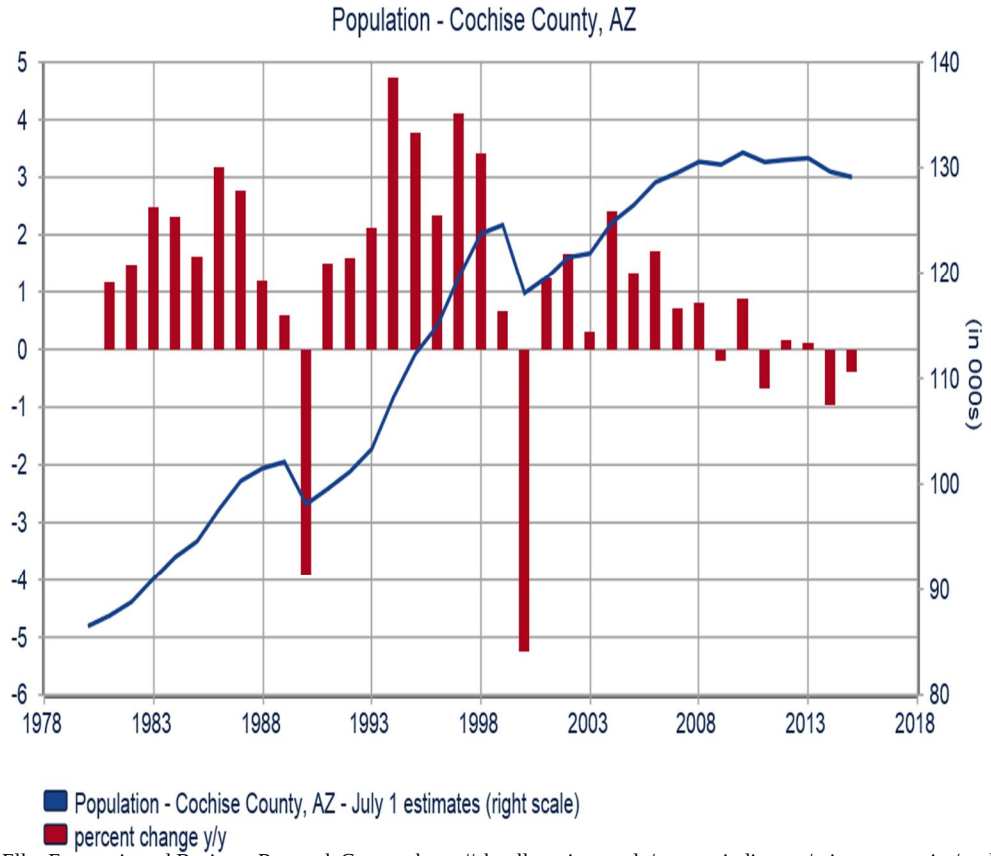
Cochise County is located in southeastern Arizona. The county has a total land area of 6,219 square miles, making it the eighth largest county in Arizona by land mass. Cochise County shares a border with the Mexican State of Sonora, and as of 2013, the largest city in Cochise County – Sierra Vista, had a population of 45,129.

The population figures presented are from the Office of Employment and Population Statistics, Arizona Department of Administration (ADOA) and differ from official Census population estimates. The Eller Economic Business Research Center (EBRC) considers the ADOA estimates to be more accurate. All population counts are mid-year July 1st estimates.[6]

As shown in **Exhibit 2-1** and **Table 2-1**, population growth in Cochise County reflects a cyclic trend that which indicates a slight growth percentage (less than 1%), immediately followed by a slight growth decline, (again, less than 1%) which averages a net decline of -0.4% growth rate for the past five years. The City of Douglas, however, has been relatively steady compared to the county as a whole, despite a population spike in 2011.

[5]Retrieved from: https://www.azeconomy.org/2016/10/featured/september-data-round-up/
[6]Office of Employment and Population Statistics, Arizona Department of Administration (ADOA)

Exhibit 2-1 Cochise County Population Centers



Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/cochise-county

Table 2-1 Cochise County Population

Population - Cochise County, AZ	2011	2012	2013	2014	2015
Employment and Population Statistics, Arizona Department of Administration					
Total Population - Sierra Vista-Douglas MSA (July 1st Estimates)	130,537	130,752	130,906	129,628	129,112
% Chg from Year Ago	-0.68%	0.16%	0.12%	-0.98%	-0.4%
Benson	5,077	5,071	5,085	5,027	4,999
Bisbee	5,474	5,466	5,424	5,394	5,297
City of Douglas	17,118	16,673	16,953	16,989	16,956
City of Sierra Vista	45,098	45,794	45,303	44,286	44,183
Huachuca City	1,827	1,816	1,825	1,810	1,794
Tombstone	1,358	1,350	1,355	1,344	1,333
Willcox	3,692	3,674	3,692	3,674	3,636
Unincorporated	50,893	50,908	51,269	51,104	50,914
Published by Economic and Business Research Center.					

Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/cochise-county

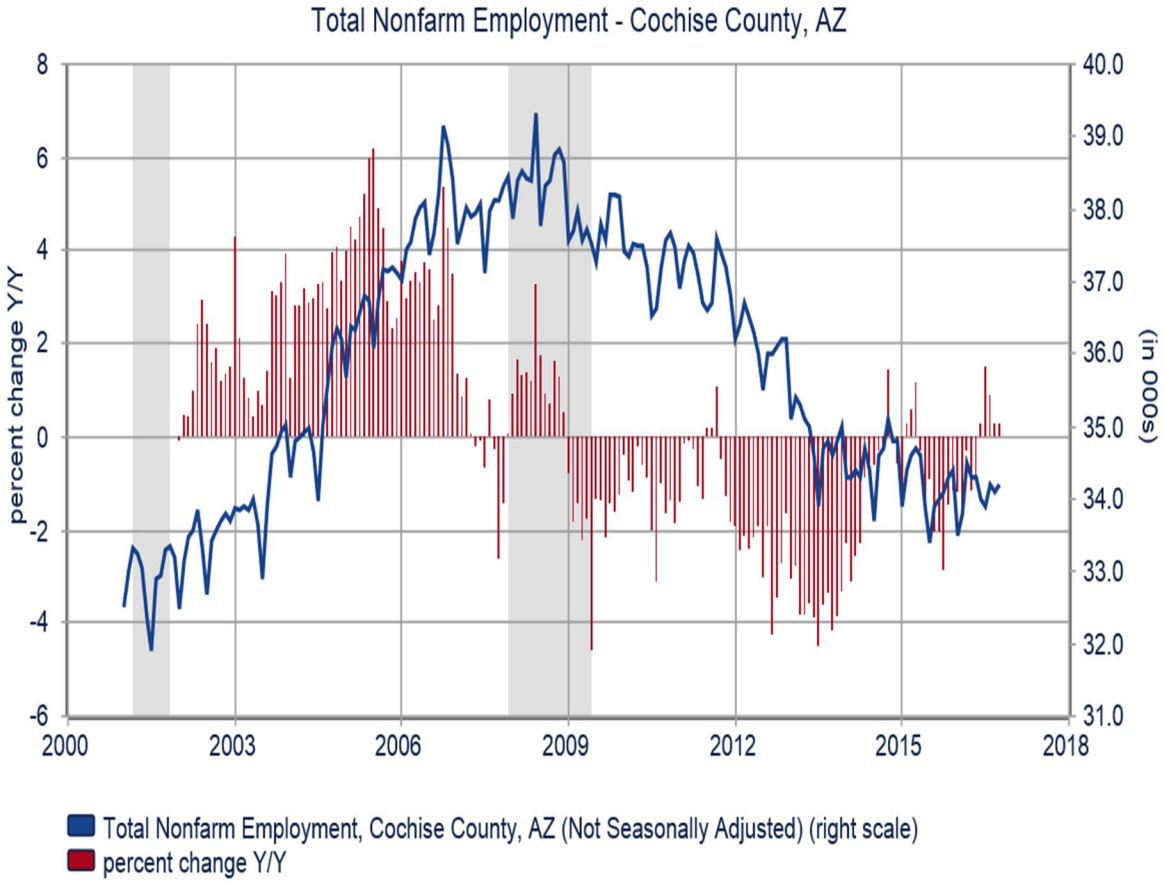
2.5.2 Cochise County Employment

As shown in **Exhibit 2-2**, general non-farm employment in Cochise County had seen steady growth peaking in 2008, with an overall 7% increase. However, since that peak, the subsequent years (2008-2015) reflected a similar downward trend resting at the present -2%, a differential swing of 5%.

This downturn can be attributed to many factors, including but not limited to changes in policy by the United States Department of Homeland Security (Post 9/11) stifling trade with the Mexican Border city of Aqua Prieta and the general regional employment lag in southeastern Arizona. The general business climate of Douglas has been dramatically affected in recent years by restrictive border policies. A major portion of the retail trade industries in Douglas has been dependent on cross border traffic, along with a large portion of the available labor base. With the advent of more restrictive regulations by both the United States and Mexico, cross border traffic in the immediate Douglas area has been dramatically reduced, with a subsequent negative impact on Douglas retail businesses and industries.

Employment trends for Cochise County from the year 2000 through 2016 are reflected in **Exhibit 2-2** and **Table 2-2** shown below:

Exhibit 2-2 Cochise County Employment Statistics



Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/pima-county

Table 2-2 Cochise County Employment

Employment - Cochise County, AZ *(not seasonally adjusted)*	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016
Current Employment Statistics, Bureau of Labor Statistics						
Total Nonfarm Employment	34,300	34,000	33,900	34,200	34,100	34,200
% Chg from Year Ago	-0.87%	0.29%	1.5%	0.88%	0.29%	0.29%
Total Private	22,500	22,900	23,000	22,700	22,500	22,500
% Chg from Year Ago	-0.88%	1.33%	2.68%	1.79%	1.35%	0.45%
Goods Producing	1,700	1,700	1,800	1,800	1,800	1,800
% Chg from Year Ago	-10.53%	-5.56%	-5.26%	0.0%	-5.26%	-5.26%
Service Providing	32,600	32,300	32,100	32,400	32,300	32,400
% Chg from Year Ago	-0.31%	0.62%	1.9%	0.93%	0.62%	0.62%
Trade, Transportation, and Utilities	6,000	6,000	6,000	5,900	5,900	6,000
Other Services	600.0	700.0	600.0	700.0	600.0	600.0
Government	11,800	11,100	10,900	11,500	11,600	11,700
% Chg from Year Ago	-0.84%	-1.77%	-0.91%	-0.86%	-1.69%	0.0%
Federal	4,900	4,900	4,900	4,900	4,800	4,800
State and Local	6,900	6,200	6,000	6,600	6,800	6,900
Published by Economic and Business Research Center.						

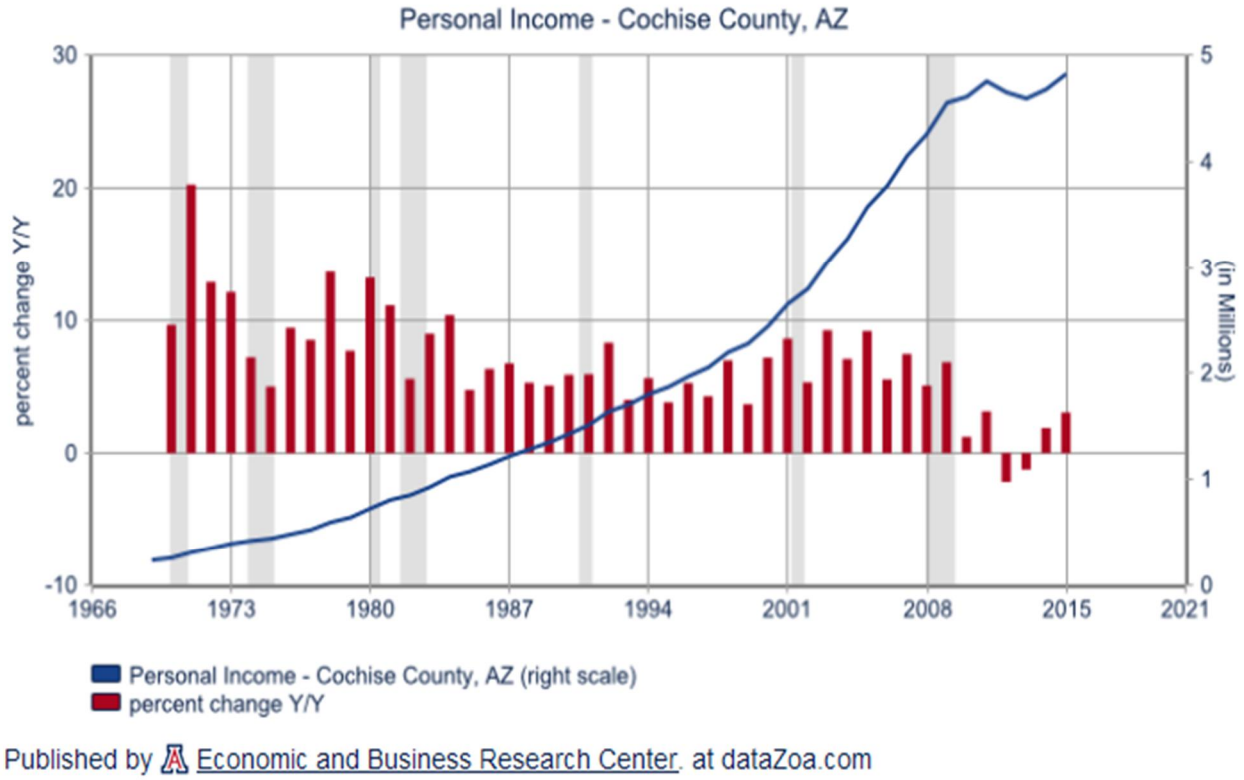
Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/cochise-county

2.5.3 Cochise County Personal Income

Personal income is another major indicator of community economic health, and Cochise County has shown a steady increase in general personal income over past years (see **Exhibit 2-3**). Considering the national economic downturn in 2008 and 2009, Cochise County showed no relative decline in personal income. However, since 2009, income growth slowed dramatically from the previous 7% average prior to the 2008-09 timeframe, to approximately 2% (including a two-year negative indication 2012-13).

All data presented in this section are from the Bureau of Economic Analysis (BEA), Table CA 30, with the exception of per capita personal income and per capita net earnings. EBRC calculates these two-series using population estimates from the Arizona Office of Employment and Population Statistics, as opposed to using the official Census Bureau estimates used by BEA.

Exhibit 2-3 Cochise County Personal Income



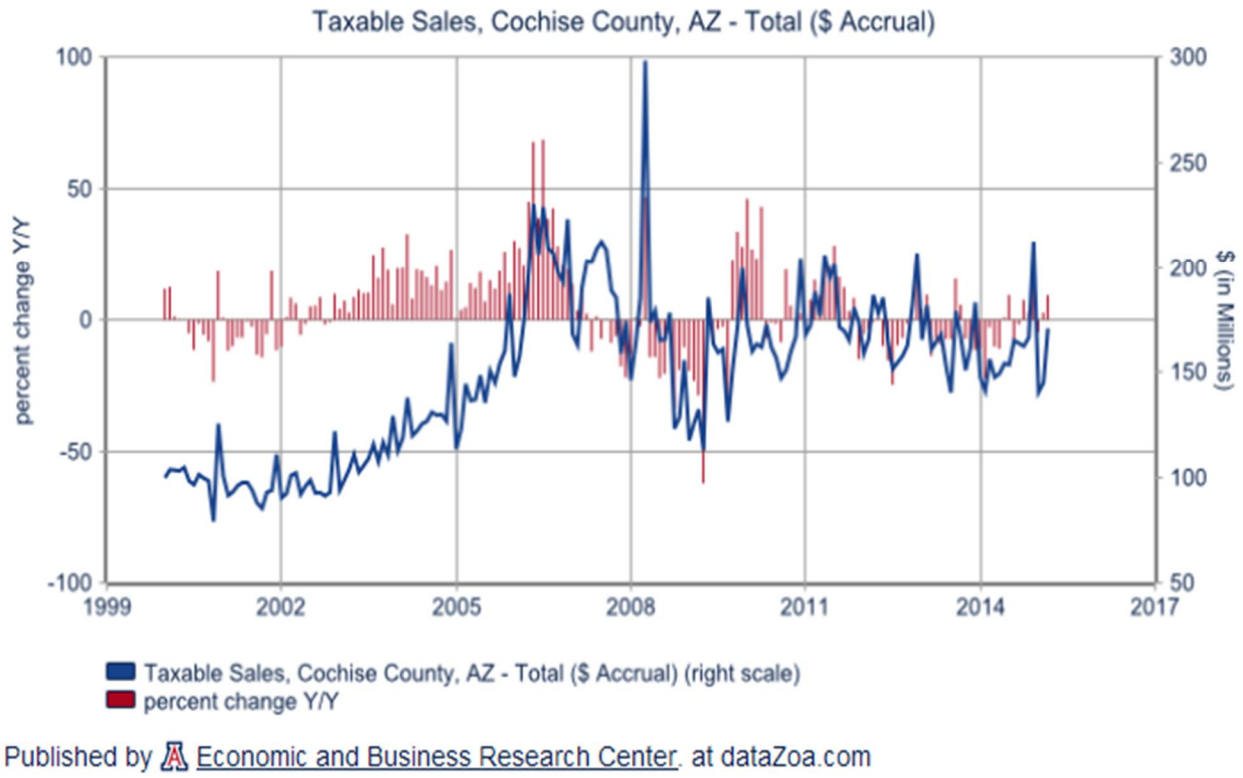
Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/cochise-county

2.5.4 Cochise County Taxable Sales

Taxable sales on goods and services indicate the availability of disposable income in the community, and general indications of where and how those dollars are being spent. Cochise County tax records indicate that the area has enjoyed a steady climb in County Taxable Sales over the past 16 years, with the notable exception seen in the 2008 and 2009-time frame, whereby the nation suffered a serious downturn followed by a period of slow economic growth that persists today. **Exhibit 2-4** depicts historical taxable sales in Cochise County.

Current trends indicate that the Cochise County economy continues to achieve a slow recovery averaging approximately $200 million in annual taxable sales. These trends are expected to continue into the near future, and corresponding economic development efforts may increase growth rates in the near term.

Exhibit 2-4 Cochise County Taxable Sales



Source: Arizona Eller Economic and Business Research Center - https://ebr.eller.arizona.edu/current-indicators/arizona-counties/cochise-county

Economic indicators for Cochise County show a variable economic environment. Disposable income spent on amusements, leisure/business lodging, and retail sales are the predominate economic drivers. However, the City of Douglas and Cochise County are not immune to the influences of the State and national economies of course, and as national downturns have occurred, they have been reflected in the local economies as well.

2.6 Market Drivers for City of Douglas

According to the *2015 Economic Outlook Report*, the City of Douglas continues to see a recovering economy, predominately due to an overall growth in the Mexican middle class from the neighboring cross-border City of Agua Prieta in the State of Sonora and other projected economic developments[7]. Such projects include the construction of the Agua Prieta-Bavispe highway. This would allow for the faster connectivity between Agua Prieta and Bavispe, as well as seven other towns, resulting in better facilitation of tourism, mining, and cattle and agricultural trade between Northeastern Sonora and Southeastern Arizona[8]. According to the 2014 Arizona Commerce Authority (ACA)/Wall Street Journal White Paper entitled *AZ State of Business,* there also exists

[7]http://nebula.wsimg.com/940ec730ea3fc1cad815bbc212cf04da?AccessKeyId=6206F29E9883B3474EEC&disposition=0&alloworigin=1
[8]Ibid.

a number of programs that serve as economic drivers today[9]. Some of the major economic drivers include, Commercial/Industrial Solar, Computer Data Center Programs, Aerospace and Defense, and Advanced Manufacturing, both in Douglas and from the maquiladoras (factories) in Mexico.

