City of Delaware, Ohio, USA

In Partnership with

Delaware County

Request for Proposal (RFP)

for

Airport Organizational Structure Consulting Services

INVITATION

In partnership with Delaware County, the City of Delaware issues this RFP seeking responses from consultants experienced in the field of airport management and organizational structure. The work of the consultant will inform the City and County as they explore the feasibility of forming a Regional Airport Authority.

ISSUE DATE:	Friday, March 31, 2023
ISSUED BY:	City of Delaware, Ohio City Manager's Office 1 S Sandusky Street Delaware, OH 43015
INQUIRIES FOR CITY:	R Thomas Homan, City Manager City of Delaware rthoman@delawareohio.net (740) 203-1011
INQUIRIES FOR COUNTY:	Tracie Davies, Delaware County Administrator Delaware County tdavies@co.delaware.oh.us (740) 833-2104
QUESTIONS DUE:	April 21, 2023
PROPOSAL DUE:	April 28, 2023
INTERVIEWS:	Week of May 8, 2023

BACKGROUND

DLZ is a leading central Ohio general aviation facility. It is home to approximately 100 based aircraft and handles an estimated 40,000 operations per year, including corporate activity, training, and pleasure flying. The City oversees all aspects of the airport. The airport is strategically located to serve the region, including commercial centers in Delaware, Dublin, Westerville, Worthington and Powell. The City has aggressively pursued airport enhancements that include an expanded 5,800-foot runway, Automated Weather Observing System, and Wide Area Augmentation System (WAAS), allowing precision approach for horizontal and vertical navigation. Other upgrades include a grooved runway and improvements to the flight terminal, lounges, and weather briefing areas. Please visit the City's website at www.delawareohio.net for more information on the airport.

In January 2020, the City completed an Airport Strategic Business Plan. In April 2022, the City prepared a White Paper entitled Delaware Municipal Airport and Delaware County: A Partnership Opportunity. Both documents are attached. The white paper outlined the potential benefits of forming a regional airport authority. This was followed by the City and County considering entering into a Cooperative Agreement to undertake a feasibility study of such a venture.

SCOPE OF SERVICES

The consultant shall complete the following tasks associates with this work and provide a final report summarizing the recommendations concerning the formation of an Airport Authority as governance structure at the Delaware Municipal Airport.

A. Interview key City and County personnel to gain a full understanding of the questions and concerns each entity has regarding the formation of an Airport Authority.

B. Review the current city airport operations, management, and governance structure.

C. Review current airport budget, funding mechanisms, and strategic plans.

D. Establish recommendations, identifying the merits and concerns associated with establishing an Airport Authority as the governance structure. Specific areas to be addressed include but are not limited to:
    - Contractual, legal, and other obligations of the Authority, City and County toward airport management and operations.

- Financial condition assessment and cost-benefit analysis of the airport under the governance of an Authority verses municipal control.

- City and County financial obligations toward airport operations, capital improvements, annual budgeting, and economic development opportunities.

- The makeup (membership) of the Authority as a governance structure; individual authority of members; interaction with City Council and County Commissioners; disposition of the existing City Airport Commission.

- Options for the provision of daily management and oversight of airport operations, staffing, and existing and future tenant and FBO contracts.

- Changes to the ownership of airport property, grounds and facilities.

- Authority to represent and interact with the FAA regarding airport operations, financing, grant requests and planning.

E. Summarize the findings and recommendations in a final report to be submitted to the City and County. **The report shall be submitted within four (4) months of issuance of a Notice to Proceed with work.**

F. Participation in a follow up meeting with City and County representatives for further discussion of recommendations.

PROPOSAL AND INTERVIEW FORMAT

The City and County intends to receive proposals and interview up to three firms.

Proposals should be limited to no more than 10 pages in length and include the following basic information:

- Project understanding and approach including any recommendations related to scope and schedule.
- Listing of project specific team members.
- Project history specifically applicable to this project, with a minimum two project examples provided.
- A minimum of three references consisting of names, addresses, email addresses and telephone numbers these clients with similar characteristics, attributes and requirements to the City of Delaware.

Interviews will be conducted with each firm in a one-hour time slot the week stated in the schedule. Interviews will include the opportunity for firms to provide a 15-to-20-minute presentation followed by informal discussion with question and answers.

EVALUATION CRITERIA

The following are the primary evaluation criteria to be utilized to select the best-qualified firm. Selection is very subjective in many areas and the decision of the City and County will be final and not subject to re-evaluation.

- Experience – such considerations as other similar projects completed by the firm, key personnel of the firm, range of in-house capabilities, etc.
- Quality of Proposal – such considerations as quality of proposal and presentation, understanding of project scope and approach, recommendations given in proposal and interview, etc. Specific attention will be given to recommendations for project approach and BPMP format that best suits the objectives of this project.
- Commitment to and ability to meet the proposed schedule.

FEES FOR SERVICES

The successful consultant shall prepare and submit a separate cost proposal identifying the staff hours and fees associated with the completion of each task A-F identified in the Scope of Services, and a not to exceed total fee for completing the work. If the City and County are not agreeable to the costs as presented (or modified through negotiation with the consultant), the City and County reserves the right to terminate negotiations with the consultant and enter negotiations with an alternative consultant.

Insurance

The Company shall maintain liability insurance during the term of this service and shall comply with all requirements imposed by O.R.C. 4513.67 and 4921.09. A copy of the company's current insurance policy, with specified dates of coverage, shall be provided to the City Manager or his representative upon joining this agreement and anytime upon request thereafter.

Notices

All notices, requests, statements, reports, and other communications under these rules shall, except as otherwise provided herein, be in writing and shall be deemed to have been duly given when delivered by hand, email with return receipt or when mailed by certified or registered mail, return receipt request, to the Parties' addresses as set forth below.

Attachments

- Airport Strategic Business Plan
- White Paper entitled Delaware Municipal Airport and Delaware County

EST 1808
CITY OF
DELAWARE
OHIO

Airport Strategic Business Plan

Delaware Municipal Airport
Delaware, OH

January 2020

CMT

Executive Summary

Background of Delaware Municipal Airport

The Delaware Municipal Airport (DLZ) is a public use airport owned and operated by the City of Delaware and is located approximately two miles south of the City. The City of Delaware is the County seat of Delaware County, which is part of the Columbus Metropolitan Statistical Area (MSA) and is the fastest growing in the State of Ohio. DLZ has one asphalt runway (10/28), which was extended and rehabilitated in 2016. Runway 10/28 is 5,800' long and 100' wide, is in good condition and has non-precision markings, medium intensity edge lighting, and a full-length parallel taxiway. It is home to approximately 100 based aircraft and handles an estimated 39,900 operations per year.

Key Recommendations

Standardize Lease Agreements and Rates – The City of Delaware and DLZ need to develop standard lease agreements and rates to ensure compliance with FAA regulations as well as increase equity and customer satisfaction among tenants at DLZ.

Develop Customer Service Approach to Managing the Airport – At many general aviation airports, the best ambassadors of the airport are pilots who are based or routinely fly in and out of the airport. If they are happy with their experience, they are very likely to use word of mouth, social media, or other mediums to promote the airport on your behalf. Similarly, pilots for corporate flight departments, often discuss the pros and cons of potential bases with existing pilots based at the field. Conversely, if current tenants are unhappy with the existing facilities, management, or the overall atmosphere, they are more likely to speak negatively about the airport, which will limit potential growth opportunities in the future.

To the extent feasible explore implementing some of the suggested changes and improvements highlighted in the survey of airport tenants. Finally, identify existing tenants who could serve as a liaison to the airport manager to collaboratively work together to implement some of the customer service-related items identified in the survey.

View and Market the Airport as a Regional Asset by Promoting the Airport's Proximity to Columbus and Key Attractions (Columbus Zoo, Muirfield Village, etc.) to increase Visitor Traffic - One of the critical enablers of success for general aviation airports is to focus their attention on their comparative advantages. DLZ has the advantage of being within 13 miles of two major tourist attractions: Muirfield Village and the Memorial Golf Tournament, and the Columbus Zoo. The Memorial Tournament draws affluent business jet travelers from around the country in late May or early June each year, while the Columbus Zoo draws approximately 2.5 million visitors annually to the region. Highlighting DLZ's proximity and convenience to these two major regional attractions should be a priority for the City of Delaware.

Develop Marketing and Promotional Materials that Highlight the facilities and Activity at DLZ – In addition to highlighting the proximity to the region's major attractions, the airport should highlight the strength of its facilities on marketing materials, including the website and social media. Specifically, the airport should highlight that it has the longest runway (5,800 feet vs. 5,000 feet at OSU) and can still therefore accommodate the widest range of aircraft seeking to visit the key attractions and businesses mentioned above. Additionally, the City of Delaware should promote the value the airport provides to the community and to taxpayers through its economic impact, the facilitation of its military or emergency services, and in the case of DLZ, providing a facility to train the next generation of pilots to help address the nationwide shortage of pilots.

There are a variety of approaches to better highlight the diversity of activity at DLZ, including a rotating banner of photos with different aircraft staged on the ramp. Another strategy to promote an active facility is to engage in social media postings on a routine (several times a week) basis. Each of these approaches help to not only promote the airfield to a wider range of citizens, but also to give the impression to prospective pilots and corporate operators of an active airport.

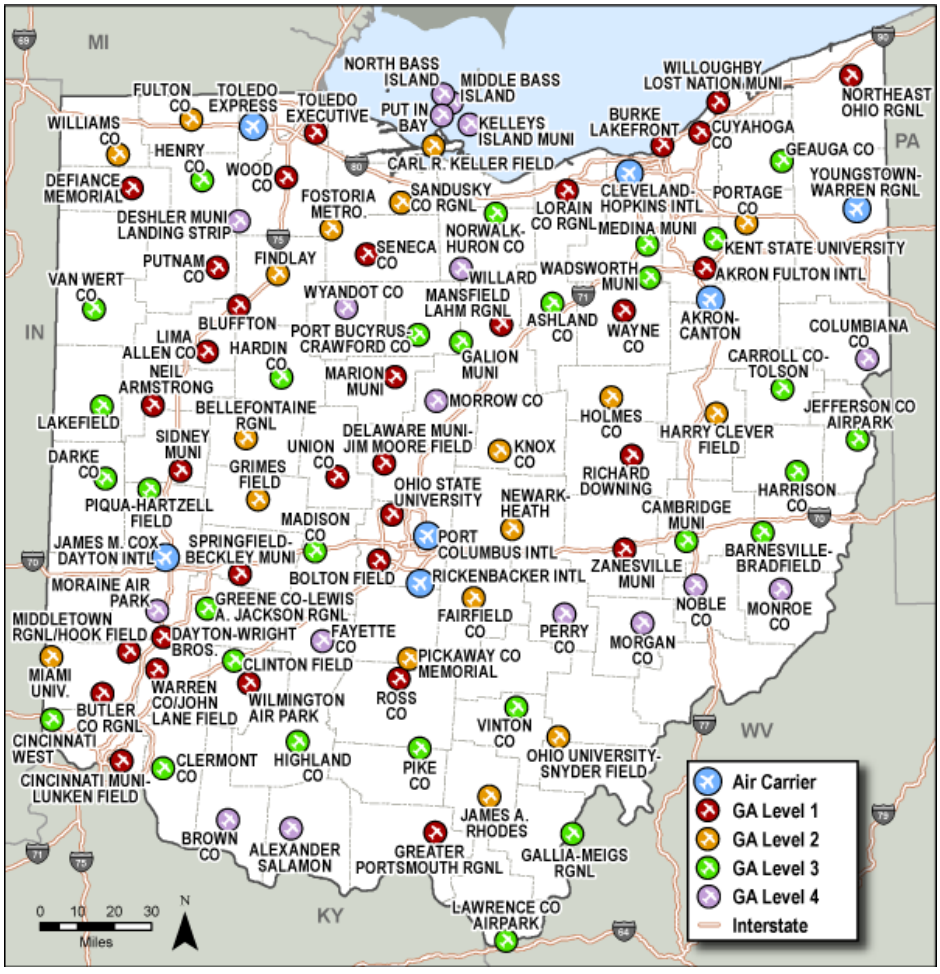
Work with Local Economic Development Officials to Promote the Airport in Business Retention and Expansion Visits to Local Companies – The airport should capitalize on both the population and economic growth in Delaware County. DLZ should work with the City of Delaware to develop marketing materials that highlight the airport's ability to connect visitors and businesses to the "Center of the Fastest Growing County in Ohio". The city's economic development officials should work to highlight the airport's facilities, convenience, and economic development potential during annual business retention and expansion visits with local companies and during visits from companies and corporate site selectors thinking of relocation to the region.

SECTION 1

AIRPORT OVERVIEW

The Delaware Municipal Airport (Airport) is a public-use airport owned by the City of Delaware. The airport is situated on approximately 325 acres at an elevation of 945 feet mean sea level (MSL) and is located approximately two miles south of downtown Delaware. The Airport is categorized within the Federal Aviation Administration's (FAA) National Plan of Integrated Airport System (NPIAS) as a Regional-General Aviation (GA) airport. The Airport is also included in the Ohio Aviation Systems Plan as a Level 1 facility. The Airport can provide access to turboprop and turbojet business aircraft and is located where there is enough population or economic activity to support a moderate to high level of business jet activity and/or provide capacity in metropolitan areas.

DLZ is a leading Central Ohio general aviation facility. It is home to approximately 100 based aircraft and handles an estimated 39,900 operations per year, including corporate activity, training and pleasure flying. The city currently oversees all aspects of the airport. The airport is strategically located to serve the region, including commercial centers in Delaware, Dublin, Westerville and Powell. The city has aggressively pursued airport enhancements that include an expanded 5,800-foot runway and a Wide Area Augmentation System (WAAS), allowing precision approach for horizontal and vertical navigation. Other upgrades include a groov to the flight terminal, lounges and weather briefing areas.



Source: *Ohio Airports Focus Study*

1.1 Airport Facilities

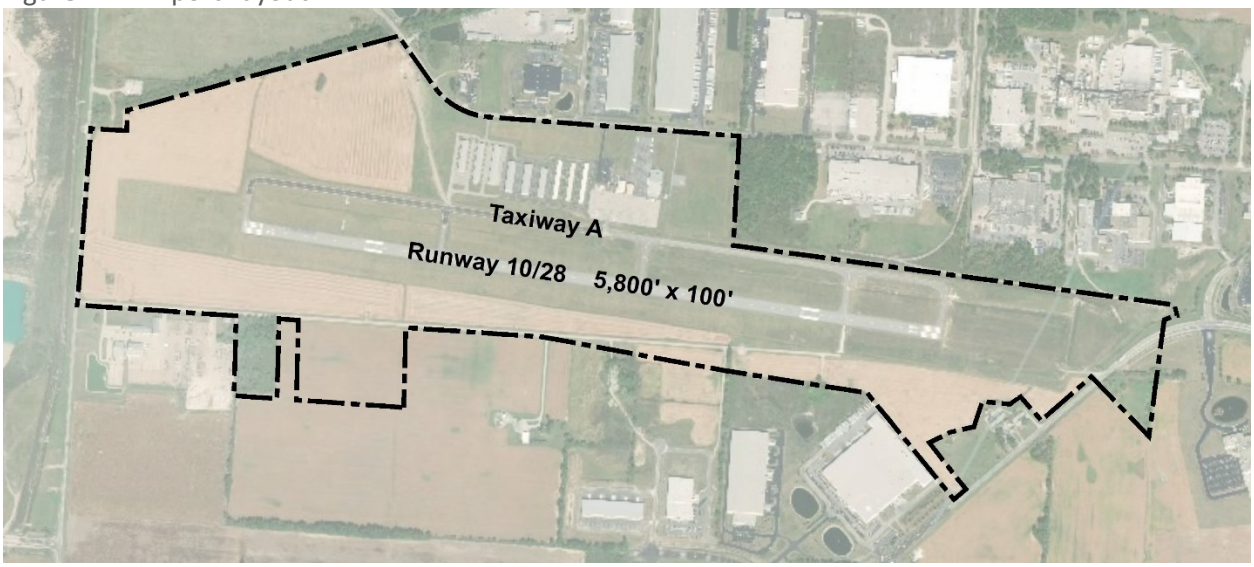
According to the Ohio State System Plan, DLZ is a Level 1 Airport, which is the highest level of GA airports in Ohio. These airports are intended to meet nearly all the needs of general aviation turbine powered aircraft and their users. These airports can provide nearly all the services necessary to support corporate jet aircraft. This facility classification can also support recreational general aviation activities and flight training.

Airport facilities can be divided into two different categories: airside and landside. These facilities are important from a business perspective because they dictate the types of aircraft that can be accommodated at an airport. The larger the aircraft, the more expenditures at the airport for fuel, aircraft storage, maintenance can be realized. Airfield facilities include those directly used by aircraft during takeoff and landing, such as runways, taxiways, lighting, and instrumentation. Landside facilities include support facilities such as buildings and other structures such as aircraft hangars, and aircraft parking aprons, automobile parking lots, and access roads.

1.1.1 Airside Facilities

DLZ has one asphalt runway (10/28), which was extended and rehabilitated in 2016. Runway 10/28 is 5,800' long and 100' wide, is in good condition and has non-precision markings, medium intensity edge lighting, and a full-length parallel taxiway. The taxiway is 35' wide with a taxiway-runway separation of 400 feet (see **Figure 1-1**). There are three non-precision approaches available at DLZ. Both Runway 10 and 28 have RNAV/GPS approaches (250 – 7/8) and Runway 28 has a VOR approach. DLZ also has over 22,500 square yards of apron area used for tie downs and transient parking.

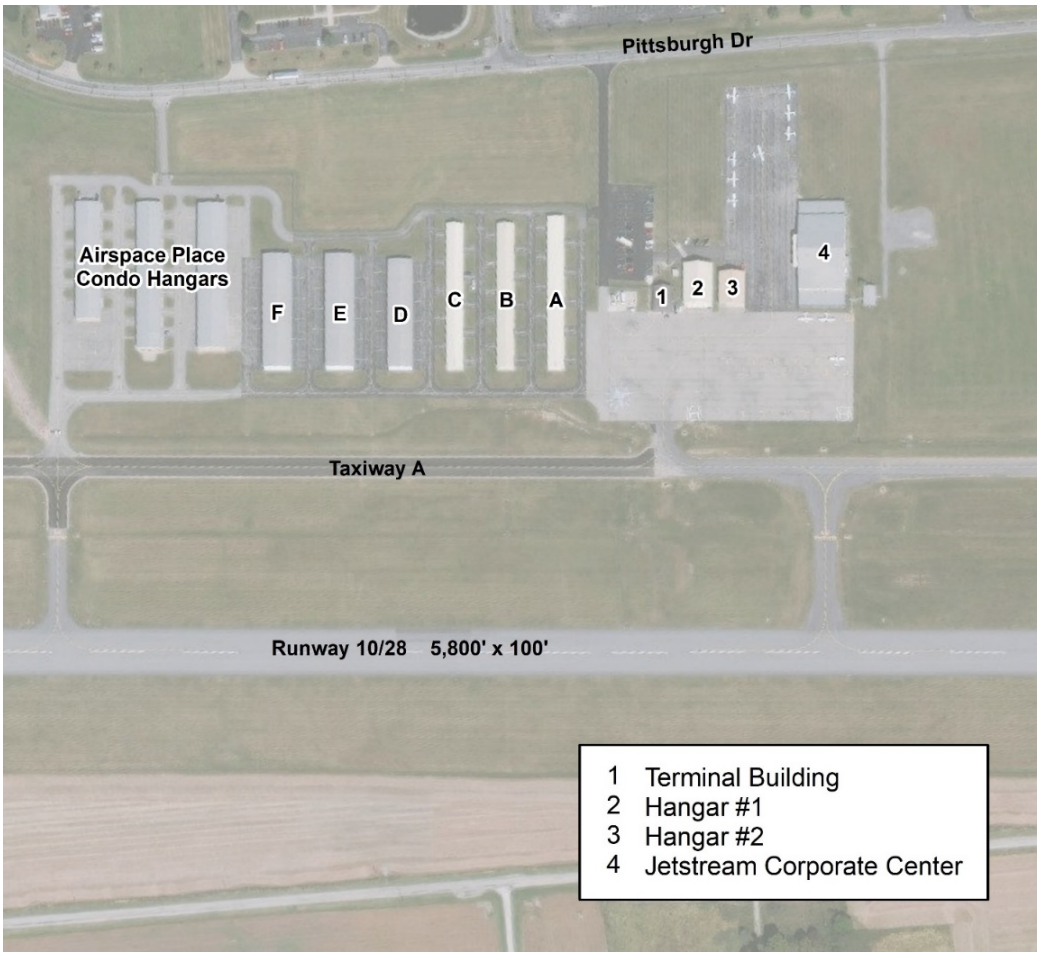
Figure 1-1: Airport Layout



1.1.2 Landside Facilities

The landside facilities at DLZ include a terminal building, two corporate hangars (one currently being used by the City for maintenance equipment and snow removal equipment storage), six (6) City-owned T-hangars, and three (3) privately-owned condominium hangars (see **Figure 1-2**). The Airport also has both Jet A and 100LL fuel capabilities and over 30 tie-downs. Descriptions of the existing corporate hangars are listed below with existing T-hangars described in **Table 1-1.**

Figure 2-1: Terminal Area



- Terminal Building – approximately 1,700 square feet which includes a waiting room, public restrooms, airport manager office, pilot lounge, conference room, and storage area.

- Hangar #1 – approximately 5,600 square feet located to the east of the terminal building. It was constructed in the early 1970s and was relocated to its current location when the runway was re-oriented in the 1990s.

- Hangar #2 - approximately 3,700 square feet located to the east of Hangar #2. Although previously leased to a maintenance operator, it is currently used to store airport maintenance and snow removal equipment. It was also constructed in the early 1970s and was relocated to its current location when the runway was re-oriented in the 1990s.

- Hangar #3 – approximately 16,000 square feet of aircraft storage and 6,400 square feet in office space.

Table 1-1: Existing T-Hangars

T-Hangar	Size
T-hangar A – City Owned Constructed in 1970s	12,675 SF
T-Hangar B – City Owned Constructed in 1970s	12,100 SF
T-Hangar C – City Owned Constructed in 1970s	12,100 SF
T-Hangar D – City Owned Constructed in 2000	11,550 SF
T-Hangar E – City Owned Constructed in 2000	14,850 SF
T-Hangar F – City Owned Constructed in 2000	14,580 SF
Condominium Hangars (3) – Privately Owned (via Land Lease) – Constructed in 2005	18,500 SF (2) 13,000 SF (1)

1.1.3 Operations

The aviation activity at the Airport is made up of primarily of general aviation traffic. The level of activity is gauged primarily based on based aircraft and operations. Since the last Airport Master Plan for DLZ was completed over twelve (12) years ago, the FAA's Terminal Area Forecast was reviewed for existing operational and based aircraft information (see **Table 1-2** and **1-3**). The airport currently has approximately 39,900 annual operations (or approximately 100/day) and 94 based aircraft, with two of them being corporate jets.

