

A circular photograph of Jackson County Airport at night. In the foreground, the tail of a white aircraft is visible, featuring the registration number N113PT. In the background, the airport's control tower is illuminated with warm yellow lights, and the word "JACKSON" is visible on its upper section. The sky is dark blue, and a few airport lights are visible in the distance.

Jackson County Airport – Reynolds Field

Business Plan

2017

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Jackson County Airport – Reynolds Field

BUSINESS PLAN

Executive Summary

The Jackson County – Reynolds Field airport is located in Blackman Charter Township, County of Jackson, Michigan along I-94 between major highways M-60 to the west and 127 North to the east. The airport is licensed by the Michigan Department of Transportation Aeronautics Office as a General Utility Airport and has approximately 105 based aircraft. The Airport offers air traffic control services under a joint contract between the FAA, Midwest Air Traffic Control Services and Jackson County.

The Airport has many private businesses located on the premises and has an overall local community economic impact of \$18,000,000 annually. Most of the hangars are privately owned with the owners paying an annual ground lease to the Airport. The Airport owns and rents two corporate type hangars and fifteen small aircraft “T” hangars to augment revenues. Airport policies, oversight and limited purchasing authority are the responsibility of the five member Airport Board. The County Administrator – Controller provides administrative and budgetary oversight to the Airport and Airport Manager.

In 2015 the Jackson County Airport Board commissioned creation of an Airport business plan with the intent for the resultant document to serve as guidance for both short and long term planning decisions to the benefit of the citizens of Jackson County. Some might wonder why a public airport would embark on formation of a business plan. The airport, while a public entity, operates much like a business in many respects.

The Airport generates revenue, has tenants, owns rental structures, competes with other area airports for business, has approximately 75 private sector employees located on the premises, is critical to the success of many area private sector businesses and has a significant economic impact on the region. For all of these reasons, creation of an airport business plan seems logical.

Airport business planning and airport master planning are both essential in planning the future of an airport. Sound business planning will provide airport managers and policymakers with the tools to make informed, prudent, and defensible business decisions relating to the operation and management of the airport.

*“Guidebook for Developing General Aviation Airport Business Plans”
Marci A. Greenberger, Staff Officer Transportation Research Board*

The information that follows is a product of broad input from key stakeholders associated with the airport. Ideas and feedback were solicited from members of the Advisory Council, Airport business owners, Airport staff and the Airport Board to create the foundation of this document with the intent of accomplishing the following:

- 1) Identify how recent airport history has created the current state of affairs i.e. give an historical perspective to present day conditions;
- 2) Describe the current financial condition of the airport coupled with projections for the next five to ten years;
- 3) Describe the current state of the airport's infrastructure and generally describe critical capital needs;
- 4) Make recommendations for future management and policy makers of the airport in critical areas including: enhancing revenue; controlling expenses; defining staffing needs; enabling construction of new private hangars; encouraging additional businesses to locate here while supporting existing airport businesses; public outreach and communication; and, leadership/management recommendations.
- 5) Serve as a tool for transition of airport management when that transition occurs.

A number of important planning steps occurred in preparation for writing the Business Plan and have become the backbone for the body of this report and resultant recommendations. Specifically, the planning steps included:

- 1) Creation of a Mission statement;
- 2) Creation of a Vision statement;
- 3) Creation of Value statements;
- 4) Endorsement of the 2011 Airport Marketing plan;
- 5) Advisory Council interviews of representative airport business owners;
- 6) Advisory Council review of Business Plan components and concepts;
- 7) Airport staff discussion of the Business Plan strategies;
- 8) Review and approval of the Plan by the Airport Board.

The Mission, Vision, Value and Motto statements are a product of input from Advisory Council and airport staff members and selected airport business representatives with review and approval by the Airport Board.

The overriding goal is for this Business Plan is a better understanding of the business nature of the Jackson County Airport and to eventually produce specific goals and objectives coupled with an action plan that will make the Business Plan a working, living document. In summary this business plan will serve as a guiding document for future airport policy makers and managers in developing an action plan for implementation of the associated recommendations.

A primary reference document utilized in development of the Jackson County Airport – Reynolds Field Business Plan is the “Guidebook for Developing General Aviation Airport Business Plans” produced by the Airport Research Program and sponsored by the Federal Aviation Administration. Additional resources include: The Small Business Administration, MSU Institute for Entrepreneurship and Innovation, and the Small Business Support Center “Business Plans 101” sponsored by CP Federal Credit Union

History

The airport was originally known as Reynolds Municipal Field and resulted from a donation of 160 acres of farmland owned by Mr. and Mrs. Wiley Reynolds to the City of Jackson in 1927. Mr. Reynolds, during the 1928 dedication ceremony, affirmed his vision that “aviation fields” would play a vital role in the economic health of the greater Jackson area.

The airport was owned and operated by the City of Jackson from 1927 until 1976 when it was sold to the County of Jackson for \$1.00. The primary reason for transferring ownership of the airport was to create a broader tax base from which to fund airport operations and capital improvements. The County of Jackson operated the airport jointly with the City of Jackson for two transitional years and has operated the Airport solely since 1976.

“Several of our most public spirited citizens, including our mayor and city commissioners as well as the aviation committee of the Chamber of Commerce have taken up and are devoting a great deal of time and energy to the promotion of interest in aviation in Jackson. I feel that we should all assist this group of citizens in every possible way and do what we can by giving them ample funds and support in carrying out their desires...”

Wiley R. Reynolds, June 2, 1928

In 1934 the Civilian Works Administration constructed a two-story brick terminal building that also housed runway light system controls and weather monitoring equipment. In 1937 a large brick municipal hangar was constructed, also by the CWA program. These two buildings remain in service today with the former serving as the Airport Administration Building and the latter is rented by an aviation company.