2.6.1 Population Stability

The general population of Douglas has not grown appreciably in several years. However, most current residents are attracted to the area's benign climate with over 285 days of annual sunshine, which also contributes to the area's attraction for retirees. Others have immediate family ties on both sides of the border. Real estate and general cost of living costs are lower than the State average, making the Douglas area a very attractive place to live. Most people come to Douglas with the intent of remaining long term. While jobs are not considered plentiful, the skill sets of the population base are more than sufficient to meet the requirements of local business and industry.

2.6.2 Multi-Modal Transportation Opportunities

Multi-modal transportation opportunities can be major market drivers for the Douglas area. The ability to move people, goods, and services efficiently through Douglas are key components in the logistics, tourism, resort, and manufacturing industries of the area.

Douglas benefits from a regional roadway system that connects to Interstate 10 with efficient access for major automobile and truck transportation and connections to both the greater Tucson and Phoenix areas, and connections beyond to the nationwide interstate system. While the North American Free Trade Agreement (NAFTA) predictions for international trade traffic through the region, as noted in an August 2017 Arizona Economy article titled: NAFTA, Long Courtship, Marriage of Conveniences, and Now Looming Separation, never materialized, Douglas is still home to several trucking and logistics companies, and this access represents the largest inter-modal economic benefit to the City at this time. The El Paso and Southwestern Railroad was a short-line American railway company with a terminal in Douglas, which operated in Arizona, New Mexico, and Texas, with line extensions across the international border into Mexico. However, in recent years this rail line was abandoned, and future use is currently unknown.

The third element of the City of Douglas multi-modal structure is Douglas Municipal Airport, which provides direct access into the NAS for its aviation users. The City has indicated that it would like to improve the capability and service levels of the Airport in the future to help expand and promote the City's future resort, tourism, and business development opportunities.

2.6.3 Tourism Development

The location of the City of Douglas offers some unique opportunities for tourism within the region. The Douglas area is home to a number of historic ranches, museums, including the Border Air Museum located at the Airport, and landmark hotels like the Gadsden, all with a unique Mexican/American flavor.

Additionally, potential exists for increased "Medical Tourism". Many people come to the area today to take advantage of medical and prescription services that exist across the border at

[9]Wsj-az_state_of_business.pdf

significantly reduced costs compared to the United States. Appropriate marketing of Douglas Municipal Airport could raise awareness to individuals that Douglas is a convenient transition point for this market immediately adjacent to the border.

2.6.4 Industrial and Business Development Incentives

As highlighted in the aforementioned *2015 Economic Outlook Report,* three (3) recent economic developments are positioned to continue the growing economic environment for the City of Douglas. These include: (1) Douglas Port Expansion, (2) Regional Public Transportation, and (3) Douglas/Agua Prieta Sisterhood Agreement.[10]

- *Douglas Port Expansion - The* City of Douglas, in partnership with Douglas International Port Authority, is actively engaged with private and public stakeholders on both sides of the border to advance development of a new Douglas Commercial Port of Entry. In December 2014, City of Douglas submitted a proposal to U.S. Customs and Border Protection (CBP) for construction of the new facility. As of May 2015, the proposal was being evaluated by CBP and U.S. General Services Administration.

- *Regional Public Transportation* - City of Douglas, City of Bisbee, and Cochise College recently launched a public transportation partnership with funding by ADOT. The project coordinates efforts between public transportation systems in Bisbee and Douglas to improve mobility between the cities and Cochise College. As of early 2015, discussions were underway to expand the partnership to include Sierra Vista.

- *Douglas/Agua Prieta Sisterhood Agreement* - In 2013, the cities of Douglas, Arizona, and Agua Prieta, Sonora, Mexico entered into a sisterhood agreement to strengthen ties and cooperation on issues including international trade and commerce, foreign investment, global competitiveness, technology, regional economic development, infrastructure, arts and culture, tourism, sporting events, public safety, and the environment. The cities expressed commitment to exchange economic data, collaborate on promotional initiatives and expositions, and provide mutual support to tours, music performances, co-productions, and other artistic programs.

2.6.5 Educational Institutions

Education institutions play a large role in developing the Douglas market, offering quality education for children of local residents, and contributing to the local quality of life. The Unified School District boasts an excellent K through 12-school program. However, in recent years when the State of Arizona spent an average of $7,578 dollars annually state wide on each student in the public-school system, the City of Douglas spent slightly less, or approximately $7,228 per student over that same time period. The region is also home to institutions like the University of Arizona and Cochise College providing specialized educational opportunities for a broad variety of disciplines.

[10]http://nebula.wsimg.com/940ec730ea3fc1cad815bbc212cf04da?AccessKeyId=6206F29E9883B3474EEC&disposition=0&alloworigin=1

2.6.6 Quality of Life Factors

General quality of life factors plays a major role in attracting people and businesses to Douglas, and pushing the market forward. In Cochise County, foreclosed homes offered at lower prices have continued to dampen demand for new home construction through 2015 and into 2016. In the City of Douglas, however, foreclosures on the market appear to have moderated in 2015, although they remain well above levels seen prior to the national housing market crisis.[11] The overall crime rate is relatively low, and the overriding environment of Douglas is showing signs of positive growth and a bright future. City officials claim that it is a clean and safe place to live, work, and raise families.

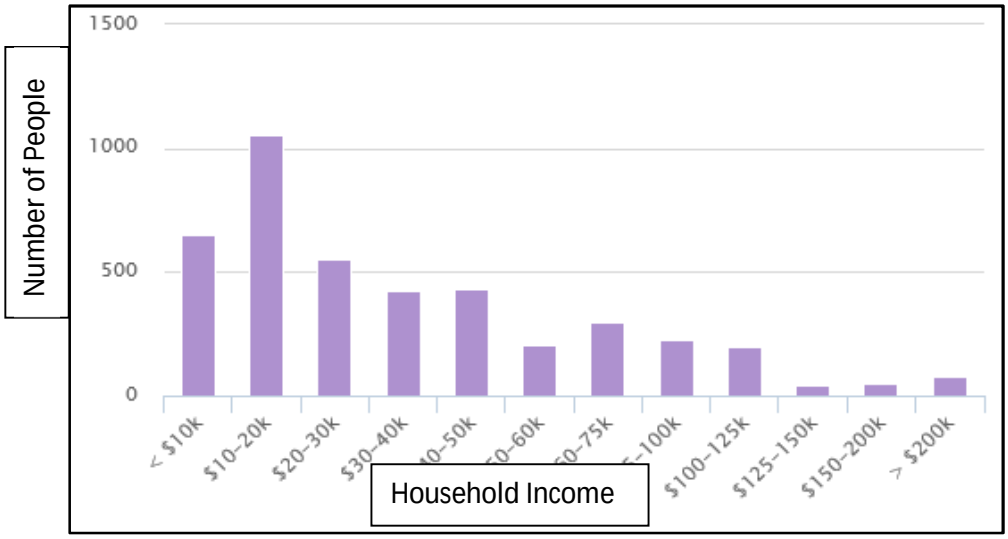
2.6.7 Community Demographics

According to the 2010 U.S. Census, the City of Douglas had a population of 17,509, 4,986 households, and 3,662 families within the City limits.[12] By the year 2014, the population of the City had decreased to 16,744, reflecting the difficulties of the local economy and job availability.

Income: In 2013, the Median Household Income for a family living in the City was approximately $32,564 annually, compared to a State of Arizona average of $57,163 annually. Family incomes in the City lagged the rest of the State of Arizona by nearly 40%.

Exhibit 2-5 below indicates the Median Family Income Range for Douglas in 2013.

Exhibit 2-5 Range of Median Family Income for Households in Douglas as of 2013



Source: http://www.city-data.com/income/income-Douglas-Arizona.html

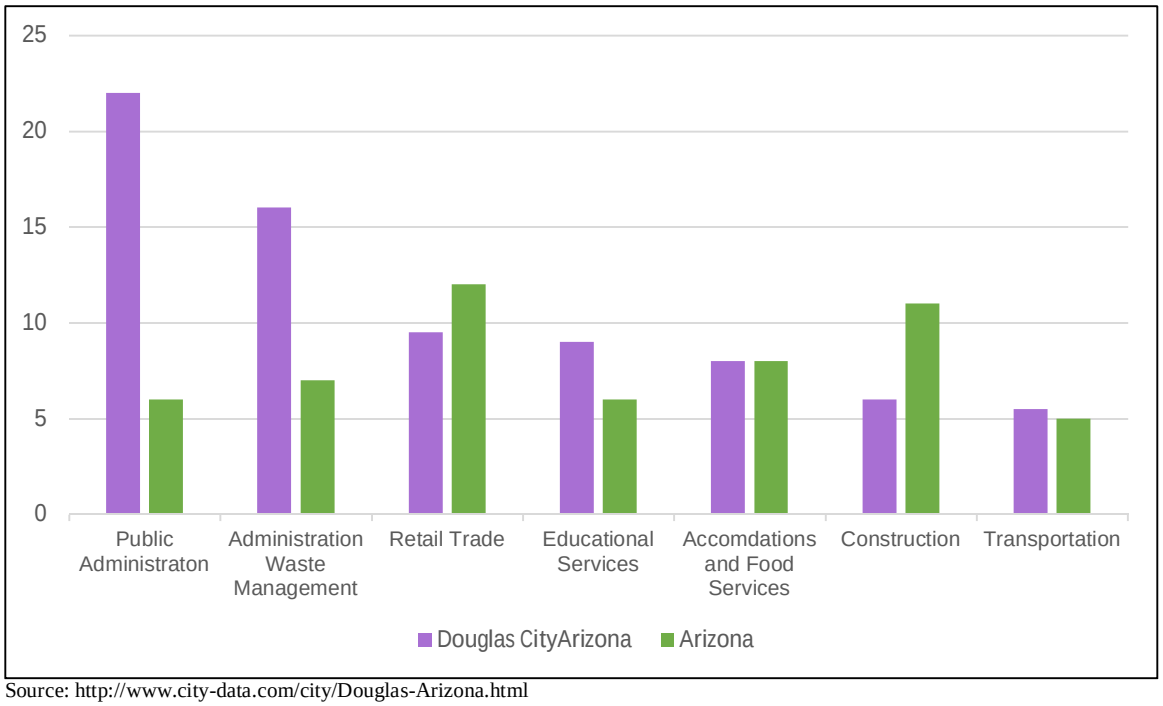
[11] http://nebula.wsimg.com/940ec730ea3fc1cad815bbc212cf04da?AccessKeyId=6206F29E9883B3474EEC&disposition=0&alloworigin=1

[12] "Selected Economic Characteristics: 2008-2012 American Community Survey 5-Year Estimates (DO03): Douglas city, Arizona". U.S. Census Bureau, American Factfinder. Retrieved November 1, 2016

The City supports several businesses and industries in addition to local ranching and agrarian activities. It is the principal retail center for the area serving patrons from both sides of the U.S. - Mexico border. However, stricter regulations pertaining to border access have contributed to a significant downturn in the business and services market in recent years. The local unemployment rate in the City is currently 7.10%, in 2013 with job growth of -0.61%. Future job growth over the next ten years is predicted to be 31.67%.[13]

Exhibit 2-6 below indicates the principal industries and businesses in the City compared against the State of Arizona as of 2013.

Exhibit 2-6 Most Common Industries in 2013



Source: http://www.city-data.com/city/Douglas-Arizona.html

While recent economic times have been challenging, future opportunities for improved growth and development do exist.[14] The City continues to play a vital role as a gateway to Mexico and the Rio Sonora region and shares a rich cultural, and economic history with its Mexican sister city, Agua Prieta. Additionally, the Airport has an opportunity to become a center for general aviation and a base for local government operations.

[13] http://www.city-data.com/income/income-Douglas-Arizona.html
[14] http://www.city-data.com/city/Douglas-Arizona.html

2.6.8 Community Economic Development Overview

Cochise College Center for Economic Research, compiles an annual economic report for Cochise County cities and towns. As detailed in their 2015 Economic Outlook Report, the following indicators were noted:

Douglas continues to see positive effects of a recovering economy, as well as benefits of a growing Mexican middle class and continued capital investment in Northern Sonora.[15]

The report also stated that that development of a new Douglas Commercial Port of Entry continues to be a prime economic focal point for the City. As recent as May 2015, the port facility was in the evaluation stage by the U.S. Customs and Border Protection and U.S. General Services Administration. Additionally, concentrated interaction and cooperation with the City of Aqua Prieta, Sonora, Mexico, is hopeful to increase trade and commerce between Southeastern Arizona and Northeastern Sonora.

2.6.9 City of Douglas Governance Structure

The City has a council-manager form of government, where policymaking is vested in elected representatives and management in an appointed professional manager. Legislative authority for the City is vested in a six-member mayor and council. City administrative officials include mayor, city council (representing six City wards), city manager, city attorney, finance manager, and city clerk.

The council sets the duties and compensation of City officials and employees, and enacts ordinances and resolutions relating to City services, taxes, appropriating and borrowing moneys, licensing and regulating businesses and trades, and other municipal purposes. The City Council appoints the city manager who has full responsibility for executing council policies and administering City operations. City employees are hired under personnel rules approved by the Council.

The Airport is owned by the City, which serves as the public sponsor for purposes of obtaining and administering Arizona Department of Transportation (ADOT) grants. ADOT issues grants to fund improvements at airports in the State of Arizona. The Airport is not included in the Airport Improvement Program grant funding program as administered by the FAA since it is not included in the FAA's NPIAS. The Mayor and City Council have policy and oversight responsibilities for the Airport and all major City functions.

The Airport is operated by City staff, which includes an Airport Director and essential Airport operations employees. The Airport Director reports to the City Manager, and continues up the chain of command to the Mayor and City Council. Currently, Airport oversight and administration duties reside with the City Public Works Director.

[15]"http://factfinder2.census.gov/bkmk/table/1.0/en/ACS/12_5YR/DP03/1600000US04

2.6.10 City of Douglas Financial Structure

The City's financial structure is based on the establishment of three divisions assigned to conduct all fiscal administration.

The *Finance Division* is responsible for the day-to-day operations for cash management, banking, and investment functions. Finance also monitors the operating budget for all City funds and departments, and is responsible for the financial administration of grants. Douglas Municipal Airport in conjunction with this division receives ADOT grants from the State Aeronautics Group.[16]

The *Accounting Division* collects, records, and summarizes daily transactions and prepares periodic reports summarizing financial activities for the City management, City Council, and departments. The division implements and maintains sound financial accounting procedures, and ensures that transactions and reports are issued in compliance with Generally Accepted Accounting Principles (GAAP)[17].

The *Purchasing Division* assists departments in obtaining informal and formal bid and quotations from the procurement of materials, supplies, and services, based upon availability, quality, and price. The procurement process includes preparing bids and specifications, tabulations, and conducting bid proceedings.[18]

2.6.11 Budgets

The City is tasked with the management and coordination of all departmental budgets of the various departments and divisions within its structure.

The most current 2015 – 2016 Budget Summary indicates annual expenses of approximately $16,286,000 across the various departments of the City. Within that budget, the Airport's expenses for 2016 were projected to be $159,762. However, projected revenues for the Airport only equaled $99,460 for 2016, necessitating the transfer of $60,302 to balance the 2016 budget, as indicated below in **Table 2-3**.

As the City moves forward to make improvements to the Airport, certain operating expenses, matching funds for ADOT grants, and other expenses will drive the need for larger future operating budgets. However, it is also anticipated that successful marketing and development efforts will increase Airport traffic and related revenues, offsetting the increased expenses and moving the Airport towards a "break even" position, where General Fund monies may no longer be necessary. Recommended marketing and development strategies to help achieve that goal are addressed in subsequent chapters of this document.

[16]Selected Economic Characteristics: 2008-2012 American Community Survey 5-Year Estimates (DO03): Douglas
[17]*Ibid.*
[18]*Ibid.*

Table 2-3 Revenue Budget 2015-2016

REVENUE BUDGET 2015-2016

AIRPORT FUND

Account		Description	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2015 10-month Actual	2016 Projected	2016 % Change
33221		FEDERAL GRANTS		7,377	14,108		$ _		0.00%
34880	1	FUEL SALES (100 LL)	38,739	32,126	23,718	30,500	19,278	21,960	-28.00%
34880	2	FUEL SALES (JET A)	61,979	47,200	77,611	54,000	51,991	51,600	-4.44%
36201		RENTAL PAYMENTS	5,058	9,769	8,170	8,500	3,151	8,500	0.00%
36201	5	SMALL HANGAR AVIATION	14,970	14,400	14,980	14,700	12,250	14,700	0.00%
36201	1	TRAILER RENT	2,400	2,550	4,056	5,044	3,617	2,700	-46.47%
38001		MISCELLANEOUS REVENUE	-	12,722	-	-	-		0.00%
39103		TRANSFER FROM LTAF	-	-	-	-	-	-	0.00%
39104		TRANSFER FROM GENERAL FUND	-	22,265	15,933	38,594	15,136	60,302	56.25%
		TOTAL REVENUE	**$123,146**	**$148,409**	**$158,576**	**$151,338**	**$105,423**	**$159,762**	**5.57%**

Source: City of Douglas, FY 2015-2016 Budget

SECTION 3 – AIRPORT INDUSTRY TRENDS

3.1 Introduction

Business levels at airports are influenced by national, state, and local factors. The state of the national economy, recent trends in air travel, aircraft use, and new aircraft manufacturing all influence the volume and type of aviation activity that may occur at a general aviation airport like Douglas Municipal Airport. Likewise, the state of the local economy, business activities, and other factors that serve to attract aircraft users and associated businesses are also important factors to consider. The combination of these influencers and the airport sponsor's own marketing and development efforts will determine the levels of aviation activity an area receives. This section explores airport industry trends and forecasts, and discusses recent changes in aviation activity that influence the Airport's future.

3.2 National Aviation Trends

As the national economy recovers from the most serious economic downturn since World War II and the slowest expansion in recent history, forecasters have projected that aviation will continue to feel the economic effects and growth will be slow over the long run. According to the *FAA Aerospace Forecast, Fiscal Years 2016-2036,* all segments of the industry including airlines and general aviation will continue to show growth in future years, but at a slow and measured rate as the national economy continues to recover.