Table 1-2: Airport Operations

OPERATION TYPE	TOTAL
Air Carrier	0

Air Taxiway Itinerant	3,071
General Aviation Local	33,483
General Aviation Itinerant	3,346
Military	0
TOTAL	39,900

Source: FAA Terminal Area Forecast, 2018

Table 1-3: Based Aircraft

AIRCRAFT TYPE	TOTAL
Single Engine (SE)	82
Multi-Engine (ME)	7
Jet	2
Helicopter	3
Military	0
Ultra-Light	0

Source: FAA Airport 5010, May 2019

1.1.4 Commercial Aeronautical Operators

There are numerous commercial aeronautical operators on the Airport. The City operates the airport directly through City employees and operate the Fixed Base Operator series of fueling, lease management, airfield maintenance including snow removal and series to airports users. Other commercial operators at the airport are:

- The Jet Stream Corporate Center: offers Aircraft Storage & Specialized Aviation Service Operations (SASO) [100' x 160' hangar & 6,400 square feet of office space]
    - Spencer Aviation (Flight Training
    - COAR (Central Ohio Aircraft Repair) Services, Inc. (Aircraft Maintenance-SASO)
    - Mac-Michael Avionics, Inc. (Avionics-SASO)
    - John Schoettmer, MD – Aviation Medical Examiner (office only)

1.2 Existing Airport Governance

The Delaware Municipal Airport is owned by the City of Delaware OH. The City operates the airport directly through City employees and operate the FBO (fueling, airfield maintenance including snow removal, etc). The City manages the airports through an Airport Advisory Board to the City Council by members appointed by the Mayor/Council representing citizens with interest and/or specific knowledge relevant to the airport and its operation. This arrangement has advantages of the enhanced input and expertise, like a Board of Director to give direction, insight, and balance both to the airport staff in its operations and to the City staff and city Council saving time and effort for each. However, the Airport Advisory Board is not empowered to make staffing, expenditure or investment decisions, hire or fire staff, enter into contracts and only make recommendations to leasing and rates and charges considerations. As a result, policy regarding each of these items can change with each city administration. As a benefit, the airport does benefit from a City structure that aids in areas of accounting, human resources, maintenance and procurement that is often a hindrance for many a small airport authority. Costs for these areas are often subsidized by its City owner or absorbed entirely freeing up revenues for other operational costs.

1.3 Economic Role

DLZ is an important catalyst for economic growth in the region and plays a vital role in partnering with the business community. In 2015, the Ohio Department of Transportation, Office of Aviation completed an Airports Economic Impact Study as part of the state system plan update. This study concluded that DLZ had a total economic impact (on-airport, construction, visitors, and multipliers) of 96 jobs, $3.3M in payroll, and $10.8M in economic output.

1.4 Community Overview

Delaware is a city in and the county seat of Delaware County, Ohio. Delaware was founded in 1808 and was incorporated in 1816. It is located near the center of Ohio, is about 24 miles north of Columbus, and is part of the Columbus, Ohio Metropolitan Area.

The Delaware downtown is the epicenter of the city. It boasts The Strand Theatre, the longest continually run movie theater in Ohio, nearly 20 restaurants, most with outdoor eating spaces. Quaint boutiques, antique shops, bookstores, yoga and dance studios are located amid floral shops, a record shop, cycling store, pre-prohibition style bar, Staas Brewing Co. and a wide selection of specialty ice cream parlors, coffee shops, commercial banks, salons and spas. Visitors can shop the twice weekly farmers' market, wine store, brewer's supply house and beer emporium. Downtown Delaware has a main branch library, city hall, municipal courthouse and the county tourism bureau.

Delaware has maintained a traditional downtown shopping area and added other shopping venues that includes the Delaware Commons pedestrian mall, a small mixed-

use complex built at the end of the urban renewal era. This area contains an increasing number of large retail stores and restaurants run by national chains. Others say the chain stores boost local shopping options for residents considerably, many of whom would have previously shopped elsewhere, while increasing sales tax revenue for the city and county. The tradeoff between sprawl and economic development continues to be debated throughout the city and the surrounding area.

The economic mix of the county reveals a balance of the following main economic activities: Manufacturing (18%), Trade (27%), Government (15%), and Service (23%) according to statistics published by Delaware Area Chamber of Commerce in 2000. The largest employers are in automobile coatings, plastics, copper products, education, insurance, automobile parts and distribution, sports apparel, retail, services, and government, which utilize the Delaware Municipal Airport.

1.5 Industry Trends

Industry stakeholders, such as FAA, and General Aviation Manufacturer's Association (GAMA), create forecasts each year based on factors such as historical trends, aircraft sales, tourism trends, oil prices, economic outlooks and many other factors. These forecasts help understand the general aviation trends for the next 20 years.

1.5.1 FAA aerospace Forecast Fiscal year 2018-2038

The FAA's aerospace forecast is released yearly and provides information on historical, existing, and future trends of air traffic. As stated by the FAA, this forecast also derives its forecasted estimates of fleet size, hours flown, and utilization rates from the General Aviation and Part 135 Activity Survey (GA Survey).

GA Fleet Size

The FAA forecasts the overall GA fleet to remain level from 2018-2038. There is steady growth for turbine fleet, specifically jet aircraft where the group is expected to grow at an average of 2.2% per year. Conversely, the piston aircraft fleet is expected to decrease an average of -0.9% each year. This decline can be attributed to unfavorable pilot demographics, overall increasing cost of aircraft ownership and operation, coupled with new aircraft deliveries not keeping pace with retirements of the aging fleet. According to the FAA, the growth in U.S. GDP and corporate profits are catalysts for the growth in the turbine fleet.

GA Hours Flown

The total hours flown for the GA fleet are projected to grow at an average of 0.8% per year with jet aircraft expected to account for most of the increase, at an average of 2.7%. The largest decline is expected to be with piston aircraft where that category is expected to see a decrease at an average of -1.0%. The FAA states that the increase in jet hours flown results mainly from the increasing size of the business jet fleet, along with estimated increases in utilization rates.

1.5.2 General Aviation Manufacturers Association (GAMA)

GAMA is an international trade organization that primarily represents general aviation aircraft manufacturers. While the GAMA forecast provides comprehensive general aviation information on subjects from aircraft shipments and billings to accident statistics.

Fleet Growth

According to the report, the overall outlook for general aviation, particularly business jet operations, is optimistic due in part to business jet deliveries being the highest worldwide in the North American market. For the first time since 2007 North America comprised the largest market share for business jets.

GA Fleet Size

The GAMA forecast indicates that jets are projected to grow at an AAG of 1.3%. Turboprops and piston aircraft are projected to decline at 0.1% and 0.9%, respectively. The overall general aviation fleet is projected to decline at an AAG of 0.3% through 2025.

GA Hours Flown

Jets maintain the highest growth in hours flown out of all categories at an AAG of 3.5%, while turboprops are second highest with an AAG of 0.7%. The piston aircraft are expected to decline, on average, at 1.4%. The overall AAG of total hours flown by 2025 is projected to grow at an AAG of 0.6%.

In relation to based aircraft forecasting, and although there is no direct correlation to based aircraft projections, the "active aircraft fleet" metric used in both the FAA Aerospace and GAMA forecasts can be used to guide and establish a based aircraft trend. In general, both forecasts are projecting the active piston fleet to decline. The total active aircraft fleet is predicted to remain stable as the jet aircraft are expected to offset the retirement of the piston aircraft. **Table 1-4** shows the compound annual growth rate (CAGR) for each category of aircraft as presented in the GAMA and FAA Aerospace forecasts

Table 1-4: Industry Trends & Forecast – Active Aircraft Fleet Projections

	GAMA 2017 Annual Report	2018 FAA Aerospace Forecast FY 2018-2038
Piston	-1.0%	-0.9%
Turbo-Prop	-0.2%	1.7%
Light Jets	2.3%	2.2%
Small Jets		
Medium Jets		
Large Jets		

Source: FAA Aerospace Forecast FY 2018-2036; GAMA 2017 Annual Report (2017-2026); CMT 2018

1.6 Benchmarking

According to the Ohio Airports Focus Study (2015), there are 97 general aviation airports in Ohio with DLZ ranked as the 17th busiest based on total annual operations. As part of the peer review of like airports, the 33 Level 1 airports were reviewed. According to the ODOT, Division of Aviation a Level 1 airport has >4,000' of runway length, 10,000 gallons of Jet-A fuel sold annually, piston and turbine maintenance, and standard instrument approach procedures. In order to narrow down this list, only airports that had at least 5,500' and was a Level 1 airport were analyzed and listed in **Table 1-5.** Finally, all the "reliever" airports were also included for comparison purposes. A reliever airport is defined by the FAA as a "*an airport designated to relieve congestion at commercial service airports and to provide improved general aviation access to the overall community*"

Table 1-5: Airport Market Area Aircraft & Operations Comparison

Airport	Runway Length	Annual Operations	Total (Jets)	Hours	Itinerant Traffic	Corporate Hangars	NPIAS Classification
Cuyahoga County	5,502'	21,577	181	7-days 24-hours	56%	12	Reliever
Bolton Field	5,500'	22,745	0	7-days 0730-1930	46%	2	Reliever
Ohio State	5,004'	77,605	12	7-days 0700-2200	42%	8	Reliever
Butler County	5,500'	61,687	2	7-days 0700-2200	53%	20	Reliever
Lima Allen County	6,000'	32,500	0	Mon-Friday (0800-1700) Sat (0900-1600) Sun (1300-1700)	18%	9	General Aviation
Mansfield Lahm	9,001'	16,919	3	Mon-Fri (0700-1900) Sat-Sun (0800-1800)	58%	21	General Aviation
Middletown Regional	6,100'	40,050	1	7-days (0800-1700)	46%	5	General Aviation
Springfield-Beckley	9,009'	24,200	1	7-days (0730-1800)	74%	4	General Aviation
Toledo Executive	5,829'	90,700	1	Mon-Friday (24 hours) Sat-Sun (0800-2000)	14%	6	Reliever
Neil Armstrong	5,500'	16,473	0	7-days (0800-1900)	79%	8	General Aviation
Cincinnati Lunken	6,101'	83,185	77	7-days 24-hours	49%	45	Reliever
Burke Lakefront	6,195'	34,796	20	7-days	40%	3	Reliever

				24-hours			
Dayton Wright Brothers	5,000'	89,045	7	7-days (0800-2100)	43%	13	Reliever
Lorain County Regional	5,002'	15,690	2	7-days (0700-2300)	16%	41	Reliever
Willoughby Lost Nation	5,028'	45,085	10	7-days (0700-2100)	41%	6	Reliever

Source: Ohio Airports Focus Study (2015); FAA 5010

SECTION 2

STAKEHOLDER INTERVIEWS

To gain insight into the daily challenges and direction of stakeholders associated with DLZ, several interviews were conducted with airport tenants and government officials to determine the primary issues facing the airport. Those interviewed were encouraged to discuss historical issues and trends they have encountered with the Airport, as well as future needs and opportunities that would be beneficial for future growth.

The City of Delaware already has its own Mission, Vision and Values statement. The City is also undertaking an update to its Comprehensive Plan to identify practicable and implementable strategies to maximize its potential. In similar fashion, each of the city's staff that were interviewed for this study had a well-defined structure of responsibility within that plan. It was noted during these interviews that the individual departments with the City's structure interfaced and communicated well with the other City departments, and the airport.

Interviews of local government (city of Delaware) officials specifically included the following:

- City Manager
- City Financial Officer
- Economic Development Director
- Planning Manager
- Public Works Superintendent
- Airport Manager

On the non-governmental side, the Airport's primary tenants were also individual interviewed and are listed below:

- Dr. John Schoettmer (JetStream Corporate Center)
- Mr. Bernie Rifkin (EAA Chapter)
- Mr. Mike Spencer (Spencer Aviation)
- Mr. Andy Archer (JEGS Chief Corporate Pilot)
- Mr. Shane Young (Shamrock Maintenance Services)
- Mr. Rick Ochs (potential airport tenant & avionics provider)

Each of the individuals interviewed for this study were asked to speak to the subject matters most relevant to their current and future operations, and their relationship to future airport development. A synopsis of the interview results are broken down by airport strengths, weakness, and opportunities/suggestions, which are depicted in the following tables. The full questionnaires can be found in **Appendix A.**

2.1 Commercial Tenant Interviews

The interviews with the six (6) major tenants at the airport revealed multiple strengths and weaknesses. All the tenants interviewed had been doing business at the Airport since 2004 or longer. All tenants agreed the airside pavement and configuration is a strength of the airport. The 5,800-foot runway can accommodate most business jet aircraft, the runway is in very good condition, and the rest of the airside pavements have all been rehabilitated or reconstructed in the last four (4) years. The fuel pricing at the Airport also resonated with the tenants as being fair and in some cases lower than neighboring airports. The overall weakness of the Airport, which was shared by all interviewees, was the difficulty in negotiating land leases with the City. Most of the tenants felt the process takes too long and in some situations is unfair. **Table 2-1** provides an overview of the results with individual surveys located in **Appendix A.**

Table 2-1: Tenant Survey Results Overview

TENANTS RESULTS	
STRENGTHS	• Runway length & condition • Improved access to Columbus via Sawmill Parkway • Fuel pricing is significantly less than other airports in area
WEAKNESSES	• City difficult to work with • Perception is the City prohibits investment • Lack of De-Icing available • Parking at the City-owned T-hangars • Existing land lease language • No large corporate hangars for transient business jets • Limited airport hours (8-5 daily)
OPPORTUNITIES	• De-Icing capability • Lease negotiations need to be fairer and the process needs to be quicker • Culture that encourages private development • Maintenance on City-owned T-hangars • 100 LL Fuel Truck • Additional hangar development (T-hangar & corporate) • Explore Remote Airport Traffic Control Tower technology

2.2 City of Delaware Interviews

Like the tenant view of the Airport, the City interviewees felt the airport was a good asset to the City, County, and surrounding communities with great airside facilities. Some of the weaknesses that were discussed with the City were the difficulty in responding to the speed of the private sector, while balancing FAA requirements. They also felt the Airport was understaffed and it has become difficult to convince the City Council to take risk. **Table 2-2** provides an overview of the results.

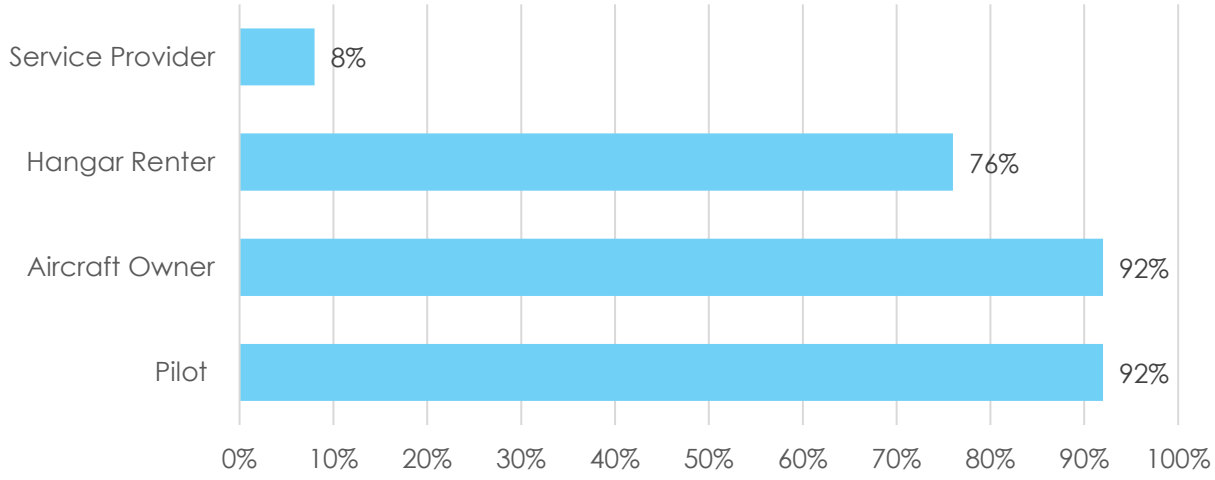
Table 2-2: City Survey Results Overview

CITY RESULTS	
STRENGTHS	• Good asset • Sawmill Parkway offers direct access to Columbus area • Transportation Improvement Fund (TIF) in place • Strong public financing leadership within City • Great facilities (runway, taxiways, pavement)
WEAKNESSES	• No hangar sites that can be marketed as "build" ready • Difficult to respond to the speed of the private sector • Underutilized • Difficult to convince City Council to take risk • Airport personnel are understaffed • Non-eligible FAA projects become low priority • Marketing plan • Leases are not standard or updated in 15 years • Last real infrastructure investment at the airport (besides airside pavements) was 2004
OPPORTUNITIES	• Private-Public Partnerships • Airport can assist with "soft infrastructure" and high-income opportunities. • Additional aviation services at the airport • Market how the airport benefits community as a whole • City funded hangar

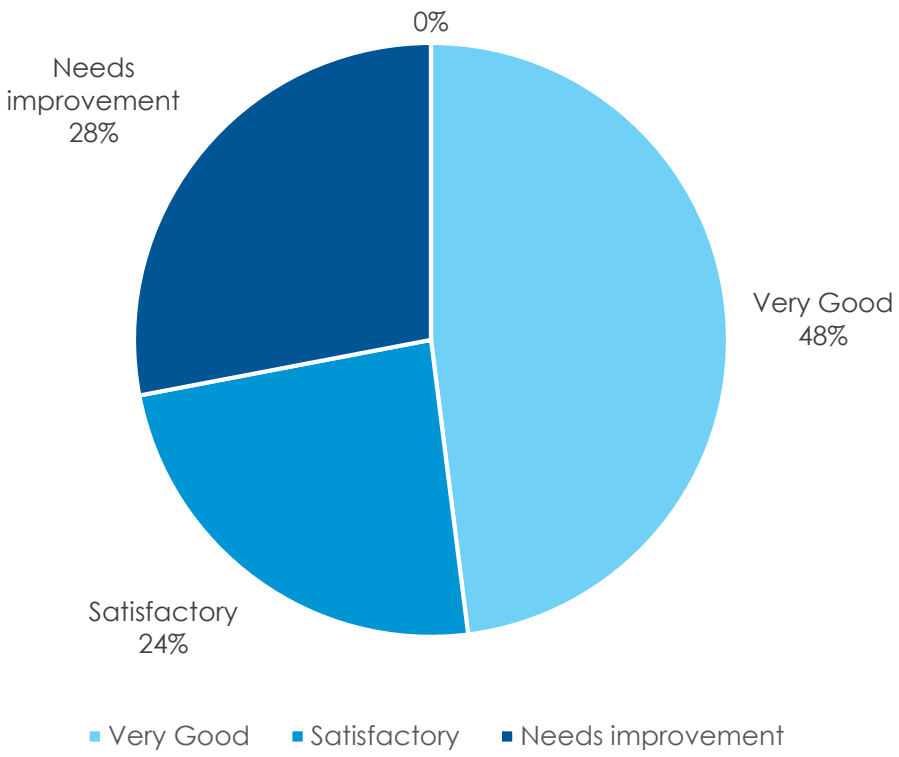
2.3 Other Tenant Interviews

Finally, a survey monkey was sent to all the tenants that have aircraft on the airfield. A total of 25 responses were received. The survey included 17 questions ranging from the respondent's role at DLZ, the quality of customer service, strengths, weaknesses, improvements that could be made, and communication. All of the questions and responses are also included in **Appendix A**. A few of the survey results are shown graphically below.

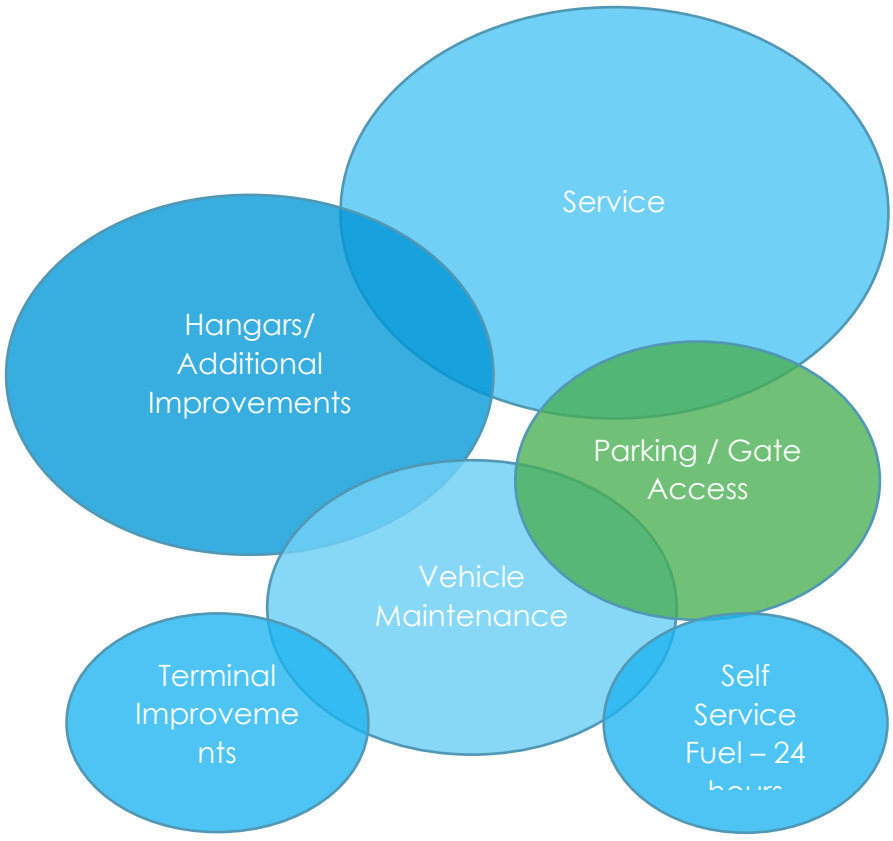
What is your role at DLZ?



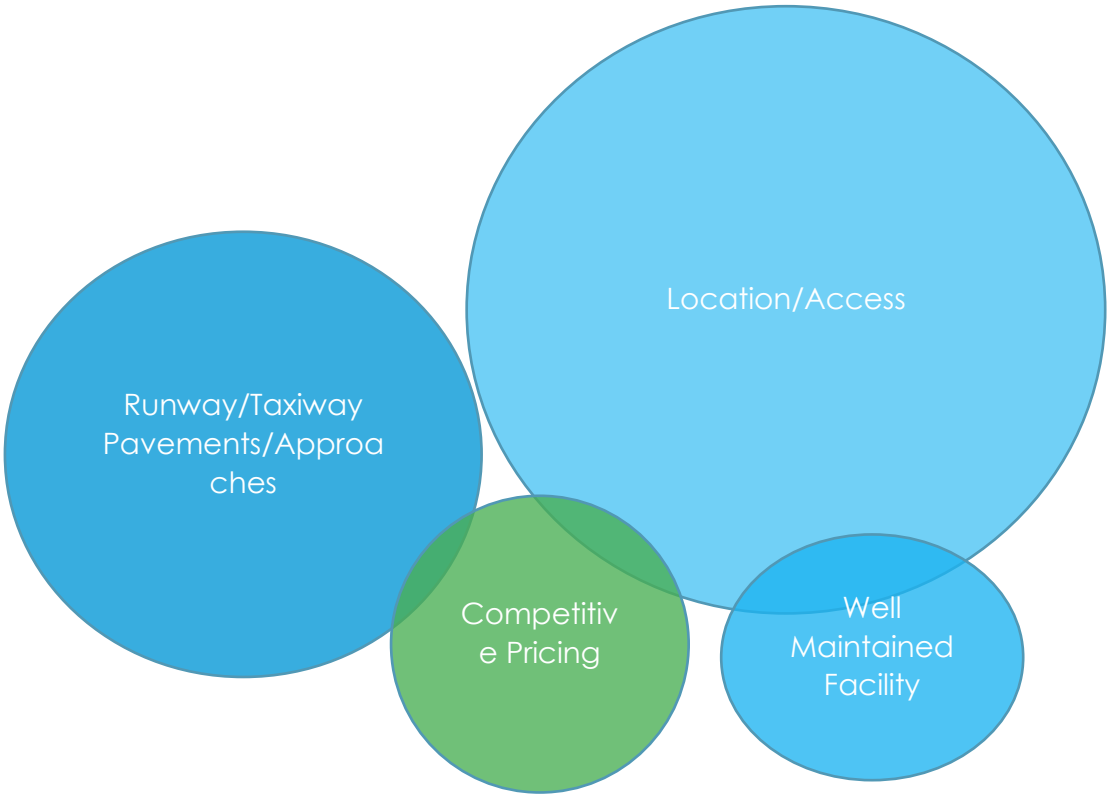
How would you rate the ease of operational use at DLZ?