The original runway system consisted of north-south and east-west runways that were constructed by the City of Jackson Public Works Department. These runways were replaced in 1942 when, as part war preparations, the Army Corps of Engineers and War Department constructed runways 5-23 and 13-31. Both of these runways were paved and lighted. These runways did not have the recommended safety areas at each end, a problem that persisted until 2017. In the early 1950’s runway 5-23 was extended by closing Airport Road and lengthening the runway to the east. The safety area deficiencies were ultimately corrected in 2017 after a sustained 15-year effort to plan and fund the multi-year construction project. In 1960-61 the Terminal Building and Air Traffic Control Tower buildings were constructed and air traffic control services were initiated and remain in place today. The Terminal Building

houses the Airport Restaurant, Skyway Aviation and AVIS Rentals. The Tower Building is rented by the FAA and contains runway and radio equipment, the air traffic control facility at the top, and a pilots' lounge on the ground floor.

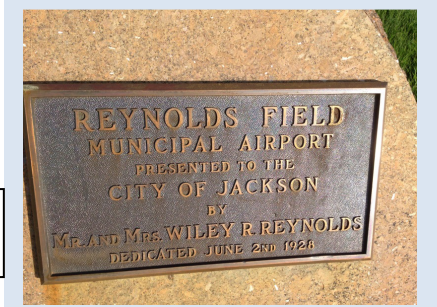
In the very late 1990's the FAA put airports on notice that they must actively pursue correction of runway safety deficiencies or risk a shortened runway system by virtue of subtracting the safety area(s) from existing pavement length. The primary safety deficiency was the absence of required safety areas at the ends of the airport's runways. Runway 14-32 required 300' of unobstructed run off area and Runway 6-24 required 1000' of safety area. In 1999 an ad hoc committee appointed by the Jackson County Board of Commissioners studied nine alternatives to bringing the runways into FAA safety standards and selected the best alternative.

As a result of the runway safety study, the County of Jackson began what turned out to be a 15 plus year effort to construct runway safety areas upon these runways, now numbered 14-32 and 6-24. As of the writing of this document, the safety areas have been constructed on runway 14-32 (2008) and are in progress for future runway 7-25 (2015-2017). The total cost for correcting the runway safety area deficiencies will approach \$49 million dollars. Broadly speaking, \$13 million of the total budget generally was funded FAA Discretionary funds; \$23.4 million by FAA Federal-MDOT Aeronautics State Apportionment funds; \$2.3 million by FAA Federal Entitlement funds; \$2.7 million in MDOT Aeronautics State matching funds; \$1.2 million in County of Jackson match funds; and, \$6.5 million in County of Jackson funds for hauling and disposal of landfill materials.

Another key historical event was the loss of 100% FAA funding for air traffic control services because of a decline in the number of landings and take offs at the airport. Since 2007, the FAA has funded 85% of the cost with the County of Jackson funding the remaining 15%. The funding formula is based upon a Benefit-Cost Analysis performed on a periodic basis by the FAA. The BCA was originally conducted every two years, but the FAA has not conducted a fresh BCA study since 2007. The current County costs are approximately \$70,000 annually and is paid from the airport's operating budget.

Additional airport history can be found at this links: <https://www.co.jackson.mi.us/241/History> or <https://www.co.jackson.mi.us/239/Flight-Line-Newsletters>.

Original Airport dedication plaque displayed in Aviation Heritage Park



Governance

Generally speaking, the airport is governed by an Airport Board that is established under authority of Public Act 327 of 1945. The Airport Board is comprised of three Jackson County Commissioners plus two at-large members. All members are appointed by the Jackson County Board of Commissioners. The County Administrator/Controller serves as an Ex Officio member of the Board. The Airport Board is permitted by the Jackson County Board of Commissioners policy to approve routine lease agreements, rental agreements, and authorize purchases of \$10,000 or less. The Airport Board is also charged with establishing Airport policies, Rules and Standards for matters related to the airport and to provide general oversight of the Airport Manager. The Airport Manager jointly reports to the County Administrator/Controller for matters of budget, personnel matters and general day to day supervision.

The primary document that defines the manner in which aviation business is conducted is the Minimum Standards and is required by FAA grant assurances. The document is periodically updated and routinely published to the airport web site. The controlling document for defining the expectations of all individuals who utilize the airport as a base for aircraft storage, special events and individual behaviors are the Airport Rules and Regulations. Both of these documents are subsets of the Airport Board policy statements that likewise are periodically updated. The Advisory Council conducts an initial review and update of these documents with final review and approval by the Airport Board.

The Airport Manager serves as the administrator of the Jackson County Joint Airport Zoning Ordinance that has zoning authority for a 10 mile radius of “air space” from the center of the Airport. Generally speaking, the Airport Zoning Ordinance controls the height of objects depending on the distance and orientation to the airport and controls land use that might create a hazard for residents or would interfere with a pilots ability to see or communicate during landings and take offs. The Joint Zoning Board is appointed by the Jackson County Board of Commissioners (3 members) and the Airport Board (1 member) and the Michigan Aeronautics Commission (1 member) and is charged with administration and modification of the Zoning Ordinance. The Joint Zoning Board appoints a 5- member Zoning Appeals Board as prescribed in the Zoning Ordinance.