3.3 General Aviation Trends

The general aviation market continues a slow but steady recovery. According to the *FAA Aerospace Forecast, Fiscal Years 2016-2036,* while the general aviation industry has made moderate gains in in recent years, in 2015 the industry experienced its first decline in deliveries since 2010. Flight operations from the staple of the general aviation industry – single-engine piston aircraft, continued to grow. Business jet deliveries recorded a modest increase compared to the previous year, turboprop deliveries were down 10 percent, and the smaller category of multi-engine piston deliveries declined 40 percent.[19] Based on figures released by the General Aviation Manufacturing Association (GAMA) in 2016, U.S. manufacturers delivered 1,581 aircraft in CY 2015, 3.1 percent fewer than 2014. This was the first decline after four years of growth in shipments that showed first signs of slowing down in 2014, (as shown in **Table 3-1**).[20]

[19] faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf
[20] *Ibid.*

Table 3-1 2015 Aircraft Shipments and Billings Compared to 2014

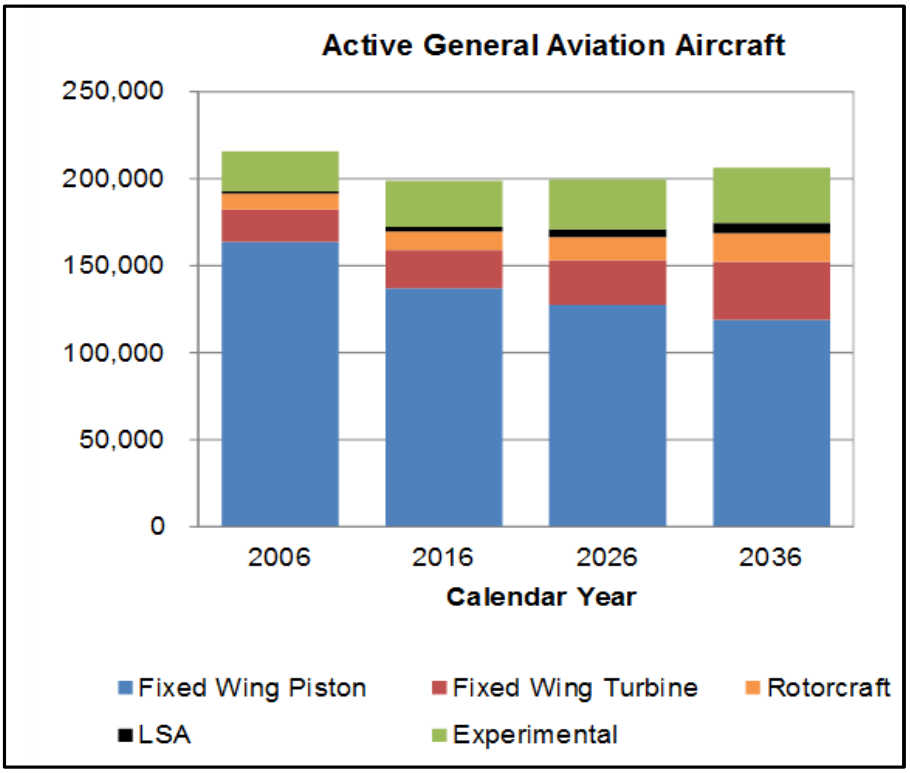
2015 AIRCRAFT SHIPMENTS AND BILLINGS COMPARED TO 2014			
AIRPLANE	**2014**	**2015**	**CHANGE**
Pistons	1,129	1,056	-6.5%
Turboprops	603	557	-7.6%
Business Jets	644	654	+1.6%
Total Shipments	**2,376**	**2,267**	**-4.6%**
Total Billings	***$21.8B***	***$20.9B***	***-4.0%***
ROTORCRAFT	**2014**	**2015**	**CHANGE**
Pistons	257	279	+8.6%
Turbine	741	675	-8.9%
Total Shipments	**998**	**954**	**-4.4%**
Total Billings	***$4.9B***	***$3.8B***	***-21.9%***

Source: https://gama.aero/news-and-events/press-releases/gama-publishes-2016

The active general aviation fleet is projected to increase at an average annual rate of 0.2 percent over the 21-year forecast period, growing from 203,880 in 2015 to 210,695 by 2036. An active aircraft is one that flies at least one hour during the year (see **Exhibit 3-1**).[21]

[21] *Ibid., pp. .3-1*

Exhibit 3-1 Active General Aviation Aircraft



Source:https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-

3.4 Other Aviation Trends

Other aviation industry trends in the U.S. include new emerging technologies and the acknowledgement of the importance aviation has on the economy. New technologies such as unmanned aircraft systems (UAS), and the Next Generation Air Transportation System (NextGen) continue to expand in a positive direction. The aviation industry continues to be economically beneficial for not only the U.S., but also for the state of Arizona where it has been found to contribute large amounts of jobs and money, either by primary or induced impacts to the State. Both new emerging technologies and studies documenting the economic impacts of aviation indicate positive trends within the industry in the near future.

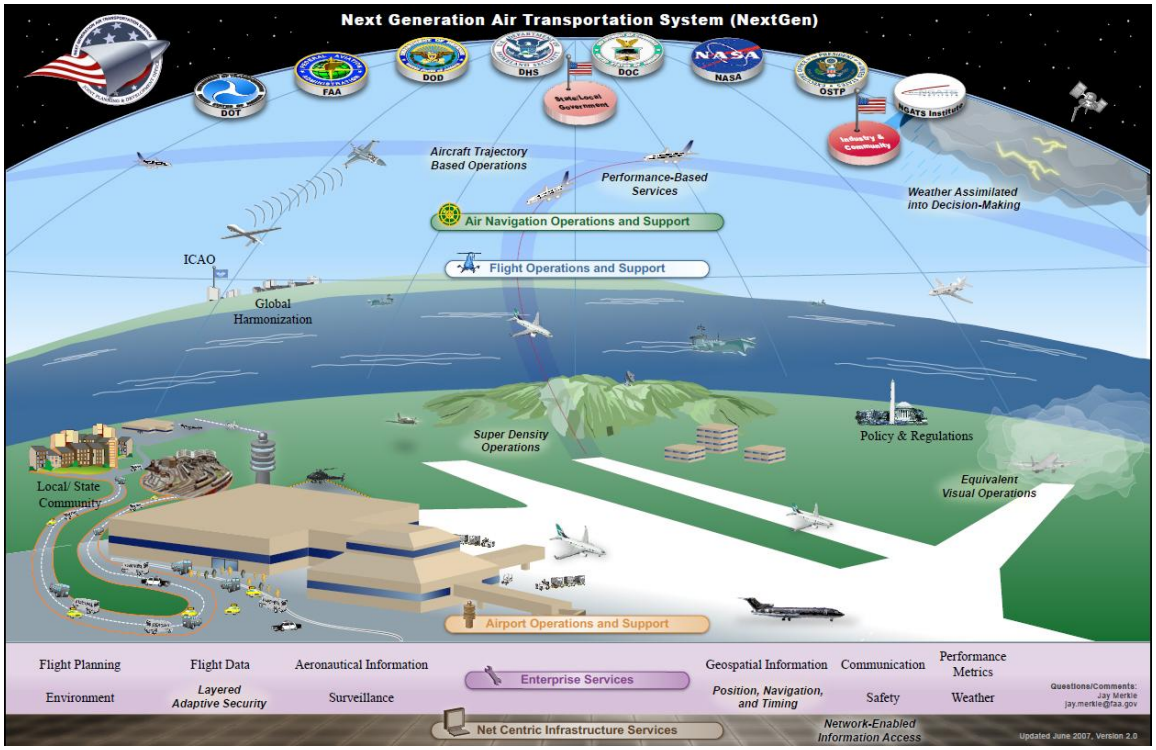
Unmanned aircraft systems take on a wide variety of forms from very small machines to full size aircraft platforms. The military applications initially gained the spotlight with development of small hand-held machines for local surveillance, up to full sized aircraft platforms capable of delivering an armament or surveillance package anywhere in the world. The nonmilitary world has also recognized the importance of UAS for everything from research, communications, or package delivery, to agriculture. The UAS technology is here to stay, and will begin integrating routine operations into the NAS in the foreseeable future.

NextGen represents a new era in aviation transforming the National Airspace System (NAS) through modernization and improvements in air traffic management technologies and procedures;

airport infrastructure and navigation technologies; and environmental, safety, and security related enhancements.

Exhibit 3-2 below highlights the various elements and organizations involved in NextGen technology and operations.[22]

Exhibit 3-2 Elements and Organizations Involved in NextGen Technology



Source: https://www.faa.gov/search/?omni=MainSearch&q=nextgen

3.5 Regional and Local Aviation Trends

Activity at the regional level and specifically at Douglas Municipal Airport in recent years has been relatively weak yet stable. Based on statistics from the FAA Form 5010-1, *Airport Master Record*, the official record kept by the FAA to document pertinent airport information, and input from the Airport sponsor, the number of based aircraft has dropped from a high of 27 in 2007 to 12 in 2016.[23] Correspondingly, aircraft operations were reported as 11,100 in 2007, compared to an estimated 2,600 in 2016.[24] This history is also reflected in the latest Airport Master Plan Update for the Douglas Municipal Airport. It is important to recognize that aircraft operations at airports with an air traffic control tower reflect actual counts that are logged by air traffic control. For non-towered airports such as Douglas Municipal, airport operations are more difficult to track and are

[22]http://www.faa.gov/nextgen/media/general aviation.pdf
[23]2016 DGL Airport Master Plan
[24]Local Airport Management Data

often comprised of estimates or extrapolations of actual counts made by airport management and staff.

3.6 Trends Analysis

The analysis of aviation data for the Douglas Municipal Airport in recent years has been inconsistent at best. While the shift in general aviation airports nationally as well as regionally has been from the small aircraft market to a substantially larger corporate aircraft market, the Douglas Municipal Airport does not seem to follow this trend. However, this facility is in a unique position to not only re-establish a solid 'typical' general aviation market, but also launch and support niche or unconventional general aviation activities. For example, expanding on existing unmanned aircraft system/vehicle (UAS/UAV) training or activity operations for military and national security uses. Since Sierra Vista/Fort Huachuca Army Airfield (FHU) is approximately 45 nautical miles west of the Airport, the potential for UAS/UAV conflicts with air traffic is minimal. Additionally, to bolster economic development in the regional area, a civilian UAS/UAV training/operations base may attract business users that may want to tap into this segment of the general aviation market.

SECTION 4 – MISSION, VISION, VALUES, AND GOALS

4.1 Introduction

This Section establishes a range of Goals for the Airport based on its mission, vision, and values statements; a Strengths, Weakness, Opportunities, and Threats (SWOT) analysis, and an analysis of the practical implications associated with each of those options. The following sections describe the details of that process and ultimately, the identified markets and related programs that will be important for future development of the Airport.

4.2 Mission Statement

An understanding of the local government and Airport environment and each of their unique perspectives is essential to the development of a viable ASBP for the Airport. This constitutes an understanding of the basis for formulating a mission direction and concise vision that creates the framework for the development of an appropriate ASBP study.

The purpose of Douglas Municipal Airport Mission Statement is to define the organization's purpose and primary objectives. These statements define the basis of the ASBP and give direction for its development. The basis for the Mission Statement was drawn from several sources including input from the ASBP's first working group meeting. Individual comments and input from members of this group were instrumental in the formulation of a draft Mission Statement for the Airport. From this initial work, a final statement was developed that clearly defined the input of all of the working group members, Airport management, and City government representation.

The following identified areas represent a compilation of the workshop input by those members:

Douglas Municipal Airport is known for:

- Aviator convenience - "Hidden Gem"
- Corporate business operators
- Distinguished aviation history
- Ease of ingress and egress
- Facilitator of general aviation activities
- Friendly staff and tenants
- Geographic location
- Lower aviation fuel prices
- Provides good service
- Proximity to Mexico border

Douglas Municipal Airport stands out from the competition because:

- City support
- Ease of access
- Friendly staff
- Good fuel prices
- Location and growth region
- Potential for development
- Services
- Support from the City of Douglas
- U.S. - Mexico Border Access

Douglas Municipal Airport excels at:

- Adaptability to business needs
- Business support
- Competitive fuel costs
- Convenience to users
- Flexibility
- Involving the community
- Outreach to business community
- Quality and customer service

Douglas Municipal Airport wants customers to:

- Choose Douglas to spend their aviation dollars
- Come back
- Feel safe and secure
- Feel welcome
- Return to the Airport
- Share their great experience with others
- Think of Douglas as a fueling and crew preparation site
- Think of Douglas as a great place for local general aviation services
- Think of Douglas as the landing facility for cross border opportunities

After consideration of each of the elements listed above, the ASBP working group formulated a Mission Statement that best describes the mission of Douglas Municipal Airport.

4.2.1 Douglas Mission Statement

The Mission Statement captures the intent of the Airport to grow into the future as a safe, secure, and responsible facility that serves as an economic engine to achieve those desired economic opportunities sought after by the community and region. To fulfill the intent of its Mission Statement, the Airport must build on its current foundation and improve its capabilities into the future to accommodate those goals for operational effectiveness and economic opportunities set forth by the Airport and community.

> ***The Douglas Municipal Airport provides a safe, secure, and welcoming airport where the economic environment drives aviation opportunities for both resident and business communities.***

The Mission Statement provides a general description of what the Airport will become in future years. Maintaining the community core values, establishing an appropriate vision for the future, and developing practical and obtainable objectives provides a road map for accomplishing that mission.

4.3 Vision Statement

A Vision Statement for the Airport is an assertion or image of the ideals of the Airport in the future that helps to inspire and empower the organization's stakeholders. The Vision Statement is used to project the Airport into the future and to visualize its ideal state.

The following identified areas are a compilation of the workshop input by the working group members of elements important to the Vision Statement:

What is the human value in the development of Douglas Municipal Airport?

- A highly efficient airport and a productive tax base
- Convenience to international access
- Efficiency of time and location
- Employment
- Home-town feel
- Ideal location to develop an Airport related business
- Privacy
- Recognition by the community of the value of the Airport
- The people who run and own businesses at the Airport are the key to success

Identify what Douglas Municipal Airport and its customers and other stakeholders value the most about the organization:

- Development potential
- Ease of travel for air commerce
- Efficiency and low cost services for the airport users
- Employment in and around the Airport
- Location
  Tax base

What does success look like?

- Aviation-related Business Park and catalyst for the region
- Creating significant return on investment
- Develop and maintain adequate infrastructure
- Economic magnet
- Erasing local and regional borders
- Increased corporate traffic
- More business to the Airport
- Name recognition
- Operating a successful and profitable airport facility
- Sustainability

The Vision Statement is the organizational tenet upon which the vision for the future of the Airport is predicated and is developed to answer questions such as:

- How is this interpreted and translated into a vision for the future of the Airport?
- What does this mean in terms of what the airport is expected to look like in 20 years?

While the Airport will continue to accommodate a broad spectrum of general aviation users, the Airport will maintain its long-established primary focus on business aviation. Ideally, the Airport of the future will be an integral part of the City, with a focus on public safety and consistent, high aesthetic standards for buildings, landscaping, and signage, and superior services. The working group's consensus was that when you are in the City – be it at the Airport or anywhere

else in Douglas – you will know you are in Douglas; there will be a strong sense of place, supported by a welcoming culture.

> ***Douglas Municipal Airport is committed to becoming a regional hub of aviation business activity, economic development, and gateway to attractions of the Sonoran Desert.***

The Vision Statement provides descriptions for the City's vision for the future of the Airport. These are mainly aspirational, examples of what could be done and not necessarily what will be done.

4.4 Core Values and Value Proposition

A Values Proposition Statement communicates to the community, airport users, and all others, the values of the airport. Based on the working group input and the outcomes of the Mission and Vision Statements, the following draft Value Proposition Statement was proposed:

Douglas Municipal Airport core values are:

- Always maintain the highest level of safety;
- Encourage community involvement;
- Strive to provide professional and courteous service at all times;
- Aspire to build a progressive airport business climate by promoting investment and opportunities consistent with the nature of the community; and
- Value our environment and strive to maintain sustainable growth.

An organization's value proposition is, after in-depth analysis, its proclamation of the benefits, costs, and values it believes it can deliver to its customers, prospective customers, and stakeholders within and outside the organization. The City's Value Proposition for the Airport is to exemplify the general aviation industry's "best business practices," while maintaining consistency with the City's own "best product" Value Proposition, emphasizing innovation and creativity. The Airport will provide services to its customers, prospective customers, and stakeholders that will be clearly recognized as of such quality that they will be willing to pay a premium for those services, if necessary. The Airport will not always be the lowest-price service provider, but it will provide services of high quality that customers will ask for it by name.

Thus, the City's Value Proposition for the Airport is:

> ***Become an industry-leading general aviation airport serving the needs of aviation commerce and general aviation by: Aspiring to build a progressive airport business climate by promoting investment and opportunities consistent with the nature of the community, and by always maintaining the highest level of safety, providing professional and courteous service always, being actively engaged with the community, valuing our environment, and striving to maintain sustainable growth.***

4.5 Douglas Municipal Airport - Future Possibilities

This section is intended to describe the ideal general future vision and direction that the City of Douglas would like to see for the Douglas Municipal Airport, and identify some of the challenges that will be met aong the way. Generally, the Airport sponsor builds, maintains, and improves common-use infrastructure: particularly the runway, taxiways, certain navigational aids, airfield lighting and guidance signs, perimeter fencing and access controls, and general utilities including water and sewer. Whenever possible, the Airport leverages its own capital investments with grant funding obtained from ADOT and any other sources that may be available. The Airport usually does not build hangar facilities, shops, and office spaces. That type of development is customarily built using private funding, most often in the context of a ground lease agreement. This does not mean that the Airport could not or would not ever participate in a hangar development project, but it would be a departure from the normal manner of Airport development, and it would presumably require a compelling reason to do so.

In some circumstances, the Airport may partner with a private developer, improving common-use infrastructure to facilitate desirable private development. Another key consideration is that most Airport development is market-driven: in the absence of sufficient demand for a particular project, there is little incentive to build, either for the Airport or (especially) for a private developer seeking a return on an investment. On the other hand, not every project should be evaluated or executed based solely on the prospects of its financial return: if that were the case, there would be no public parks, aircraft viewing areas, or public art amenities of the type that have long been much valued by the City's community. Different measures of value surely apply to these kinds of projects; return on investment is not the only measure of success.

The City's ideal Airport of the future would accommodate a wide, diverse variety of aviation users and uses. Airport businesses would provide a comprehensive range of aviation products and services. The Airport would provide high quality amenities for tenants, pilots, passengers, and visitors; it would be a pleasant place to work or visit, with a strong sense of community and a professional and friendly atmosphere. The Airport's stakeholders and the surrounding community would take great pride in the Airport. The Airport and City would coordinate to promote and take advantage of local attractions, amenities, and events. The Airport and the City would be the destination of choice for a wide spectrum of general aviation users.

The Airport of the future would ideally have an area designed to support and grow a community of aviation enthusiasts and aircraft owners. This area would feature new T-hangars and a host of amenities including a self-service fueling installation, an aircraft washing facility, public tie-down spaces for visiting aircraft, an executive terminal with pilot weather and flight planning facilities, maintenance facilities, and perhaps aircraft viewing and special event areas for the public.

The Airport of the future would have a "front door" facility serving as the gateway from the Airport to the community and from the community to the Airport. This "front door" facility would be distinct, uniquely recognizable, emblematic of the Airport and reflective of Douglas's unique culture of creativityAdditional branding elements to help define the Airport of the future would include way-finding signage and iconic structures that are distinct and instantly recognizable as "Douglas." The Airport would also have elements that are attractive and accessible to the general

public as well, such as public art, the Border Air Museum, aircraft viewing areas with hospitality features such as an airport restaurant.