What are the weakness of DLZ?



What are the strengths of DLZ?



SECTION 3

REVIEW OF POLICIES & PROCEDURES

The use of the Airport by a business or an individual for their personal use is a privilege, which brings with it certain responsibilities. The City of Delaware has responsibilities as they must protect the public, the public's investment in the facility and the airport's tenants. The owner must assure that any private use of the facility is conducted in an acceptable manner and is not detrimental to the transportation function of the airport. These responsibilities are accomplished through the development and enforcement of minimum standards and airport rules and regulations. Each of these documents was analyzed against FAA AC 150/5190-7: *Minimum Standards for Commercial Aeronautical Activities.* Airport rules and regulations are normally adopted to ensure safety, security, and compliance with FAA regulations for anyone using the airport facility. An airport's minimum standards contain business rules regulating commercial business on an airport

3.1 Rules & Regulations

The FAA highly recommends that the airport owner establish rules and regulations for the safe, orderly, and efficient operation of the airport. Rules and regulations are often referenced in airport lease agreements but are developed to apply to all persons using the airport for any reason. Like minimum standards, rules and regulations should be tailored for individual airports with public safety, preservation of facilities, and protection of the public in mind.

Airport owners of federally obligated airports are required by grant assurances to establish and enforce fair, equal and not unjustly discriminatory airport rules and regulations. Rules and regulations typically cover the general use of the airport for such issues as:

- Aircraft rules
- Personal conduct
- Animals
- Smoking
- Waste containers and disposal
- Storage
- Pedestrians
- Vehicle operations
- Fueling safety
- On-airport traffic rules
- Environmental restrictions
- Airport residences
- Hangar construction
- Fire safety

The airport's Rules and Regulations could be enhanced by updating and expanding them to reflect current FAA policies and standards, which then work in concert with the Airport's future leasing and rents/fees policy. There are no current rules or regulations stated in non-conformance to current FAA policies and standards, however, several items might be better suited to be found in the Airports Rates and Charges schedules or specific lease documents and terms. It is suggested that the adopted Rules and Regulations be reviewed with industry best practices every 2-3 years or as required should significant airport or industry changes occur. Comments on the DLZ existing Rules & Regulations, as well as a sample of a well-developed Rules and Regulations from Addison, Texas is included in **Appendix B**.

3.2 Minimum Standards

A sponsor's establishment of minimum standards contributes to nondiscriminatory treatment of airport tenants and users. It also helps the sponsor avoid granting an exclusive right. When the sponsor imposes reasonable and not unjustly discriminatory minimum standards for airport operations, and the sponsor then denies access or services based on those standards, the FAA will not find the sponsor is in violation as long as those standards apply to all aeronautical services at the airport, are reasonable, are relevant to the activity they provide, and provide an opportunity for other aeronautical business to meet the standards. According to the FAA Compliance Manual (FAA Order 5190.6), the FAA strongly recommends that airports develop minimum standards because they:

- Promote safety
- Protect airport users from unauthorized or unlicensed services
- Enhance/promote the opportunity for adequate services to exist for airport users
- Regulate the development of airport land
- Distinguish between services providers that will provide acceptable levels of service and those who will not
- Prevent disputes between aeronautical service providers

Couldn't find AMCG's analysis of DLZ's Minimum Standards?

SECTION 4

REVIEW OF GROUND & BUILDING LEASES

Land leases are the most common types of airport leases. The value of leased land may depend on multiple factors including the location on the airport, permitted use, and possibly the length of the lease term. The site for an FBO may have greater value than the site for privately owned hangars because the revenue generation potential is much greater at the FBO site. On the other hand, FBOs that are subject to minimum standards and the requirement to provide a variety of services to the public should, perhaps, pay lower rates than an end user (e.g. corporate hangar) that does not provide any benefit to the public. The typical airport lease term is within the range of 20 to 30 years, with the provision that at the termination of the lease all improvements revert to the airport.

Many lease agreements include provisions governing the tenant's ability to sublease (sublet) all or a portion of the unused leased property. In cases when the tenant subleased the property for the amount greater than the lease paid to the airport, it is not uncommon for the airport sponsor to receive a percentage of the profit in accordance with the terms of the lease agreement:

Funding development projects at public-use airports involve additional risks for the lenders due to specific restrictions on the use of property located on or around the airport. In traditional real estate development, the lender can place a lien on the property as collateral against the default of the borrower. Public airports are typically unable to provide this type of security to the lender as they are prohibited to allow claims (such as liens) to be placed against airport property. In case the developer defaulting on the loan, the lender is left with improvements on the property and the remaining lease or sublease to collateralize the debt.

Both the developer's and lender's risk depend heavily on the ease of replacing the tenant/subtenant after the initial lessee defaults. As a rule, the more specialized facility or more restrictive the allowable use of property, the smaller the market for the developer to lease the property to a different tenant, and the greater the risk to the developer/lender. Greater risk may require compensation with longer lease terms and a higher rate of return on investment. Such funding challenges are one of the reasons why incentives or grants are used for airport development projects. Pursuant with the scope of work, the lease agreements with Airspace Place and Jetstream were reviewed with observations and recommendations in each in the following subsections and **Appendix D.**

4.1 Airspace Place

Airspace Place, an aviation club that builds condo-type T-hangars for sale, has an existing ground lease with the City for three (3) T-hangars. A review of the lease language revealed the following recommendations:

- Rent increases - No increases over the term of the lease expressed. Recommend a clear escalation clause but if not desired, recommend a clear stated intention for no escalation.

- Recommend a clear layout/plat of the leased property, perhaps including photographs of the facility and condition at time of lease initiation for records.

- Consider lease term extensions for periods longer that 1 year. An additional investment by the lessee or the decision to expand services would benefit from at least a 3-year extended period to initiate such growth activity.

- A clear statement or process for dispute resolution might be beneficial should the lessee have a complaint

- Additional detail including hours of service, if identified in the Request for Proposals, should be referenced or included.

- Item 13Q could use clarification of the intended appearance of the hangar area to avoid conflict on the appearance by differing opinions during the lease term.

- Consider higher limits more reflective of the value of aircraft that might be found on the airport property.

4.2 Jetstream Ground Lease

The Jetstream Corporate Center is a 16,000 square foot (160' x 100') clear span lighted and heated hangar located on the east side of Apron B. The two wings of office space on each side of the hangar area consist of 24 individually leased office spaces totaling 6,400 square feet. Currently, the ground lease on the Jetstream Hangar is in year 15 of a 25-year lease with two (2) 25-year options with a rehabilitation plan.

A review of the lease language revealed the following recommendations:

- The lease term identified in Article 4 seems very clear identifying a 25-year period with (2) 25-year options at Lessee's discretion if a rehabilitation plan is presented and approved by the City.

- Article 2 expresses an intent for a ground lease to construct an aircraft hangar. There is no mention of size or investment required. The language does include timing requirements of proposed improvements. Article states rights of lessee to make improvements and obligations to make such improvements during and after lease term.

- Incudes requirements for City plan review and approval prior to construction and lien waivers before construction.

- Some unclarity on page 5, Article 2, paragraph 5: "*Title to the facility and all other improvements on the Leased Premises shall remain in the Lessee's name during the original term hereof*". This could cause confusion regarding reversion clause for the improvements. Should revise to clarify.

- Rent increases: The rent was set artificially low at the beginning to offset development costs. There are no increases over years 1-15 and a negotiated rate set for years 16-25 and beyond. The valuation method is based on the Consumer Price Index (CPI) with % cap over 5 years. A market value approach to escalation for any extension periods is recommended.

- Recommend a clearer and dimensioned layout/plat of the leased property. Should also include photographs of the facility and condition at time of lease extensions for records.

- A clear statement or process for dispute resolution might be beneficial should the lessee have a complaint.

- If additional service is permissioned later, necessary additional detail including hours of service, etc. should be referenced or included in the lease.

- Consider higher insurance limits more reflective of the value of aircraft that might be found on the airport property.

4.3 Conclusion

A recommended best practice is to develop a standard airport leasing policy that would, at a minimum, address land lease rates (differentiated by area), hangar lease rates (differentiated by the size and construction cost of the hangar), building and facility lease rates, Fixed Base Operator/Special Aviation Services Operations (FBO/SASO) lease requirements (consistent with the airport's minimum standards), subleasing policy, and the process for adjusting lease rates and fees. It is wise to periodically review lease rates and adjust them for inflation. The most common form of rent escalation is the increase every 3 to 5 years, where the escalation coefficient is tied to the changes in the CPI, published by the U.S. Department of Labor.

A more precise approach involves performing an appraisal every 3-5 years for each property parcel; however, that may not be feasible or even justified. Airports need to balance the financial gain from the higher accuracy of the valuation with the incremental cost of performing a professional appraisal. As a general rule, performing an appraisal to adjust lease rates may be justified for large and/or high-value property parcels with long lease terms and when there is sufficient reason to believe that the market lease rates have increased significantly since the previous market rent analysis was made. In other cases, CPI adjustment can work best to provide automatic

escalation of lease rates with little or no costs to the airport. A compromise approach should be to alternate between CPI and appraisals every 3-5 years.

While many leases can be uniformly applied to multiple tenants using such policy, some leases may be rather unique and may warrant special considerations. The City should determine whether the circumstances of a specific lease are unique enough to justify the deviation from the standard leasing policy or that consistency is more important than accommodating few (or one) tenants.

Lease rates should be based on comparable facilities surrounding airports and it is good practice to track the rates at the same comparable airports over time. The City should also conduct a market rent analysis on various sites by an appraiser to estimate the annual market rent for multiple aeronautical sites and to assist with future lease negotiations and budget planning.

This will help with establishing the baseline market rates that may be adjusted for the unique circumstances of an airport. While the FAA recommends that the airport sponsor maintains airport rental rates that maximize revenue, some airports may decide to set lease rates below established baseline rates if the tenant provides additional airport revenue through other sources, such as fuel sales, percentage of gross revenue, etc. Such practice may be deemed acceptable if there is transparency in how the rates were established and the airport sponsor can clearly outline the rationale to justify the lower rates and charges.

There are four broad areas that the City should pay attention to in order to maintain compliance with federal and state grant assurances.

1. Lease Term – FAA advises against longer lease terms for land that has actual or potential aeronautical use and considers any lease longer than 50 years a de-facto disposal of land. Consequently, FAA may require the payment of market rent from the airport sponsor for such transaction. For example, the lease of aeronautical property by local governments is limited to 30 years in Florida statutes. However, counties, under certain circumstances, can lease airport property for a longer term.

2. Economic nondiscrimination – all tenants must be treated equitably when determining lease rates, fees, and terms.

3. Airport sustainability – airport should charge market rent for airport property and maintain a fee structure that would maximize the revenue for the airport.

4. Exclusive rights – no exclusive right could be granted to any tenant by the airport

SECTION 5

T-HANGAR LEASE AGREEMENTS & PRICING

According to the data provided by the Airport, DLZ owns six 10-unit T-hangar buildings that provide 60 hangar rental spaces. Currently, all hangar units are being rented, placing hangar occupancy at 100%. A hangar rental waiting list has been generated that reflects a community of aircraft operators that would like to rent hangar space when it becomes available.

5.1 Market Assessment & Pricing

A generalized market assessment was completed by calling general aviation airports in the region. In this analysis, general aviation airports were evaluated by contacting them and obtaining comparable hangar rates. A total of 20 airports were contacted, which included the peer airports in the state that were depicted in **Table 1-5,** as well as some additional general aviation airports that are within the vicinity of DLZ. Of the 20 airports contacted, 6 responded with some form of rental information and Ohio State's was obtained from their website. **Table 5-1** indicates the surveyed airports and the various rates and occupancy levels for each.

Table 5-1: T-Hangar Survey

Airport	Older T-Hangar Monthly Rent*	Newer T-Hangar Monthly Rent*	T-Hangar Occupancy
Middletown Regional	$225	$307	95%
Dayton Wright Brothers	$150 (very old/1950s)	$375 (new)	100% (waiting list)
Toledo Executive	$210	$320	80%
Neil Armstrong	$130	$268 ($.21/SF)	92%
Knox County Regional	$160	$225/$275 (corner)	100% (16 on waiting list)
Cuyahoga County	$200	$310-$450	100% (waiting list)
Ohio State	$325-$490 (new in 2017)		100% (waiting list)

**All dollar amounts are monthly*

All airports surveyed were over 80% occupancy and 2 airports were at 100%. The range of monthly rental rates was anywhere from $130-$160/month for hangars constructed 40+ years ago to >$300 for new hangars depending on size, location, and amenities.

A Return on Investment (ROI) analysis is used to determine if an outlay of capital is expected to provide an adequate rate of return. The ROI depends on several key factors including the interest rate on loans, monthly rental rate, annual rent increases, maintenance costs, etc. **Table 5-2** displays an example ROI analysis intended to provide the City with general information that can be used as framework to aid the in internal decision-making processes. For this example, the following assumptions were made:

- One 10-unit nested T-hangar with site work (access road extension, taxilane pavement, utilities)
- $750,000 development cost
- Annual occupancy rate of 95%
- Annual Maintenance service ($30/month per unit) after Year 4
- $750,000 loan, amortized over 30 years @ 4% interest

Using the parameters above, an analysis of month rent ($325, $350, and $375) and annual rent escalation rates of 1%-3% was conducted to ascertain what year the City would realize positive cash flow on the T-hangar.

Table 5-2: ROI Example of City Funded 10-Unit T-Hangar – 30 Year Amortization

Monthly Rent	Rent Escalation	Cumulative Positive Net Cash Flow
$325	1%	N/A
	2%	Year 22
	3%	Year 15
$350	1%	Year 30
	2%	Year 15
	3%	Year 9
$375	1%	Year 14
	2%	Year 2
	3%	Year 2

Since this scenario is conceptual and is not tied to a known monthly rent or actual cost of site improvements and the hangar itself, it is recommended that the City obtain additional information related to the various assumptions and inputs described above while determining the acceptable timeframe for a positive cash flow.

5.2 FAA Hangar Policy

When an airport sponsor accepts grants under AIP, it signs a contract agreeing to operate the airport in a way that grants equal access to all aeronautical activities. When an airport sponsor signs the grant for AIP money, that contract includes several specific Grant Assurances, so a pilot flying a helicopter, glider, airplane or a hot-air balloon is accorded equal access to its airport by the airport sponsor. One of the guarantees an

airport sponsor makes is to use airport property only for aviation-related purposes unless the FAA specifically approves otherwise. That means a city that owns an airport and accepts federal grants cannot, for example, put a park or walking trail on part of its airport unless it gets FAA approval.

This aeronautical-related requirement also relates to hangars on an airport that has received federal funding, no matter who owns the hangars. Since the FAA doesn't have the time or resources to inspect every airport, rules about what can be stored in a hangar can be inconsistent and very different from airport to airport.

On June 9, 2016, the FAA issued its final policy on *Non-Aeronautical Land Use of Airport Hangars* (Federal Register Vol. 81, No 115). The overall message of the final policy was the if the primary purpose of the hangar is for parking an air-worthy aircraft, the storage of other items had no effect on the aeronautical purpose of the hangar. It should be noted that the final ruling affects all hangars on the property of an airport that has received AIP funds, whether those hangars are owned by individuals and subject to a land lease with the airport or owned by the sponsor and leased to individual people. Some

- Non-commercial construction of amateur-built or kit-built aircraft is considered aeronautical activity
- A sponsor can prohibit the indefinite storage of nonoperational aircraft.
- If the hangar is used primarily for aeronautical purposes, non-aeronautical items may be stored in the hangar if the items do not interfere with the aeronautical use of the hangar.
- Acceptable to have things like furniture or TV in the hangar, if they don't hinder the movement of the aircraft in and out.
- A hangar cannot be used as a residence as hangar homes cannot be on an airport that receives federal funding.

Along with the policy, the FAA has a number of Frequently Asked Questions and answers to each found here: https://www.faa.gov/airports/airport_compliance/hangar_use/#q9.

5.3 Existing T-Hangar Lease Recommendations

If we add a markup of T-hangar lease it would go in Appendix E

SECTION 6

FUEL SALES & PRICING

Aircraft fueling is an integral part of services provide at an airport. Aircraft rely on fuel provision to operate and due to the hazardous nature of 100LL or JetA fuels, transport of fuels onto the airport and then placed into aircraft for flight operations is not typically allows. Fuel receipts represent typically the number 1 or 2 source of airport revenue at an airport facility.

6.1 Existing Conditions

At the Delaware Municipal Airport, both 100LL and Jet A fuels. 100LL is a 100-octane fuel used in piston powered aircraft – typically the single and twin engine propellered aircraft. Some small piston powered aircraft have been modified to operate on lower octane automobile gasoline fuels, but these represent a very small part of the market segment. JetA serves the higher-powered turboprop and turbine jet aircraft most associated with corporate jet planes and commercial carriers.

DLZ currently sells both fuels and has storage for 10,000 gallons of 100LL fuel and 10,000 gallons of JetA fuel onsite in underground storage tanks adjacent to the fueling area. **Table 6-1** & 6-2 show the historical fuel sales figures at DLZ. In 2018, DLZ sold over 40,000 gallons of 100LL and over 91,565 gallons of JetA fuels.

Month	2013	2014	2015	2016	2017	2018
January	2,059	1,222	1,732	1,887	2,175	1,771
February	2,320	1,235	980	2,613	2,754	1,392
March	2,714	2,622	1,789	2,627	2,558	2,779
April	3,830	3,380	2,989	4,117	3,510	3,414
May	4,185	3,470	4,991	4,839	3,922	4,108
June	3,635	3,796	3,247	4,917	3,880	4,975
July	3,931	4,212	5,019	2,212	6,315	5,674
August	4,377	3,593	4,849	3,474	5,129	5,915
September	4,879	3,720	4,517	3,417	4,253	5,320
October	3,398	3,177	3,179	4,157	3,255	3,801
November	2,649	2,348	3,587	2,841	2,684	2,758
December	2,012	2,149	2,033	2,090	2,242	0
TOTALS	**45,550**	**39,989**	**34,924**	**38,712**	**42,674**	**41,907**

Table 6-1: 100LL Gallons of Fuel Sold (2013-2018)

Source: City of Delaware, December 2018

As depicted in **Table 6-1**, the trending direction for 100LL usage is a slow but steady upward movement. This usage reflects the very moderate growth in the smaller general aviation aircraft forecasts, with actual number of aircraft projected at not more that 0.5%

annually. Operations for small general aviation use follows a similar activity growth with exceptions in the area of flight education.

Table 6-2: Jet A Gallons of Fuel Sold (2013-2018)

Month	2013	2014	2015	2016	2017	2018
January	3,499	3,280	4,499	2,727	2,970	4,974
February	3,146	4,902	3,109	5,487	2,354	5,722
March	5,704	6,953	6,512	3,379	7,381	9,396
April	5,338	3,108	3,345	2,420	4,061	8,045
May	8,010	6,675	8,421	5,443	9,428	12,742
June	9,586	8,287	8,057	4,641	13,274	13,608
July	6,484	3,404	6,635	809	9,509	8,182
August	7,224	8,646	7,795	6,894	6,673	13,024
September	6,610	7,921	4,806	6,226	7,786	7,157
October	9,453	6,266	7,990	6,589	7,877	5,082
November	3,805	3,628	6,280	6,442	9,626	3,633
December	2,955	2,781	5,119	3,164	5,772	0
TOTALS	**71,814**	**65,851**	**72,568**	**54,221**	**86,551**	**91,565**

Table 6-2 depicts a significantly different picture of JetA fuels sales with a more dynamic swing of activity year over year and a stronger long-term growth line. Larger corporate aircraft burn much more fuel per flight hour and purchase a significant more amount of fuel with each fueling typically than smaller general aviation planes that may burn 6-10 gallons per hour and thus purchase fuels 15-20 gallons at a time.

6.2 Where Pilots Buy Fuel & Why

The decision of where a pilot opts to purchase fuel varies as well based upon the type of user. Smaller single and twin-engine aircraft far more readily will fly "out of their way" to land at an airport, visit and purchase fuel if savings are perceived in the fuel rate. Local area flyers, for example,, based at other central OH airports, may opt to fly to DLZ to purchase fuel and then proceed upon their route or simply fly over, fuel up and then return to their based airport until a future flight. This pattern sometimes defies the logic of the fuel price savings versus the additional fuel burn incurred during aircraft startup, flight time, and landing but occurs nonetheless and is often the target of some airports to have the lowest price around to attract flyers and the accompanying operations. Since operations are not counted directly by FAA tower control at most general aviation airports, the increased operations account is largely non-important in terms of seeking additional FAA favor for capital improvements.

6.3 DLZ Pricing Policy

Presently, DLZ sets the fuel price based upon a formula evaluation that includes the price of the fuel purchased from the wholesaler, with the addition of federal and OH petroleum activity excise taxes upon that fuel, and a target 33% markup upon that value. The retail sale price then is that combined price plus current OH state sales tax. An example of this calculation is below:

100LL fuel / gallon from wholesaler	$3.00/gal
Federal excise and OH Petro Activity Tax	0.1849 (approx. 6.1%)/gal
Proposed Mark up (33%)	$1.0510/gal
Base Fuel Price to customers	$4.24/ gal
OH state sales tax (7.5%)	$0.32/gal
Final Price Per gallon to Customer	$4.56/gal

The Jet A fuel sales price is also generated in similar fashion. The pricing formula then reworks the formula to reflect the pump sale price and works downward subtracting the pump sales tax value

This pricing policy has a very sound basis in that it fully recognizes and recovers the costs associated with the fueling purchase by the airport. However, the 33% markup is not grounded in any market placed analysis and would likely at times be generous in resulting "profit" or could result in less generous and lost opportunity. The airport has a determined value for the cost of operating and maintaining the fuel tanks system and JetA fueling truck. This value in the current pricing formula is based on 2005 data, both costs for these operations and the volume of fuel sold.