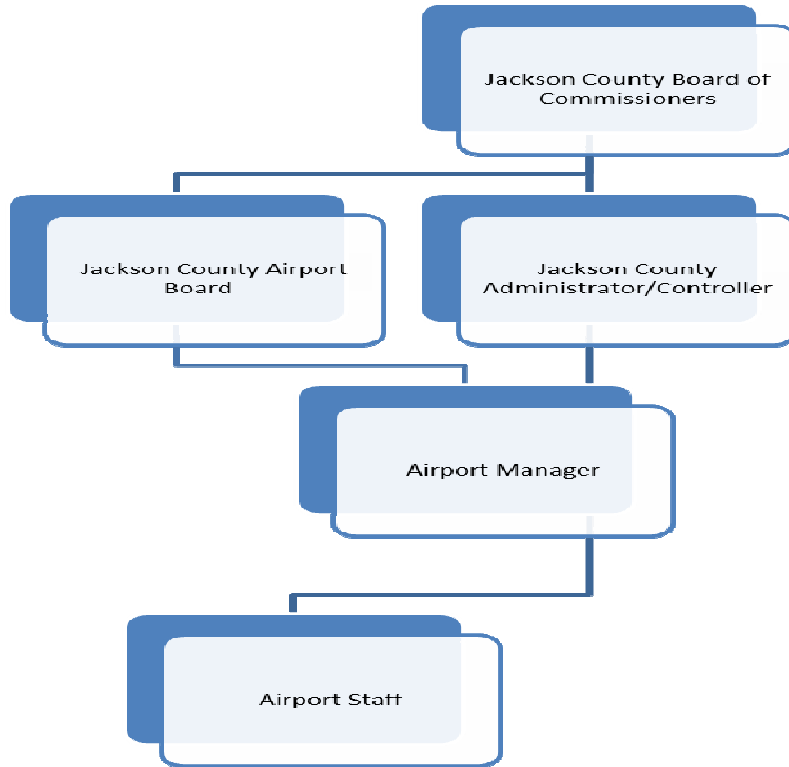
The Airport Manager is charged with: managing the airport; supervising airport staff; ensuring airport security measures are in place; complying with FAA grant assurances and standards; and negotiating leases and business agreements on behalf of the Airport Board. Additionally, The Airport Manager serves as part of the County of Jackson management team as requested by the County Administrator/Controller.

Additional information about Airport Governance can be found at:

<https://www.co.jackson.mi.us/250/Policies-Rules-Standards>

Jackson County Airport – Reynolds Field

Organization Chart



Staffing

Currently the airport is staffed with a full-time Airport Manager, a part-time administrative secretary (29 hours), a full-time airport maintenance technician, a full-time airport maintenance worker III, and a casual airport maintenance worker II (400 hours annually).

As with other County offices and departments, airport staffing has been reduced over the past fifteen years due to budgetary pressures. The highest airport staffing levels in recent history consisted of (1) full time mechanic FTE, (3) full time airport maintenance employees), (1) full-time Airport Manager (1) full time Assistant Airport Manager/Administrative Assistant. The staff reductions pressed the Airport Manager into service to assist with grass mowing and snow removal activities until 2016 with the addition of a casual maintenance employee.

This reduction in staffing added importance to acquiring more efficient equipment and work methods. Some examples of how efficiencies have been enhanced are: large zero-turn mowers to reduce time required for finish mowing; contracting with a farmer to cut and bale 200



Unimog snow blower clearing a taxiway

acres of airfield grass land saving 100's of hours of airport staff time; a new more efficient Snow Removal Equipment building; vegetation killing around airfield lights and signs, hangar buildings and fence lines that eliminate weed whipping and mowing in those areas.

However, the staffing reductions have not been without noticeable impact to services offered including: a reduction in

airport administration office hours; an increase in the time it takes to remove snow from airport runways, taxiways and other pavement; a reduced number of newsletters published annually; less time to perform routine preventative maintenance on buildings and grounds; routine mechanical work on the airport vehicles and equipment is now performed, as much as possible, by the two remaining maintenance staff members; an increased response time to urgent building repairs; and a general increase in responsibility and workload by airport staff. The fundamental functioning of the airport with current staffing levels is of high quality and maintains FAA runway safety standards.

Airport Operations

Airport "operations" are a standard measure and important barometer for airports that have an air traffic control tower. An "operation" generally speaking is either a landing or take off of an aircraft, but also includes when an aircraft traverses the airspace associated with that airport. The operations are tracked in various categories based on the type of aircraft including Air Taxi, Air Carrier, General Aviation and Military. The FAA maintains a data base for all towered airports in the United States that can be accessed through the FAA web site: <https://aspm.faa.gov/opsnet/sys/main.asp>

An analysis of that data reveals a significant drop in the total number of operations at Michigan airports with air traffic control towers over the past twenty years. Since 1997 total operations in Michigan have fallen 51% and a continued decline since 2007 of 32% inclusively. Some Michigan airports realized tremendous reductions in the number of operations since 1997 greater than 70% (Flint and Lansing) and others greater than 60% (Kalamazoo and Pontiac). Operations at Jackson County – Reynolds Field have also fallen during similar time periods, but not as drastically. Operations dropped 31% from 1997 to 2016 and fell 18% during the period of 2007 to 2016. The year that had the highest number of operations for Jackson between 1997 and 2016 was 1999.

Analysis of this data indicates that Jackson County – Reynolds Field has been more resilient than other airports as measured by the percentage of reduction in operations, possibly because it is a mixed-use airport. Jackson County – Reynolds Field is utilized extensively for training, as a home airport for over 100 based aircraft and has based corporate aircraft