The Airport of the future will have a strong business presence. It will be an engine for economic development not just for the City, but for the entire region. The Airport will partner with the City's Economic Development Department to attract aviation-related business to the City. The Airport will also partner with the Economic Development Departments of neighboring communities to support their programs to attract, retain, and grow businesses.

The Airport can be the regional leader and model for best practices among general aviation airports and will be an asset in which the community will take immense pride.

4.6 Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

The preceding Sections have presented an extensive amount of information about the Airport, its current markets, and the status of the aviation industry. While compilation of this type of data is critical to the ultimate success of any planning effort, the challenge for most business plans is how to take the information that has been generated and use it most effectively. Due to the amount and diversity of data that has been gathered on the study area, a SWOT analysis has been conducted to strategically summarize the information.

Generally defined, a SWOT analysis is a standard strategic business planning tool used to identify the strengths, weaknesses, opportunities, and threats associated with a particular action or area. The SWOT analysis involves specifying an objective or an object (in this case the Airport) and identifying the internal and external factors that are favorable and unfavorable for that object being successful in a given environment. For this ASBP, the following sections summarize the SWOT analysis factors related to the Airport that provide the greatest indicators of the Airport's current condition.

On October 3, 2016 the SWOT process was initiated by gathering the ASBP working group together to conduct one of the most important elements of the building of a strategic business plan – the SWOT workshop. This workshop provided a venue for the working group to input their diverse perspectives on the unique elements of the Airport and the future development of the ASBP. The SWOT analysis workshop isolated and categorized actual and perceived strengths and weaknesses of the Airport and its organization from an internal perspective and opportunities and threats from an external perspective. As noted in the workshop:

- **Strengths** – internal items accomplished particularly well or unique assets of the Airport or the organization, especially in comparison to competitive and comparable airports or organizations.

  Strengths need to be preserved, built on, and leveraged.

- **Weaknesses** – internal items that: (1) are not accomplished particularly well; (2) hinder or prevent desired performance; or (3) are acutely lacking or need to be improved.

  Weaknesses need to be addressed and remedied.

- **Opportunities** – external items that could help realize the mission and vision for the Airport. Opportunities may be identified by studying changes or trends within the industry, the marketplace, or the community.

Opportunities need to be seized or capitalized on.

- **Threats** – external items that could threaten the realization of the Airport's mission and vision. Threats are typically identified by studying changes or trends within the industry and the local marketplace.

Threats need to be managed or, if possible, eliminated.

The following matrix depicted in **Exhibit 4-1** shows the inter-relationship between the various SWOT elements and how they work with each other.

Exhibit 4-1 Douglas Municipal Airport SWOT

Source: Airport Corporative Research, Report 77, sponsored by the Federal Aviation Administration. Library of Congress Control Number 2012948352 © 2012 National Academy of Sciences.

The Douglas Municipal Airport Working Group identified the following categories to be utilized in the Airport's SWOT determinations.

Strengths

- Airpark Capabilities
- Available Land
- Border Location
- Border Patrol Facilities
- Business Friendly
- Community Support
- Convenience
- Flight Training Potential
- Free Trade Zone (FTZ)
- Fueling Capability
- Good Weather
- Historical Aviation Museum
- Room for Expansion
- Strong Leadership
- U.S. Customs

Weaknesses

- Ageing Population
- Aging Infrastructure
- Funding Issues
- General Business Decline
- Insufficient Airport Operations Budget
- Lack of Marketing Plan (Cohesive)
- Low Public Awareness
- No Scheduled Public Transportation
- Pavement Weakness: runway, aprons, and taxiways
- Perceived International Airspace Issues
- Regional Airport Competition
- Under-developed
- Utility infrastructure
- Understanding of the Douglas Market

Opportunities

- Increase Corporate Traffic
- New Terminal and Development Space
- Business/Industrial Park
- More Focused Advertising
- Medical Tourism
- Growing population in Mexico
- U.S. Customs Service
- Charter Service
- Hangar/Aviation Storage
- Land Development
- Increased Grant Funding (ADOT)
- Current Favorable Airport Fee Structure

Threats

- Unsecured Funding
- Border Security Precautions
- Regional Airport Competition
- Passport Regulations (Mexican Side)
- Current Limited Maintenance Funding
- Limited Staff
- Poor Runway PCI Index
- Lack of Infrastructure
- Rising Costs
- Waning General Aviation Interest

4.7 Goal Preparation Using SWOT

The findings of the SWOT analysis served as the basis for the development of Goals that realize the Mission and Vision for the Airport. **Table 4-1** presents a summary of those working documents used with the Airport Working Group to facilitate development of goals for the Airport. The following SWOT Matrix describes how the Airport can leverage its strengths to take advantage of its stated opportunities. It also addresses the Airport's weaknesses and threats and the best available course of action to overcome them.

Table 4-1 Douglas Municipal Airport (DGL) SWOT Matrix

Internal / **External**	**Strength (S)**	**Weaknesses (W)**
	S1 Available areas of Growth	W1 Lack Focused Marketing Plan
	S2 Proximity to Borders and Business Friendly Catchment	W2 Poor Runway Surface
	S3 Free Trade Zone (FTZ)	W3 International Airspace Issues
	S4 Strong Leadership	W4 Funding Issues
	S6 Border Patrol	W5 Local Business Decline
	S7 Historical Museum	W8 Regional Airport Competition

Opportunities (O)	**SO Goals** ***(that leverage strengths to take advantage of opportunities) Quadrant One***	**WO Goals** ***(address weaknesses & take advantage of opportunities) Quadrant Two***
O1 New Facilities	1. Build New Facilities/Terminal	
O2 Existing Aviation Business	2. Expand and Develop/Specialty Air Services for General Aviation and Corporate	

O3 Infrastructure & Runway Strength Improvements	3. Improve infrastructure by capturing funding sources	New development/funding plan to achieve infrastructure upgrade.
O4 Funding Opportunities Available for Airport Projects	4. Improve relationships with FAA and other funding source	
O5 Strong Support from Town, Economic Development Dept., and Rotary Club		5. Develop and implement Airport Marketing Plan
Threats (T)	**ST Goals** **(that leverage strengths to manage/avoid threats)** **Quadrant Three**	**WT Goals** **(that address weaknesses to manage/avoid threats)** **Quadrant Four**
T6 Shrinking General Aviation Market	6. Market additional flight services & businesses	8. Implement Marketing Plan to halt Douglas market attrition
T7 Regional Airport Competitors	7. Advertise advantages of doing business with Douglas Municipal	
T8 Conflicting Airspace, Pinal County Airport		

Source: Airport Corporative Research, Report 77, sponsored by the Federal Aviation Administration. Library of Congress Control Number 20129483352 National Academy of Science.

4.7.1 Smart Model Goals Evaluation

A SMART Model is designed to assist decision makers with goal development by evaluating each proposed goal against specific standards, that help assure the completeness and continuity of those proposals. A SMART Model worksheet was developed and applied to each of the eight Goals identified by the working group and Airport management to assist with evaluating these Goals and assuring that each met the SMART criteria:[25]

[25]Airport Corporative Research, Report 77, sponsored by the Federal Aviation Administration. Library of Congress Control Number 2012948352 © 2012 National Academy of Sciences

Specific – Is each goal simply stated, straightforward, and compelling?

Measurable – Is each goal tangible, able to be tracked, and identifiable when a final solution has been reached?

Attainable – Is each goal possible to accomplish without being too burdensome? Is it reasonable?

Relevant – Is the accomplishment of each goal relevant and meaningful to the Airport? Does it tie in with the Airport's core values and general mission?

Time Bound – Does each goal have a beginning and end point? Is it identified with a viable time frame for accomplishment?

After general discussion of the identified Goals, and reaching an agreement that each stated Goal satisfied the SMART Model criteria, the detailed analysis of the GROW Model was applied to each of those goals.

4.7.2 GROW Model Goals Evaluation

The GROW Model worksheet was designed to help refine the stated goals using the **G**oal, **R**eality, **O**ptions, **W**ill model. The GROW Model was applied to each of the stated goals. Generally stated, each element of the GROW Model is described as follows:

Goal – A goal is a statement of a desired result, outcome, or level of attainment that needs to be reached to realize the mission and vision for the airport. All goals need to be SMART goals.

Reality – This component focuses on the current state of the Airport. It includes an assessment of the current reality of the situation at the Airport, the magnitude of the work that needs to be accomplished, and the people who need to do the work.

Options – This component focuses on identifying the various ways to achieve a specific goal. An analysis of the alternatives and the issues, challenges, problems, and risks associated with each option can be used to help identify the most appropriate alternative.

Will – This component focuses on determining whether or not the resources will be available and the people will be ready, willing, and able to perform the tasks necessary to achieve the goal. There is a subjective element to this decision as Airport directors and policymakers will need to assess the readiness, willingness, and ability of others to make and keep a commitment to achieve the goal.

Each of the eight identified Goals were subjected to the detailed analysis of the GROW Model, and specific information and requirements for each were applied and analyzed.

After the GROW Model evaluations of the stated Goals were complete, it was determined that the majority of the Airport's Goals centered around the development and implementation of a Marketing Plan, and related marketing and development efforts for specialty areas of the Airport. Of equal priority were facility goals to improve the Airport's infrastructure, and new business development.

4.8 Prioritized Goals

Utilizing the SMART and GROW models, the Airport has identified eight primary Goals from the ASBP. Since many of the goals are related, such as those tied to future marketing efforts, several Goals may be pursued simultaneously, depending on the availability of resources to do so.

Prioritizing the Airport's Goals requires the careful consideration of several factors such as:

- Which of the goals do you need the most, and how quickly do you need them?
- Consideration must be given to the cost of achieving each Goal.
- Can the City afford a Goal now, or should it be moved down in priority when required funds may be more available?
- Which Goals are the most essential to future airport development, and should they be moved up in priority?

Even though Goals have been prioritized, in practice, it may be necessary to pursue more than one Goal at a time, or in parallel with each other. An example of Goals that should be pursued in parallel might be: develop a new marketing plan and identify new funding opportunities for infrastructure improvements. In the case of the Airport, an immediate need to market the Airport to new business opportunities exists now. However, the Airport's infrastructure does not currently meet the requirements that new business is likely to bring. Thus, both Goals need to be pursued simultaneously.

After the eight initial Goals for the Airport were selected, the ASBP working group prioritized them based on considerations of need, cost, and the ability to accomplish each in a timely manner. The results of that prioritization are shown in **Exhibit 4-2**.

Exhibit 4-2 Douglas Municipal Airport Prioritized Goals

Priority	Goals
1	**Goal:** Develop new comprehensive marketing plan for Douglas Municipal Airport **Justification:** This goal is necessary to the identification and recruiting of new future business and operators for the Airport.
2	**Goal:** Improve working and political relationships with Federal, State, and Local funding agencies **Justification:** Building a positive image of Douglas Municipal Airport and the City of Douglas by maintaining the high standards of conduct and fiscal responsibility to facilitate greater opportunities for future traditional funding will improve working relationships.
3	**Goal:** Identify new funding opportunities for infrastructure improvements **Justification**: Traditional State funding sources as utilized in past years are insufficient to meet the timing of future required infrastructure development. Additional sources of funds must be developed or identified.
4	**Goal:** Increase Fuel and Services sales to General Aviation and Corporate aviation customers **Justification:** Additional marketing of sales and services will heighten the profile of the Airport and increase operating revenues.
5	**Goal:** Improve working and trade relations on both sides of the Border by working with Mexican and American immigration officials to facilitate better access **Justification:** Access of persons and goods important to the Douglas economy is currently inhibited by border crossing regulations and restrictions.
6	**Goal:** Develop Douglas Municipal Airport as an operational base for border protection drones and other Border Patrol services **Justification:** The Douglas Municipal Airport is well positioned to offer additional services to the Department of Homeland Security operations such as being a base for drone operations and other border patrol operations.
7	**Goal:** Increase Medical Tourism **Justification:** A large market currently exists for medical services on the Mexican side of the border, which could be better serviced by raising awareness of services and border crossing opportunities at Douglas Municipal Airport.
8	**Goal:** Attract new air services to Douglas Municipal Airport **Justification:** This goal speaks to continued efforts to attract additional General Aviation and Corporate aircraft to the region.

4.9 Community Stakeholder Interviews

To gain insight into the daily challenges and direction of stakeholders associated with the Airport, a number of interviews were conducted, both by telephone and in person, with Airport tenants, local government, City officials, and members of the general public, to determine the primary issues facing successful Airport development today. Those interviewed were encouraged to discuss historical issues they have encountered with the Airport, as well as, future needs and opportunities where association with the Airport would be beneficial to future growth. While perspectives varied, all of those interviewed agreed on a number of basic issues that must be addressed at the Airport for business to move forward.

Infrastructure issues seemed to be primary in all discussions. The immediate need for runway, taxiway, and apron repairs and upgrades was deemed vital not only for safety, but for the Airport's ability to accommodate current and future growth. Other issues such as an "on site" weather observation system, and the benefit of acquiring an instrumnent landing system were also discussed.

Marketing issues also emerged as a major concern. Many of those interviewed felt that the world had forgotten what a historic and important place the Douglas Municipal Airport was, and how it had contributed to development of the region. It was generally felt that a comprehensive marketing effort should be undertaken that would highlight not only the historical significance of the Airport, but also showcase the new opportunities for development present in the market today.

Financial constraints and the limitations of current City and Airport budgets were widely discussed. Funding for routine repairs and even matching funds for State sponsored capital projects have been lacking in the past. Most felt that this was the primary issue pertaining to the general deterioriation of the Airport's infrastructure. General discussions of additional or non - traditional funding sources were also included.

Key points and other information obtained during the course of these interviews were factored into the formulation of future airport Goals and related Action Plans to assist in identifying and accomplishing those Goals.

SECTION 5 – DOUGLAS AND AIRPORT DEVELOPMENT FACTORS

5.1 Introduction

There is a need to understand the current function of the Airport as it exists today and compare it against its expected role in the future, in order to effectively chart a successful path to future development.

This section is dedicated to a more in depth look at the elements influencing businesses at Douglas Municipal Airport, an analysis of the future activity forecasts, and a discussion of the existing facilities and tools that the Airport can bring to bear to support future business development. A number of these discussions will also indicate the need for improvements or additional services beyond what currently exists, to adequately address future needs.

5.2 Douglas Municipal Airport Market Drivers

All of the economic factors that influence markets in the City of Douglas and Cochise County also influence the activity levels at Douglas Municipal Airport. As new businesses are developed in the City, and as tourism and special event visitors increase, a certain percentage of those new activities will utilize the services of the Airport in some fashion.

Economic development officials in Douglas believe that the Airport has the potential to lead the region in attracting technology and industrial business partners. As stated above in the 2014 *AZ-wsj _state of_ business* white paper, Aerospace and Defense and Advanced Manufacturing related industries are two of the economic drivers that can support the local area by basing associated activities at the Airport. Douglas Municipal Airport can benefit from United States Homeland Security operational activity in Cochise County by promoting and supporting the existing unmanned aerial systems/vehicle (UAS/UAV) operations at Fort Huachuca, which in turn could attract associated defense and industry contractor fixed wing and rotor craft aircraft to the Airport. Advanced manufacturing industries typically increase the number and frequency of large corporate jets utilizing the Airport. While considering potential increases in business and traffic for the Airport, it is important not to lose sight of the fact runway repairs remain key to the Airport's ability to accommodate future traffic.

As Douglas Municipal Airport and the community move forward to accommodate this changing marketplace, it is appropriate to understand the Airport's current capabilities, and analyze the potential impacts of forecast future demand. The current Airport Master Plan Update contains evaluations that will help define the measures necessary to effectively carry the Airport into the future, and accommodate the demand of the future marketplace.

5.3 Douglas Municipal Airport Future Forecast

The current Airport Master Plan Update indicates that Douglas Municipal Airport will see limited, but steady growth in based aircraft and annual operations throughout the 20-year projection period. This growth is primarily driven by the Airport's advantageous proximity to both Douglas and Agua Prieta, as well as the existing facilities at the Airport. Business and corporate activity has also

steadily increased in recent years, which is largely attributed to the Maquiladoras in Agua Prieta. Furthermore, the availability of both Jet A and 100LL fuel at DGL is an attractive facility for itinerant users. Lastly, projected socioeconomic data show that Cochise County will similarly grow at a slow, steady rate over the next 20 years, similar to projected growth in aviation-related activity at the Airport.

As the market develops in future years, many of the products and services currently provided by the Airport will need to be expanded and improved upon to accommodate future growth. A discussion of current capabilities follows in the next section.

5.4 Aviation Products, Services, And Facilities

Douglas Municipal Airport offers a number of services and facilities to the general aviation community. Fueling services offering both 100 LL and Jet-A products are available. Maintenance services, and aircraft storage services are all resident on the airfield. Hangar space is still available, and the Airport is currently identifying areas for future growth and facility development to meet the demands of the future. Some of the major elements of Douglas Municipal Airport services are listed below:

5.4.1 Aviation Fueling Facilities

The City of Douglas provides both Airport Management and fueling services on the airfield, and provides both 100LL Avgas and Jet A fuels to both based and transient aircraft operators. The City also provides parking and hangar services, pilot supplies, and courtesy transportation services.

The fuel storage capacity is adequate for current levels of business. It is not anticipated that an expansion in fuel storage capabilities will be necessary in the foreseeable future.

5.4.2 Hangar Facilities

Douglas has three hangars on the airfield: one large T-hangar, one large conventional hangar, and one small conventional hangar. The large T-hangar has 10 units that are currently all being utilized. The large conventional hangar has six based aircraft, while the small conventional hangar has one Lifeline based helicopter. Additional aircraft storage is provided in the form of open air tie downs in various locations across the Airport.

As the Airport grows and continues to experience a shift in use from smaller aircraft towards larger and heavier corporate aircraft additional structures may become necessary. Generally, owners of larger corporate type aircraft prefer to have their aircraft hangered in times of bad weather or heat, or if they are staying for an extended period of time. If a maintenance service providers chooses to operate at the Airport, they will also need to provide structures capable of accommodating larger aircraft that may require heavy maintenance out of the weather. The locations of these larger facilities should be carefully considered, and placed in areas that are convenient to the user and perhaps adjacent to other services that may be required.

5.4.3 Terminal Building

Douglas Municipal Airport currently has three on-airport buildings and a trailer that are owned by the City of Douglas. Portions of the permanent structures have been used for GA terminal services

in the past. One structure is 800 square feet while the other is 600 square feet. Additionally, a small trailer of approximately 600 square feet provides additional office space as needed. Currently, the permanent structures are not being used for a specific purpose. While the Airport currently does not have a designated terminal building, construction of one is a specific recommendation identified in the 2016Airport Master Plan Update.

5.4.4 Aircraft Rescue and Fire Fighting (ARFF) Station

According to FAA guidance, operators of Part 139 certificated airports must provide Aircraft Rescue and Fire Fighting (ARFF) services. The Douglas Municipal Airport is not a Part 139 certificated airport, therefore ARFF equipment is not required. Local municipal or volunteer fire departments typically provide fire protection to general aviation airports in their district. Mutual aid agreements may also be provided and developed with nearby fire departments to assist in emergency situations. In any case, procedures should be in place to ensure emergency response in case of an accident or emergency at the airport. Although statistically very safe, the most likely emergency situations at general aviation airports are an aircraft accident, fuel or aircraft fire, or a hazardous material (fuel) spill. The level of protection recommended in FAA AC 150/5210-6D, Aircraft Fire and Rescue Facilities and Extinguisher Agents, for small general aviation airports is 190 gallons of aqueous film forming foam (AFFF) supplemented with 300 pounds of dry chemical. Proximity suits should be utilized for fire fighter protection. Aviation rated fire extinguishers should be immediately available in the vicinity of the aircraft apron and fueling facilities.