6.4 Recommendations

It is highly recommended that DLZ monitor area fuel pricing for both 100LL and JetA on a regular basis but not less than quarterly to determine the range and the average of fuels sales pricing for these competitor fuel sales points. Several source information provided this data quickly and easily with few clicks of computer mouse. One of these is AirNAV which pulls up 15 area airports with current fuel pricing. On the date of the report preparation, the data provided was not more than 12 day sold for all listed publicly owned airports. In that review, current pricing for area airports yielded:

- 100LL range of $4.72/gal- $6.65/gal, with average of $5.24/gal (DLZ current price $5.19/gal)
- JetA range of $3.55/gal - $5.28/gal, with average of $4.27/gal (DLZ current price $4.20/gal)

It is highly recommended that DLZ consider where it desires to have its airport brand placed in the range of area pricing. DLZ represents superior airfield facilities and strives to maintain that position with longer runway, parallel taxiway, pavements in good

condition at all times with exemplary snow an ice removal, A& P services on the field and assisted service for those needing hep without additional costs. Along with the stated objective to have friendly welcoming service, it would be recommended that the area evaluation allow DLZ to price fuel sales in the marketplace not less than 50% of the average of the

It is recommended that the airport management always evaluate the cost of fuels, associated taxes, the cost of providing, maintaining and operating the fueling system, tanks and delivery vehicles, and the personnel time cost associated with fueling activities be evaluated at minimum yearly to confirm that fuel pricing never be set below actual costs. However, rather than having the pump price set with a backward-looking cost recovery only, it is also important to set the market rate pump price, on the consideration of the value to replenish the fuel on airport. Therefore, the airport business manager should strive to stay on top of the anticipated next purchase price and trends in the marketplace to set price with these forces in mind.

SECTION 7

AIRPORT CAPITAL IMPROVEMENT PLAN (ACIP) REVIEW

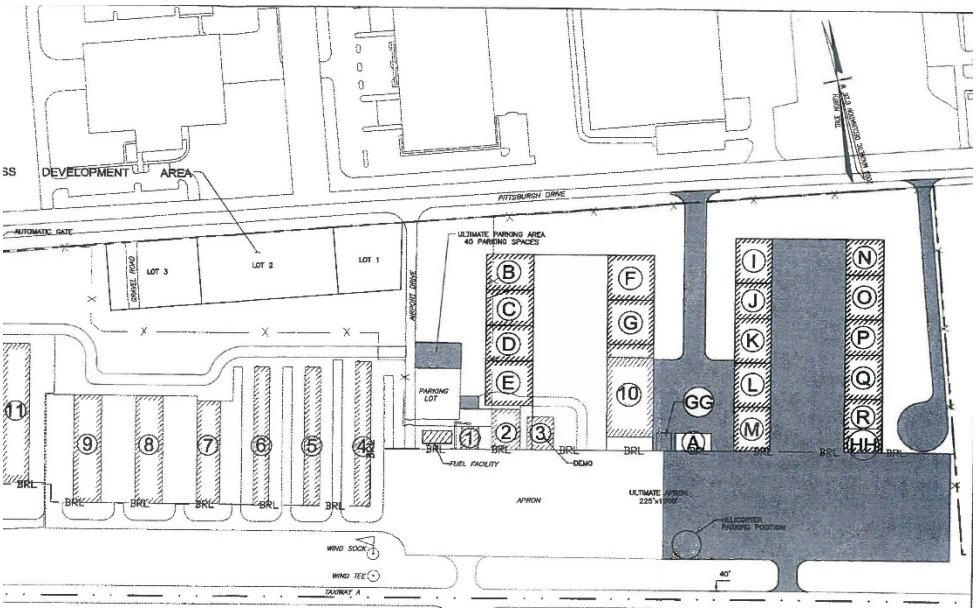
The FAA and ODOT requires 10-year Airport Capital Improvement Plans (ACIP) to be developed and updated each year. The ACIPs are documents submitted to the FAA each year and generally include all capital project whether they are funded by the state, locally, other, or the FAA. The projects featured in the current ACIP and not yet funded are identified and discussed in the following sections. Typically, past the 10-year planning horizon an existing Master Plan is utilized to steer an airport into the future. Since the last Master Plan for DLZ was updated in 2008, some generalized analysis and recommendations were made for the 10+ year plan.

7.1 Airport Capital Improvement Plan

The City of Delaware undertook a comprehensive Airport Master Plan which was finalized in 2008. The Master Plan provided development recommendations in phases to support the existing traffic levels as well as forecasted growth. The recommendations included airside and landside development for the 20-year planning period (2006-2026). In the short term, the master plan recommended land acquisition, control of both Runway Protection Zones, a runway/taxiway extension, Runway Safety Area improvements, and additional T-hangars. All this was completed while achieving a Pavement Condition Index (PCI) of 90 or higher for all critical airfield pavements.

Other facilities that were constructed were the Jetstream hangar and the three (3) Airspace Place T-hangars on the west side of the terminal area. The ultimate build out of the terminal area was to develop the east side with an apron expansion and corporate box hangars (see **Figure 7-1**). The west side was planned for additional T-hangars.

Figure 7-1: Proposed East Side Corporate Development

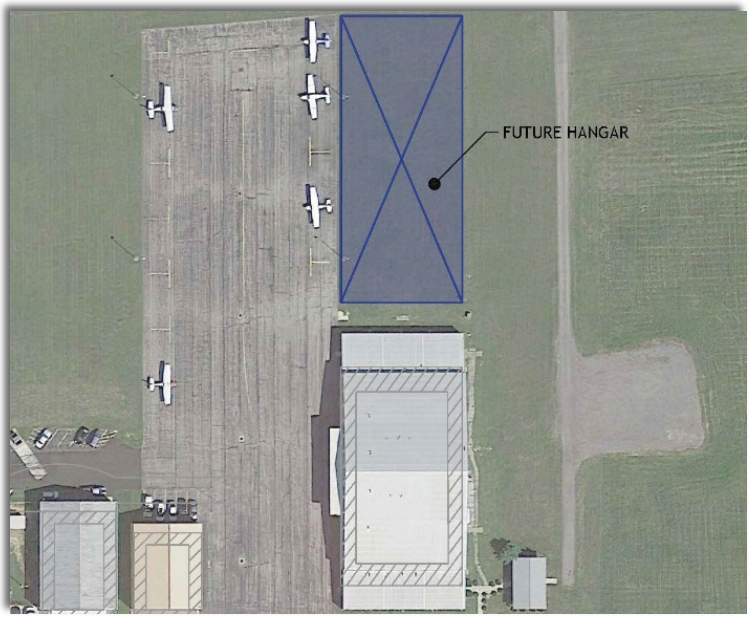


A review of the FY2020-2029 ACIP (December 2019) revealed the near term (0-10 years) projects are primarily pavement preservation and maintenance projects, which are listed below.

- T-Hangar (A-F) Pavement Reconstruction (Design & Construction) - $665,000
- Apron 'B' Rehabilitation (Design & Construction) - $370,000
- Parking Lot Access Drive Reconstruction (Design & Construction) - $192,692
- Taxiway C1/C2 Rehabilitation (Design & Construction) - $333,000
- Apron 'A' Expansion (Design & Construction) - $750,000
- Existing Apron 'A' Rehabilitation (Design & Construction) - $500,000

The FAA AIP (codified under Title 49, United States Code) has existed, under various names, since the end of World War II for the purpose of developing a system of airports to meet the nation's needs. To be eligible for funding, projects must advance the basic goals and objectives of AIP policies, which generally include promoting airport safety, security and capacity, and complying with FAA standards. Currently, AIP-eligible projects for airports like DLZ receive 90% federal funding and are also eligible for an additional 5% state match. Therefore, the local match required for AIP projects can be as low as 5%. However, revenue producing projects (new terminals/hangars) do not compete for funding when compared to safety and pavement preservation projects. Therefore, the burden of most revenue producing projects falls back to the Sponsor. As legislation currently dictates, a non-primary airport like DLZ receives $150,000 a year from FAA and can be rolled for four consecutive years to put as much as $600,000 towards a project. This limited funding even makes keeping up with pavement preservation very difficult for general aviation airports.

Although not in listed in the ACIP, constructing a corporate hangar to the north of the Jetstream hangar should be considered in the near term. This could be done by the City financing the construction and owning the facility or through a ground lease with another private entity. A market analysis of both scenarios should be conducted in the near term conducting pro forma analyses for both scenarios using current market rent performed by an appraiser.



The existing Master Plan and Airport Layout Plan is over 14 years old; therefore, changes to the proposed terminal area should be re-evaluated. For example, the 35-40 acres of open area located to the west of the existing T-hangars is reserved (according to the 2005 ALP) for 10 additional T-hangars; however, the recent interest in that property by a large maintenance/aeronautics company indicates the property may be more valuable than simply reserving for T-hangars from both an aeronautical use and non-aeronautical use perspective. This property may be better served as being reserved as aeronautical/non-aeronautical in the long term for potential commercial development if there is an interest given DLZ's location in within the Pittsburgh Drive/Office park setting.

7.1.1 Non-Aeronautical Land Use

Access to the airfield generally will require that the property be designated "aeronautical" and therefore ineligible for non-aeronautical development without FAA approval. A sponsor's primary obligation and is to operate the airport and non-aeronautical development should not be pursued if it will impede or interfere with that priority. Nonetheless, non-aeronautical development should be evaluated. Some examples could be warehouses, office buildings, or solar energy facilities. A sponsor's federal grant obligations impose three critical restrictions when considering a non-aeronautical development:

- The sponsor should be able to demonstrate to FAA that the total compensation it will receive will meet or exceed the fair market value as supported by an independent appraisal. Depending on the complexity of the transaction, the sponsor and/or the developer may need to prepare detailed revenue projections or other financial analysis to satisfy this requirement.

- Airport property purchased with FAA funding must request a land release from aeronautical to non-aeronautical use. If not designated as "non-aeronautical" on the ALP, the FAA assumes the property was purchased for aeronautical purposes.

- The length of any lease must be short enough to allow the sponsor to retain control of the property. FAA interprets "long-term leases" (usually those that exceed 25 years) to be essentially the same as sales and, accordingly, often requires a formal release instead of mere approval. However, carefully structuring the transaction as a series of shorter option terms additional capital improvement conditions for each term will often help with this constraint

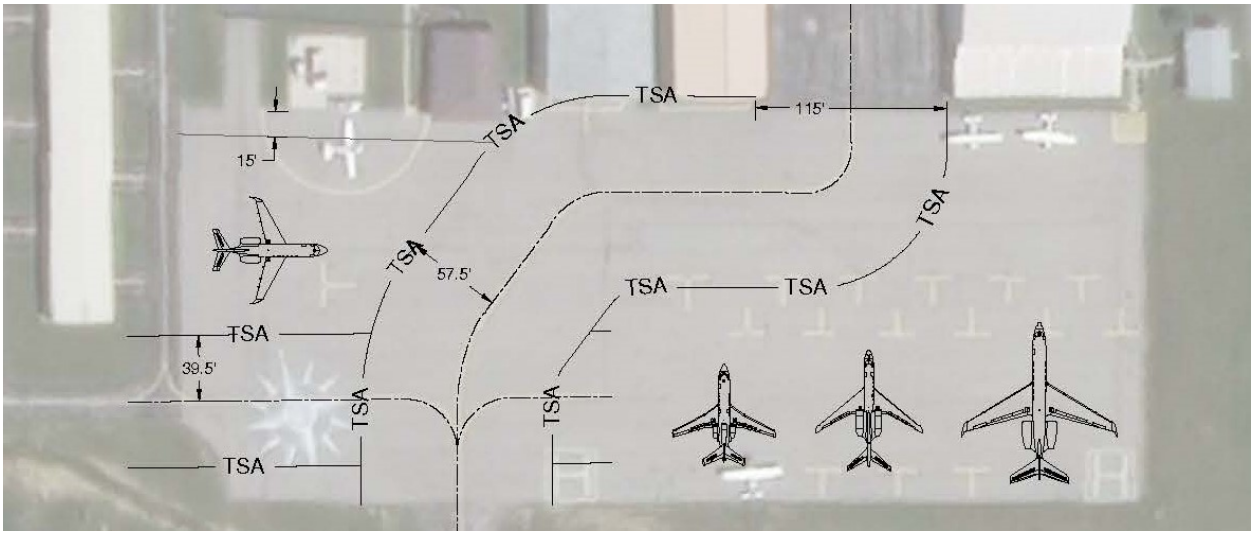
7.1.2 Existing Facilities

TERMINAL BUILDING: The terminal building at general aviation airport's typically offers various amenities to passengers, local and transient pilots, and airport management. Terminal buildings most often house public restrooms, public telephones, a pilot lounge area, and information regarding airport services. The existing terminal building at DLZ also serves as the FBO and is used by transient and local aircraft operators. It is recommended that an airport terminal building be able to satisfy the forecasted peak-hour general aviation pilot and passenger demand. The current terminal facility is adequate for current levels of service. However, as future demand along with the size of future aircraft utilizing the airport increases, it may be appropriate to relocate or develop a new terminal facility, which should be evaluated as part of the Master Plan Update.

HANGARS: DLZ currently has a variety of different aircraft hangars ranging from T-Hangars to a large corporate hangar. Additional aircraft storage is provided in the form of tie downs in various locations across the airport. Generally, owners of larger corporate type aircraft prefer their aircraft hangered in times of bad weather or if they are staying for an extended period. Additionally, maintenance service providers 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 located in areas that are convenient to the user. Near term corporate hangar development should be located to the north of the Jetstream hangar, as currently discussed with future corporate hangar development on the east side of the terminal area. A market analysis on potential land use would allow the City to decide whether additional T-hangars to the west of the terminal area is the best use or there are other uses that would generate more airport revenue.

APRON AREA: An aircraft apron is usually the largest facility on an airport, except for the runway and parallel taxiway. An apron requires significant planning because of the short-term and long-term impacts to the airfield and other GA facilities. It is important to select the proper size, location, and when to expand so that the apron interacts well with other GA facilities and so that airport operations are not limited, and safety is not compromised. The existing main apron is approximately 14,000 square yards and serves as both a transient apron and an area where based aircraft tie-down. As you can see from **Figure 7-2**, if there are more than 4 corporate jets at one time for an event (golf tournament, horse race. etc), the apron is comprised by displacing tie-downs and it becomes difficult to maneuver aircraft with Group I and II taxilane setbacks from moveable or fixed objects and wing tip clearances. In addition, the distance between Hangar 2 and the Jetstream hangar (113') is a limiting factor as a Group II taxilane should be 115' with safety areas and set backs. The main apron area should be considered as a near term improvement and potentially be moved up in the ACIP. A potential new hangar north of Jetstream and the type of aircraft that would need access to it would also determine how quick an apron expansion may be needed.

Figure 7-2: Apron Area Limitations



7.2 Recommendations

Corporate Hangar Market Assessment: In the near term, conduct a study that would assess the financial implications of the City developing a new corporate hangar north of the Jetstream hangar or preparing the hangar site and leasing the land for development. The study should conduct a market analysis specific for that hangar site, cost estimations for both alternatives, and pro forma projections.

Update Airport Master Plan: The Master Plan should be updated in the next five-years. A full evaluation of aviation forecasts, industry trends, and facility needs should be the priority in the next Master Plan. Currently, the airfield supports the needs of the airport users in terms of runway length, standard geometry, meeting FAA design and safety standards, as well as pavement condition; however, the best use of undeveloped property, a new terminal, and apron expansion all need evaluated, updated, and justified.

Document Transient Apron Parking: The FAA will require justification for any proposed apron expansion. In the short-term, until an update to the Master Plan is completed, document transient jet traffic by recording type of aircraft, how long the aircraft was parked on the apron, and if the aircraft displaced any of the existing tie-down aircraft. In addition, document any event where apron space was compromised with photos.

Airport Land Use Study: If a Master Plan cannot be conducted in the next five years, an Airport Land Use Study or Market Assessment of undeveloped property should be conducted to re-evaluate priorities and obtain what fair market values are for all undeveloped parcels.

Lease Ready Site Evaluation: Identify and prioritize appropriate infrastructure projects with the potential to increase the inventory of "lease ready" sites (for both aviation and commercial business leases). Evaluation should include the cost and financing structure to most economically/efficiently increase the lease inventory.

Streamline & Simplify Lease Process: Evaluate current lease and development processes to generate a more comprehensive on-line library and set of business tools for the potential airport investor, which should include:

- Lease Site availability map with relevant infrastructure data
- Clearly outlined steps with appropriate contact persons
- Development Application information links/contacts
- Testimonials from established businesses at airport
- Resource list for business and/or development assistance.

Section 8

REVIEW OF CURRENT AIRPORT SERVICES

The range, level, and quality of aviation services and facilities being provided at a general aviation airport can play a key role in achieving the goals established for the airport. Once demand for aviation services and facilities has been ascertained through the market assessment process, a determination needs to be made about who or what entity is best suited to meet the demand and how, in what manner, demand is going to be met. In the figure below are identified some of the most common aviation services and facilities being provided at general aviation airports today:

FACILITIES	PASSENGERS & CREW	FACILITIES
Guidance & Parking	**Loading and unloading**	**GA terminal buildings**
Ground Services & Handling	**Baggage handling**	**Aircraft Parking (ramp)**
Towing	**Catering**	**Aircraft hangars**
Ground Power	**Pilot Supplies**	**Office**
Deicing	**Ground transportation arrangements**	**Shop**
Lavatory	Shuttle service	**Storage**
Potable Water	Crew cars	**Vehicle Parking**
Aircraft Cleaning	Rental cars	
Cabin	Limousines	
Exterior Washing & Detailing	**Concierge reservations**	
Fuel	Hotel/motel	
Jet, Avgas, Mogas	Restaurant	
Lubricants	Entertainment	
Piston & Turbine	**Flight Services**	
Technical Services	Flight training	
Airframe & Powerplant	Aircraft rental	
Avionics & Instruments	Aircraft charter	
Paint & Interior	Aircraft management	

The availability of aviation fuels is one of the key factors driving the decision of based or transient aircraft operators to select one airport over another. By providing aviation fuels, aviation businesses can generate revenue through fuel sales and airport sponsors can recover costs through fees (if charged) which helps maximize financial self-sufficiency.

8.1 Market

Regardless of the entity meeting demand, an assessment of the key assets, amenities, and attributes of the airport and the community and an analysis of the industry and the

market, is essential. By the way of the market assessment process, the level of demand in the market can be ascertained and compared to the capacity at the airport to identify any deficiencies. For airport sponsors who have decided to provide aviation services and facilities directly to customers, the market needs to be examined much more closely. Although many of the same areas need to be studied, a more detailed analysis is required. This would include:

- examining the range, level, and quality of services and facilities being provided by the airport sponsors and private entities in the industry, at comparable and competitive airports, and at the subject airport; and
- identifying the key assets (e.g., vehicles, equipment, tools, and materials) and the key resources (e.g., time, people, and funding) that will be required to provide each service and facility.

8.2 Organization

Aviation services and facilities can be provided at a general aviation airport in the following three ways:

- by private entity using the private entity's assets and resources and operating under a lease agreement or operating permit with the airport sponsor;
- by a private entity using the airport sponsor's assets and the private entity's resources operating under a management agreement with the airport sponsor;
- by the airport sponsor using its own assets and resources.

This section defines each approach and discusses the actual and perceived advantages and disadvantages of each approach from an airport sponsor and customer perspective. Although the entity (private enterprise or airport sponsor) providing services and facilities at a general aviation airport varies from one airport to the next, many believe that the private sector is best suited for engaging in these activities. Private entities, generally, have the qualifications, experience, and ability to offer a wider range, superior level, and higher quality of services and facilities. However, at some general aviation airports, based on the level of demand in the market and the amount of investment required, a private entity may not be able to generate a reasonable financial return. In such situations, the airport sponsor may need to provide, or facilitate the provision of, certain products, services, or facilities to customers.

Regardless of the situation at the airport, within the market, or in the industry, the Airport Sponsor Assurances give airport sponsors the ability to exercise a proprietary exclusive right to engage in commercial aeronautical activities and exclude other from doing so.

Although, in such cases, the airport sponsor needs to meet the same requirements imposed on private entities and, most important, the airport sponsor needs to use its own assets and resources to do so. In essence, an airport sponsor exercising a proprietary exclusive right must provide aviation services and facilities directly – not indirectly, or

under contract with a third part. An airport sponsor can provide aviation services and facilities on a non-exclusive basis as well. In such case, the airport sponsor would still need to meet the same requirements imposed on private entities but would not be required to use its own assets and resources.

A survey of general aviation airports revealed that airport sponsors provide aviation services or facilities at approximately one-third of public use general aviation airports. Most of these airports are smaller general aviation airports that provide limited services or facilities (aircraft parking and self-serve Avgas only, in many cases) and many of these airports may not be able to support private sector investment. At most of the larger general aviation airports serving the business segment of the market, aviation services and facilities are typically provided by private entities.

Ultimately and consistent with best practices, the market should dictate the most appropriate means for providing aviation services and facilities at an airport. To ascertain the interest, qualifications, experience, and capabilities of private entities to engage in commercial aeronautical activities at an airport, an RFQ/RFP ca be issued by the airport sponsor. However, if a qualified, experienced, and capable private entity has already expressed interest in providing services and facilities, the airport sponsor may forego the RFQ/RFP process and negotiate directly with the entity.

The advantages and disadvantages of each of the three primary approaches depend on the situation or circumstances that exist at the airport, within the market or in the industry.

8.3 Private Entity – Lease Agreement or Operating Permit

Under the private entity lease agreement/operating permit approach, the airport sponsor allows a private entity to lease land or improvements or receive a permit to provide specific aviation services or facilities at the airport. The private entity's employees operate and manage all aspects of the provision of services and/or facilities using the private entity's assets and resources.

Under this option, the private entity may:

- lease land only from the airport sponsor and make improvements (e.g., general aviation terminal buildings, hangars, office, shop, and ramp) to the land;
- lease land and certain improvements and make additional improvements; or
- lease land and all associated improvements.

8.4 Operations

If the airport sponsor has chosen to provide services or facilities using the airport sponsor's assets and resources, this decision will have a significant effect on the airport business plan. Each service and facility should be thoroughly investigated, and specific goals,

objectives, and action plans will need to be incorporated into the airport business plan. From an operational standpoint, the following areas should be considered by the planning team if an airport sponsor has decided to engage in these activities directly.

8.5 Staff

The type, number, qualifications, experience, and abilities of employees will be directly related to the range, level, and quality of services and facilities provided. If relevant, reasonable, and appropriate, airport staff could be cross trained to provide services and facilities. Specialized training programs would need to be implemented as well. While there are several industry resources available in this area, many service and facility providers use a combination of in-house and third-party training materials.

8.6 Equipment

Depending on the services and facilities provided, the airport sponsor may need to procure, maintain, and repair a wide variety of specialized vehicles and equipment, including fueling vehicles, towing vehicles, tow bars, towheads, ground power units, lavatory carts, potable w3ater carts, oxygen and nitrogen carts, cabin service carts, emergency response carts, ramp vehicles, courtesy vehicles, crew vehicles, utility vehicles, preheat units, deicing units, compressed air units, and more.

8.7 Insurance

For any service or facility provided by the airport sponsor, a risk assessment should be performed. Relevant, reasonable, and appropriate insurance coverages and policy limits should be secured with consideration given to premiums, deductibles, exclusions, and other factors. Examples of insurance coverage that airport sponsors may need to secure when providing services and facilities are:

- completed products and operations, including coverage relating to the sale of aviation services to the public
- hangar keepers, including coverage relating to property damage for all non-owned aircraft under the care, custody, and control of the airport sponsor.

8.8 Standard Operating Procedures

When providing services and facilities, various standard operating procedures (SOPs) need to be considered. This includes:

- aircraft fueling and location-based services
- aircraft, vehicle, and equipment operations
- safety, security, and quality control and associated checks, inspections, and reporting
- passenger and crew services

- hazardous materials and waste handling
- processing payments at the point of sale, reconciling sales and inventories, collecting and paying taxes, and maintaining financial controls.