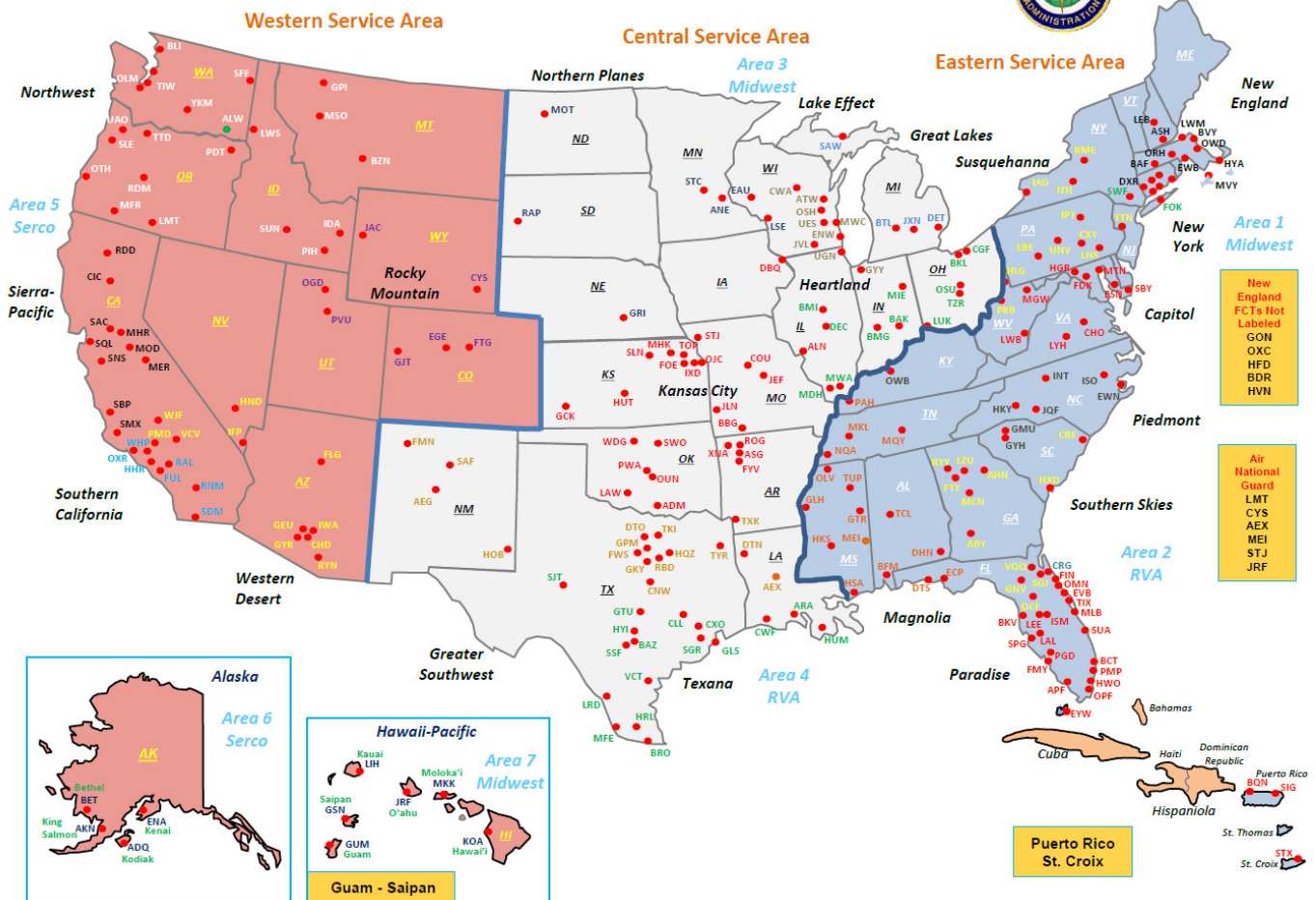
coupled with corporations flying here to conduct business. The number of operations directly impacts other airport businesses including aviation fuel sales, car rentals; aircraft repair services, and airport restaurant patronage. The airport derives revenue from commercial landing fees and fuel sales (fuel flowage fee) and this revenue fluctuates accordingly.

The number of operations also has a direct correlation to FAA funding for air traffic control services. As mentioned previously, the drop in operations since 2007 requires a 15% local funding match in order to maintain the current Contract Tower agreement/air traffic control services with the FAA. The dollar amount of that match for 2017 is approximately \$73,000 annually.

FAA CONTRACT TOWERS (FCT)



Federal Aviation Administration



Map of FAA Contract Towers

The Airport as a “Business”

Airports play unique roles in their respective communities. The primary role for an airport is serving as a major component of the community’s overall transportation infrastructure serving private, corporate, military, passenger, cargo and medical aviation uses. Inherent in this unique community role is the duty to maintain the airport’s infrastructure including runways, taxiways, navigational aids, equipment and buildings.

A secondary role for airports is to support local and regional businesses that are located at the airport or depend in some manner upon the airport. The following data from Jackson County – Reynolds Field will shed light on the importance of the airport as a business: Approximately 57 people are employed by 14 private sector companies that are located at the airport. Nine of these companies have a direct aviation connection that supports the central mission of that business. All but two of the remaining companies have an indirect association with aviation, that is, their central mission is augmented by virtue of being located at the airport.

Another economic role for airports in general is to support businesses that are not physically located at the airport, but depend upon the airport for its economic viability. Examples include shipping cargo, outbound business travel and inbound business travel. Ancillary airport uses include military, law enforcement and medical transportation.

A recent Michigan Office of Aeronautics economic impact study attempts to quantify the economic value of airports and a 2016 study determined the economic value for Jackson County – Reynolds Field to be \$18,000,000 annually.



Richmond Brothers Inc. Headquarters & Corporate Hangar at JXN

Revenue

Generally speaking, the airport offsets approximately 66% of its total operating expenses through various forms of revenue. The most significant airport revenue comes from rental of airport-owned T-Hangars (20% of total revenue) followed by Ground Leases (19% of total revenue). The FAA leases the Air Traffic Control Tower building representing (14% of total revenue) and Sears Holdings leases the land upon which the K-Mart building stands (6% of total revenue). Other revenue comes from a variety of sources including Fuel Flowage Fees, Landing Fees and Terminal Building business rentals with Skyway, Airport Restaurant and AVIS, all of which account for another 15% of total Airport revenue. The remaining balance comes from a variety of other sources.