It should be emphasized that Douglas Municipal Airport is not an FAR Part 139 facility, and as such an onsite ARFF station is not required. However, as a matter of policy many corporate flight departments utilizing larger corporate aircraft of the type that are becoming increasingly popular at Douglas, will not dispatch their aircraft to an airport without some type of firefighting capabilities. The timely development of such capabilities, even if only on an “on call” basis, will likely be an influential factor in the future success of Douglas Municipal Airport’s corporate aircraft development.

5.4.5 Support and Maintenance Facility

Another facility that the Airport does not currently have is a dedicated support and maintenance building. It is recommended that the Airport construct such a building in the long-term planning period in order to have a secure, functional, and organized location for the airfield’s maintenance equipment. It is recommended that the building be approximately 5,000 - 10,000 square feet, although this is flexible.

5.4.6 Airport Access and Vehicle Parking

The surface transportation network and local community surrounding the Airport include State Route 80 and U.S. Route 191, which provide primary north-south access between Douglas and other cities within the state of Arizona. Access between the major routes and the Airport are primarily provided by 15th Street and 10th Street. Douglas Municipal Airport borders W. Airport Rd and E. Geronimo Trail. The southern edge of the Airport is located directly on the U.S. – Mexico border.

Auto parking at DGL is accommodated by the 30 paved parking spots just north of the primary apron and large conventional hangar. These spots are also shared with the Border Air Museum.

Immediately to the west of the main aircraft parking apron is an unpaved lot outside the western fence that can accommodate approximately 20 vehicles. Vehicles are frequently parked on the apron near the Lifeline building and near the small hangar away from aircraft parking areas.

5.5 Airport Infrastructure

The general infrastructure of Douglas Municipal Airport has developed over the years to meet the needs of the current business and operations levels. While the existing infrastructure is considered adequate for today, with the exception of the condition of Runway 03-21, many of its systems will need to be upgraded and expanded to meet future needs. Much of the information for this section has been drawn from the recent Douglas Municipal Airport Master Plan Update, which evaluated the current infrastructural elements and made recommendations for future improvements.[26]

5.5.1 Utilities

The existing electric, water, and telecommunication utilities are considered adequate for the existing facility. Upgrades and improvements to the existing utilities are recommended, as needed, in order to accommodate recommended development. The need for additional utilities, or modifications to existing utilities should be evaluated, as future development scenarios are refined.

5.5.2 Airfield Pavements

Douglas Municipal Airport is currently served by a single paved runway, Runway 03-21. Runway 03-21 is 5,760 feet in length and 75 feet in width and is constructed of asphalt. The weight bearing capacity of the runway is listed at 12,500 pounds, single wheel gear. Douglas previously had a second unpaved runway, Runway 18-36. This runway has been closed indefinitely as it was described as having large brush, rocks, and an uneven surface. Runway markings are generally faded and in need of re-painting across the airfield.

Most of the taxiway and parking apron pavements are in fair to poor condition, with noticeable pavement failures in many areas. Pavement strengths are generally in the 12,500 pounds category and less in areas of apparent failure. Many of the pavement areas across the Airport are in need of crack sealing, seal coating, or rehabilitation to bring them back to full strength. Additionally, as future demand develops, and the Airport continues its transition towards heavier aircraft, primary taxiways and apron parking areas will need to be strengthened to accommodate the regular use of larger corporate jets. Additionally, rehabilitation or reconstruction of the existing runway is needed, and should be the Airport's primary near term objective.

5.5.3 Airfield Lighting

Airport lighting and runway markings are important to supporting the control and movement of aircraft in the airfield area. They also help pilots visually identify their location relative to the airport and the airfield area. Existing airfield lighting consists of MIRLs (Medium Intensity Runway Lights) which define the lateral limits of a runway and are spaced 200 feet apart.

[26] 2017 Douglas Municipal Airport Master Plan Update

5.5.4 Airfield Signage

All of the lighted airfield destination signs have deteriorated with age and should be replaced as appropriate; the new signs should be internally lit with LED fixtures. This system upgrade should serve the Airport well into the future.

5.5.5 Instrument Aids to Navigation

Currently, Douglas Municipal Airport does not have any Instrument Approach Procedures or related NAVAID's. Potential future jet traffic may warrant this. An examination of potential instrument approaches are currently being analyzed in the Airport's Master Plan Update.

One possibility would be the development of a GPS approach specific to Douglas Municipal Airport. Non-precision Global Positioning System (GPS) approaches do not require ground-based facilities on or near the airport for navigation. The GPS receiver uses satellites for navigation, and it involves little or no cost for the airport sponsor. An instrument approach increases the utility of the airport by providing for the capability to operate in inclement weather conditions. This is especially important for air ambulance, physician transport, and business flights. It is also useful for conducting training and maintaining instrument currency. Further investigation as to whether or not a non-precision instrument approach can in fact be created for Douglas Municipal Airport can be determined by the FAA Flight Procedures Office.

5.5.6 Visual Aids to Navigation

The Precision Approach Path Indicators (PAPIs) on Runway 3 are posted out of service indefinitely, but the PAPI's on Runway 21 are currently in good working condition. There are Runway End Identification Lights (REIL's) located on both ends of Runway 3-21. The runway is equipped with medium intensity runway lights which should be maintained until they have reached the end of their useful life-cycle. It is anticipated that some or all of the components of these systems may need to be replaced in the medium- to long-term planning period. The wind cones and segmented circle are also in relatively good condition. The Airport should maintain and replace/paint as needed over the course of the planning period. Finally, the Airport rotating beacon is also in adequate condition, although it was noted that the fixture and tower are outdated. Possible replacement in the medium-term planning period may be warranted.

5.5.7 Weather Aids

The nearest weather station is an Automatic Surface Observation System (ASOS) that is located nine miles away at Bisbee Douglas International Airport. This ASOS meets the existing needs of the Airport and is in good overall condition. Installation of an ASOS system physically located on Douglas Municipal Airport property would be preferable in future years.

SECTION 6 – AIRPORT BUSINESS DEVELOPMENT

6.1 Introduction

This Section expands upon the information contained in Section 5 pertaining to existing aeronautical activities and infrastructure into an analysis of future business development opportunities and configurations. An evaluation of existing economic development centers located both on and adjacent to the Airport is provided, followed by a discussion about appropriate zoning to help achieve future business development.

The results of this analysis help to identify appropriate economic zones for future development that are compatible with both Airport operations and other activities immediately adjacent to it. This provides an overview of existing businesses and services at the Airport and within the City that are conducive to driving future development, and identify specific business types and their associated marketing requirements that the Airport wishes to attract in the future.

6.2 Current Business Configurations

Douglas Municipal Airport is surrounded by open land uses to the north and east of its boundaries, and by a medium density residential area to its west. Directly south and adjacent to the Airport boundary is the Mexico border, and high-density development in the City of Agua Prieta.

The major business and service areas of Douglas Municipal Airport today are primarily situated in the central and western portions of the airfield. A row of T-hangars is located in the central section of the Airport and surrounded by available space for future tie down or hangar development. Larger conventional hangars are located towards the western perimeter of the field, along with fuel storage facilities, the main aircraft parking apron, and a self-service aircraft fueling island. The Airport also maintains a small trailer on the western side of the airfield that is used as administrative offices and project offices for onsite Airport projects. Automobile parking is located west of the perimeter fence adjacent to the aircraft parking apron.

The general layout of the Airport is reasonably segregated into compatible and related business centers. However, some of the service functions like the fuel farm may suffer from space constraints when required to service multiple aircraft simultaneously. As the primary service function of the Airport shifts from smaller to larger aircraft, some reallocation of existing space may need to be made to effectively accommodate the demands of future business. Additionally, as discussed earlier several infrastructure upgrades to the Airport's runway and aircraft parking areas will need to be addressed in the short-term to accommodate those larger aircraft and the businesses that service them. At the present time, the poor condition of the runway is a serious detriment to the development of new aviation services, as business operators are currently showing a preference for utilizing Bisbee-Douglas International Airport and other nearby facilities with runways that are in better shape.

Although the Airport currently has a large amount of undeveloped space within its boundaries, it is constrained by access limitations. The west side of the Airport is easily accessed by existing roadways. However, no access roadway systems currently exist on the north and east sides of the

facility, and access to the south side is constrained due to the immediate location of the Mexico border. It seems likely that any initial new business development will have to occur on the west side of the field for the foreseeable future. Major elements of the existing Douglas Municipal Airport infrastructure are shown in **Exhibit 6-1.**

Exhibit 6-1 Douglas Municipal Airport Terminal Area Infrastructure

Source: Douglas Municipal Airport Master Plan

6.3 Airport Development Areas and Recommendations

The most effective utilization of land at Douglas Municipal Airport will occur if the available properties on the airfield are zoned for specific types of development that are compatible with each other. This type of segregation by use will allow for the most efficient development of similar businesses and help promote the highest and best use of the available developable land. For purposes of this study, six general categories or "zones" have been developed to accommodate those businesses or services most likely to base at Douglas Municipal Airport. These include the separation of based general aviation aircraft from corporate aviation activities and also from special operations and services. The Border Air Museum was also given its own development category, as well as Homeland Security and Airport Compatible Development zones. A description of how such developments should be grouped follows:

Specialty Aviation Services Zone: This district shown in yellow in **Exhibit 6-2** is located on the west side of the Airport and can be developed to accommodate specialty operations such as aircraft refurbishing, airframe modifications, hangars for mechanical and avionics shops, and other specialty work associated with aircraft maintenance. As demand for such development occurs, consideration should be given to expansion of the main aircraft parking apron or perhaps a connecting taxiway to the new business developments.

General Aviation Zone: A General Aviation Complex, shown in blue, and related development should occur in the central portions of the airfield, around the existing T-hangars and associated parking areas. This area should be designed to accommodate a variety of aircraft hangars, shade hangars, and open aircraft parking facilities as demand warrants. Other buildings in this area should include possible FBO facilities and the fuel farm. Future growth in this area will be directed towards hangar and facility development for small to medium sized general aviation aircraft.

Corporate Development Zone: The Corporate Development Complex, shown in green, should be located on the western side of the Airport, adjacent to what is now the main aircraft parking apron. Future planning indicates that this area is best designated for the development of facilities and services to accommodate larger corporate type aircraft and their related service requirements. Such development will likely include larger hangars, satellite fueling services, specialty maintenance operations geared towards larger corporate aviation, and an expanded executive terminal building. This development would also serve to separate the larger corporate aircraft and their operations from the resident general aviation population, and their related parking or hangar requirements.

Aviation Museum and Visitors Zone: This area currently accommodates the existing Border Air Museum that details the history and development of Douglas Municipal Airport from its early days as an international airport to its current day function as a general aviation facility. The future development area, shown in red, should continue to be set aside and developed as an attraction for tourism to the area for those who are interested in the historical aspects of the Airport. Activities for the Museum can also be coordinated with the adjacent park located immediately north of its location.

Homeland Security and Support Development Zone: This area is a large section of land located in the north central portion of the Airport. Its location would provide reasonable space for development of buildings and facilities necessary to the various functions of Homeland Security agencies and their support agencies. It also provides reasonable access to airport runways and taxiways for the aviation applications of these agencies.

Airport Compatible Development Zone: This area encompasses a large section of undeveloped land on the east side of the Airport's runway, inside of its boundary. While most FAA-NPIAS airports are required to limit development inside boundaries to aeronautical uses, Douglas is not a NPIAS airport and has some latitude as to the types of compatible business and industrial development it can accommodate within its fence line. It is recommended that development within this zone be made available to businesses and light industries that are considered compatible with the Airport's operation.

These six Zones are recommended designations for development likely in the immediate future. Additional room exists for expansion of each of these development zones in the future as conditions warrant and funding becomes available for expansion of the Airport's infrastructure.

Exhibit 6-2 Douglas Municipal Airport Recommended Development Zones

Source: Google Earth and Douglas Municipal Airport Master Plan

6.4 City of Douglas Economic Activity Centers Adjacent To DGL

All of the Airport property is within the City of Douglas limits, however, the Airport itself does not have a specific zoning classification. The extents of the City of Douglas zoning jurisdiction terminate at Airport Road which serves as the western border of the Airport property. Zoning designations immediately to the west of the Airport property include single family residential and multi-family residential. The land surrounding the Airport to the east is zoned by Cochise County as RU-4 (Rural). Cochise County identifies an RU-4 parcel as having a minimum lot size of four acres. Examples of uses in RU-4 parcels include all single and multiple household dwellings. Land use immediately south of the Airport in Mexico is a medium to high density mix of residential and commercial uses.

Therefore, opportunities for "off airport" development in the immediate vicinity of Douglas Municipal Airport are limited without a change in the current zoning designations. Even though most of the Airport's immediate development opportunities can likely be accommodated on Airport property, it is important for the City of Douglas to properly screen future developments in those areas to ensure future conflicts with Airport operations do not occur. Examples of developments that could interfere with Airport operations include sensitive residential development including churches and schools, heavy industries that produce smoke or vapors that may impede visibility around the Airport, tall towers or chimneys that may penetrate critical airspace surfaces, or water attractions that may attract wildlife and birds creating a wildlife hazard for Airport operations. The greatest and best use of lands surrounding Douglas Municipal Airport are served by developing businesses and industries that share a synergy with the Airport that mutually benefits the growth of each.

Even though most economic activity centers in the City are located away from the Airport, the business and economic connections remain. The City of Douglas hosts a strong core of merchants and other businesses that attribute between 20% and 70% of their trade to cross border traffic, depending on the type of business. Douglas also has several manufacturing entities and transportation firms that will benefit directly from an improved economy. Government and educational institution residents in the area will also see benefits from improved community access resulting from a busier airport.

The largest economic activity center for the Douglas area is the City of Agua Prieta in Mexico and its associated manufacturing and business community. Cross border traffic in previous years has been substantial with Douglas merchants and businesses routinely relying on Mexican visitors for half of their annual revenues. Conversely, the City of Douglas also serves as a major gateway for firms doing business with the manufacturing entities in Agua Prieta and the surrounding area. The principal economic activity in the area is manufacturing. Several maquiladoras and over 30 companies operate in Agua Prieta, which is also a major commercial port for Mexican products and goods being exported to the United States. Improvements in Douglas Municipal Airport infrastructure should allow more individuals and firms with corporate aircraft to take advantage of Douglas's unique location when accessing business interests across the border. Additionally, Agua Prieta is a popular shopping area for southern Arizona residents. Agua Prieta craftsmen are known for their saddlery and boot making skills and the City is known as a location to find and

purchase handmade pottery, blankets, and other such products. Other important economic drivers in Agua Prieta include agriculture and cattle ranching.

The current political situation between the United States and Mexico is complicating today's cross border commerce picture. Immigration issues, illegal traffic, potential construction of a border wall, and stringent limits on border passage by both governments all have the cumulative effect of limiting the beneficial economic impacts that Douglas and Agua Prieta have on each other than when people, goods, and services can flow more freely. The possible future opening of another cross-border port of entry nearby may help to ease some of these issues.

6.5 New Business Analysis

The proposed business sectors for Douglas Municipal Airport have been developed using "standard categories of Business Products and Services" as developed by Business Week. These categories follow the Standard Industrial Classification system of the U.S. Department of Commerce. Under the Business Week program, there are 28 categories of Business Products and Services. These categories cover all of the classifications for any type of business that operates in the United States. The primary purpose of this classification inventory is to give decision makers a sense of the availability of the various business resources in the region. The current locations for each of the businesses listed, i.e.; "At the Airport", "In the area", or "Not in the area" are noted and taken as a whole, produce a picture of the general business structure and resources available in the Douglas area today. This information in turn can be built on to help attract future target markets that Douglas and the Airport wish to exploit. The full 28 categories are noted in **Table 6-1**.

Based on interviews with various community and business leaders, the goal of the community is to help existing businesses expand and attract new companies supporting and generating tourism and support small manufacturing and industry applications in the area. The Douglas Municipal Airport can contribute to expanding the base of business for the community. Developable land for aeronautical activities still exists inside the boundaries of the Airport and in other areas of the City as well. The City of Douglas and the Airport can optimize revenues with an effective business development program targeted towards general aviation, corporate aviation services, specialty aviation services, and other aviation-related businesses that fit the general business characteristics of the community. With appropriate infrastructure repairs and upgrades, the Airport is well designed to meet the demands of forecast future general aviation and corporate aviation development.

The strengths of the Airport include: central location for residents in southern Arizona, valuable highway access, lower cost land and facilities compared to larger population centers like Phoenix, Tucson, Albuquerque, a major push for more tourism, and a strong business community. Some of the primary weaknesses of Douglas Municipal Airport, as noted in Section 5, include infrastructure issues such as pavement strengths, utility limitations, and limited facilities to accommodate future growth of the corporate aviation market.

Table 6-1 Inventory of Business Products and Services

INVENTORY OF BUSINESS PRODUCTS & SERVICES LOCATED IN DOUGLAS AREA			
Product or Service	**At the Airport**	**In the Area**	**Not in the Area**
1. Aerospace/Aviation			
a. Gov. & DOD	**X**		
b. Non-Gov.	**X**		
2. Agriculture			
a. Production		**X**	
b. Processing		**X**	
3. Automotive			
a. Vehicle Manufacturing			**X**
b. Parts Manufacturing			**X**
c. Sales & Service		**X**	
d. Tire & Rubber		**X**	
4. Banks		**X**	
5. Business Services		**X**	
6. Chemicals		**X**	
7. Conglomerates		**X**	
8. Consumer Products		**X**	
a. Apparel		**X**	
b. Appliance & Furnishings		**X**	
c. Beverages		**X**	
d. Personal Care		**X**	
9. Containers & Packaging			
a. Glass, Metal, Plastic			**X**
b. Paper			**X**
10. Fashion		**X**	
11. Education a. Services		**X**	
a. College			**X**
12. Electrical/Electronics			
a. Electrical Products		**X**	
b. Electronics		**X**	
c. Instruments		**X**	
d. Semi-Conductors			**X**
13. Food			
a. Distribution		**X**	
b. Processing		**X**	
c. Retailing		**X**	
14. Fuel			
a. Coal			**X**
b. Oil and Gas	**X**		
c. Petroleum Services		**X**	
15. Health Care			
a. Drug Manufacturing			**X**
b. Research			**X**
c. Medical Services		**X**	
d. Medical Products		**X**	
16. Housing & Real Estate			
a. Building Materials		**X**	
b. Construction		**X**	
c. Real Estate Sales		**X**	
17. Leisure Activities			
a. Eating Establishments		**X**	
b. Entertainment		**X**	
c. Hotel/Motel		**X**	
d. Recreation Products		**X**	

Source: Standard Industrial Classification system of the U.S. Department of Commerce. Under the Business Week, Program

Product or Service	At the Airport	In the Area	Not in the Area
18. Manufacturing			
a. Fabricated Metal		X	
b. Furniture		X	
e. Primary Metals		X	
f. Rubber & Plastics		X	
g. Textiles			X
19. Metals and Mining		X	
20. Non-Bank Financial			
a. Financial Services		X	
b. Insurance		X	
c. Thrift and Loan		X	
21. Office Equipment and Computers			
a. Business Machines/Services		X	
b. Computers/peripherals		X	
c. Software Services		X	
22. Paper & Forest Products		X	
23. Public Administration	X		
a. Federal Government		X	
b. State Government		X	
c. Local Government		X	
24. Publishing & Broadcasting			
a. Broadcasting		X	
b. Publishing and Printing		X	
25. Service Industries			
a. Advertising		X	
b. Construction		X	
c. Distribution		X	
d. Engineering		X	
e. Consultants		X	
f. Other Services		X	
26. Telecommunications			
a. Equipment & Services		X	
b. Telephone Companies		X	
27. Transportation			
a. Airlines			X
b. Bus		X	
c. Rail			X
d. Ship			X
e. Trucking		X	
28 Utilities & Power		X	

Source: Standard Industrial Classification system of the U.S. Department of Commerce. Under the Business Week, Program

6.6 Customer Requirements

The key to the recruitment of a new business to the City of Douglas and Cochise County area is the ability to meet the requirements of that business. The potential customer will create jobs for the area residents and contribute to the overall aviation business at the Airport. The following are considered the most important requirements of the customer or new business wishing to relocate.