If providing fueling services, the method of fueling (self-serve fueling stations, fueling vehicles, or a combination thereof) needs to be determined and airport management and staff are required to understand every aspect of fueling, including:

- ordering, maintaining, and reconciling fuel inventories
- receiving fuel into storage
- storing and handling fuel, including transferring fuel from storage into fueling vehicles and aircraft fueling
- fuel quality assurance
- vehicle, equipment, and facility maintenance and repair
- record keeping

If providing location-based services (including aircraft line services, parking, and hangars), airport management needs to have an intimate understanding of all aspects of these functions as well.

8.9 Marketing

While the initiatives used to market these activities may overlap with some of the initiatives for the airport, several unique approaches need to be considered by the planning team in promoting the aviation services and facilities provided by the airport sponsor.

Most important, industry directories convey essential information about the airport and the products, services, and facilities being provided to customers in print or online formats. Additionally, there are organizations that negotiate contract fuel prices with aviation fuel providers and FBOs on behalf of aircraft owners and operators. Consideration should be given to identifying the contract fueling program preferred by the customers using the airport and negotiating a contract price for fueling services that will improve the financial performance and position of the airport sponsor.

8.10 Financial

For those airport sponsors providing aviation services and facilities, a separate financial department should be established to record, track, and report the financial performance and position of the department. If possible, the department should be established as an independent legal entity to help protect the airport sponsor from a liability standpoint as sovereign immunity may not extend to proprietary endeavors. In addition, the department should be treated as an independent lessee of the airport. Appropriate market rents should be charged for the land and improvements being occupied or used by the department's activities at the airport. This best-practices approach will provide the framework for establishing the department's pricing for services and facilities and for

accurately recording, tracking, and reporting the department's financial performance and position.

Section 9

MANAGEMENT STRUCTURE

As discussed previously in **Section 1.2**, the Airport is owned by the City of Delaware OH. The City operates the airport directly through City employees and operate the Fixed Base Operator series of fueling, lease management, airfield maintenance including snow removal and series to airports users. The City manages the airports through an Airport Advisory Board to the City Council by members appointed by the Mayor/Council representing citizens with interest and/or specific knowledge relevant to the airport and its operation. This section provides a brief comparison of other airport governances in Ohio and the advantages and disadvantages of alternative forms of airport sponsorship.

The U.S. national airport system is comprised of over 19,000 airports ranging from small general aviation airports in rural communities to large hub airports in major metropolitan areas. Airports perform very diverse roles including the movement of people and cargo, providing critical access to remote communities, including emergency medical services, and providing infrastructure for training the next generation of pilots, aircraft mechanics, and airport managers. Of the 19,000 airports in the U.S., almost 5,100 are classified by the Federal Aviation Administration (FAA) as public-use airports with 3,328 of those airports eligible for federal funding through their inclusion in the National Plan of Integrated Airport Systems (NPIAS). The public-use airports in the NPIAS vary greatly, ranging from large hub airports to basic general aviation airports.

Not only do the 3,328 public-use airports included in the NPIAS illustrate the diversity of the functions of airports, they also demonstrate the variety of governance structures employed to operate and oversee airports in the United States. While federal regulations surrounding airport funding specify that most airports receiving federal funding must be owned by a public entity, they do not specify what type of public entity must be used. As a result, airports in the United States are governed by virtually every type of public entity including general purpose governments at the federal, state, county, and municipal levels and special-purpose entities such as airport authorities and port authorities. Importantly, the governance structures in place at many airports today are the result of historical legacies rather than an analytical examination of the type of governance structure best suited to improve the effectiveness of the airport.

9.1 Overview of Governance

At its core, governance refers to how society or groups within it, organize to make decisions. Although academics and practitioners from various fields will define the term differently, governance often refers to the examination of three main questions:

- Who has authority to make decisions?
- What is the process for making decisions?
- How are decision-makers held accountable for their decisions and by whom?

Examinations of who has the authority to make decisions often focus on governance structures such as hierarchy within government bureaus or board membership, length of term, and composition for non-profit or private corporations. Many of these examinations are conducted from a legalistic perspective with a focus on enabling legislation, regulations, or agreements. Process-oriented governance studies focus on decision-making norms, rules, procedures, and voting rights within organizations or collaborative. For example, what is the process for approving procurement within an organization? How many board members does it take to approve a new hire? Finally, studies of governance also examine the oversight of organizations by elected officials, board of directors, and shareholders. For example, what are the reporting requirements for organizations? How are decisions reviewed by oversight bodies? What performance measures are examined to evaluate performance?

9.2 Airport Governance in the United States

Airports in the United States are governed by a cornucopia of different arrangements that have evolved since the 1920s. Following the end of World War I, many airports used for the military effort were decommissioned while a select few were retained for use by the U.S. mail service. However, many local communities began to understand the economic impact airports could provide to their communities through the movement of people and cargo. The passage of the Air Commerce Act of 1926 codified that the development of airports would be a local, not federal, responsibility. Following passage of the Act, many communities began to acquire private land to build airports. During World War II, the U.S. Government constructed several airfields to assist in the military effort and transferred the airfields to local governments with the passage of the Surplus Property Act of 1944. The passage of the Federal Airport Act of 1946 established a federal role in the funding of airports owned by local governments or other entities that has continued today with the Airport and Airways Trust Fund (AATF) created through the passage of the Airport and Airway Development Act of 1970.

Despite the early roots of airports in local governments, the increase in air travel and the complexity of airport management in 1950s and 1960s led to the creation of many airport authorities designed to foster regional collaboration in the expansion and management of airports. As the national transportation network became more integrated leading to the creation of the Department of Transportation (DOT) in 1967, many special-purpose entities such as port authorities chartered by states became involved in owning and operating airports. Today, because there are relatively few federal or state constraints on the type of public entity that can own, manage, and operate an airport, the governance structures employed in airports in the United States vary quite significantly.

Many of the airport governance structures in the United States fall into one of the following categories:

- **Directly governed by city, county, or state government**: The most common form of airport governance in the United States typically involves an airport director reporting to a mayor, county executive, city manager, county manager, Secretary of Transportation or other elected or appointed commissioners. Importantly, some cities, counties, or states may own and operate multiple-airport systems such as the City of Chicago (ORD and MDW) and the State of Oregon which owns 28 general aviation airports around the state.

- **Airport Authority**: Airport authorities are quasi-governmental entities responsible for the operation and oversight of an airport or multi-airport system. Airport authorities are often created by municipal, county, or state legislation and can also be created through joint agreements between jurisdictions seeking to share fiduciary, operational, and oversight responsibilities. In many cases, the airport authority will lease an airport from a governmental entity for a defined period (often, 99 years). Authorities may be given special powers beyond operational control of the airport including policing power, zoning authority, eminent domain, and bond issuance. Airport authorities are typically overseen by a board appointed by a wide variety of organizations including elected officials or business organizations. A recent study found airport board sizes vary considerably, ranging from 7 to 17 members.

- **Multi-model port authority**: While similar to airport authorities, multi-modal port authorities are a distinct form of airport governance. A port authority is a public authority for a special-purpose district usually formed by a legislative body or bodies to operate ports and other transportation infrastructure. For example, the Waukegan Port District in Waukegan, Illinois oversees the Waukegan National Airport (UGN) and the Waukegan Harbor & Marina. Port authorities are usually overseen by boards or commissions appointed by surrounding jurisdictions. Several port authorities oversee multi-airport systems including the Port Authority of New York and New Jersey (EWR, LGA, and JFK) and the Toledo Lucas County Port Authority (TOL and TDZ).

- **Other public or private entities**: Several airports in the United States are governed by entities that fall outside the boundaries of the categories described above. Some airports are owned and operated by other public entities, including universities. For example, the Ohio State University (OSU), the University of Oklahoma (OUN), and Bowling Green State University (1G0) own airports used primarily for flight training. Ronald Reagan Washington National Airport (DCA) and Dulles International Airport (IAD) are owned by the federal government but operated by the Metropolitan Washington Airports Authority (MWAA) under a lease agreement with a 17-member board appointed by the Governors of Maryland and Virginia, the Mayor of Washington D.C., and the President of the United States. Additionally, some airports such as Monterey Peninsula Airport (MRY) and part of a special district, not incorporated into a city of county.

9.3 Evaluation of Existing DLZ Governance

When airports, communities, and consultants are assessing whether an existing governance structure is effective for their current environment, they will often look to compare their governance structure to that of "peer airports". Within the 97 public owned and public use NPIAS airports in Ohio, the following breakdown exists for current governance of airport facilities.

- **Municipal Owned and operated**: 23 airports including notable similar airports Akron Fulton, Middletown Regional, Dayton Wright Brothers, Bellefontaine, Findlay, and Zanesville.

- **County Airport Authority owned and operated**: Ohio's general aviation airports include 67 county owned facilities operating by a county established airport authority or board. There are many variations of this model and would be cumbersome to recount each here and to enumerate the differences of each board or authority's financial capabilities and/or their encumbrances. This is by far, the largest form of airport ownership and governance in the state due to a former governor's aggressive airport development approach in the 1960's to have a public use airport in every OH county. Notable relevant examples include Fairfield County, Lima/Allen County, Newark Licking County, and Wood County. Notable examples of airports operating directly under County Commissioner control without an intermediary board or authority include Butler County and Erie-Ottawa airports.

- **Airport Authority/Port Authority and Special Bodies**: The remaining 7 general aviation airports are owned and operated by a combination of OH port authorities or universities. The port authorities created by the Ohio General Assembly give differing authority and capabilities separate from especially created airport authorities. Port authority owned and operated airports include Toledo Metcalf and Youngstown Regional. Notable examples of University owned airports include Ohio State University Airport, Ohio University and Kent State University airport.

9.4 Recommendation

The advantage of an airport authority is that a sole focused governmental body sets forth direction, policy and action plan for the airport with a single purpose to manage its for its growth and impact to the area. Airport Authority's often originate because the airport's impact is to an area larger than the City or County of its ownership and thus the costs of the ai report operations can be spread as well as the benefits. In addition, the streamlined ability of an authority, focused entirely upon the airport's operations include greater operating efficiency, improved amenities, and increased capital investment when budget decisions are controlled directly by the operator and not in competition with other municipal needs or constraints.

One of the unique aspects of airports is that they are often owned by one municipality but have benefits that spillover to the surrounding region. Many communities have made the decision to transfer the ownership and/or governance of their airport to a regional airport authority to allow for a singular focus on the operation of the airport while include a wider range of stakeholders in the governance process. Airport authorities have separate boards whose sole focus and expertise is on developing and operating the airport, which can often result in an airport that is more business-oriented and capable of faster decision-making. In the case of DLZ, creating an airport authority that has representation and potential funding from Delaware County, the City of Delaware, and other jurisdictions would allow for a more equitable sharing of the costs of operating DLZ while also providing those jurisdictions with input on the future plans of the airport. The City should explore the potential for transferring the governance of DLZ form the City of Delaware to a regional airport authority.

SECTION 10
MARKETING & WEBSITE

Marketing plans are often misunderstood and too much emphasis is placed on certain pieces of a marketing plan. The true key to success from a Marketing Plan is to implement a holistic approach that utilizes the Airport's strengths and targets the right markets. Chief amongst these pieces within a holistic approach is the Airport's goals. A few examples of goals that the Airport may entertain:

- Does the Airport strive to be more than financially self-sustainable?
- Is the Airport interested in tailoring to the surrounding community and capturing additional GA users? Is that market already saturated?
- Is the Airport interested in attracting corporate users?
- Is there a focus on businesses already in town?
- Is there a focus on attracting business from out of town? Has the economic development commission or other city leadership involved in attracting businesses to Delaware?

These represent just a few of the questions that should be asked when developing a targeted marketing plan. However, one of the most important questions is what markets are already covered by airports in the surrounding area and what marketing efforts are you already engaged in? If these markets are currently covered by other Airports, what does Delaware have at their disposal to develop the relationships and interest in basing at the Airport?

When answering this question, it is important to play to the Airport's strengths, but also to align Delaware's capabilities and objectives with the prospective user's objectives. In order to accomplish this, a few major tasks need to be accomplished by the Airport. These tasks serve as a platform on which Delaware can build their existing userbase, the Airport as a whole, and better serve the community. The following steps to facilitate knowledge of the airport and to begin marketing in a more deliberate manner.

10.1 Community Value Study

A community value study would be highly beneficial to the Airport. This study would help enhance the public's understanding of the Airport. This study should be highly publicized in order to attract maximum positive attention to the Airport. This could include, but limited to:

- Public Engagement meetings
- Public Question and Answer
- Determination of Economic Value to the Community
- Publication of Airport statistics in order to promote awareness
- Develop an understanding of additional ways in which to involve the community

This Community Value Study could be incorporated into a Master Plan Study as part of the public involvement efforts.

10.2 Branding / Rebranding

As discussed in a previous section, branding is a valuable process for developing a consistent identity for the promotion and differentiation of your product or service. A successful brand is one that calls to mind a host of positive thoughts and associations in the minds of consumers, distinguishing it from the competition within its market and compelling consumers to experience and advocate for the brand. In this regard, the development of a unique identity for DLZ can be beneficial to the future growth of the Airport.

To support this process, it's recommended that the City consider a branding effort, which includes a new, custom logo, an upgraded website, and new branded signage, all of which would be carried through the recruitment/marketing campaign. Additionally, a compelling tagline or slogan, supported by mission and values statements, can be displayed in the terminal area and will effectively communicate and continually reinforce the Airport's brand to its consumers.

The branding effort should be followed-up with a public relations and promotional campaign to reintroduce DLZ to the local and regional market, with a focus on business aviation. However, something else to consider is public involvement during the brand development process. When it comes to creating a unified vision and strong brand identity, the feedback received from public involvement early in the development process can be extremely beneficial. Whether it's the airport's current users/tenants or even the general public within Delaware County, when you consider what the community feels, you'll get valuable information on the airport's current perception in the marketplace and others' visions for its future. This helps align with the Community Value Study. It provides guidance for developing a brand that either reinforces or transforms current perceptions. Plus, you create early buy-in from your target audience. People are more likely to invest in and advocate for a brand when they had a hand in its development.

Therefore, it is recommended that the City should market via the Internet and aviation publications. This marketing could take the form of providing information (or at least a link to the Airport's website) on the websites of the major downtown and regional destinations, and in return, provide a similar level of information or linkage to these destination websites.

Ideally, a branding project, and thus a new brand identity, should be the starting point for all marketing, business recruitment, advertising, public relations, and promotion activities involving the Airport. However, it is possible to execute successful marketing and business attraction activities without the branding effort. The benefit of the branding

project is to develop a strong, recognizable, distinct, and lasting identity for the Airport, and messaging that can be consistent and incorporated into all outreach efforts.

Following the completion of the branding project, protocols and brand guidelines are established for the consistent use of logos, taglines, and messaging. When used consistently across all platforms, a strong identity offers the biggest opportunity for the Airport by reinforcing the brand and building awareness in the market for the long-term.

10.3 Joint Marketing

Joint marketing efforts between Delaware City Economic Development Council and even Delaware County in conjunction with the Airport staff is seen as highly beneficial. Economic Development teams are well versed in negotiating with businesses, knowing what's important to businesses, and offering incentives to the potential business. It's the Airport's job to use their strengths such as existing infrastructure, available lease area, and overall airfield capabilities to compliment the offerings laid out by the EDC or equivalent entity.

Using the EDC or anyone within the City hierarchy can be a powerful tool in attracting business to the region. If these businesses have aircraft(s) as part of their operation, the Airport and EDC should partner in approaching the entity. No one knows the Airport like the staff and they're the best people to convey the Airport's message, goals and long-term and portray how that aligns with the business' objectives.

10.4 Airport Website Development Overview

The existing Airport website is outdated and requires a refresh in order to fully support the Airport's goals and mission. Best practices and key good qualities of airport websites are described in greater detail below.

- Branding standards – these are incredibly important and discussed in greater detail within the marketing plan and tips presented in this report. The branding standards will dictate the look of the website to a great extent. If the City does not do its own graphic work, then it would be appropriate to contact their current web designer to see what the policy is. Since the airport is closely tied with the City, the new site should have a similar look and feel. Conversely, if the airport has its own logo, it is suggested that you pull colors from the logo and use it throughout the site banner, headings and all other facets of the website.

- Use of Graphics – verify that the city/airport have rights to any imagery being used on the website. Use high-quality photography when possible. One of the most powerful parts of top-end airport websites is the use of photography to not only convey the capabilities of the Airport, but to tell a story. For example, Waukegan National Airport uses drone footage on their opening pages to convey their

existing infrastructure, their current clientele, and the overall feel on and around the airfield.

- Navigation – keep navigation items short and concise and don't overwhelm site visitors with too many options to choose from. With top navigation options that flow horizontally left to right 4-6 menu items seem to be consistent. If you decide on a left/right nav that flows vertically top to bottom this list could be up to 10 menu items.

- Content – keep content fresh, concise and displayed in a manner that appeals to your audience. The longer the sentences/paragraphs the more likely your audience will not read it. If a long explanation is needed use more of a blog post style which includes a brief sentence with a link to read more. Consider a welcome message on the homepage that briefly describes the Airport's role within the state/national system and who the Airport currently serves.

- Loading time – in today's world where everyone is in a hurry and wants access to information as quickly as possible, you don't want your site visitors to have to wait for pages to load. Keep this in mind when designing content for your site.

- Mobile friendly – consider the shift in browsing patterns. People want to quickly access information, so the number of users accessing your website will be most likely be higher on mobile devices than computers. Make sure and incorporate a mobile friendly design.

- Video/Drone – tell a story on your homepage/site with visuals of the airport and services you offer through video. This will help make the site seem modern/relevant. Also, when incorporating video be sure to provide a mute button so that users can turn the sound off quickly and not have to silence.

- Analytics – this is often overlooked in the web design process. Having a good gauge on knowing that your website is doing its job is very important. Consider using tools to help measure traffic and to measure goals on your website.

- Social Media – use this new website as an opportunity to leverage your social media platforms. Incorporate all social platforms into your website. This will help in driving traffic to and from your website.

- CMS (Content Management System) – if you want the ability to update the site and keep it fresh, having a content management system will provide a lot of value. This would allow you to post and edit content as needed.

Competition among area airports includes digital marketing efforts. In this regard, an effective online presence can be used to promote brand awareness. Listed below are the efforts that some peer airports have put into their online presence.

Table 10-1: Peer Airport Website Comparison

Airport	Dedicated Web Site	Facebook Account	Twitter Account	Other
Delaware Municipal	**No**	**Yes - 1,482 visits**	**No**	• **No real links to services**
Cuyahoga County	No	Yes - 2,931 visits	No	• Separate links to airport services, master plan, developable sites
Bolton Field	No	Yes – 1,576 visits	No	• Links to FBO, aviation services, and leasing/hangars available
Ohio State	Yes	Yes -1,623 followers	Yes	• Numerous links to news, upcoming events, master plan, construction activities, flight school, and hangar availability
Butler County	Yes	Yes - 2,107 visits	No	• Links to airport info, news, and airport services
Lima Allen County	No	Yes - 1,482 visits	No	• No real links to services offered
Mansfield Lahm	No	Yes - 2,810 visits	No	• Links to airnav, airport manager info
Middletown Regional	No	Yes – 2,120 visits	No	• Separate links/pages for airports services, hangar assets, pilot info
Springfield-Beckley	No	Yes – 1,198 visits	No	• Links to airport info, airpark Ohio, master plan documents, drone usage info, ODOT-Division of Aviation
Toledo Executive	Yes	Yes – 375 visits	No	• Links to services, available properties, contact information
Neil Armstrong	Yes	Yes – 95 visits	No	• Separate pages for fuel prices, hangars, airport zoning, news, contact information
Cincinnati Lunken	No	Yes – 11,939 visits	Yes	• Clickable sites to charter flights, pilot information, noise abatement, master plan, airport board info and docs
Burke Lakefront	Yes	Yes – 20,661 visits	Yes	• Links to airport services, leasing information, list of tenants, parking & transportation, contact info
Dayton Wright Brothers	Yes	Yes – 5,568 visits	Yes	• Links to business, real estate, doing business
Lorain County Regional	No	Yes – 1,022 visits	No	• Separate links to facility services, facility data, tenants, contact info

Willoughby Lost Nation	Yes	Yes – 691 visits	No	• Links for charter services, airport services, aircraft for sale, contact info

10.5 Recommendations

The following are recommendations for marketing and branding improvements:

- **Improve Web Site:**
    - Develop stand-alone website
    - Establish reciprocal links to/from sites of interest to your users
    - Optimize search engine visibility
    - Infuse website with visuals, videos, and keep the site current
    - Add lease opportunities & existing rental fees
    - Provide links to things like minimum standards, rules and regulations, etc

- **Market Multi-County Region:** a key target group in marketing efforts should be registered aircraft near DLZ. The FAA has a public database of registered aircraft (show below). This resource can provide information for potential customers. According to the database, as of February 2020, there were over 7,000 registered aircraft in Ohio and 176 in Delaware County. A high quality airport brochure or flyer describing services offered, development opportunities, etc should be distributed to this data base for the multi-County region.

https://registry.faa.gov/aircraftinquiry/StateCounty_Inquiry.aspx

- **Create a Marketing Video:** Create a video to be posted on new website and You Tube. This video could be less then five (5) minutes but would convey why a prospectus user should visit, base, or develop at DLZ. The video should be professionally produced. The video should include airport and City staff describing the benefits of DLZ. The video should describe the facilities with drone footage of the airport.

SECTION 11

MANAGEMENT

11.1 Overview

In the ever-growing aviation industry, the role of Airport Manager is one that brings stability, purpose and direction to an Airport. An Airport Manager is responsible for innumerable tasks, and this often requires the individual to "wear multiple hats". Regardless of whether the airport is owned by a municipality, an airport authority, or otherwise, it is the Airport Manager's job to converse with, work with, facilitate the needs of, and be compliant to his or her:

- General Aviation Tenants
- Airline Tenants
- Employees
- The Federal Aviation Administration (FAA)
- The Applicable State Department of Transportation
- The various customers of the Airport
- Airport Board/City Council
- Airport Advisory Board (where applicable)

To meet the needs of the Airport's many customers, the Airport Manager ultimately functions as the CEO but may need to play the role of Marketing Coordinator, Human Resources Director, Head of Business Development, Accountant, negotiator, operations specialist, engineer, planner, motivator – you get the gist. More directly, the Airport Manager is responsible for the direction and continual compliance of the Airport that they are charged with leading. Because Airports are often referred to as small cities, running an Airport is no easy task and it requires a highly knowledgeable, devoted, and very driven individual to bring success to the Airport. Success can be defined in several different ways depending on the size or nature of the Airport.