A review of total revenue since 2007 demonstrates a somewhat static picture. The factors that affect revenue include: the number of commercial operations i.e. landing fees; the occupancy rate for T-hangars and airport commercial hangars; the total gallons of aviation fuel delivered [i.e. Fuel Flowage Fees]; and the Consumer Price Index since ground leases are adjusted based on the December-to-December change in CPI costs. In most years, this index trends upward, but in two recent years the CPI resulted in slight reductions in ground leases rates. A relatively new revenue stream resulted from agricultural leases for tillable land and grass baling agreements.

Expenses

The total Operating Budget for the airport is just under \$600,000 annually. This figure includes expenses for an annual payment to repay a loan from the County Tax fund to construct Hangar #201 and also includes the costs associated with funding air traffic control services. These two items account for 16% of the Operating Budget. The increase in the airport operating budget from 2007 to 2016 totaled approximately 9%. A review of the interceding years demonstrates that the increase from year to year has not been a steady one when some years such as in 2008 and 2009 the operating budget decreased dramatically (9%) from preceding years. These two years, 2008 and 2009, are anomalies due to the recession and resultant airport FTE reductions. The other odd year was 2014 when brutal winter weather impacted fuel flowage/sales, overtime and vehicle repair expenses disproportionality.

The shortfall between revenues and expenses is made up by an appropriation from County of Jackson general funds. It is important to understand that any Capital expenses related to matching FAA or MDOT grants, major equipment purchases or building improvements are additional to the operating funds and are allocated from County of Jackson Capital Improvement funds. Additional information about the Airport budget can be found at this link: <https://www.co.jackson.mi.us/DocumentCenter/View/2756>

Motto, Vision, Mission and Values Statements

The following statements are a product of broad based input from the Airport community as represented by the Advisory Council, Airport businesses and Airport Staff with final review and approval by the Airport Board. These statements become the foundation from which future goals, objectives and action plans are constructed.

Motto - *“Flying Jackson Forward”*

Vision Statement - *Jackson County Airport - Reynolds Field is a full service airport that encourages people to travel and conduct business here.*

Mission Statement - *Providing an exceptional airport with supporting infrastructure for our aviation and community partners.*

Values

Quality – *We do great work getting it right the first time and continue to seek new methods to improve our services.*

Integrity – *We are open and honest with each other and our customers keeping high integrity at the forefront of all that we do.*

Community – *We strive to serve our community during and after work.*

Teamwork – *We collaborate with coworkers, partners and customers to accomplish the airport mission.*

Efficiency – *We work to enhance the value of our resources.*

Accountability – *We hold ourselves accountable for our actions and for the resources entrusted to us.*

“What may happen a century from now is largely a matter of guess work, but many experts believe the aircraft of that time will be greatly improved and altogether different from the machines of today. Helicopters may be a common sight on the Jackson airport as they rise and land vertically, hover and attain horizontal flight making it possible to bring traffic into the heart of the city where planes would land on the roofs of buildings or in small areas. Jackson, in its advance, cannot ‘hitch its chariot to the stars’, but it may someday have the opportunity to hitch its chariot to the airplane and climb to the stars in the heaven of aviation as one of Michigan’s great airports”.

The Jackson Citizen Patriot July 24, 1927

Concepts for Future Airport Development and Success - Overview

The following Target Concepts are intended to meet two purposes: as a central “future big idea” to encourage additional discussion and exploration; and, as the foundation for a future action plan should a decision be made that one or more of the big ideas has merit. While each idea or concept has already survived initial stages of review and brainstorming, it should not be considered as having been fully vetted, nor should the list of concepts be considered complete. The concepts and ideas that follow are in no particular order or priority.

These future concepts are intended to foster **economic growth** of the airport by supporting existing and new airport businesses and increasing the number of based aircraft through hangar and hangar site development; improving the **airport as a destination** for both air and land side travelers; and, providing an **orderly transition and future** for management and governance as key people leave their positions whether administrative or political.

The Target Concepts are the product of grass roots stakeholder input and brainstorming and it is recommended that additional research and planning for implementation be conducted in the same manner. These concepts are the result of a coordinated process to “imagine” and are offered for consideration and additional study.

As detailed previously in this document, the airport impacts the economic health of the greater Jackson area by approximately \$18,000,000 annually as determined by recent State of Michigan Office of Aeronautics analysis as detailed in the Community Benefits Survey of Airports. This survey takes into account the number of the number of aviation passengers, private and public sector jobs located at an airport, the number of area businesses that rely upon the airport in order to successfully conduct their business and the type and amount of air cargo processed at the airport. Other factors include the use of the airport by military, law enforcement and medical services.

“It has been my sincerest hope that after the completion of this airport that it might have a great influence in bringing new industries to our home town that are connected with aviation for we all realize that if Jackson is to grow we must have new industries that are founded on a firm financial footing and that will employ a high class of citizens who will help to support our stores and help make Jackson a larger and better town to live in.”

*Wiley R. Reynolds
June 2, 1928*

This report also discussed the important role the airport assumes in assisting current airport-based businesses and attracting new businesses to the airport. Additionally, the airport can continue to improve its attractiveness as a “destination” for land side and air side travelers by further development and/or addition of aviation themed parks. The following Concept

Proposals seek to augment the existing role and relationship of the Airport within the economics of the surrounding community.



Aerial view of runway work in progress 2016-2017

Concept One: New Hangar Site Development

The most significant barrier to construction of new hangars at Jackson County - Reynolds Field has been the lack of suitable sites upon which to construct a new hangar. Six new hangars have been constructed at Jackson County Airport during the past fifteen years. In every one of those projects the hangar owner faced significant challenges with bringing the hangar site to grade without impacting drainage for neighboring structures; determining where electrical power will originate; a desire to have sewer and water, but realizing that the sewer is usually not accessible and the only source of water has been to drill a well. The hangar owners assume the costs of hangar site development and are charged by the airport for the ground lease when the hangar is substantially constructed.