- Low-cost labor and non-union environment
- Low-cost land and low taxes for facility
- Pre-constructed and/or build-to-suit facilities
- Limited environmental restrictions

- Economic incentive and availability of training funds
- Location that offers "Quality of Life" for employees
- Transportation access to major markets
- Strong community support for business

The City of Douglas and Cochise County have reasonably low-cost labor and low-cost land. The cost of labor and land is lower than other metro areas like Tucson, Phoenix, and Albuquerque which allows this area to be very competitive in this region. Indications from some developers are that they have some empty facilities available and are willing to build-to-suit the client requirements. The City of Douglas will move to quickly accommodate new developments in town where appropriate as well, which is very positive.

All of the ASBP working committee members interviewed indicated that the "quality of life" is the number one attribute of the area. Housing in the area is very reasonable and the area has low crime. Family values and education are key to the area. Many community leaders would like to see companies in the 50-employee size or smaller with higher wages. The highway system, eventual connection to Interstate 10, and the continued development of the Airport are all key assets to new business or industrial customers.

6.7 Market Characteristics for Airport-Related Business

There are certain products and services that are directly related to aviation and air service. These products and services, by their nature, may be required to be located at or near an airport. In reviewing various aviation guides and directories, a list of 52 aviation and airline products and services has been developed. In reviewing the list, it was discovered that, in most cases, the air service and aviation-related products and services need to be onsite or near Douglas Municipal Airport. In the survey, it was identified that 39 of the 52 activities need to be at or near the Airport. These activities are the service-related businesses that support air service passenger and freight and general aviation services. These products and services are dependent on being physically located on an airport.

Thirteen activities were identified that do not depend on an airport location to operate effectively. These products or services included manufacturing, engineering, training, publishing, and consulting. These products and services could be located at an airport or near an airport as long as the cost of operation is lower than a location away from the airport.

Table 6-2 lists the location characteristics for aviation-related businesses. As mentioned in the Customer Requirements section of the ASBP, the need for low-cost land, low taxes, build-to-suit facilities, economic incentives, and limited environmental restrictions are the market drivers for companies that would also locate in development areas on and around the Airport.

Table 6-2 Location Characteristics of Aviation

LOCATION CHARACTERISTICS OF AVIATION-RELATED PRODUCTS AND SERVICES			
Aviation Activity	**Onsite at the Airport**	**Near the Airport**	**No Airport Requirement**
1. Accessory Manufacturers			X
2. Acoustics			X
3. Air Ambulance	X		
4. Air Cargo	X		
5. Air Charters	X		
6. Air Courier	X		
7. Air Taxi	X		
8. Aircraft Brokers		X	
9. Aircraft Cleaning Services	X		
10. Aircraft Interior, Design, & Modifications			X
11. Aircraft Manufacturer	X		
12. Aircraft Parts Manufacturer			X
13. Airframe Repair and Overhaul	X		
14. Associations/Clubs			X
15. Auto Parking Lots	X	X	
16. Auto Rental	X	X	
17. Aviation Attraction	X		
18. Aviation Fueling	X		
19. Aviation Medical Services	X		
20. Avionics Distributors and Dealers		X	
21. Aviation Training School	X		
22. Catering	X	X	X
23. Component Design Engineering			X
24. Computer Software			X
25. Aircraft Electrical Repair		X	
26. Aircraft Engine Repair and Overhaul	X		
27. Flight Planning Services	X		
28. Freight Forwarder		X	
29. General Aviation Center	X		
30. Gift/Retail Shop	X	X	X
31. Ground Equipment Manufacturer			X
32. Ground Equipment Repair		X	X
33. Government Agency			X
34. Helicopter Charter	X		
35. Helicopter Repair/Overhaul	X		
36. Hotel		X	X
37. Flight Attendant Training			X
38. Instrument Manufacturer			X
39. Aircraft Instrument Repair	X	X	
40. Aircraft Modifications, Repair, Painting	X	X	
41. Private Passenger Terminal	X		
42. Pilot Training	X		
43. Publications			X
44. Reservations Training			X
45. Restaurants/Food Service		X	X
46. Safety and Emergency Equipment			X
47. Scheduled Airline	X		
48. Scheduled Airline Corporate Office		X	
49. Scheduled Airline Maintenance Base	X		
50. Aircraft Simulators		X	
51. Weather Services	X		

Source: Standard Industrial Classification system of the U.S. Department of Commerce. Under the Business Week, Program

6.8 Market Segmentation

The Airport is dealing with a very broad and diverse market in its efforts to find companies that will relocate to the Douglas and Cochise County area. Available options are numerous, widely scattered, and varied in their selection requirements. Some of the Airport's competitors are in a better position to serve certain segments of the market. Instead of competing everywhere, it is in the best interest of Douglas Municipal Airport to identify the most attractive segments of the market that it can serve most effectively.

The market consists of companies that differ in their wants, resources, geographical location requirements, buying attitudes, and practices. These industrial markets can be segmented by variables such as: demographic variables, operating variables, business character, situational factors, and personal characteristics. Based on the market segment variables that apply to the Airport, the segmentation strategy for the City of Douglas and Cochise County should be evaluated on the following areas:

- *Demographic Variables*– Area population experienced steady growth in previous years. Currently, Douglas exhibits a flat growth picture when compared to other metro markets in the West. However, reasonable cost of living makes the area very attractive to younger families and retirees.

- *Operating Variables* – Companies will need low-cost facilities and a skilled labor force to be competitive. Land and building costs will need to be very competitive. New businesses will need reliable and quality internet and communications capabilities.

- *Business Character* – Professional and technical companies that have the greatest flexibility in locating in the smaller metro markets. The City of Douglas should continue to add to its existing areas of business specialty niches and clusters.

- *Situational Factors* – In the short-term, Douglas, Cochise County, and the Airport should focus on companies that need a quick change of location. Companies seeking to leave the high crime areas in the large metropolitan areas are often the best candidates.

- *Personal Characteristics* – The companies that Douglas, Cochise County, and the Airport are seeking to attract, in most cases, are privately owned. The existing location of these companies is based on various business factors and the companies are close to where the owner wants to live. "Quality of Life" and lower cost of operations are the key selling points of the area and this should be emphasized.

6.9 Business Development Opportunities

Analysis of recent trends in the City of Douglas and corresponding air traffic and service demands at Douglas Municipal Airport, highlight the potential for new business development opportunities. The primary focus of this ASBP is to analyze and highlight aviation and other business opportunities that can be accommodated on Douglas Municipal Airport that will contribute towards its successful growth in the future. In general terms, Douglas's various attractions are instrumental to attracting an increasing number of corporate aircraft into the community and

creating an associated increase in demands for fuel and other revenue-producing services. The net result is that the Airport appears to be on the front end of several developing opportunities that could mark a period of growth for the facility if its infrastructure issues can be addressed in a timely fashion. There is development potential both on Douglas Municipal Airport property and in the adjacent areas zoned for industrial use near the Airport. Some of the best development potential appears to fall into several categories listed in the following subsections.

6.9.1 Aircraft Services

The Airport is already in the business of providing some aircraft services, including fueling and courtesy transportation. However, in previous years the primary market centered on smaller single and twin-engine aircraft. Today there is an increase in larger, more complex corporate jet aircraft In the U.S. fleet. The full-service package many of these customers usually require may include much larger volumes of fuel, major maintenance capabilities, security, large overnight hangar accommodations, water and lavatory services, catering, pilot lounge, flight planning and weather briefings, ground transportation, and reasonably private terminal accommodations for their passengers.

Service requirements for smaller aircraft can continue to be accommodated and expanded in the southwestern portions of the Airport as previously mentioned. However, the parking and hangar requirements of the larger aircraft desired for the future will likely be best developed on the Airport's large primary apron, located on the west side of the facility. Careful planning of this area will allow for future development of fueling facilities, larger corporate type hangars for storage and related aircraft services, and an adjacent executive terminal building with office accommodations to meet the needs of these clients. In today's corporate aircraft world, having such facilities often makes the difference between a company flying to your airport or to another airport that does have such accommodations.

In future years, the City of Douglas will need to target business and service operators that can provide:

- ***Expanded FBO Services:*** Douglas Municipal Airport has always provided quality services to meet the demands of based and transient aircraft from the region. However, to meet the demand for future business, the scope and type of services that future aviation customers may demand may include:
    - General aircraft maintenance and cleaning services
    - Appropriate hangar and storage service
    - Ground transportation services and rental car options
    - Catering services
    - Flight planning and weather services
    - Executive security services
    - Expanded and up-scale rest areas, including restrooms and other private areas

- ***Maintenance, Repair, and Overhaul Facilities (MROs):*** MROs encompass a multitude of maintenance functions and service providers that may be present on an airport. Based on the local history, and the forecasts for increasing use of the Airport by heavy aircraft, Douglas has an opportunity to develop its reputation as a maintenance base for aircraft throughout the region. As operations increase, and as demand for such services for newer and larger aircraft grow as well, new opportunities for MROs could present themselves.

  There are three broad categories of MROs including airline affiliate MROs, original equipment manufacturers (OEM), and independent MROs. At present, approximately three quarters of the MRO market is comprised of component overhaul, engine overhaul, and line maintenance. The commercial aircraft engine MRO market is the largest of those groups, and due to the increasing complexity and costs of modern engines, demand for quality services in this area are forecast to rise. Demand for other facets of the MRO market will grow as well creating opportunities for other operators such as avionics specialists, airframe and power plant (A&P) mechanics, aviation paint shops, and specialty aircraft and airframe refurbishing businesses. Specialty operators of this type should be targeted when considering future development opportunities.

  The market for MRO facilities reflects levels of demand for direct aircraft maintenance activities including line maintenance, base maintenance, and component overhaul as well as supporting activities such as technical services including engineering, maintenance planning, publications, purchasing and materials management, and quality assurance and control. Line maintenance activities include pre-flight and transit checks, daily checks, weekly checks, A-checks, and technical fault and troubleshooting and recertification. Base or heavy maintenance is performed on an out-of-service aircraft and includes major system modifications, schedule checks above the A-level, special inspections due to Airworthiness Directives, aircraft interior modifications, and aircraft painting. Component overhaul involves maintenance of specialized equipment on the aircraft such as engines, landing gear, avionics, hydraulic and pneumatic systems.

  Future development of heavier aircraft operations, and attraction of the appropriate MRO support services would form a synergistic relationship that supports growth into the future. Ample room exists today on the western side of Douglas Municipal Airport to accommodate the heavier MRO functions shown above. Target markets should include MRO operators and services that will be in demand as aircraft operations grow.

- ***Flight Schools and Training Facilities:*** The Douglas Municipal Airport occasionally receives student pilots from other airports that fly to Douglas to perform flight training exercises. It is certainly within reason that the Airport could support a small flight school "on site" as well. The benefits of such development would translate into higher fuel sales, increased lease revenues, and higher activity levels for the facility.

  Depending on the size of the flight school organization and its activity level, space on the aircraft parking apron would have to be assigned, and office space acquired sufficient to accommodate the school's activities. As the Airport moves towards future development it would be wise to designate available space for flight school activities, and target flight schools that might have an interest in expanding or relocating to Douglas.

- ***Charter Aircraft Operators:*** On-demand aircraft charter operators fill a niche for the traveler that occaisonally requires personalized air travel accommodations. These are usually point-to-point charters outside of traditional commercial airline services. Often times the charter aircraft operator requires nothing more than a parking spot, or hangar for their aircraft, and small office accommodations.

  Charter service providers should be targeted and marketed as appropriate to fill the need for local demand. While this service may not represent a large segment of the overall Douglas aviation picture, it is a normal and expected service airport users look for.

6.9.2 Facility and Office Development

As aircraft traffic and related services continue to grow in future years, which is anticipated assuming the Airport's facilities are upgraded including the runway condition, so would the demand for appropriate facilities to house their activities. In addition to hangars for aircraft storage, classrooms and offices for flight schools, facilities for small aviation businesses, and general office space would grow in demand. Many businesses associated with the logistics of moving goods and freight or providing services to the community often benefit by having an operating location on, or immediately adjacent to, an airport. Trucking companies and freight haulers, technical companies that are involved in the development of small components or electronics, small office complexes that may serve as a home base for airport tenants, or other business entities all represent viable future development opportunities. Future recruiting efforts should target such airport compatible businesses capable of utilizing or developing such facilities both on or off the Airport. Examples of potential businesses or operators include:

- ***Trucking and Logistics Companies:*** Trucking and logistics companies can require large amounts of outdoor space for parking, maneuvering and terminal activities. While businesses of this type do not generally require direct airside access, they do benefit from locating in areas nearby the airport and access to local transportation systems. Additionally, development areas immediately adjacent to an operating airport should be considered semi-industrial in nature, and trucking and logistics firms are a good fit for that environment without presenting negative impacts to the airport.

- ***Aircraft Parts and General Manufacturing:*** Manufacturing of aircraft parts, or general light manufacturing of a nature that does not interfere with local airport operations is another category of compatible businesses that can be located adjacent to an airport boundary. Specifically, aircraft parts or systems manufacturing could also support the activities of the MROs operating on the facility, or help attract clients with aircraft undergoing system upgrades or modifications. In similar fashion, any manufacturing entity producing a product that does not impede the operations of the airport by structure or emissions (smoke, steam, etc.) would also be a good neighbor to the facility, and fit well into the light industrial environment around the Airport.

  When recruiting manufacturing entities, priority should be given to those entities that best compliment the adjacent environment of the Airport. Aviation or aviation-related goods or services first, and general manufacturing that is compatible with the airport environment

second. This represents the application of a policy of "the highest and best use of available land" when targeting new development.

- ***Office Park Development:*** A small office park development may be an appropriate development opportunity if the Airport grows. Many firms that transit into and out of the Douglas and Tucson area might see the benefit of a local office presence near the Airport.

  Additionally, other industrial park operators, aviation and non-aviation alike, may benefit from the ability to extend management and operations controls over their enterprises from a local office. Training facilities, reservations centers, and research facilities can all be accommodated in an office park development. High-tech firms that specialize in electronics, component development, communications, and other similar disciplines that may require a combination of office/engineering space, and small warehousing or light manufacturing space can be strong candidates for a modified office park as well.

  The diversity of businesses that can be accommodated in a properly designed office park/light industrial park will give the City of Douglas a great deal of flexibility when placing new entrant businesses desiring to relocate to the community.

- ***Educational Facilities:*** When considering compatible land uses on and around an airport, facilities like schools, hospitals, and churches sensitive to noise or other impacts generated by an operating airport are conspicuously absent. One exception to that rule would be an educational facility associated with flight training or other aviation pursuits that would benefit from a location adjacent to an airport.

  The prospect of Douglas Municipal Airport hosting an auxiliary element of an aeronautical school or university is worthy of consideration if the prospect were to materialize. Other opportunities may be found in several Vocational Educational schools, or Airframe and Powerplant training as well, where the airport's industrialized environment is not a detriment to the course of study.

- ***Flight Museum:*** Douglas Municipal Airport already has an excellent aviation history portrayed in the Border Air Museum that displays the rich aeronautical history of the facility and region. This should be highlighted, and promoted in all future tourism development efforts. If possible the facility should be expanded if more material becomes avaliable, and promoted as a central attraction for all future airport related events or activities in the area.

6.9.3 Non-Aeronautical Use

In general terms, both FAA, and ADOT regulations dictate that all land and facilities located inside the fence will be utilized for aeronautical purposes. This includes the entire obvious infrastructure like runways, taxiways, NAVAID's, and apron areas. It also includes airport businesses and operators. Facilities like an aviation paint shop, an FBO, aircraft hangars, or other aviation service provider are acceptable functions on the airside. However, since Douglas Municipal Airport is a non-NPIAS airport, other operations such as a non-aviation manufacturing facility, an office building, or other non-aviation commercial operations may also be accommodated within the fence.

It is recognized that a variety of non-aeronautical uses are both beneficial and appropriate to an airport's function. Hotels, restaurants, rental car facilities, gas stations, parking facilities, and a variety of other concessions are appropriate to the structure of services offered by an airport. Such operations provide a necessary service to airport users and are typically located on airport property, but outside of the airside fence or boundary.

Many other businesses or industries can enjoy a symbiotic relationship with the airport as well. Development around the perimeter of an airport should be compatible in nature with the impacts that are produced by routine airport operations. While it is recognized that sensitive types of developments such as churches, schools, hospitals, and residential areas should be avoided in the immediate impact areas of an airport, other industrial or business types of development are compatible with the airport environment. Additionally, many businesses such as manufacturing entities, infrastructure and transit companies, and business parks directly benefit from the nearby access to the airport for transportation of their people, products, and services.

The areas immediately adjacent to the Airport are currently zoned for residential use by both the City and County. It is not anticipated that a need to change the existing zoning will be necessary in the immediate future. However, a balance must be maintained to assure that the specialized aeronautical requirements of the Airport are not compromised by the activities and functions of its immediate neighbors. This is best achieved by trying to attract compatible development that benefits from being located adjacent to the airport.

6.9.4 Through the Fence Operations

Through the fence operations represent a situation where the airport allows access, generally from private land outside of the airport perimeter, through the fence onto the airport operating area. This allows private entities to utilize the benefits of access to the airport's runways, taxiways, and facilities without necessarily being subject to normal airport fees and other controls for "on airport" operators. That means through the fence operators contribute to the wear and tear of the airport's runways, taxiways, and other systems by their use, but do not necessarily pay land rent, hangar fees, parking fees, and other associated users fees that would offset the airport's costs for maintenance and operations.

The FAA encourages all airports to be as self-sustaining as possible and charge fair market value for their services in an effort to offset the need for outside funding and grants. While both the FAA and ADOT do not prohibit through the fence operations, they do not encourage them either, believing that such access increases the maintenance and operation costs of the airport, without any substantial revenue return.