Airport managers are the decision-makers and policymakers for airports. They create jobs and oversee the management of each airport department. The job is multi-faceted and vital to aviation safety. Large airports that serve commercial airlines need managers to oversee several departments, but smaller airports may need airport managers to be more hands-on with areas such as finance, security, maintenance, and more."[1]

[1] https://www.thebalancecareers.com/airport-management-and-administration-job-282636

Setting aside the differences between Airports, the following characteristics and their applicability are highly desirable when searching for an Airport Manager:

- Negotiation skills – contract and lease negotiations with prospective tenants and Airport users
- Operational background – knowledge of the way an Airport functions operationally both from a landside and airside perspective
- Ability to manage a few, a dozen, hundreds, or even thousands of employees while implementing a shared vision and culture that everyone works towards
- Public Relations skills – Airports are the doorstep to the community and therefore they are very high profile in nearly all cities or counties in which they reside. Communication, both written and verbal, are key components of an Airport Manager's arsenal
- Marketing – Airports are encouraged through FAA grant assurances to be self-sustainable – they exist and operate without the support of local tax dollars. It is crucial for an Airport Manager to market the strengths and capabilities of the Airport to prospective tenants, whether they are airlines, general aviation users, corporates users, cargo operators, or non-aeronautical users.
- The ability to budget – An Airport Manager is general given considerable freedom when it comes to drafting a budget. That means they must have considerable knowledge in the way their Airport acts as business. They must be cognizant of the revenues being realized by the Airport, but so too the employee salaries, infrastructure costs, maintenance costs, and other operational expenses.
- Certification – this is highly desirable for an Airport Manager to either have or to be working towards. Certification through the American Association of Airport Executives (AAAE) either as a Certified Member (CM) or Accredited Airport Executive (AAE) demonstrates a commitment to both the aviation industry as well as a deep understanding for major components of airport management.
- Education - A Bachelor's Degree from an accredited college or university with major course work in business, airport or aviation management or closely related field.
- Knowledge of FAA Policy/Standards and Grant Assurances – a proficient knowledge of the FAA standards and grant assurances helps keep the Airport from getting into undesirable situations with the Federal Government.

These are just a few of the considerations when hiring an Airport Manager. To supplement this list, sample job postings have been included herein at the end of this section for recently Airport Manager job postings at a variety of different Airport sizes. These job postings were found on www.indeed.com.

11.2 Duties & Responsibilities

It seems safe to say that no two airports anywhere have the same problems, the same needs, or the same resources. It is virtually impossible for anyone to prepare a list of managerial duties and responsibilities that would be universally applicable.

All we can do is offer some generalities that are known to be rather common management functions. No attempt has been made to rank the items on this list in any degree of importance except the first item. Duties of general aviation airport managers generally include:

- **Safety** – One of the most important responsibilities of an airport manager is providing safety for users, visitors and employees. Regardless of legal or contractual requirements, it is the absolute responsibility of everyone even remotely connected with aviation to promote safety in every possible way. Violations of good practices, as well as violations of state or federal aviation regulations, must be corrected by the airport manager, even at the cost of losing a friend or customer. Any less emphasis would represent moral, if not criminal negligence.

- **Notices** - As previously mentioned, it is the airport manager's responsibility to generate Notices to Airman (NOTAMS) which are then issued by Flight Service Station (FSS) personnel to enhance the safety of flight. Airport managers should contact the controlling FSS anytime a situation arises that may affect flight of aircraft, and request a NOTAM be issued. A NOTAM should also be issued, as soon as practical, when any condition, on or near the airport, would present a hazard to arriving or departing aircraft. A similar notification should be made when the condition has been corrected.

- **Promotion of Aviation** – It is a responsibility of an airport manager to promote aviation by example, by word of mouth, by promoting media relations and other means.

- **Promotion of the Airport** – The airport is a public utility owned and operated for the good of all citizens, not just airplane owners. Public displays, open houses and the like should be planned and conducted. More importantly, every visitor should be made welcome and should be allowed access to the airport, consistent with safety and security consideration.

- **Political Relations** – One of the most difficult feats to accomplish is maintaining good relations with municipalities, authorities, and other governing bodies. The job requirements of the governing body and the manager should be clearly defined in writing in order to prevent any miscommunication between the two. A manager is an effective communicator who can understand the legal jargon of political meetings and documents.

- **Maintenance of the Airport** – It is a major concern of the owners that their investment be protected. Upkeep of buildings, repair of surfaces and the like are obvious duties. Maintaining the appearance of the airport to attract visitors and users is also important but more frequently neglected. An important tool in airport safety is implementing an "Airport Self Inspection Program." This allows the manager to keep up with items such as pavement condition, airfield safety areas, ground vehicles, lighting operation and ongoing development, to name a few. This program is described in Section 5C below.

- **Preventive Maintenance** – One of the best ways to avoid accidents is by implementing a preventive maintenance program. Maintaining the appearance of the airport, will not only attract visitors, but will also assure the owners their investment is protected. The upkeep of buildings, upkeep of runway, apron, and parking surfaces, manicuring the grass, and other preventive techniques, should be accomplished.

- **Supervising the Airport** – The airport manager usually has the responsibility of making and posting airport rules necessary for safety and security. (Depending on the governance of the airport, such rules may require board and/or executive approval). In this regard, we strongly believe that the fewest necessary rules represent best management.

- **Developing Policies** – The airport manager must develop basic policies in every area of airport management. The policies present guidelines for the airport staff, maintenance programs, record keeping, potential tenants, business contracts, environmental issues, and the annual budget. The enforcement of these policies also falls at the feet of the manager. Having these policies in writing can decrease the chance of misunderstanding requirements.

- **Enforcement of Regulations** – It is the duty of the airport manager to ensure enforcement of laws, ordinances and regulations pertaining to safety and security of the airport. Included in this responsibility is liaison with law enforcement agencies.

- **Business Management** – The airport manager has budget-making and accounting responsibilities regardless of the size of the airport. Effective and efficient use of funds, avoidance of waste, and proper reporting, are among the manager's direct responsibilities.

- **Public Service** – The airport manager plays the role of a public servant who focuses on the goals of the community, not the airport's profitability. It is the airport manager's duty to remain informed on aviation matters and be prepared to help and provide advice on aviation when required. The manager is always available to cope with any airport emergency. A manager who also serves as the fixed

base operator (FBO) is cautious of decisions that may create a conflict of interest for the airport and keeps the wellbeing of the airport in mind.

SECTION 12

RECOMMENDATIONS

Logical next steps call for the development and execution of specific action plans to move the airport forward on its infrastructure and business development track. This section will address both short-term and long-term recommendations for the airport.

12.1 Short-Term Recommendations

12.1.1 Revenue Enhancements

One of the top priorities repeatedly expressed by Airport/FBO city/management is the enhancement of the Airport's and FBO's revenue-generating capabilities to cover annual operating expenses (reducing or eliminating the City's subsidy of the Airport). Historically, the City's General Fund have subsidized the Airport Fund. The Airport Fund has routinely operated at a deficit over the last several years.

Based on CMT/AMCG's review and discussions with Airport/FBO management, it appears the Airport/FBO is currently operating on a limited budget. Continued outside pressures in areas of compliance, regulatory requirements and facility operations and maintenance experiencing costs rising generally faster than existing activity revenue streams, the City will risk a further reduction in Airport/FBO operations and revenue. Based on the budgetary information provided to CMT/AMCG, there appears to be nominal (if any) operating expenses to eliminate or reduce from the Airport's and FBO's expenditures without significantly impacting the operation and maintenance of the Airport and FBO.

CMT/AMCG recommends the City explore revenue enhancement strategies to balance the Airport's and FBO's budget and provide budget surpluses to enhance the operation and management of the Airport/FBO and reduce or eliminate the City's subsidy. These revenue enhancement strategies could include, but not limited to:

- *An aggressive fuel pricing strategy, for example, seeking to be in the 50-75% range of area fueling pricing.*
- *Aggressively market and develop development ready land areas for investment in aircraft hangar storage facilities.*
- *Aggressively position for ready site development of corporate flight department investments at the airport.*

To enhance the revenue potential of the Airport and FBO, CMT/AMCG provides the City the following recommendations for consideration:

- *Continue to track, log and evaluate the airport's own land lease and facility rent values to determine if current rental rates for City land and improvements reflect market conditions at the Airport and support future rent adjustments.*

- *Continue to account for all airport revenues and expenses are accounted for through the City's finance office. FAA Airport Sponsor Assurance #25 (Airport Revenues) indicates that all airport generated revenue be used solely for airport related purposes.*

- *Consider conducting a more detailed Airport Fee Study to ascribe costs for airport development, operations, and maintenance for airport functions and services as accurately as possible for comparison to existing or proposed revenue streams. This may allow the City to better understand and prescribe a cost-recovery based fee schedule for costs incurred relating to the planning, development, operation (including maintenance and repair), management, and marketing of the Airport. A future, updated Fee Schedule may include based aircraft fees, fuel flowage fees, and ramp fees.*

- *Continue to monitor fuel pricing at competitive regional facilities and review the current DLZ fuel pricing analysis to ensure that the City's existing fuel pricing program establishes fuel prices that are competitive in the marketplace and captures the value of the Airport and FBO.*

- *Segregate Airport and FBO financials into two different accounting cost-centers to better understand where revenue enhancements and operating expense management focus efforts should be.*

12.1.2 Airport/FBO Staffing

Airports and FBOs are highly complex facilities and associated operations that require dedicated management professionals to ensure the airport and FBO are operated in full compliance with legal requirements, meets the needs of the ever-changing aviation industry, and reflects the desires of the local community.

The current staffing levels of the Airport/FBO are enough to implement proper Airport safety with current traffic and activity levels. However, in order to provide additional services or to accommodate increased activity levels, or to initiate or implement additional airport management type initiatives or activities, the current level of staffing begin to become more stresses. Industry best practices to provide the type, level, and quality of FBO products, services, and facilities desired and expressed in the interviews and surveys would suggest additional resources are necessary. This is especially true when an Airport/FBO team member needs to take a vacation or utilize available sick time. Additional consideration should be given to internship and other summer programs as well as cross utilization of City staff for operational activities.

12.1.3 Management and Professional Training

Professional airport management is essential to operating an airport successfully. Today's demanding and sophisticated aviation industry requires that an airport manager acquire and develop the appropriate tools to lead and assist the local community realize the value and potential of the airport. Areas of airport management include planning, compliance, operations, maintenance, environmental, community development, legislative, security, safety, budgeting, finance, grant/project management and administration.

CMT/AMCG recommends the City of Delaware budget resources for the airport manager to attend recognized professional training /certification opportunities. The Ohio Aviation Association provides webinars, conferences that includes training and knowledge-based learning on many different airport management or facility operational topics. In additions, the American Association of Airport Executives provides accreditation for Airport Managers beginning with a 'Certified Member' Course. The Certified Member (CM) is a nationally recognized designation and standard that all airport managers should seek to obtain. The CM provides foundational and advanced knowledge essential for operating and managing an Airport to best management practices and standards. The accreditation continues with certification to an Accredited Airport Executive, A.A.E.

12.1.4 Airport Commission

At the present time, the City through ordinance defers several City Council duties to an Airport Commission. Such duties are normally assigned and performed by the airport manager and city staff (e.g. leases and permits, airport budget, personnel) with oversight by the City Manager and approved by the City Council. When properly structured and focused, the Airport Commission can provide critical guidance and recommendations to City Council in developing airport master plans, major capital projects, and other management and compliance documents.

CMT/AMCG recommends the City modify and update the Airport Commission duties and responsibilities (Chapter 175.03 Airport Commission – Powers and Duties, last approved Ordinance 01-36) whereby, the Airport Commission duties shall include review and make recommendations regarding establishment of Airport goals, development and adoption of Airport master plans and relevant planning documents, major Airport capital project schedules, Airport design guidelines and Airport ad hoc committee efforts. In addition, the Airport Commission will work as advocates of the Airport and advise the City Council regarding airport matters including serving as a feedback mechanism regarding the Airport, build awareness of the Airport and its role in the economic health of the region, develop Airport advocacy, educate users/tenants/neighbors about operating guidelines, create opportunities to engage the public, and ensure good neighbor practices by the Airport.

12.1.5 Aeronautical Service Enhancements

One of the recurring concerns expressed by Airport management was the need to expand general aviation products, services, and facilities that cater specifically to corporate/business transient operators utilizing turbine aircraft. Currently, these services (including aircraft fueling) are provided by one or two airport employees depending on their work schedule who are also responsible for the maintenance and upkeep of the Airport. Line services are available seven days per week (8:00 a.m. to 5:00 p.m.). After-hours services are subject to prior arrangement and a minimum call-out fee is charged. Additionally, there is a lack of ground handling equipment to accommodate piston and turbine aircraft. Based on discussion with Airport management, CMT/AMCG understands there is a growing consensus that transient aircraft operations are increasing as the local and regional economy continues to develop.

Market drivers for corporate/business transient operators utilizing aircraft include the airport's location, infrastructure, facilities, and products and services.

CMT/AMCG recommends the Airport provide enhanced general aviation products, services, and facilities:

- *Update marketing efforts and airport website with information on hours of operation with a focus on customer service;*
- *The FBO needs an identity, with an appropriate industry business name which then is branded through the city/Airport marketing efforts.*
- *Expand and enhance aircraft ground handling services, including arrival and departure aircraft marshalling, potable water, O2, Nitrogen, ground power, etc.*
- *Expand and enhance passenger and crew services, cabin services, baggage handling, and courtesy transportation, as well as ground accommodations.*

To accomplish this element, the Airport should expand and enhance the availability of products and services to be more responsive to the increasing demand of transient (and based) aircraft operators. The Airport may need to purchase the necessary ground support equipment.

12.1.6 Airport Environmental Compliance

Managers of small airports like Delaware Municipal Airport have long faced the on-going task of complying with federal environmental requirements while dealing with limitations in staffing and environmental expertise. To ease this burden, the Airport Cooperative Research Program (ACRP) created the Guidebook of Practices for Improving Environmental Performance at Small Airports (Report 43) with the primary purpose to promote environmental awareness, identify applicable federal environmental compliance requirements, outline practices that proactively enhance environmental

stewardship, and identify resources and tools that small airports can use to be proactive. The Guidebook provides a basic overview of environmental regulations and practices that can be easily understood, no matter the experience level.

CMT/AMCG recommends the City continue to actively to modify and update the Airport's SPCC and SWPPP (SWMP) as soon as possible. The current Airport's SPCC was last prepared in 2008 and does not accurately reflect current airfield conditions and would benefit by such update in order to ensure compliance with current EPA regulations. As an FBO operator, the City needs to secure and maintain appropriate insurance coverage for the type of services and activities being provided. While AMCG did not review or discuss the Airports current insurance policy and coverages, it is recommended that all applicable insurance coverages be reviewed annually.

12.1.7 Airport Management

The aviation industry has evolved considerably over the last several decades. Airports and their communities as well as airport related businesses are evolving to meet changing demand and build brand recognition through commercial aeronautical services. Airports are the infrastructure where providers of aviation related services meet the users of aviation related services; hence an airport is a specialized market. These specialized services, along with safety and regulatory requirements ensure the Airports success. Airport management in conjunction with City of Delaware staff is responsible for the overall governance, operations, development, planning, financial, legal requirements necessary to operate an Airport. Additionally, the Airport should engage both ODOT and the FAA for on-going guidance and support that will assist the Airport develop appropriate management processes and procedures.

Based on ACMT/MCG's airport assessment, we recommend the Airport consider utilizing the following tools.

Airport Management Assessment	Airport Management Resources
Utilize On-line Airport Management Tools	- American Association of Airport Executives (AAAE) https://www.aaae.org - National Air Transportation Association (NATA) http://nata.aero/ - Guidebook for Managing Small Airports - http://www.trb.org/Publications/Blurbs/162145.aspx - Guidebook of Practices for Improving Environmental Performance at Small Airports –

	http://www.trb.org/Publications/Blurbs/164885.aspx - Ohio-Aeronautics - http://www.dot.state.oh.us/Divisions/Operations/Aviation/ Pages/Airports.aspx

12.1.8 Airport Property Management

It is the longstanding policy of the FAA that airport property be available for aeronautical use and not be available for non-aeronautical purposes unless the FAA approves that non-aeronautical use. Use of a designated aeronautical facility for a non-aeronautical purpose, even on a temporary basis, requires FAA approval. See FAA Order 5190.6B, Airport Compliance Manual, paragraph 22.6, September 30, 2009. The identification of non-aeronautical use of aeronautical areas receives special attention in FAA airport land use compliance inspections. See Order 5190.6B, paragraphs 21.6(f)(5). The Airport's current use of the former hangar for the storage of snow removal equipment may raise question of compliance with Airport Sponsor Assurances and Order 5190.6B.

It is significant to note: 1) the existence of an airport (aircraft operator) waiting list, those seeking aircraft storage. 2) the relinquishment of lease revenue from aircraft operators seeking aircraft storage 3) the Airport not accounting for the type of hangar use (non-aeronautical) and for not accounting for a below-market rate (FMV for non-aeronautical use) in violation of the sponsor's obligation for a self-sustaining rate structure and FAA's Revenue Use Policy.

Conversely, when an airport has unused hangars and low aviation demand, a sponsor can request the FAA approval for interim non-aeronautical use of a hangars, until demand exists for those hangars for an aeronautical purpose. Aeronautical use must take priority and be accommodated over non-aeronautical use, even if the rental rate would be higher for the non-aeronautical use. The sponsor is required to charge a fair market commercial rental rate for any hangar rental or use for non-aeronautical purposes. (64 FR 7721)

CMT/AMCG recommends the City actively develop a plan that addresses both the Airport's need for airport maintenance equipment storage facility and the replacement or restoration of the current Snow removal Equipment building to aircraft storage capability as a means to maximize its prime location on the terminal area apron and its revenue producing capability. As a leasing policy and rates and charges policy are

developed or in conjunction with an Airport Master Plan is prepared, the evaluation and clear designation of aeronautical and non-aeronautical properties can be identified.

Airport Operations	Observations
NOTAMs (Notice to Airman)	DLZ's process for NOTAM issuance should include daily verification and appropriate updates as necessary. Airport staff effectively developed and manages a sound process that accounts for all Movement Area variances and changes that directly impact aircraft operations.
Airport Vehicle Storage Facility (hangar used to store the Airport's snow equipment and mowers, etc.)	The former hangar currently in use as Snow Removal Equipment (SRE) facility may be viewed a non-compliant based on the structure' original use as an aircraft hangar and its location on the terminal area apron. FAA's Hangar Use Policy - https://www.faa.gov/airports/airport_compliance/hangar_use/
Movement Area Operations (Airport Staff)	The Airport staff demonstrated a high level of professionalism and competency while operating on the movement and non- movement areas of the airport. Equipment used to inspect runway surfaces is well maintained.

12.1.9 Primary Management Compliance Documents (PMCDs)

Several documents, commonly referred to as Primary Management Compliance Documents (PMCDs), play a key role in the development, operation, and management of an airport by outlining applicable policies, standards, and guidelines. In totality, these documents are designed to:

- ensure the long-term financial health of an airport
- facilitate the orderly development of an airport,
- ensure the provision of quality aviation products, services, and facilities at an airport,
- protect the health, safety, interest, and general welfare of the public, and
- reduce the potential for conflicts with tenants, consumers, and users.

Typically, PMCDs consist of the following:

- Rules and Regulations–These set forth the rules and regulations for the safe, orderly, and efficient use of the airport.

- Minimum Standards–These set forth the minimum requirements for an entity to engage in commercial aeronautical activities at an airport.

- Leasing/Rents and Fees Policy–These set forth the parameters for leasing airport land and improvements and outline the process for establishing and adjusting rents and fees.

- Development Standards–These set forth the parameters governing the design, development, construction, or modification of improvements at the airport.

Primary planning documents (i.e., airport strategic plan, airport business plan, and airport master plan) are planning tools used by airport managers and policymakers to help achieve goals and realize the mission and vision for the airport. In comparison, PMCDs are policies that govern the development, operation, and management of the airport. PMCDs are typically binding on the airport sponsor, airport tenants and users, and stakeholders.

The Airports current "Rules and Regulations" (2006) are dated and could be enhanced by making additions or amendments with industry best management practices. The Airport's "Minimum Operating Standards" (Ordinance 05-48, May 23, 2005) are noncompliant with FAA recommended practices

CMT/AMCG recommends the City initiate efforts to update the Airport Rules and Regulations and the Minimum Operating Standards to strengthen the guidance to airport management and operations, thereby strengthening the attractiveness for potential investments at the airport. These documents, as part of a suite of PMCDs will assist in providing the foundation and tools crucial for the professional development, operation, and management of the Airport, which addresses airport compliance and industry best management practices.

12.1.10 Marketing Plan

The Airport does not have a detailed and aggressive marketing plan. Outside of the local region, potential users and customers are virtually unaware of the services and facilities available at the Airport. The development of an effective marketing strategy will be a key component of the Airport's future success.

The marketing plan should emphasize the Airport's strengths and opportunities and convey its mission, vision, and value. The marketing plan will provide a platform for reaching potential customers, stakeholders; it will position the Airport within the marketplace. This should include an extensive website development/update strategy.

During the Airport's marketing effort, potential synergistic relationships should be explored to promote the Airport (e.g., flight training and nearby industry). The Airport provides easy access for itinerant, high-end customers, and corporate executives.

CMT/AMCG recommends the City and the Airport develop and fully implement a marketing plan as follow up to this Strategic Airport Business Plan. The identification of key target market sectors and potential based operators in coordination with City economic development initiatives will serve as primary marketing plan initiatives.

12.2 Long Term Recommendations

12.2.1 Property Acquisition (Runway Protection Zones)

Runway protection zones are a trapezoidal area "off the end of the runway end that serves to enhance the protection of people and property on the ground" in the event an aircraft lands or crashes beyond the runway end. Runway Protection Zones underlie a portion of the approach closest to the airport.

While the RPZ also has limitations on obstructions (because it lies below the approach surface and because it includes safety areas and obstacle free areas), the primary purpose of the RPZ is the protection of people and property on the ground. Airport Property and the RPZ Under FAA design criteria (which applies to all obligated airports), the airport must own the landing area. Secondly the airport owner must have enough interest in the Runway Protection Zones to protect the Runway Protection Zones from both obstructions and incompatible land use. Finally, the Airport must strive to attain compatible zoning around the airport in order to prevent incompatible land uses that:

- Could cause sufficient conflict that endangers the airport
- Cause it to be closed or
- Require substantial remedial investment to purchase conflicting developed property.

The Airport may attain enough interest in the Runway Protection Zones in three primary ways.

- The first and the preferred method is for the airport to purchase the approach areas in fee. Ownership in fee is preferred because it provides maximum control for the airport.
- The second is through purchase of an easement (or a combination of easement and zoning).
- The third alternative is to rely upon adequate zoning which should be enacted even if fee or easement ownership is in place.

The City has significant control over the current RPZ areas and what remains outside City control appears at low risk for incompatible development, however, CMT/AMCG

recommends the Airport works to acquire the remaining land portions identified as RPZ and/or enact appropriate land development restrictions as through local ordinance that complies with FAA guidelines for compatible land use (AC 150/5300-13). This is especially important as the City of Delaware updates their Master Plan and/or the City Comprehensive Plan.

12.2.2 Hangar Feasibility Study

Currently, there are few individual hangars located on the Airport. The construction of hangars could increase the number of based aircraft and increase aircraft operations and potential revenue generating opportunities for the Airport. Aircraft hangars come in a wide range of shapes and sizes to accommodate various types of aircraft and users. However, hangar construction can represent a significant investment for the Airport (or a private developer). Therefore, it is important to fully assess and analyze the demand and explore various funding/development scenarios before proceeding with a hangar development project.

Current conditions have the Airport with a "waiting list" of aircraft owners desirous of a T-hangar location if facilities and presumably competitive costs were available. *CMT/AMCG recommends the Airport conduct a market assessment/feasibility study as it relates to hangar development to determine the demand and feasibility of hangar development at the Airport in the long-term and the capability or appetite for the City to serve as the developer or to simply provide opportunity as landlord with a ground lease. In addition, the Airport should contact hangar manufacturer representatives such as Erect-A-Tube and/or FulFab and fully explore options for hangar development.*

12.2.3 Expand Airport Operation - Types

The Airport is dependent on city revenue to support the operation of the airport, therefore, key to future growth is the need to expand airport operation types. General aviation operations are considered to be those aircraft operations not conducted by air carrier aircraft or the military. The airport should develop and implement a plan and foster growth through marketing, community development, aviation industry outreach and providing enhanced commercial services as a way to increase the following operation types.