Hangar sites and hangars anecdotally have been in demand at Jackson County Airport over the past 15 years. The airport owns and rents 15 T-hangars. The occupancy rate has historically been very high and over the past six years has been approaching 100%. There are frequent inquiries about the availability of hangar building sites. It is suggested that a hangar/hangar site demand study be conducted prior to investing any significant funds into this target concept.

This concept proposes predevelopment of twenty hangar sites along the former Foxtrot taxiway. This taxiway becomes developable once Runway 6-24 is decommissioned in 2017. The airport would fund the development of these sites including bringing the site to grade and buildable and bringing sanitary sewer and municipal water to each site along with electric, natural gas and phone and internet communications capabilities. A necessary preliminary step will be to conduct an engineering study with a site plan and develop project cost estimates.

The airport would recoup the cost of hangar site development as each hangar site is “sold”, eventually recovering all costs associated with development. A net economic gain will occur within six to nine years after each site is “sold”.

Some of the hangar sites would be sized for single aircraft hangars of 3,000 to 4,000 square feet. Others would be sized for corporate sized hangars of 10,000 square feet. The layout could be designed so that a corporate-type hangar would merely take two single aircraft hangar sites. The increase in revenue is based on additional square feet, not the number of hangars.

The airport currently derives a significant portion (19%) of its revenue through hangar ground leases. Each hangar owner pays approximately \$.40 per square foot per year for a ground lease cost. By way of example, a 3,000 square foot hangar would pay \$1,200 per year subject to annual CPI (Commercial Price Index) adjustments. Increasing the number of hangars will increase revenue by \$.40 per square foot.

Example: The airport develops 20 hangar sites at a total initial cost of \$400,000. The average cost per site is \$20,000 (illustrative costs for site utilities, grading and taxi street construction) and eventually will be passed along to the future hangar owner in the following manner:

- 1) An individual approaches the airport to construct a new hangar on one of the predeveloped sites. The size of the hangar is 4,000 square feet.
- 2) That individual pays to the airport a fee of \$20,000 representing the costs incurred by the airport for development of the site, a cost the hangar owner would have to pay under the current system.
- 3) (Under the current system the ground lease fee for this hangar would start out at \$1,600 per year and be charged immediately).
- 4) Under this proposal the hangar owner would not pay a ground lease fee until such time as that person recouped the initial \$20,000 that they have paid for site development costs.

- 5) In 12.5 years the hangar owner has “saved” \$20,000 in ground lease fees and would then begin to pay an annual ground lease fee. The airport then derives a net increase in revenue by payment of a standard ground lease from then on.

The site fee for a newly developed hangar site could and should vary by size. The corporate sites should cost more than the smaller sites. For the example above, the average cost was used for simplicity purposes. Under a variable site fee, the private sites might cost \$15,000 and the corporate sites \$25,000. More analysis is needed.

Let’s assume that it takes three years for all twenty sites to be “sold”. The airport would then have recouped its initial investment for site development. If five of these sites have 10,000 square feet corporate hangars and the remaining fifteen sites have 4,000 square feet private hangars, then the following conclusions can be made:

- 1) Net increase in hangar square footage = 110,000 square feet
- 2) Average number of years before ground lease fees begin = 9.1 years
- 3) Net increase in airport revenue after 9.1 years is \$44,000 annually.
- 4) The other benefits of additional aircraft are increased fuel sales, increased patronage of airport businesses, and an increased corporate presence at the airport enhancing business in the region.

The question of funding is a large one assuming an initial investment of approximately \$400,000 (not based on actual costs, illustrative only). One potential source of funding, other than County of Jackson capital funds, is the Blackman Township DDA within which the airport is included. *NOTE:* The VOR transmitter is scheduled to be decommissioned in 2019. This FAA device creates a building restriction line of 1000 feet that now limits hangar development on the east side of the airport along the Bravo taxiway. This area should also be considered for hangar site development in the future.

The recommendations for next steps are:

- 1) Determine engineering and site development budgetary costs of this proposal
- 2) Commission a Hangar Market Analysis for Jackson County Airport
- 3) Research funding options
- 4) Report findings

West Side Hangar Development Site



East Side Hangar Development Site



During review and discussion of this idea of predeveloping new hangar sites, it was suggested that variations of this proposal may have merit and should also be considered:

- 1) The first variation would see the airport recouping its hangar site development costs upfront and then charge the ground lease fee immediately. It was thought that this variation would remain attractive to the hangar owner and result in the airport deriving an immediate increase in ground lease income.
- 2) The second variation proposes a combination of the two previous proposals i.e. the airport “shares” the cost of hangar site development on a 50-50 split with the hangar

owner and only recoups one half of hangar site development costs with that being offset to some degree by the immediate increase in hangar ground lease revenue.

- 3) A final variation involves airport construction of a new multi-bay hangar much like the hangar that was constructed in 2001 (hangar #165). The individual units in this hangar would be condo style hangars and if all of the hangars were sold then the initial investment in hangar construction would be recovered. Those hangar units that were not yet sold would be rented on a month to month basis for revenue.

Concept Two: Market and Sell Select Airport Parcels and Buildings

Land, property and buildings associated with the airport are legally owned by the County of Jackson and managed by the airport. Further, land officially associated with the airport is under control of the FAA to a certain extent. If the land and property appear on the airport's official list of FAA obligated land (Exhibit A), then the FAA must first agree to "release" that parcel from FAA control. If the land is sold or leased, the FAA also places limitations on how those proceeds are expended. More information can be found at:

https://www.faa.gov/airports/environmental/relocation_assistance/land_acquisition_under_aip/release_airport_property/

FAA land release procedures and "obligations" must be carefully examined because the sale of previously "obligated" land or buildings may not result in an immediate economic benefit to the airport i.e. the net proceeds will likely be restricted to funding projects related to the runways, taxiways or snow removal equipment purchases. The intended use of proceeds is necessarily a requirement of any land release request. However, not all airport buildings and property are under these FAA restrictions. County-owned buildings generally will not carry the FAA restriction for release and sale.