In the future, Douglas Municipal Airport may have an opportunity to pursue through the fence operations if appropriate. If a business or industry that required direct access through the fence was developed in an adjacent location, then appropriate access and security measures could be implemented to accommodate that function. With that being said, the most appropriate action for the Airport would be to attempt to locate such businesses with airside requirements physically on the Airport first, where appropriate lease and fee controls could be put in place. The most beneficial situation for the airport occurs when aeronautical activities and development are physically located on airport property. While other businesses and industries may benefit by

being located in the immediate vicinity of the airport, direct access onto the airport operations area should be reserved only for special circumstances, if at all.

6.9.5 Qualitative Analysis

Potential exists for developing each of the target markets listed above. However, pursuit of these opportunities should take place within a well-structured understanding of what businesses can be accommodated in what areas. For example, aircraft services can be anchored in three of the six development zones on the Airport depending on the market they serve. FBO services for corporate aviation may best be developed in the Corporate Development Zone, while existing services continue to service smaller general aviation in the General Aviation Zone. Heavy maintenance may occur in either the Corporate Development Complex or the Specialty Aviation Services Zone depending on circumstances and target market.

Non-aviation landside businesses such as restaurants, retail facilities, offices, museums, educational and training facilities do not necessarily need direct access to the airside to function, and can be accommodated on the landside, or outside the Airport Operations Area (AOA) fence portion of the Airport.

Adjacent off-airport development for businesses and industries that may benefit by being located close to the Airport, but do not normally require direct airside access, may represent the majority of development opportunities. This immediate adjacent industrial zone can accommodate numerous opportunities for development for everything from manufacturing entities, office parks, and transportation and logistics companies to specialty educational and training facilities.

When planning in all its various configurations, it is also important to understand the limits of Douglas Municipal Airport's current infrastructure. The condition of the existing runway must be repaired first to continue viable fixed wing operations. Taxiways and apron areas must be upgraded and repaired as well to accommodate additional aircraft traffic. Likewise, utilities, water, and sewer systems must be expanded and upgraded to accommodate the proposed large-scale growth, and electrical and communications systems expanded and extended to meet future demand. It is important that each new development be placed in a designated area where it is appropriate and functions best, in unison with similar trades and developments around it. As the necessary infrastructure is upgraded and improved and each zone is appropriately developed, this approach will create a balanced business and operating environment for all.

SECTION 7 – DOUGLAS MUNICIPAL AIRPORT FINANCIAL ANALYSIS

7.1 Introduction

Proper execution of an airport's fiduciary responsibilities is a key factor in the long-term success of an airport and its operation. Additionally, under the FAA's Airport Improvement Program (AIP) certain grant assurances such as Airport Sponsor Assurance No. 24 apply, and the FAA requires that any AIP funded airport be as financially self-sustaining as possible given the circumstances that exist at the airport. While FAA's grant assurances do not apply to Douglas Municipal, ADOT and their grant program operate under similar requirements. The development and implementation of an ASBP provides the opportunity for airport managers and policymakers to demonstrate that fiduciary responsibilities and the requirements of ADOT are being taken seriously. An airport's financial statements, budgets, and other performance measures are considered essential tools for achieving goals and realizing the mission and vision for the airport.

In recent years, Douglas Municipal Airport has maintained a modest annual budget providing Airport management, operations, and basic maintenance services necessary to meet the facilities obligations. The City is looking for funding opportunities in an effort to move forward with the funding of essential projects necessary to the Airport's long-term operations. The majority of capital projects at Douglas Municipal are funded by ADOT grants and programs, with required matching funds coming from the City of Douglas. Consequently, even with state assistance, the Airport has numerous high-priority capital projects that should be addressed in the immediate future for the facility to keep up with market demand that will require City funding.

As noted in the 2017 Douglas Municipal Airport Master Plan, the composition of aviation services demand is changing. Traditional Airport traffic consisting of small to mid-sized single and twin-engine aircraft is beginning to subside slightly, while potential activities from larger corporate jet traffic appears to be on the verge of an upswing. These activities are expected to translate into demand for higher volumes of fuel sales, maintenance services, and associated facilities within the next few years, if the Airport's basic infrastructure needs can be addressed. Additionally, this potential surge in heavier aircraft traffic could impact the Airport's runways, taxiways, and parking facilities as aircraft that exceed the current load bearing capacity of these pavements begin to utilize Douglas on a regular basis.

All of the factors described above drive the need for essential capital projects such as runway, taxiway, and parking apron rehabilitation and/or strengthening, facility development, and general infrastructure upgrades. Since many of these capital projects may be necessary to the Airport's development sooner rather than later, the Airport will need to work with ADOT, and perhaps others to evaluate sources of funds and priorities necessary to accomplish critical work in time to meet the demands of new business.

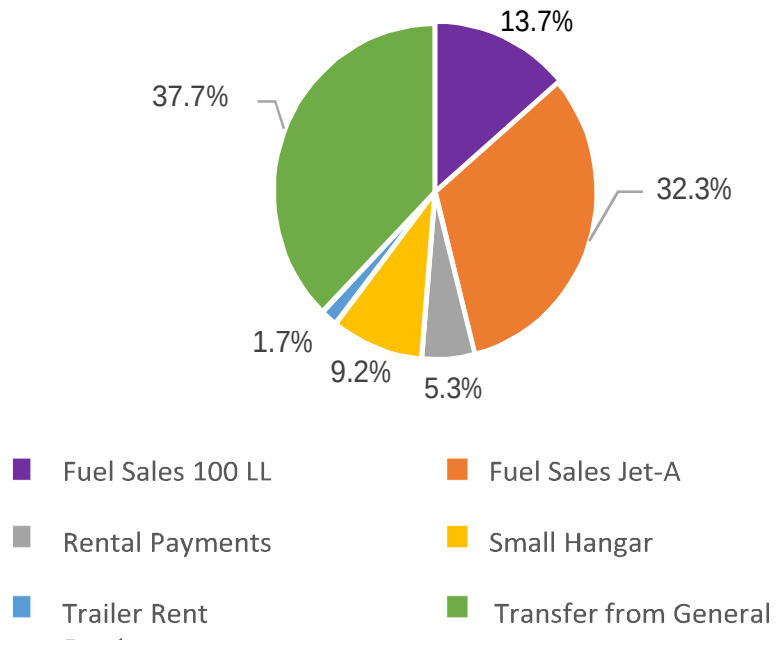
As Douglas Municipal Airport moves into the next phase of its development, Airport and City officials are planning to upgrade various aspects of its financial structure, and begin evaluation of

a comprehensive financial program necessary to meet demands of future development and operation.

7.2 Financial Overview

The overall City budget was initially discussed in Section 2, and indicated the Airport's expenses for 2016 were projected to be $159,762 dollars. However, projected revenues for the Airport only equal $99,460 dollars, necessitating the transfer of $60,302 dollars to balance the year's budget, as indicated below in **Exhibit 7-1**.

Exhibit 7-1 2016 Budget – Douglas Municipal Airport



Source: City of Douglas 2016 Budget

Annual revenues generated by the Airport have not always kept up with expenses. The Airport's general revenue outlook could improve if larger jets frequent the Airport on a more regular basis, and if new Airport tenants locate to Douglas. Nonetheless, a backlog of capital projects, increasing costs of repairs and operations, and an urgent need to upgrade facilities to accommodate new business will also translate into increased expenses for the Airport in the near term.

7.2.1 Sources and Uses of Funds

Douglas Municipal Airport is a Department under the City of Douglas Public Works. A portion of revenues necessary to its annual operations are generated by Airport services, rents, and other contractual revenue sources. The Airport may also receive monies from the City of Douglas General Fund as necessary to its operation, subject to the financial processes and approvals of the City. Major capital improvement or planning projects are traditionally funded by appropriate grant

programs from ADOT's aviation fund. In the case of ADOT, project assistance can come in the form of grants or the State's airport pavement maintenance program for specific runway, taxiway, or apron area pavement preservation projects.

7.3 Projected Revenues

Projection of future revenues for Douglas Municipal Airport are based on several factors including estimates of future aircraft activity, fuel sales, and associated revenues from services and leases. The Airport will, collect additional fuel sales revenue, along with any applicable landing fees, percentages of gross sales, and parking fees when aircraft utilize the public areas.

Over the last four years, basic Airport revenues have averaged approximately $99,460 annually, excluding grant funds or other outside funding dedicated to specific CIP projects. It seems reasonable to assume that direct Airport revenues could increase approximately 20% in the near term to approximately $120,000 annually. However, this is likely contingent upon the restoration of grant funding from ADOT in the very near future, because repair of the runway is critical to any future development. After runway repairs, a number of possibilities exist that could help achieve this additional revenue flow:

- The Airport would acquire a greater share of the corporate aircraft fueling business, approximately doubling its fuel sales over the next five years through appropriate marketing efforts.
- New businesses such as flight schools and technical service companies to service the corporate aircraft fleet and others will locate on the Airport.
- New hangar and land leases for business will be developed over the next five years that will be marketed at fair market value compared to other airports and similar lands in the region.

If the development as described above occurs in the next five years, this will represent a modest growth trend for Douglas Municipal Airport. These factors will also represent a marked increase in corporate aircraft operations, much higher fuel sales, and a small increase in Airport tenants and businesses.

Opportunities for the Airport to improve its annual revenue picture can also increase over the long-term in a number of areas. More aircraft operations in the future translates into more service fees, and higher fuel and related commodity sales. Future development will also increase land lease revenues and related developmental revenues.

7.3.1 Fuel Sales

The fuel storage facility at Douglas Municipal Airport is located to the south of the small conventional hangar near the primary apron. On this site, the Airport maintains two above ground storage tanks, one with AvGas and the other with Jet A fuel. Each tank holds approximately12,000 gallons of fuel. Self-serve Jet A fuel is available at the tank site, while AvGas is available on the main apron. The Airport primarily provides self-fueling service, but offers assistance upon request. Airport fuel is provided 24 hours a day. Historical fuel sales are indicated in **Table 7-1**.

Table 7-1. Historical Fuel Sales

Year	100LL	100LL Gallons Sold	Jet A	Jet A Gallons Sold
2007	$0.00		$15,815.50	
2008	$34,278.99		$18,091.63	
2009	$53,035.76	11,960	$35,207.48	4,310
2010	$179,197.52	24,550	$26,048.84	6,010
2011	$69,138.58	16,100	$59,041.73	12,110
2012	$53,124.59	11,600	$26,392.09	5,830
2013	$56,328.70	11,580	$34,478.81	6,140
2014	$74,065.46	15,190	$18,312.81	3,120
2015	$64,387.62	15,210	$20,147.55	3,520

Source: Douglas Municipal Airport Master Plan Update 2017

With the exception of a couple of peak years around 2010, annual combined fuel sales at Douglas Municipal Airport average approximately 18,000 gallons annually. It is not unreasonable to assume that with proper marketing efforts, and appropriate runway and facility repairs, total fuel sales might rise 30% to approximately 27,000 gallons annually. Depending on the type of fuel demands in future years this could result in an increase in fuel sale revenues from approximately $84,000 dollars annually to $120,000 dollars or more annually in the relative near term.

7.3.2 Land Lease and Operating Fees

Over the long-term, the Airport has development potential in the areas of hangar development, terminal development, and new business and office development. It is unlikely that the Airport or the City will engage in direct development and construction of these facilities. Most airports tend to be in the "land business," which encourages appropriate land leasing options for facility developers and others wishing to locate on the airport. Leasing rates should be tied to fair market value and duration of lease terms structured to allow recovery of investment and operation appropriate to each type of business.

7.3.3 General Services

Douglas Municipal Airport provides several services to the flying public directly. Landing fees, aircraft parking fees, special event accommodations, long-term storage services, and a variety of other call-out services are charged as needed. The Airport should update its rates and charges structure on a regular basis to assure that Douglas remains competitive with other similar facilities in the region. The Airport should continue to remain current with all its rates and charges to cover as much of the Airport overhead cost of operations as possible.

Douglas Municipal Airport has potential for the development of a new market in the corporate aircraft realm. Other opportunities for development appear to be present as well. It appears that circumstances may change rapidly, making it difficult to accurately forecast new revenue in the short-term. However, it appears reasonable to assume that Douglas Municipal Airport can likely raise its base annual revenues to higher levels in the next few years, assuming that critical infrastructure issues associated with the runway can be addresses.

7.4 Projected Operating Costs

Operating costs should be expected to continue to rise over the short-term as well. Inflation, employee salaries and benefits, costs of utilities, insurance, and other routine costs seem to increase at 3 percent to 5 percent annually over recent years in the State of Arizona. Fuel costs can be more volatile, but have remained reasonably steady over the last few years, only recently beginning to climb again in 2016. Maintenance costs tend to rise slowly each year as well, as costs of materials and supplies grow.

The real exposure for Douglas Municipal Airport is the immediate need for accomplishing certain capital programs in the near-term. Many runway and apron areas critical to current Airport operations are badly in need of repair. While most are eligible for State grants, the Airport is still catching up after several years of inactivity, and funds are not yet available to address all issues.

In general terms, most of the Airport's projected operating costs will continue to grow somewhere between 3-5 percent annually. However, costs for the maintenance or rehabilitation of critical portions of the airfield that may be prone to failure in the near-term could cause an unexpected spike in the Airport's cost of doing business.

7.5 Projected Capital Costs

The Douglas Municipal Airport Master Plan Update indicates a comprehensive capital program necessary to meet ADOT standards and promote the safe and efficient operation of the facility. The overall Airport capital improvement plan (ACIP) shown in Douglas Municipal Airport Master Plan Update totals **$5,074,000** in various capital projects over the next five years. These projects are phased and generally accomplished in order of priority as funding becomes available.

7.6 Costs, Phasing and Prioritization of Capital Programs

The current Douglas Municipal Airport ACIP from the Master Plan Update is shown below in **Table 7-2** in order of priority, along with associated costs, and phasing.

Table 7-2 Douglas Municipal Airport Capital Improvement Plan

Item #	Phase I: Near-Term Development (0-5 Years)	Total Project	State Grant	Local Match
1	Conduct environmental documentation (Categorical Exclusion) for reconstruction of Runway 03-21	$60,000	$54,000	$6,000
2	Obstacle removal, brush clearing	$5,000	$4,500	$500
3	Reconstruct Runway 03-21	$2,500,000	$2,250,000	$250,000
4	Reconstruct turnaround taxiways on Runway End 03	$150,000	$135,000	$15,000
5	Conduct study for implementation of an instrument approach	$50,000	$45,000	$5,000
6	Main Apron pavement maintenance	$150,000	$135,000	$15,000
	Total Phase I Costs	**$2,915,000**	**$2,623,500**	**$291,500**
Item #	**Phase II: Long-Term Development (6-20 Years)**	**Total Project**	**State Grant**	**Local Match**
7	Construct terminal building	$42,000	$37,800	$4,200
8	Construct permanent helipad with taxilane, fencing	$200,000	$180,000	$20,000
9	Install weather reporting station (AWOS or ASOS)	$150,000	$135,000	$15,000
10	Crosswind Runway Feasibility Study	$70,000	$63,000	$7,000
11	Update Airport Layout Plan	$150,000	$135,000	$15,000
Item #	**Phase II: Long-Term Development (6-20 Years)**	**Total Project**	**State Grant**	**Local Match**
12	Construct full-length parallel taxiway	$500,000	$450,000	$50,000
13	Land acquisition for runway protection zones and crosswind runway (± 75 acres)	$350,000	$315,000	$35,000
14	Install unpaved/gravel crosswind runway	$500,000	$450,000	$50,000
15	T-Hangar Apron pavement maintenance	$150,000	$135,000	$15,000
	Total Phase II Cost	**$2,159,000**	**$1,943,100**	**$215,900**
	Total Development Costs	**$5,074,000**	**$4,566,600**	**$507,400**

Source: Douglas Municipal Airport Master Plan Update 2017

7.7 Overview of Potential Funding Sources

Douglas Municipal Airport must evaluate all internal and external funding sources and opportunities to develop a comprehensive funding picture capable of supporting its operations.

7.7.1 Operational Sources of Funds

The Airport collects fees for many direct services to its based and transient customers, including landing fees where appropriate, parking, tie-down, or hangar fees, Special Aviation Service Organization (SASO) and various commercial business fees, and fueling fees and permits. The compilation of all such direct fees constitute Douglas Municipal Airport's Rates and Charges Structure, as updated and amended to reflect current markets.

The revenues derived from such direct Airport charges are generally applied as an offset to its expenses and costs of operation. If revenues are sufficient, they can also be applied against local share requirements for State grants. The amount of revenue Douglas Municipal Airport receives from this category of funding varies from year to year depending on the amount and type of aviation traffic that frequents the facility and the number and type of other special events that may occur during that year.

7.7.2 Non-Operational Sources of Funds

In addition to operational revenue sources such as landing fees, parking fees, operating agreements and leases, airports generally must look to non-operational funding sources to support the capital improvement programs. Non-operating sources of funds typically come from external sources, are not debt related, and are not directly related to the use of the airport or the leasing of airport land, improvements, and facilities. Some specific examples of non-operating sources of funds include the following:

State Grants – In the State of Arizona ADOT is the government agency responsible for providing a safe, efficient, cost-effective multimodal transportation system including airports. Monies collected from flight property tax, aircraft lieu tax, aircraft registration, and aviation fuel tax are deposited into the State Aviation Fund and distributed by the Multimodal Planning Division (MPD) Aeronautics Group. On an annual basis, money is allocated for airport development across five major programs. Projects eligible for state grant funding include design, construction, safety, security, capacity enhancement, environmental, planning, and land acquisition. An airport loan program is available for revenue generating improvements such as hangars and fuel storage facilities.

The size of the program varies from year to year depending on available funding. Due to numerous legislative sweeps from the Aviation Fund, three of the five programs have been suspended until Fiscal Year 2019. These include the state/local grant program, airport pavement management system (APMS), and airport loan program, which have historically been a significant source of funding for Douglas Municipal Airport.

Taxation and Government Subsides - In many cases, general aviation airports receive subsidies from the airport sponsor to cover operating deficits or provide matching funds required to receive state grants. Some airports may also receive subsidies from other municipalities or counties that benefit from the presence of the airport. Douglas Municipal Airport receives support from the City of Douglas for matching funds and other resources as appropriate.

Some general aviation airports receive funding through property taxes, both directly and indirectly. An airport may be granted direct taxing authority through state legislation when a stand-alone entity, such as an airport authority, is established to own and operate an airport. In other situations, airports may indirectly benefit from the taxing authority of the airport sponsor, such as a municipality or county, when a portion of the taxes collected by the airport sponsor are designated for the airport.

Investment Income - Investment income is associated with interest or gains directly tied to the investment of airport funds. Currently this study has not identified any direct Airport resources available for outside investment. However, the City of Douglas may pursue such investments from time to time as circumstances warrant.

Donations - While less common, private donations may also be a source of funding. Donations can be used as matching funds to help secure a grant or as capital for projects, vehicles, equipment, tools, and materials that may not be eligible under federal and state grant programs.

Sale of Surplus Assets - An airport's vehicles, equipment, tools, and other capital assets should be evaluated periodically to identify items that may no longer be needed, are beyond useful life, or have become obsolete. Such assets should be sold in accordance with airport policies and procedures. The sale of surplus assets may require the reimbursement or reinvestment of the state share of grant monies used for the initial acquisition.