General aviation business aircraft transport both goods and people. These entities understand the value of general aviation and the time savings that it can offer in comparison to air carrier operations or ground transportation. With on-demand access, no security screening, and the ability to fly virtually anywhere (usually point-to-point), travel time becomes a fraction of what it would be otherwise. Companies and staff appreciate the time and cost savings that result. Business-related operations are often conducted using corporate aircraft and pilots, although many operations are conducted through aircraft charter services that offer aircraft and pilots for hire.

Recreational operations (e.g., when pilots use aircraft for flights associated with tourism, airplane rides at air shows, and general transportation between locations that is not for hire) and flight training operations, whether for personal pleasure or for career development, are other operational types that the Airport should empathize in the long-term. With the current pilot shortage, flight training operations may be associated with a well-established flight program where students are often training to become commercial airline pilots. Special operations include, but are not limited to, those conducted for research, surveillance, agricultural spraying, emergency response, remote access, fire suppression, and law enforcement. Numerous entities (e.g., federal and state agencies, universities, and hospitals) rely on GA to carry out their missions.

CMT/AMCG recommends solicitation of neighboring aviation flight departments to determine future interest and opportunities for relocation and development at the Airport. (e.g. Cardinal Health, etc.)

12.2.4 Public-Private-Partnerships (P3)

The Airport needs to find methods beyond traditional incentives to entice airport development. The formation of public/private partnerships is an emerging trend for general aviation airports to assist in the financing of traditional non-eligible capital development, such as hangars, terminal buildings and other aeronautical facilities. Public/private partnerships are created as a means to provide a mutually beneficial financial relationship between a private entity and a city government. City governments sometimes offer corporate incentives to attract businesses and promote economic development within their communities. Whether they are companies just starting their business or are well-established enterprises looking to relocate, these incentives provide excellent opportunities to evaluate and compare multiple sites and seek out the locations that offer the most benefits. There are numerous benefits to such an arrangement. The community wins by gaining the positive (and often substantial) economic impact generated by the business. For many airports, this can lead to the construction of aircraft storage space that they would not otherwise be able to afford or an FBO terminal building. These partnerships vary from simple to complex and are usually specifically tailored to a company's individual needs. These needs can include government-provided infrastructure, bonding, development assistance, and even joint marketing and advertising campaigns. They can apply to one particular structure or facility or for a large, privately managed, government-owned development.

CMT/AMCG recommends the City pursue possible P3 projects that accommodate both the City and Airport, thus enhancing the value of the airport to the community.

12.2.5 Airport Master Plan Update

The Airport Master Plan will need to be revised and updated in ten-years or as recommend by Airport staff, ODOT, and FAA. The FAA recommends that Airport Master Plans be updated at a minimum every 5-10 years to reflect the contemporary

environment. According to the Airports ACIP program, the Airport is scheduled for a Master Plan Update in 2027. During the Airport Master Plan process, an evaluation of current and forecasted airport activity, facility requirements, and various alternatives for the Airport will be conducted. The Airport Master Plan provides guidance for future development which will satisfy aviation demand in an environmentally and fiscally responsible manner while adhering to FAA safety design standards. Through a coordinated review by the City, the FAA, airport users, and the public, a recommended development concept would evolve to serve as a guide to realistic and achievable airport development well into the future.

CMT/AMCG recommends the City conduct an Airport Master Plan Update, commencing no later than 2027 or as prescribed by the FAA and ODOT (10-yr capital improvement program – November 2018)

12.2.6 Expand General Aviation Services

Providing amenities and services allows airports to serve a wide user base and multiple types of general aviation operations. These services should be appropriate to the airport size and the types and number of operations it supports as no two airports are alike and, therefore, require individual planning to meet site-specific needs.

Aircraft parking is typically provided through an FBO which is operated by airport staff. This service is important for aircraft based at an airport, as well as any itinerant aircraft not based at an airport but traveling to the area. Adequate area to accommodate the predominant size and number of aircraft that frequent the apron area for parking is necessary. Area for maneuvering aircraft must also be considered when planning to develop an aircraft parking area. A detriment for aircraft parked on an apron is that they are exposed to weather and other environmental factors, whereas aircraft parked inside a hangar are protected from these impacts. A tie-down or parking fee should be assessed where an aircraft is parked on the apron or ramp area for a period of time. Fees are established to recover the cost of providing services and support the operation and maintenance of the airport. Such fees should be adjusted annually to reflect a cost-recovery methodology.

Aircraft storage can take many forms and includes enclosed structures such as hangars that provide protection from weather and other environmental factors (e.g., wildlife and debris). Often, aircraft owners want covered storage for their aircraft to preserve the condition of their investment and to reduce repair and maintenance costs.

Aircraft storage needs vary from one airport to another based on the types and sizes of based aircraft and airport user needs. The need for aircraft security also influences the type of storage that an airport provides. Airports have many methods to provide aircraft storage (e.g., airport owner leases of aircraft storage space, private owners subletting hangar facilities on leased airport-owned property, and single-owner private developments). Sound lease agreements ensure adequate maintenance of privately-

owned facilities. Fueling Services, the provision of fueling services at an airport is critical for attracting and maintaining a based user group and for attracting itinerant aircraft to an airport. Two fuel types are typically offered—100 low lead (LL) and Jet A. Their costs fluctuate based on the market, the same way that automobile gasoline prices fluctuate. With continued improvements in technology, such as the installation of credit card readers, many airports now offer 24/7 self-fueling options which has made providing fueling easier and more efficient. One key to growth is identifying current and future FBO services and the developing and implementing a comprehensive marketing plan. Note: the current Airport webpage provides no functionality and should be upgraded and replaced with a format more accommodating and useful. Consider visiting other FBO websites to assist in this process.

CMT/AMCG recommends the Airport closely monitor the operational volumes and fleet mix of aircraft using the Airport. If aircraft operations continue to increase along with the number of turbine aircraft operations, the Airport should consider assessing current services for revenue gains and expanding the types of commercial services.

12.2.7 New Airport/FBO Terminal/Administration Building

The existing Airport/FBO Terminal/Airport Administration Building, while sufficient now may need to be replaced with a newer facility that emulates the City's character, vision for the future and supports greater aviation demand for products and services. A well-designed airport Airport/FBO Terminal/Airport Administration Building greatly enhances FBO services and will complement the Airport staff's ability to manage and operate the Airport. In addition to accommodating the FBO services, a new Airport/FBO Terminal/Airport Administration Building would provide space for airport operations and restaurant, and meeting space. Essentially, the Airport/FBO Terminal/Airport Administration Building provides the focal point and "front door" for the Airport and community.

CMT/AMCG recommends, if substantiated in a proposed Airport Master Plan Update that the City explore, plan and program for the existing Airport/FBO Terminal/Airport Administration Building be replaced with a modern, multi- functional facility.

12.2.8 Airport Land Use Plan

With approx. 325 acres of aeronautical and non-aeronautical land, the Airport's footprint is small in comparison with surrounding airports, therefore strategic development of the airport is critical for future growth. The concept of land use planning is very much related to the economic prosperity of the Airport. A comprehensive land use/development plan guides the future growth and development of non-aeronautical areas of the Airport and addresses issues related to the appropriate uses and compatibility with the Airport.

The land use/development planning effort will create a study designed to guide the future land use actions of the Airport and present a vision for the future, including long-

range goals and objectives. The results of this study should address the current aeronautical needs of the Airport and future roadway being planned to connect to the southern boundary of the Airport.

AMCG recommends the Airport develop a comprehensive land use/development plan as part of its next Airport Master Plan. Such focus on land use will allow the City/Airport to consider alternatives for highest and best use options for aeronautical and non-aeronautical developments to plan for a balanced and maximized facility use and revenue generation.

The preparation of an Airport Master Plan for DLZ typically takes 18-24 months to complete and could cost in the range of $450,000-$650,000. This planning tool will provide an opportunity for the City to involve many stakeholders, community leaders and the public in the evaluation of the airport's strengths and potential to continue to serve a as part of the economic development drivers in the city and region.

12.2.9 Airport Sustainability

The Airport should consider the development and implementation of an airport specific sustainability program. Sustainability includes economic (financial), social, operational, and environmental realms at the airport. Airports, including general aviation airports have successfully implemented sustainability programs without creating a financial burden or causing disruption in operations. Along with benefiting their communities and the environment, airports are finding that sustainability makes good business sense. Airports that have adopted sustainable practices have found substantial benefits including reduced capital asset life cycle costs, reduced operating costs, better customer service and satisfaction, and enhanced relationships with their neighbors.

Connecting sustainability to other goals within the airport is critical to developing a successful program. In many cases, sustainability efforts begin by finding initiatives that save money while stimulating economic growth, protecting the environment, and improving social responsibility. In addition, sustainability is a useful tool to engage stakeholders, create partnerships, improve customer satisfaction, and draw business to the airport. Creating short-term successes through sustainability and showcasing those achievements helps to build support for future sustainability efforts. Examples of 'simple' airport sustainable efforts include the use of LED lighting, including runways and taxiways; consideration of solar development in and around the airport. Include sustainable construction practices in project specifications and airport hangar construction requirements that utilize sustainable materials and practices.

AMCG recommends the Airport consider the development and implementation of a formal airport sustainability program.

DELAWARE MUNICIPAL AIRPORT AND DELAWARE COUNTY: A PARTNERSHIP OPPORTUNITY

April 4, 2022

Office of the City Manager

EST 1808
CITY OF
DELAWARE
OHIO

DELAWARE COUNTY
Ohio

Table of Contents

Preface

The aviation industry is an economic generator for jobs and income. General aviation airports like the Delaware Municipal Airport play a more significant economic role than most of the public is aware. As our economy grows, airports have become a vital link to the global marketplace. Additionally, access to air transportation helps communities retain and attract businesses and provide jobs.

This White Paper provides an overview of Delaware Municipal Airport operations. It is the result of discussions between the City of Delaware and Delaware County regarding the feasibility of establishing a regional airport authority and provides recommendations for next steps in the process.

Introduction

Development of the Delaware Municipal Airport first began in June 1945, when the Delaware City Council authorized the Director of Public Service to purchase the airport site "for a landing field for aircraft." The original purchase consisted of 105.57 acres of land.

Above, a grass strip and a few Quonset huts marked the beginnings of the Delaware Municipal Airport in the 1940s. Today, the 325-acre facility is home to approximately 100 aircraft and handles an estimated 40,000 operations per year, including corporate activity, training and pleasure flying.

Today, the Delaware Municipal Airport (DLZ) is a public use airport, owned and operated by the City of Delaware, and is located two miles south of the City on approximately 325 acres. It operates as a division of the City's Public Works Department. Decision-making is handled through the airport manager, public works director and city manager and final funding authority rests with City Council. In 2001, the City established a seven-member Airport Advisory Commission, which provides policy recommendations to City Council

The airport is categorized within the Federal Aviation Administration's (FAA) National Plan of Integrated Airport System (NPIAS) as an uncontrolled Regional-General Aviation (GA) airport and is included in the Ohio Aviation Systems Plan as a Level 1 facility. The Airport can provide access to turboprop and turbojet business aircraft and is located where there is enough population or economic activity to support a moderate to high level of business jet activity and/or provide capacity in metropolitan areas.

DLZ is a leading central Ohio general aviation facility. It is home to approximately 100 based aircraft and handles an estimated 40,000 operations per year, including corporate activity, training, and pleasure flying. The city currently oversees all aspects of the airport. The airport is strategically located to serve the region, including commercial centers in Delaware, Dublin, Westerville, and Powell. The city has aggressively pursued airport enhancements that include an expanded 5,800-foot runway, Automated Weather Observing System, and Wide Area Augmentation System (WAAS), allowing precision approach for horizontal and vertical navigation. Other upgrades include a grooved runway and improvements to the flight terminal, lounges, and weather briefing areas.

Economic Impacts of a Successful Airport

DLZ is an important catalyst for economic growth in the region and plays a vital role in partnering with the business community. In 2015, the Ohio Department of Transportation, Office of Aviation, completed an Airports Economic Impact Study as part of the state system plan. This study concluded that DLZ had a total economic impact (on-airport, construction, visitors, and multipliers) of 96 jobs, $3.3M in payroll, and $10.8M in economic output.

According to the 2015 Ohio Airports Focus Study, there are 97 general aviation airports in Ohio with DLZ ranked as the 17th busiest, based on total annual operations. As part of the peer review of like airports, a total of 33 Level 1 airports were reviewed.

A well-funded airport could benefit the regional economy in several ways. Upgraded facilities would assist in attracting additional general aviation aircraft along with corporate jet traffic. Regional Airports make significant contributions to the region's economy of which they serve. The success of the airport lends itself directly to the prosperity of the region's businesses and to local tourism.

Strengths and Opportunities

Strengths

- Knowledgeable and customer-oriented staff
- Transportation Improvement Fund (TIF) in place
- Strong public financing leadership within City
- Facilities (runway, taxiways, pavement)
- Runway length and overall condition
- Improved access via Sawmill Parkway
- Competitive fuel pricing
- Non-obstructed approaches to both runways
- 2 jet fuel trucks; combined 8k gallon capacity.
- Home to both fixed and rotary wing flights schools, on-field aviation medical examiner, and FBO Aircraft Maintenance facility.
- 100 LL Fuel Truck

Opportunities

- Public-Private partnerships for hanger space
- Regional asset in collaboration with the County
- More equitable lease negotiation process
- Culture that encourages private development
- Additional T-hangar & corporate hangars
- Airport assistance with "soft infrastructure" and high-income opportunities.
- Additional aviation services at the airport
- Market the airport benefits to the community
- City funded hangar
- Airport land available for future airport growth and land lease opportunities.

Capital Improvements

The airport currently has one asphalt runway, which was extended and rehabilitated in 2016. It is 5,800 feet in length and 100 feet wide. It is in good condition and has non-precision markings, medium intensity edge lighting, and a full-length parallel taxiway. There are three non-precision approaches available at DLZ.

Since 1997, approximately $10 million of city, state, and federal funding have been invested in major pavement improvements at the airport. DLZ also has over 22,500 square yards of apron area used for tie downs and transient aircraft parking, and has recently completed the design of an additional 22,000 SY expansion to the main apron with construction anticipated in Spring ’22. The expanded apron area will serve the recent increase in corporate jet traffic utilizing DLZ, largely in association with a 2021 decision by the Muirfield Golf Club to direct patron private jet travel through the Delaware Airport. Additional information about the project is below.

The landside facilities at DLZ include a terminal building, two corporate hangars (one currently being used by the City for maintenance equipment and snow removal equipment storage), six (6) City-owned T-hangars, and three (3) privately-owned condominium hangars. The Airport also has both Jet A and 100LL fuel capabilities and over 30 aircraft tie-down spaces. Descriptions of the existing corporate hangars are listed below with existing T-hangars.

- Terminal Building – approximately 1,700 sf. square feet, which includes a waiting room, public restrooms, airport manager office, pilot lounge, conference room, and storage area.
- Hangar #1 – approximately 5,600 square feet located to the east of the terminal building. It was constructed in the early 1970s and was relocated to its current location when the runway was re-oriented in the 1990s. Currently being leased to an aircraft maintenance fixed based operation (FBO).
- Hangar #2 - approximately 3,700 square feet located to the east of Hangar #1. It is currently used to store airport maintenance and snow removal equipment. It was also constructed in the early 1970s and was relocated to its current location when the runway was re-oriented in the 1990s.
- Hangar #3 – privately owned corporate hangar, approximately 16,000 square feet of aircraft storage and 6,400 square feet in office space, currently housing 4 jet aircraft and several other general aviation aircraft.

Additional Improvements Needed

As indicated above, the Apron A expansion project, as depicted below, is necessary to accommodate the additional jet traffic associated with Muirfield Golf Club. The base cost of the project is approximately

$1.8 million; including two important project alternatives would bring the cost to approximately $2.7 million. While the project is out to bid, the City may not be able to fund this project without an investment by Delaware County, estimated at upwards of $1.5 million.

Although not listed in the Airport Capital Improvement Plan, constructing a corporate hangar to the north of the Jetstream hangar should be considered in the near term. This could be done by the City financing the construction and owning the facility or through a ground lease with another private entity. A market analysis of both scenarios should be conducted in the near term, conducting pro forma analyses for both scenarios using current market rent performed by an appraiser. With the increase in jet traffic (up to 110/month) there is an immediate need to expand the Main Ramp East to the property limits.

Also needed is an upgrade to the existing 30-year-old fuel dispensing system with a new above ground storage/dispenser system with a minimum combined Jet A and 100 LL aviation fuel capacity of 30,000 gallons.

In addition to the increased number of aircraft at the airport, there is also a surge in the quantity of jets that are too large for our existing tug to move. The purchase of a second tug with a towing capacity capable of maneuvering up to a 96 ft Gulfstream V aircraft with 93 ft wingspan is necessary.

It is recommended that an airport terminal building be able to satisfy the forecasted peak-hour general aviation pilot and passenger demand. The current terminal facility is adequate for current levels of service. Plans should be developed to replace the current facility with a terminal that includes fuel sales office, airport staff offices, pilots lounge, food vending, public restrooms, and public viewing area.

Proposed Legal Structure

Recent discussions have highlighted several partnership possibilities that would be permitted under Ohio law. Those include:

(i) the City would continue to own and operate the airport with informal input being provided by the County,

(ii) the City would continue to own and operate the airport but the City and the County would execute a cooperative agreement under ORC Section 715.02 which would provide a more formalized framework under which both the City and the County could have input on operations and capital improvements at the airport,

(iii) the City would convey the airport to the County to own and operate with informal input being provided by the City,

(iv) a Regional Airport Authority (RAA) would be created under ORC Chapter 308 and the City would convey the airport to the RAA to own and operate. Of course, any transfer of ownership or grant of operational rights from the City to a third party will likely require approval by the Federal Aviation Administration.

Based on those discussions, the current consensus is that the formation of a Regional Airport Authority to own and operate the airport would be the best approach. While the details will need to be worked out, the City and the County would likely enter into a cooperative agreement which would provide, among other matters, for the:

(i) creation of a Regional Airport Authority (RAA),

(ii) the composition and appointing authority for the RAA's Board of Trustees (likely, appointments would be made by both the County and the City),

(iii) the conveyance of the airport to the RAA, and (iv) the rights and responsibilities of the City, the County and the RAA regarding the operation, maintenance and capital expansion of the airport.

This approach would establish a governance (*i.e.*, a dedicated Board of Trustees) and management (*i.e.*, a dedicated and airport-experienced executive director and staff) structure that would be exclusively focused on the management and growth of the airport, and together with informal guidance and financial support to be provided by the City and the County through the cooperative agreement, would provide the best foundation for the continued growth of the airport and its support of economic development growth throughout the City and the County.

This type of governance structure is quite common for airports, as it provides greater decision-making flexibility, promotes collaboration, enhances funding opportunities and allows for more broad-based representation. One such example is the Ashtabula Regional Airport Authority, whose website can be viewed HERE.

The Financials

In 2021, there was a record year in Jet A fuel sales and jets services. 145,902 gallons sold and 704 jets services. The previous records were in 2018 with 97,211 gallons sold and in 2019 with 571 jets services.

The airport's operation and capital budgets are included in the appendix as well as the FAA-required 10-year capital improvement program.

100LL fuel sales in 2020 equaled 57,000 gallons which was also a record for the airport.

Staffing Makeup – Current

- 1 – Airport Manager
- 1 – Airport Technician III
- 2 – Airport Technician I (one added in '21 and one in '22)
- 1 – Part time Airport Technician

Operating Budget Highlights

Revenues

- 2021 Projected: $904,793
- 2022 Budgeted: $1,041,771

Expenditures

- 2021 Projected: $1,030,904
- 2022 Budgeted: $1,192,401

Capital Expenses Highlights:

Apron A Expansion by 22,000 SY

- 2022 Construction - Estimated Cost $2.4 to 2.9M

New Above Ground Fuel Farm Design

- 2022 Budgeted: $50,000 (design)
- 2023 Estimated $500,000 (construction)

T-Hangars D, E & F Taxi Lane Resurfacing

- 2023 Budgeted: $204,214

Apron B Rehabilitation (Corporate Ramp)

- 2023 Budgeted: $375,000

T-Hangars G, H & I Taxi Lane Reconstruction

- 2024 Budgeted: $50,000
- 2025 Budgeted: $400,000

Master Plan Update/Terminal Area Plan

- 2026 Budgeted: $350,000

Operations

City employees manage the airport and the fixed-base operations, which includes fueling, airfield maintenance, snow removal, etc. The airport benefits from the insight and knowledge of a seven-member Airport Advisory Commission, appointed by the Mayor and City Council. Membership is comprised of citizens with interest and/or specific knowledge relevant to the airport and its operation. This arrangement has the advantage of enhanced input and expertise, similar to a Board of Directors. Additionally, the airport benefits from City support in back-office areas of accounting, human resources, maintenance, and procurement. Costs for these areas are often subsidized by the City or absorbed entirely freeing up revenues for other operational costs.

Currently, the aviation activity at the airport is made up primarily of general aviation traffic. The level of activity is primarily derived from based aircraft and operations. In 2020, the airport had approximately 100 operations per day and 100 based aircraft, with three of them being corporate jets.

The airport supports a flight school, helicopter flight training, aircraft maintenance FBO, and 22,000 SF privately owned corporate hangar. The hours of operation are 8 AM – 5PM seven days a week with before and after-hours services
upon request.

Conclusion

The Delaware Airport is an increasingly attractive home base for business and recreational aircraft in central Ohio. The growth in demand should be matched by the continued improvement of ground support facilities including adequate aircraft parking, hangar space, terminal facilities, and uninterrupted fuel supply.

Though these projects are included in the ACIP, costs associated with these initiatives exceed the capacity for the City to implement alone. The proposed Apron A Expansion project has an estimated $1 M funding gap above the anticipated $1.5 M in available FAA AIG funds. Though bidding is underway, the advancement of the project through award to construction remains contingent on identifying the additional funding necessary to fill the gap as was included earlier. Grant funding has been key to delivering past airport runway and taxiway improvements but is not applicable to funding many of the ancillary support initiatives.

The creation of a partnership with Delaware County has the potential to provide greater capacity to deliver desired improvements and remains a key strategy to fully developing the airport. Without such a partnership, the ability to support regional economic development through airport expansion remains limited. Multiple inquiries have been entertained regarding the construction of additional hangar space suitable for based and transient jet traffic. However, the lack of financing options on the City's part makes private investment less attractive to interested parties. The opportunity to address such limitations through a city/county partnership would work to solidify the value of the airport to the business community within the growing Delaware Business Park, Delaware County and central Ohio.

As a next step, it is recommended the city and county jointly retain the services Mr. Chris Franzmann with Squire Patton Boggs, to assist in the process of establishing a regional airport authority. Mr. Franzmann is counsel to the Columbus Regional Airport Authority and has the expertise and experience necessary to assist in this process. At the same time, a Working Group made of city and county representatives should be established to provide input and oversight throughout this process. The goal should be to present City Council and the Commissioners with final recommendations by the end of the year.