This first proposal is to continue coordination with the County Board of Commissioners, Airport Board, Blackman Township DDA and the Enterprise Group to market the 70 + acres of land located north of I-94. This property (Airport Parcels #15A and #62) was under a development agreement between developer Ramco-Gershenson and the County of Jackson in 2007 after an FAA land release was received. Ultimately, the retail mall development was not completed primarily due to the recessionary period starting the next year. Nonetheless, the property is situated with the Blackman Township DDA and in between two major hotel developments and remains a high value property. The property, starting in 2017, will be more attractive when Runway #6-24 is decommissioned and the runway approach and associated equipment rotates away from this area. It is believed that this land is in such a prime location that it will eventually become an attractive development opportunity.

The first steps of a land release are to determine consultant costs and identify a funding source. This could be done in anticipation of a future specific development agreement. The airport's primary planner - Mead and Hunt provided consulting services during the previous land release effort.



Airport Parcels #15A and #62 at I-94 and Doney Road

As stated earlier, the proceeds from any sale can only be used as FAA restrictions permit and will primarily be for Airport Improvement

Capital purchases associated with the runway and taxiway system, hangar construction and site development, or certain snow removal equipment. *NOTE:* Only one of the two parcels was originally purchased with FAA funds, leaving the proceeds from the County-acquired parcel with fewer FAA restrictions. The advantages from the sale of this property are multiple, not the least of which is to put the property onto the tax rolls and allow the airport to complete more capital improvements that are sorely needed.

This second proposal is to research the feasibility of marketing and selling the airport's corporate style hangars #201 and #204. These two corporate style hangars were first offered for sale in 2009 after the Airport Board commissioned appraisals of the two structures. When rented, these hangars provide considerable revenue for operations. If sold, the annual revenue would be reduced to a ground lease rate and the property would go onto the tax rolls. The advantages include negating any future capital expenses associated with these aging buildings while establishing a steady stream of annual revenue for the airport.



Hangar #204 Jackson County Airport

Hangar #201 Jackson County Airport

The average annual rental income from Hangar #201 over the past ten years is approximately \$16,000 per year. Prior to the current tenant's occupancy and long term rental agreement for the entire building, the hangar was rented to individual aircraft owners and the income varied greatly from month to month. The current annual income is approximately \$19,000 annually. Hangar #201 was constructed in 1937. This hangar covers 10,000 square feet and the ground lease income would be approximately \$4,000 annually, but all future building maintenance costs would cease. Recent hangar capital improvements include new hangar doors and installation of a radiant tube heating system.

The average annual rental income from Hangar #204 over the past ten years is approximately \$8,300 per year. This hangar has had a number of previous tenants who have rented the entire hangar. The current tenant is considered a long term tenant. The hangar covers approximately 3600 square feet and the annual ground lease income would be about \$1,200. Recent capital improvements include a new hangar door, new flat roof and a radiant tube heating system. Much more research into this proposal is recommended weighing short and long term benefits to selling versus retaining this hangar.

Concept Three: Enhance the attractiveness of the Airport as a Destination

This concept is to enhance attractiveness of the Jackson County Airport as a destination to increase foot, motor and airplane "traffic". People fly or drive to the airport for varied reasons, one of which is the Airport Restaurant which is regionally known as a great place for a day trip to eat. On most good-weather weekends one can witness a constant flow of small airplanes coming and going from the ramp in front of the restaurant. Interestingly, this airplane traffic makes the restaurant attractive as a destination for families to come, eat and watch the airplanes. Children are particularly attracted to this feature of the airport.

Recently, two unique aviation displays were commissioned and installed in the front of the Terminal Building, which also increased traffic to that building.



WWII German Fokker Model



Leonardo DaVinci Design Ornithopter

Special events also attract people to the airport. Currently, the two largest events are the annual EAA Chapter #304 Pancake Breakfast and the three-day Jackson Blues Festival. The two Michigan International Speedway races still draw a number of NASCAR fans seeking autographs and a glimpse of their favorite drivers. Past events include the Hot Air Jubilee, International Aerobatics Competition and a Planes, Trains and Automobiles car show.



Planes, Trains and Automobile Event - 2005

Increasing the number and type of airport based events including; a cruise in or car show; periodic static aircraft displays during an airport open house; or enhancing one of the existing events like the EAA Pancake Breakfast or Blues Festival with some of these events. The greatest challenge in attempting these events in the past has been finding actively interested individual or organizational volunteers to do the coordinating and event work.



T-33 on active duty at Peterson Airforce Base, Colorado-1964
Jackson, MI



The same T-33 on display at Aviation Heritage Park,

Concept Four: Enhance Aviation Heritage Park

Aviation Heritage Park has been developed over the past dozen years through the efforts of some very dedicated volunteers and generosity of area businesses, foundations and individuals. This park now features more than a dozen aviation related art pieces, monuments and aircraft. This park is frequented by pilots, families, tour groups and Pokémon hunters, and greets all visitors who arrive through the main airport entrance.

The second proposal within this concept is to continue to enhance Aviation Heritage Park with additional displays and features. One idea for accomplishing that is to add a large aviation themed mural on a large privately owned hangar that borders Aviation Heritage Park on the west side of the park (with permission, of course). This hangar is currently owned by an individual and the idea has only been discussed briefly with him. One variation of this idea is to host a contest for local artists with prize for the winning entry and then installing the mural.



Installation of WWII Pilot Statue and large hangar that borders Aviation Heritage Park

Another enhancement idea includes installing an aviation themed gazebo or shaded area with a bench or table or adding another aircraft display. When and if Aviation Heritage Park no longer has space for additional displays the park could be easily extended to the east side of the main airport entrance.