Debt Financing - Long-term loans are typically used to finance the acquisition of land; the purchase of vehicles, equipment, or tools; and the development of infrastructure, improvements, or facilities not eligible for grant funding. Short-term loans or lines of credit are typically used to supplement working capital to cover operating expenses during cash flow short falls. Douglas Municipal Airport has no capacity to incur debt directly, but the City of Douglas does in its capacity as the Airport sponsor.

Bonding - Various bonding mechanisms can be used to raise funds for projects not eligible for grants. A general obligation bond is typically backed by the general tax revenues of the airport sponsor. However, the airport's revenue stream, not the tax revenues of the airport sponsor or revenues specifically associated with the bonding project, is typically used to service the debt associated with revenue bonds. Special facility bonds can be used to fund the development of a single or multi-tenant facility and the revenue generated through leasing the facility can then be used to service the debt.

7.8 Funding Considerations

Most of the funding resources listed may be available to Douglas Municipal Airport through its sponsor, the City of Douglas. Consequently, a number of considerations are involved in making the proper selection of a funding mechanism for specific projects or applications on the Airport.

Currently, the primary funding source for Airport improvements is ADOT's airport development grant program. These funds can be used for airport planning, design, construction, or land acquisition projects and may cover 90-95 percent of an eligible projects cost. The sponsor is responsible for matching the remaining 5-10 percent of project costs. These programs are limited by the fact that total grant monies available may be limited in any given year and grants are awarded on a priority basis. However, the ADOT Aeronautics grant programs represent the best and most efficient use of the sponsor's available money and should be utilized first whenever possible. Matching funds may be drawn off any of the Airport's operational revenues as available or otherwise provided by the City of Douglas.

Some special projects that may not be eligible for ADOT funding could be financed utilizing debt financing, or medium- to long-term loans. In these circumstances, the "cost of money" including total interest and other related charges associated with a loan package is the primary consideration. Municipalities may be eligible for low interest loans, and it is clearly in the best interest of the City and Airport to "shop" such available loan programs to locate the best deal.

Bonding is another vehicle that can be especially useful for medium- to long-term money. Often times the best deals in the current bond market are dependent on current interest rates, the available bond rating that can be obtained for the project or program, and the current market interested in purchasing such bonds. This is another area where the available market should be analyzed to determine the "cost of money," and the best bonding vehicle available for a particular program.

Other funding considerations including donations and sales of surplus equipment are also available to the Airport and City to fund future improvements. Usually these sources are relatively small in comparison to other funding sources. Anything that assists the Airport with achieving its matching fund requirements for grants or otherwise contributes to the available money necessary for projects should be considered.

The current identified CIP infrastructure and development projects needed for Douglas Municipal Airport total over $5 million. Douglas Municipal Airport should utilize state funding opportunities wherever possible. In some instances, certain infrastructure projects both on and off the Airport may not be eligible for grant funding or such funding may not be available on a timely basis. These cases may be addressed with longer term bonding opportunities and satisfied with future revenues from the Airport and City.

SECTION 8 – IMPLEMENTATION AND ACTION PLANS

8.1 Introduction

Previous Sections have explored the Airport's business history, its financial status, and evaluated current and potential future markets. As part of that process, goals and objectives were developed and prioritized to meet the demands of the future. Logical next steps call for the development and execution of specific action plans for each of the stated goals to move the Airport forward on its infrastructure and business development track. This section addresses those previously developed goals and outlines the required actions necessary for proper implementation of each. Responsibility for execution of specific action plans is also identified.

8.2 Goals and Action Plans

A total of eight primary goals were developed for Douglas Municipal Airport and prioritized in order of importance from one to eight. It is important to note that the current position of the Airport will require that many of these goals be pursued simultaneously in order to meet future market demand. Responsibility for taking required actions to meet these future goals will be divided among numerous individuals and departments within the City, and must be coordinated with each other to effectively address market demands. A summary of each goal and associated action plan is as follows:

Goal # 1 - Develop new comprehensive marketing plan for Douglas Municipal Airport.

The working group of the ASBP felt that the immediate development of a new Airport marketing plan was necessary for the identification and recruitment of new future business operators at the Airport. Such a plan should identify critical aviation businesses and trends that can be accommodated on Douglas Municipal Airport, and outline a plan of action to contact and recruit those businesses operators that might take advantage of specific future opportunities in Douglas.

Action Plan:

An airport marketing plan is not within the scope of this current ASBP, but should be developed as a separate effort. The City of Douglas already has certain marketing resources within its Economic Development department, and those should be coordinated within the new Airport marketing plan. Specifically, a new Airport marketing plan should include several objectives:

- The marketing plan should include recognition that Airport business is closely tied to other general businesses, opportunities, and attractions within the City of Douglas and the surrounding region; the Airport fills an important transportation link necessary to the general economic health of the area.

- The marketing plan should target specific portions of the aviation market that have shown potential for growth and require the services and capabilities that Douglas has to offer. Currently there is an identified corporate aircraft market that appears to have a strong

growth potential, and is tied to cross border business and manufactoring, tourism, and other attractions in Douglas. Other aviation service opportunities exist as well.

- A firm familiar with the economic conditions and drivers of the City of Douglas, and the aviation operational requirements of Douglas Municipal Airport, should be contracted to develop the new marketing plan. An effective plan will need to be more than a standard community marketing approach; it will entail a thorough understanding of the City's economy, opportunities, and direction, and an understanding of Douglas Municipal Airport's operational capabilities and development potential. Furthermore, a comprehensive marketing plan will need to merge the requirements and attributes of both entities to present a complete picture of the community to potential future clients.

- As part of the process for developing Request for Proposals (RFPs) and acquiring a marketing firm, both the Airport and Economic Development Department need to occupy key roles in its development. The designated Airport Manager will spearhead the process by providing relevant information as to the capabilities and development direction of the Airport, and the Economic Development Department will provide information pertaining to current economic trends and attractions within the City and region. Each of these departments can also provide lists of appropriate economic development targets and companies to be analyzed and approached within the new marketing plan.

- At a minimum, a new marketing plan should address the following six points:

    - What are the **marketing goals?**
    - Who are **the target audiences?**
    - What is **the message** the airport intends to communicate?
    - What **methods of communication** will the airport use to reach its audience?
    - What **staffing and financial resources** will support the effort?
    - How will the airport **measure success?**

- Upon receipt of the completed marketing plan, Airport management and economic development should divide implementation responsibilities and execute the plan promptly.

Goal # 2 - Improve working and political relationships with federal, state, and local funding agencies.

The ASBP working group believes improved relationships begin by building a positive image of Douglas Municipal Airport and the City Douglas by maintaining high standards of conduct and fiscal responsibility. Improvements in local standards and operations, followed by political outreach and partnering with the various federal and state funding agencies, will improve working relationships and opportunities for future funding initiatives. The priority of this goal needs to be pursued concurrently with all initial goals as it is basic to the long-term success of the Airport.

Action Plan:

The City of Douglas and the Airport can improve their status in the eyes of federal and state funding agencies in a number of ways, such as improving communications, conducting regular meetings to share information and developments, requesting guidance on regulatory issues, and working within the system. Some recommended actions include:

- Familiarizing the upper levels of City government with federal and state regulations pertaining to Airport operations, development, and funding.
- Inclusion of appropriate members of upper management in meetings with the state will promote a more thorough understanding of the processes involved, and show commitment by the City to be involved and work with those agencies on critical funding and project issues.
- Ongoing networking efforts between City and Airport management at local and regional conferences like the Arizona Airports Association, and regional FAA and ADOT conferences help keep an informed familiarity with issues between airport owners and federal and state agencies.
- Working with congressional delegates and other political bodies to educate and highlight the operational and development issues of Douglas Municipal Airport, and to garner their support where needed, should be an ongoing exercise.
- Seek guidance and concurrence from ADOT when developing Airport Capital Improvement Programs or other planning and development activities. An open discussion of the pros and cons of a program or project can streamline the effort and allow the agencies to better understand the issues involved and provide better direction.
- Airport managers should always be pro-active when dealing with federal or state agencies on funding or regulatory issues. It is important that the Airport's voice be heard. This also gives the Airport the opportunity to see and be seen when new issues arise, and to better understand any related impacts.
- In general terms, Airport management needs to stay informed about the evolution of regulations and procedures in our government bodies, and cultivate relationships within those organizations that can aid the airport in dealing with such changes as they occur.

Goal # 3 - Identify new funding opportunities for infrastructure improvements.

Traditional state funding sources utilized in past years are insufficient to meet the timing of future required infrastructure development. As such, additional funding sources must be identified to accomplish required infrastructure upgrades necessary to accommodating future growth and development of the airport. Current infrastructure concerns will be one of the biggest impediments to the successful growth and future development of Douglas Municipal Airport. Potential solutions should be investigated and implemented as soon as possible.

Action Plan:

A relatively recent shift to larger corporate aircraft has occurred at Douglas Municipal Airport for the past several years. These aircraft typically weigh far more than the existing Airport runway, taxiway, and apron areas were designed for, and the runway is currently in poor condition. Future air traffic growth hinges on runway improvements, and other infrastructure development.

The solution is to repair those runways and apron surfaces, to support the forecasted levels of future traffic, and install other infrastructure improvements as necessary to ensure the safety of operations. Unfortunately, current levels of state funding are insufficient to address all of the issues over the near-term, and a reorganized approach to available funding is required. Future actions could include:

- Meeting with ADOT to discuss current project priorities and funding opportunities in the near-term to address infrastructure needs. Opportunities for new or expanded funding opportunities should be discussed, and any applicable special programs that would improve the Airport's overall funding picture in the short-term should be explored. However a moratorium on ADOT funding mechanisms may be in place until FY 2019.

- Certain building infrastructure projects may lend themselves to public-private partnerships. The viability and availability of such partnerships should be explored as a way to share the burden of future costs associated with development.

- The State of Arizona should also be approached via ADOT to ascertain the availability of special grants or Airport Pavement Management Systems (APMS) programs that could be accessed for infrastructure improvements. However a moratorium on these funding mechanisms may be in place until FY 2019.

- In critical situations where lack of immediate development resources threatens to slow or halt Airport development, the City may wish to consider other measures such as special tax levies or bonding for specific projects.

- The City of Douglas's Financial Division should be consulted to determine if other financial resources from other federal, state, or regional sources can be brought to bear on behalf of Airport infrastructure projects.

- The Airport should establish, maintain and update its rates and charges structure and remain as self-sufficient as possible utilizing fees from services provided.

Goal # 4 - Increase Fuel and Services sales to GA and Corporate aviation customers.

Finding a way to increase revenues from Airport fuel sales and services is at the heart of any airport development plan. Additional revenues mean additional capability to address infrastructure issues, and expand the capabilities of the Airport. The path to more revenue production has to address two major issues in this case. The primary issue is the necessity of repairing the runway and related infrastructure so the airport can safely accommodate more and larger fixed wing aircraft. As that issue is addressed, the Airport should embark on a general marketing plan to pursue new

aviation customers, and educate the public about the capabilities of Douglas Municipal Airport. When these efforts are successful, then increased revenues will follow.

Action Plan:

Utilizing a new Airport Marketing Plan, the Airport should identify and reach out to established regional flight schools or startups that might be interested in locating their business on Douglas Municipal Airport. This would be a multifaceted process that would include the following elements:

- Development of marketing proposals for flight schools that would be interested in relocating all or part of their operation to Douglas Municipal Airport.
- Negotiating appropriate terms and conditions, building, hangar and land rents for a prospective flight school.
- Development of media for other regional flight schools or charter operators marketing the attributes and services of Douglas Municipal Airport.
- Development of appropriate operating agreements for use of the Airport.

Goal # 5 - Improve working and trade relations on both sides of the border by working with Mexican and American immigration officials to facilitate better access.

The political issues that affect cross border commerce are very complex today. The flow of people and materials between Agua Prieta and Douglas is currently constrained, and has had a detrimental effect on the local economies in recent years. Discussion of opening a second border crossing in the local area have raised hopes for some relief with these situations, but true progress depends on higher level actions by the governments on both sides of the border.

Action Plan:

The following actions are recommended to achieve the goal of improving working and trade relations on both sides of the border:

- Begin discussions with higher levels officials in both City and Cochise County government. Even though support already exists for a second border crossing, the educational process about what is at stake should continue.
- Involve State Representatives and Congressional liaisons in the process, educating them on the economic issues involved and garnering their support.

Goal # 6 - Develop Douglas Municipal Airport as an operational base for border protection drones, and other Border Patrol services.

This goal is intended to highlight the advantages of establishing certain unique border protection services at Douglas Municipal Airport. Drone operations and related servicing would appear to be a natural fit for the Airport.

Action Plan:

The key to achieving this goal is educating local border protection entities of the availability and operational benefits of operating from Douglas Municipal Airport. The Airport could provide several categories of service to their benefit including;

- Capability to accommodate operations of small aircraft and helicopters utilized by government services.
- Ability to desiginate areas of the Airport strictly for drone operations.
- Avaliable development space for various government services.

Goal # 7 - Increase Medical Tourism.

This goal ties in with previous goals, and the development of an Airport Marketing Plan. Improvements in the Airport's infrastructure, and subsequent implementation of an Airport Marketing Plan will raise the awareness and profile of Douglas. As the public becomes more aware that the Airport can provide access for tourism and business interests alike, individuals interested in "Medical Tourism" will recognize that Douglas is available for that function.

Action Plan:

A new general marketing plan for Douglas Municipal Airport will target several different business and tourism objectives. While new business attraction is a major part of any marketing plan, some sections of that plan should be directed to a more personal level that speaks to the attractions for individuals, either for standard, or medical tourism opportunities. A general discussion about how Douglas Municipal Airport operates as a gateway not only for business, but also for individuals and personal travel to the area is appropriate.

Goal # 8 - Attract new specialty air service providers to Douglas Municipal Airport.

This goal speaks to continued efforts to attract commercial or specialty air service in the form of air charter and air taxi services to Douglas to augment air access to the area.

Action Plan:

Douglas Municipal Airport already provides excellent access to the community for general aviation and corporate aircraft customers. On the other hand, commercial charter and specialty air taxi operations remain an underserved market. The Airport should extend its marketing efforts to the commercial segment of the aviation community by offering the following:

- Develop marketing collateral to be distributed to regional air taxi operators within the State of Arizona to heighten the profile of services offered at Douglas.
- Explore opportunities with specialty aviation operators such as charters, agricultural applications, firefighting support, and air show events.

Goals Summary

As initially stated, the goals and action plans listed above have been shown in order of priority. However, several of these priorities need to be executed simultaneously to enable the Airport to move into a competitive position and meet on-coming demand in a timely manner.

Goals one, two, three, and five speak to the establishment of a comprehensive Marketing Plan, improvements in critical political relationships, and identification of expanded future funding opportunities. These elements are critical to the operational viability of the Airport, and may require an extended period of time to be accomplished. As such, it is in the best interest of the City and Airport to begin work on these goals simultaneously and immediately.

Other goals speak to the development of additional aviation services and operators to expand the business base of the Airport. These goals are important and necessary to the appropriate future development of the Airport. Work should commence in the near-term for development of each, keeping in mind that certain infrastructure developments must come first to accommodate new growth.

8.3 Implementation

The Douglas Municipal Airport ASBP is intended to be a living document reviewed and updated at least annually to address economic changes in the community and market. It serves as a roadmap to provide direction for obtaining the Airport's goals, and should always be maintained with the most current information.

Additionally, many people will play an active role in the implementation of the ASBP. Management from the Airport and Economic Development and Tourism departments may do much of the heavy lifting, but there are roles to play for many others within the structure of the Airport and City as well.

8.3.1 Proposed Division of Responsibilities

The Manager of Douglas Municipal Airport will be the primary focal point for implementing and following the guidelines of the ASBP. It is anticipated that the City of Douglas's Economic Development Department may also assist with the projection of the Business Plan where their activities involve the recruitment of businesses or industries that are to be placed on or adjacent to Douglas Municipal Airport. Aviation-related activities such as recruiting new air services or attracting new general and corporate aviation customers should occur under the general direction of the designated Airport Manager.

Other pursuits involving improvements to relationships with federal and state agencies will include the designated Airport Manager, but should also include higher level City officials, and perhaps even state and federal representation from the congressional delegation as appropriate.

A major element of the ASBP involves the identification of additional financial resources to fund Airport infrastructure and development. The designated Airport Manager should provide direction in such issues, often time in conjunction with the City Director of Finance, or other personnel versed in the topics at hand.

As a general statement, the designated Airport Manager should provide direction for all actions necessary to achieve the goals of the Airport, supported by the various factions within the City of Douglas that can bring their specific expertise (political, economic, financial) to bear as appropriate to the issues at hand.

It is recommended that a standing Business Plan and Marketing Advisory Committee be established, utilizing members of the Airport and City staff that can contribute to the ongoing implementation efforts outlined in the Business and Marketing Plans. It is also suggested that such a committee meet at least quarterly to ascertain the status of those efforts and recommend modifications in direction as appropriate.

8.3.2 Follow on Marketing Plan

A follow-on Airport Marketing Plan will need to be developed that outlines the approach necessary to recruit specific business targets. The Marketing Plan should address each of the identified goals of the Airport, and provide details about the approach to be used for target audiences.

An effective marketing program will develop the message that the Airport and City wishes to convey to prospective clients and establish cost effective methods to communicate that message. It will also indicate the required staffing and financial resources necessary to mount an effective and ongoing campaign to expand the Airport's business base.

Finally, the marketing plan will need to establish measurable metrics to help the Airport measure the success of its marketing efforts, and make appropriate changes as the market evolves.

8.3.3 Metrics for Measuring Success

Douglas Municipal Airport can evaluate its progress in the future by measuring its performance against several different types of metrics. Comparisons can be made between current and past financial performance data. Likewise, physical comparisons that evaluate capital improvements and when they are completed against existing infrastructure today. Operational indicators that include data on based aircraft numbers and types, fuel sales, and annual operations data will be charted and evaluated against corresponding goals for growth.

Some of the major performance indicators to be monitored and tracked include the following:

- Annual Airport fuel sales
- Based aircraft
- Annual Airport revenues
- Annual Airport expenses
- Number and type of Airport lease agreements
- Capital Improvement Programs
- Annual Airport operations (takeoffs and landings)

- Infrastructure improvements

The Airport should engage in an annual forecast and goals exercise prior to the beginning of each fiscal year, and based on current circumstances establish educated performance goals for each of the above categories. The following year, those goals should be examined to determine if they were met, were exceeded, or fell short. If those goals fell short of expectations then an analysis of why performance was short should occur, and a possible modification in the Airport's business direction may be in order. This process should be conducted annually in an effort to keep the Airport on track towards accomplishing its goals and objectives, and keeping its overall business direction on course.

8.3.4 Summary

The Douglas Municipal Airport ASBP has evaluated the existing business environment of the area and constructed future goals and objectives to assist Airport growth and development into the future. Action plans were developed, and recommendations for a follow-on Marketing Plan have been made.

The information contained in this document is time sensitive, and conditions may change in a relatively short timeframe. Douglas Municipal Airport is poised to execute the guidelines set forth in the ASBP, and move forward with its infrastructure and business development efforts. Therefore, it is recommended that Douglas Municipal Airport continue its momentum and follow through on the development of a Marketing Plan and execution of its goals as soon as possible.