Appendix A

Airport Strategic Plan (Linked Here)

Appendix B

2022 Airport Budget

2022 BUDGET DETAIL
FUND: AIRPORT OPERATIONS
DEPARTMENT: AIRPORT

Org-Object	Description	2019 Actual	2020 Actual	2021 Budget	2021 Projected	2022 Budget	% Δ Prior Budget	% Δ Prior Actual	2023 Projected
	Fund Balance - January 1st	**272,195**	**184,989**	**276,741**	**276,741**	**150,630**			**0**
22200025- 493020	Transfer In - General Fund	30,000	10,000	0	0	79,521	100.0%	100.0%	251,125
22200351- 475200	Land Rent	12,075	10,513	12,000	16,000	12,000	0.0%	-25.0%	12,120
477110	Hangar Rent	77,980	79,752	86,000	92,425	86,000	0.0%	-7.0%	86,860
477120	Late Fees	60	40	200	1,000	1,000	400.0%	0.0%	1,010
477130	Tie-Down	2,581	3,251	2,000	2,739	2,000	0.0%	-27.0%	2,020
477140	AvGas Fuel Sales	296,733	280,047	300,000	240,000	300,000	0.0%	25.0%	303,000
477150	Jet A Fuel Sales	385,010	301,984	400,000	500,000	500,000	25.0%	0.0%	505,000
477160	Call Out Fees	4,375	3,580	5,000	4,500	5,000	0.0%	11.1%	5,050
477170	GPU Fees	990	840	1,000	1,000	1,000	0.0%	0.0%	1,010
477180	Ramp Fees	8,012	7,275	6,500	9,180	6,500	0.0%	-29.2%	6,565
477200	Prist	1,068	658	1,000	675	1,000	0.0%	48.1%	1,010
477210	Oil	928	647	1,200	980	1,200	0.0%	22.4%	1,212
477220	Gate Cards	100	30	100	0	100	0.0%	100.0%	101
482100	Hangar Deposits	2,233	2,816	1,200	300	1,200	0.0%	300.0%	1,212
22200352- 420600	Federal Operating Grants	0	75,985	0	0	0	100.0%	100.0%	0
483100	Real Estate Tax Reimbursements	39,355	39,028	41,000	35,574	41,000	0.0%	15.3%	41,410
484300	Miscellaneous	3,182	3,003	4,250	420	4,250	0.0%	911.9%	4,293
	Total Revenue	**864,682**	**819,449**	**861,450**	**904,793**	**1,041,771**	**20.9%**	**15.1%**	**1,222,998**
	Total Expenditures	**951,888**	**727,697**	**933,491**	**1,030,904**	**1,192,401**	**27.7%**	**15.7%**	**1,222,998**
	Carryover PO's								
	Fund Balance - December 31st	**184,989**	**276,741**	**204,700**	**150,630**	**0**			**0**
22217000- 510000	Wages	135,661	136,440	154,622	144,002	272,901	76.5%	89.5%	279,724
511100	PERS	18,773	19,004	20,935	19,735	37,424	78.8%	89.6%	38,360
511300	Medicare	1,870	1,847	2,242	1,956	3,957	76.5%	102.3%	4,056
511400	Workers Compensation	2,781	2,920	3,092	3,092	0	-100.0%	-100.0%	0
511600	Health Insurance	36,250	39,900	39,900	39,900	103,552	159.5%	159.5%	110,801
511700	Life Insurance	300	300	300	300	600	100.0%	100.0%	612
520110	Clothing & Safety	831	973	1,800	306	2,700	50.0%	782.4%	2,754
521100	Electric	15,524	17,129	19,000	17,900	19,000	0.0%	6.1%	19,380
521200	Heat	744	571	1,000	1,100	1,000	0.0%	-9.1%	1,020
523100	Professional Services	49,391	826	2,000	1,000	2,000	0.0%	100.0%	2,040
523410	Promotions/Marketing	435	201	400	400	400	0.0%	0.0%	408
526000	Travel / Training	544	508	1,400	819	1,400	0.0%	70.9%	1,428
526100	Membership and Dues	913	309	1,000	0	1,800	80.0%	100.0%	1,836
527020	Maintenance of Facility	30,359	27,424	30,000	27,437	34,100	13.7%	24.3%	34,782
527210	Garage Rotary	17,900	480	20,000	20,000	20,600	3.0%	3.0%	21,012
527220	Information Technology Rotary	3,754	3,942	5,500	5,500	6,267	13.9%	13.9%	6,392
528000	Insurance	0	0	17,000	0	0	-100.0%	100.0%	0
529210	Real Estate Taxes	59,458	58,147	62,000	53,745	62,000	0.0%	15.4%	63,240
529220	Sales Tax	42,730	36,702	42,000	42,000	42,000	0.0%	0.0%	42,840
529310	Credit Card Fees	16,686	13,971	16,500	13,500	16,500	0.0%	22.2%	16,830
531000	Office Supply	103	0	350	350	350	0.0%	0.0%	357
533000	Fuel Supply AvGas	216,494	159,739	190,000	219,000	219,000	15.3%	0.0%	223,380
533020	Fuel Supply Jet A	225,340	128,125	240,000	298,000	298,000	24.2%	0.0%	303,960
533035	Fuel Supply - Vehicles	4,468	1,025	5,000	3,900	2,600	-48.0%	-33.3%	2,652
534020	Merchandise	705	730	750	790	750	0.0%	-5.1%	765
550300	New Equip / Cap Outlay	68,404	75,911	55,000	116,172	42,000	-23.6%	-63.8%	42,840
560030	Security Deposits	1,412	573	1,500	0	1,500	0.0%	100.0%	1,530
	TOTAL AIRPORT	**951,888**	**727,697**	**933,491**	**1,030,904**	**1,192,401**	**27.7%**	**15.7%**	**1,222,998**

LINE ITEM DETAIL
AIRPORT
OPERATIONS

Explanation of significant line items

Description:	*Object:*	*Amount:*	*Explanation:*
Wages	510000	$272,901	Proposed addition of an Airport Technician to meet service expectations associated with expanded corporate jet operations. Reclass of Airport Supervisor.
Professional Services	523100	$2,000	Weather Service, Fuel Farm Inspection, NDB Security Access System - $2,000
Clothing & Safety	520110	$2,700	Additional $900 For New Technician.
Travel/Training	526000	$1,400	Line Service & Supervisor Training $1,400;
Membership and Dues	526100	$1,800	OAA Membership $1,800
Maintenance of Facility	527020	$34,100	AWOS/NDB Maintenance Contract/Repairs $4,400; HVAC Maintenance Contract $450; Airfield Lighting Maintenance $2,100; Terminal & Rental Building Maintenance $3,500; HVAC Maintenance Contract $400; Other Facility Maintenance (Sand, Fuel Truck/Farm Repairs, Fire Extinguishers, landscaping, weed control, lighting) $12,200; Fuel Farm Maintenance Contract $3,650; Contracted Electrical Repairs $2,000; Maint. Hangar $3,300; Fuel Tank Insurance BUSTR $1,100; Tow Bar Heads $1,000
New Equip/Cap Outlay	550300	$42,000	Paint Exterior of Hangers D,E & F - $42,000

2022 BUDGET DETAIL

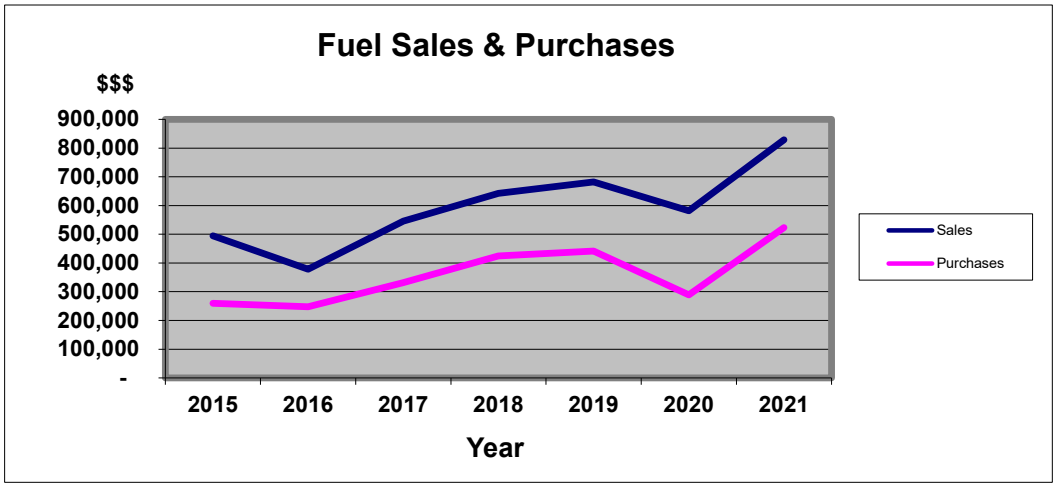
FUND: AIRPORT 2000 T-HANGAR

The Airport 2000 T-Hangar Fund was established to separately account for the operating revenues and expenses from the three t-hangar buildings (30 units) constructed by the City in 2000. Rents generated by the t-hangars needs to be sufficient to cover the annual maintenance cost and debt service for money borrowed to construct.

Org-Object	*Description*	*2019 Actual*	*2020 Actual*	*2021 Budget*	*2021 Projected*	*2022 Budget*	*2023 Projected*
	Fund Balance - January 1st	**173,352**	**180,443**	**184,910**	**184,910**	**207,209**	**217,798**
22300351- 477110	Hangar Rent	100,240	95,580	104,000	110,500	104,000	105,040
477120	Late Fees	0	20	100	1,200	1,000	101
482100	Hangar Deposits	40	1,140	400	105	400	404
	Total Revenue	**100,280**	**96,740**	**104,500**	**111,805**	**105,400**	**105,545**
22317000- 521100	Electric	2,463	2,907	3,300	2,950	3,300	3,366
527020	Maintenance of Facility	852	0	1,000	0	1,000	1,020
529210	Real Estate Taxes	19,884	19,446	21,000	18,000	21,000	21,420
560020	Refunds	0	850	0	0	0	0
560030	Security Deposits	927	892	1,000	700	1,000	1,020
570000	Transfer to Bond Retirement Fund	69,063	68,178	67,856	67,856	68,511	68,098
	Total Expenditures	**93,189**	**92,273**	**94,156**	**89,506**	**94,811**	**94,924**
	Carryover PO's						
	Fund Balance - December 31st	**180,443**	**184,910**	**195,254**	**207,209**	**217,798**	**228,419**

CITY OF DELAWARE
Airport Fund
2021 Year-End Report

	2015	2016	2017	2018	2019	2020	2021
REVENUES							
Hangar Rent	169,764	171,763	178,611	177,916	178,138	175,391	196,857
Tie Down Rent	2,702	2,474	1,873	2,385	2,581	3,251	2,966
Land Rent	9,224	11,464	11,767	11,892	12,075	10,513	12,856
Fuel Sales	494,567	378,371	545,634	642,394	681,744	582,031	828,811
Property Tax Reimbursement	37,187	36,326	46,653	30,573	39,355	41,304	35,574
Other Income	16,772	12,563	16,276	19,704	18,714	93,699	29,295
TOTAL REVENUE	$ 730,216	$ 612,961	$ 800,814	$ 884,864	$ 932,607	$ 906,189	$ 1,106,359
OPERATING EXPENDITURES							
Wages and Benefits	155,064	154,411	162,457	190,086	195,635	200,411	213,607
Operating Expenses	93,557	88,496	104,009	108,667	107,588	74,649	94,756
Special Events/Promotions	-	-	445	195	435	201	201
Fuel Purchases	259,353	247,641	332,044	424,698	441,834	288,891	523,170
Facility Maintenance	21,568	23,989	32,176	24,958	31,031	31,846	53,019
Consulting/Professional Services	2,959	780	2,530	6,828	49,391	826	1,720
Capital Outlay	4,000	2,543	-	-	68,404	75,911	118,637
Real EstateTaxes	73,735	72,021	83,656	82,155	79,342	77,593	71,719
TOTAL EXPENDITURES	$ 610,236	$ 589,881	$ 717,317	$ 837,587	$ 973,660	$ 750,328	$ 1,076,829
OPERATING PROFIT/LOSS	$ 119,980	$ 23,080	$ 83,497	$ 47,277	$ (41,053)	$ 155,861	$ 29,529
General Fund Subsidy	18,890	18,890	30,000	30,000	30,000	10,000	-
Debt Service	(80,435)	(79,120)	(53,151)	(67,897)	(69,063)	(68,178)	(67,514)
NET CASH FLOW	$ 58,435	$ (37,150)	$ 60,346	$ 9,380	$ (80,116)	$ 97,683	$ (37,985)
FUND BALANCE	$ 413,950	$ 375,824	$ 436,171	$ 445,548	$ 365,432	$ 461,651	$ 422,580
Amount Reserved for Debt	152,325	143,529	164,197	173,352	180,443	184,910	204,989
Encumbrances Outstanding	31,475	5,625	5,745	67,373	28,656	944	7,960
UNRESERVED FUND BALANCE	$ 230,150	$ 226,670	$ 266,229	$ 204,823	$ 156,333	$ 275,797	$ 209,631
Airport Capital Improvements	$ 399,963	$ 4,661,061	$ 524,575	$ 4,170	$ 73,978	$ 54,325	$ 410,730



	2015	2016	2017	2018	2019	2020	2021
Sales	494,567	378,371	545,634	642,394	681,744	582,031	828,811
Purchases	259,353	247,641	332,044	424,698	441,834	288,891	523,170
Gross Profit %	90.7%	52.8%	64.3%	51.3%	54.3%	101.5%	58.4%

Appendix C

2022-2026 Airport Capital Improvement Plan

CAPITAL IMPROVEMENT PLAN
AIRPORT IMPROVEMENTS
2022-2026

	2022	2023	2024	2025	2026
REVENUES:					
FAA Entitlement	-	94,496	45,000	360,000	315,000
FAA Apportionment	-	-	-	-	-
ODOT	-	2,500	2,500	20,000	17,500
ODOT Grant		356,250	-	-	-
TIF Revenue	-	250,000	-	-	-
CIP Allocation ***(pg.1)***	***50,000***	***125,968***	***2,500***	***20,000***	***17,500***
TOTAL REVENUES	**50,000**	**829,214**	**50,000**	**400,000**	**350,000**
EXPENDITURES:					
CITY NON-GRANT					
Apron A Expansion*					
New Above Ground Fuel Farm Design	50,000				
New Above Ground Fuel Farm Build*					
Terminal Parking Lot Resurfacing*					
GRANT IMPROVEMENTS					
T-Hangars D, E & F Taxilane Resurfacing		204,214			
Apron B Rehabilitation (Corporate Ramp)		375,000			
T-Hangars G, H & I Taxilane Reconstruction			50,000	400,000	
Master Plan Update/ Terminal Area Plan					350,000
TIF IMPROVEMENTS					
Above Ground Fuel System Access Drive*		250,000			
TOTAL EXPENDITURES	**50,000**	**829,214**	**50,000**	**400,000**	**350,000**

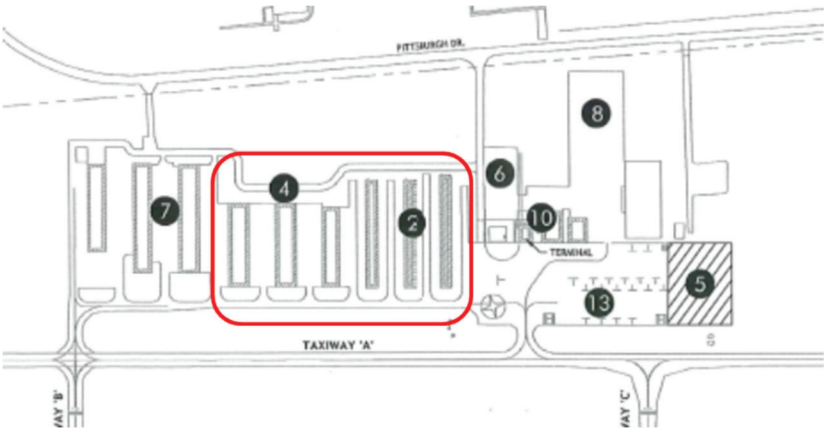
*Project Narratives can be found in the Pending Projects Section

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS
T-HANGER PAVEMENT REHABILITATION
Phase 2 & 3

BACKGROUND

The latest pavement rating performed by ODOT Dept. of Aviation indicates the pavement between existing T-hangars is in poor condition. With the earliest sections constructed in 1987, the pavement is over 33 years old and in need of rehabilitation. The pavement composing the main taxi aisles is eligible to receive federal funding while the connections to the individual hangar doors from the taxi aisles are not and require local funds to complete. The FAA provides 'Entitlement' funds covering 90% of eligible project costs, with ODOT providing an additional 5%. The City is responsible for 5% of cost plus 100% of non-eligible items. Pavement between Hangars A, B & C was rehabilitated in 2021. The second phase includes the pavement between hangars D, E & F, and the access driveway north of the hangars.



PROJECT TIMELINE

2022	
2023	Rehabilitation of T-hangar D, E & F pavement
2024	Design of T-hangar G, H & I taxilane pavement
2025	Rehabilitation of T-hangar G, H & I taxilane pavement

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2022		
2023	$204,214	$94,496 FAA; $5,250 State; $104,468 Local
2024	$50,000	$45,000 FAA: $2,500 State; $2,500 Local Match
2025	$400,000	$360,000 FAA: $20,000 State; $20,000 Local Match
TOTAL	**$654,214**	

PROJECT TEAM

CITY LEAD: Public Works – Engineering Division
DESIGN CONSULTANT: CHA
CONTRACTOR: In House

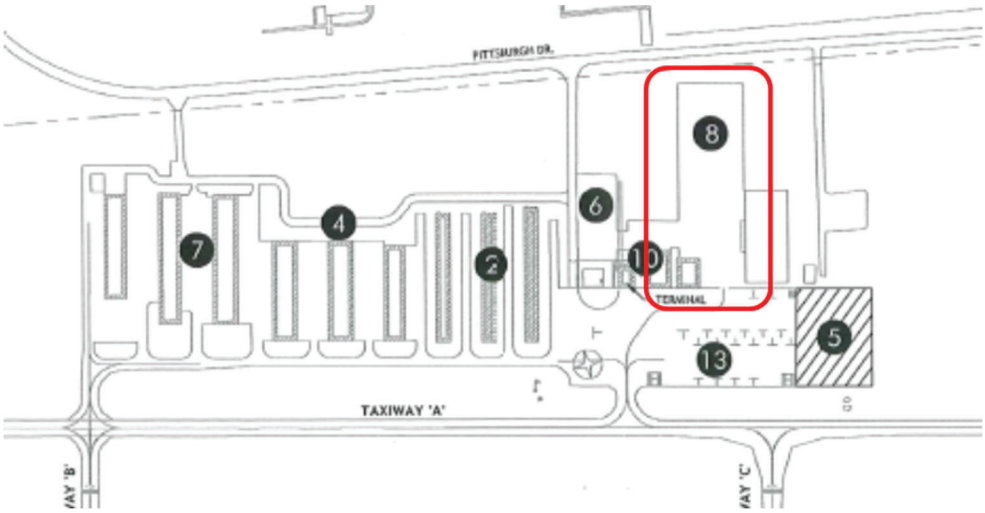
EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

AIRPORT APRON 'B' REHABILITATION

BACKGROUND

The latest pavement rating was completed in November 2016 and revealed that the pavement of Apron 'B' is in poor condition and in need of rehabilitation. Originally constructed in 1987, the pavement is over 33 years old and in need of significant restorative efforts including drainage improvements, subgrade repairs, and pavement replacement, collectively identified as rehabilitation. The utility of the apron is also in transition as a potential corporate hanger project may require the relocation or elimination of existing small aircraft tie-downs in order to provide ample maneuvering room for larger jet aircraft accessing the northeast quadrant of the apron. Work on the section of pavement is not eligible for federal FAA or ODOT funding, and therefore must be paid for locally.



PROJECT TIMELINE

2022	
2023	Design/Bid/Construction
2024	
2025	
2026	

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2022		$356,250 ODOT & $18,750 Local Funds. Not eligible for FAA Funds
2023	$375,000	
2024		
2025		
2026		
TOTAL	**$375,000**	

PROJECT TEAM

CITY LEAD: Public Works – Airport/Engineering
DESIGN CONSULTANT: CHA
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

PUBLIC WORKS

ABOVE GROUND FUEL SYSTEM ACCESS DRIVE

BACKGROUND

Delaware Municipal Airport Jim Moore Field is a leading Central Ohio general aviation facility. It is home to approximately 100 aircraft and handles an estimated 40,000 operations per year. In 2021, the City agreed to service corporate jet traffic associated with the Muirfield Golf Club. As a result, certain airport infrastructure needs must be addressed to accommodate the increase in aircraft ground traffic if an acceptable LOS is to be maintained. In 2022 a new Above Ground Fuel Storage and Dispensing System (AGF) will be designed with construction following in 2023. The AGF will be relocated from the existing fuel system location to accommodate future airport growth and to better utilize existing Apron space for priority aircraft operations. The new location will require the construction of an access drive to allow refueler vehicles to access the system for both fuel delivery and daily airport fueling operations.

PROJECT TIMELINE

2022	Preliminary & Final Design
2023	Construction

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2021		Airport TIF
2022	50,000	
2023	200,000	
2024		
2025		
TOTAL	**$250,000**	

PROJECT TEAM

CITY LEAD: Public Works
DESIGN CONSULTANT: TBD
CONTRACTOR: TBD

EST 1808 CITY OF DELAWARE OHIO

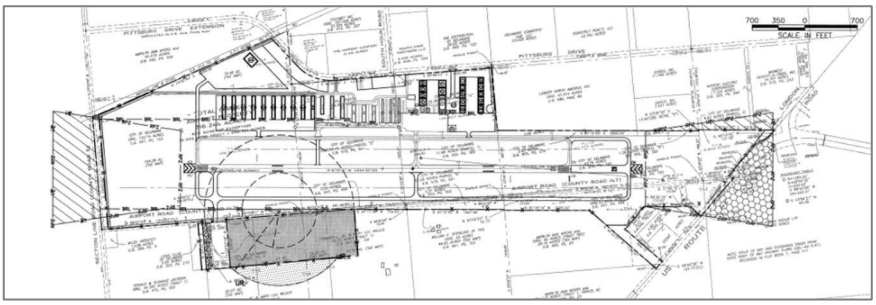
PUBLIC WORKS

AIRPORT MASTER PLAN UPDATE

BACKGROUND

The Airport is managed in part by an FAA approved Airport Master Plan that includes facility improvements into the future that support the airport operations. The last plan update was completed in 2006. The general goals and objectives addressed by an airport master plan include the following:

- To provide a framework for long-range planning (20 to 30 yrs)
- To graphically present preferred airport development concepts
- To define the purpose and need for development projects
- To comply with all applicable FAA requirements
- To enable the airport to achieve its mission
- To assure compatible land use development
- To identify facility requirements for all airport users



PROJECT TIMELINE

2022	
2023	
2024	
2025	
2026	Plan Update

FINANCING

YEAR	AMOUNT	IDENTIFIED FUNDING SOURCE(S)
2022		$315,000 FAA; $17,500 State; $17,500 Local Match
2023		
2024		
2025		
2026	$350,000	
TOTAL	**$350,000**	

PROJECT TEAM

CITY LEAD: Public Works Airport/Engineering

DESIGN CONSULTANT: CHA

CONTRACTOR: N/A