Concept Five: Enhance the Airport's Efforts at Community Outreach

Community outreach over the past decade has been in various forms and formats including: airport web site, annual reports/newsletter, public presentations, airport tours, creating an email group for airport-based pilots, hangar and business owners, and regular updates of the County Board of Commissioners. In the past, airport picnics were held as another method of networking and gaining feedback. Recently, the airport coordinated an Airport History Tour for an out-of-town group and this event was co-sponsored by the EAA Chapter #304, Airport Restaurant, and Experience Jackson. The participants gave the program rave reviews and efforts were undertaken to offer future such events.

Strong consideration should be given to expansion of public outreach via various social media platforms including Facebook, Twitter and others. The challenge of adding these other avenues is in staffing the tasks associated with keeping these more modern forms of social communication current and relevant. A necessary first step involves gaining airport user group input into proposals to determine how any new form of public outreach might be used.

Airport tours could be actively marketed as opposed to waiting for groups to make a request. K-12 education is concentrating more curriculums on science and math education as it relates to career development and the airport tours could be geared to enhance that educational component. A partnership with Jackson College Flight Center and K-12 districts would be necessary to form the tour components.



Airport Tour Group - Aviation Heritage Park

Concept Six: Actively Managing the Airport

The term “active management” indicates a style of management that is engaged at every level of the organization and with associated federal, state and local organizations with the primary goal of improving the airport and planning for its future. The key ingredient to accomplishment of this philosophy is held within the capabilities of the Airport Manager and the ability of that person to carry out the mandates of the Airport Board and County Administrator. Airports are highly regulated by the FAA and Michigan Office of Aeronautics and failure to comply with those regulations can mean a loss of funding or jeopardizing pilot and passenger safety.

Active management also implies the manager is learning and listening to key airport stakeholders, key community stakeholders plus the airport staff. Participation in the broader county organizations’ strategic planning, High Performing Organization, leadership teams and other committees is imperative. Community involvement, while not required, is also helpful in achieving the goal of active management. As such, these concepts are intended to give guidance to current and future management of the airport and possibly aid in identifying the profile of future airport managers. Here are some of the activities thought to represent “active management” of the airport:

- 1) Continue participation in County leadership and High Performing Organization, work teams and committees
- 2) Implement HPO principles in the airport organization
- 3) Practice active management of the Airport Zoning Ordinance (Joint Zoning and Zoning Appeals Boards) and Storm Water, and Spill Prevention Plans
- 4) Review all Standards, Rules and Board Policies every five years and update as necessary
- 5) Review airport procedures every two years
- 6) Keep Advisory Council active in considering issues and projects assigned by the Airport Board or Airport Manager
- 7) Actively manage the Airport Board Awards policy

“Managers of small airports are responsible for a wide range of activities that include financial management, oversight of contracts and leases, safety and security, noise control, community relations, compliance with federal grant conditions, facility maintenance, and capital improvements.”

(Guide Book for Managing Small Airports ACRP Report #16)

Concept Seven: Capital Planning

The airport is a large facility and it is an ongoing challenge to maintain the airport buildings, runways, taxiways, equipment, airfield lighting systems and associated infrastructure effectively given budget and staff limitations. The ten buildings range in age from circa 1934 to 2014. The two major snow displacement plow trucks are nearing 40 years old or older. Other maintenance equipment is more modern and not at a critical state of replacement need.

It is also important to understand recent capital purchases and projects. The following list details airport capital projects since the year 2000.

Past Airport Capital Projects Since 2000	
Year	Project
2017	Terminal, Tower and Administration Buildings door replacement project
2017	Construct Runway 7-25 Phase II (final)
2017	Terminal lobby air conditioner
2016	Pilot Lounge restroom installation and remodel
2015-16	Construct Runway 7-25 Phase I
2015-16	Unsuitable soil (landfill) relocation
2015	Ornathopter display added to Terminal front lawn (by Robert LaZebnik)
2015	Compass Rose installation
2015	Outdoor display Aviation Heritage Park illumination (By Experience Jackson)
2014	Snow Removal Equipment building construction
2014	Main aircraft parking ramp pavement section repair
2014-15	Crack sealing of taxi streets
2013	WWII Civilian Pilots Training Program display added to Aviation Park (By Wm. Maher, R.W. Mercer and community members)
2013	German Fokker DR-1 replica installed at Terminal Building (by Robert LaZebnik)
2013	Snow Removal Equipment building phase I (site work and service road)
2013	I-94 parcels clearing and grubbing project
2013	Install Air Traffic Control Tower building base air conditioner
2012	Administration building window replacement
2012	Administration building tuck-pointing
2011	WWII Bomber Pilot bronze statue installed in Aviation Park (by Robert LaZebnik)
2010	Construct Ambulance addition to Trybe Building
2009	Hangar #204 roof replacement
2009	Airport Administration Building roof replacement
2008	Airport Administration Building boiler replacement
2008	Aviation Heritage Park Phase II (by Sigmund & Community Foundations and community members)
2008	Construct Runway 14-32 Phase II
2007	Construct Runway 14-32 Phase I
2006	Airport Airfield Electrical vault roof replacement
2006	Aviation Heritage Park creation - Phase I
2005	Airport beacon replacement
2004	Hangar #201 aircraft door replacement
2004	Airport Administration Building carpet replacement
2003	Hangar #204 hangar door replacement
2002	Rehabilitation of Taxiways A & B
2002	Terminal floor coverings and restroom improvements
2002	Terminal building boiler replacement
2000	Construct County Hangar #165

A Capital Replacement Plan should be developed with staff input to establish a timetable, priority and funding sources for replacement of the following randomly ordered items:

Future Capital, Equipment and Infrastructure Needs

- 1) Replace current John Deere tractor with a new one along with a batwing mower. Research the cost of leasing as an alternative.
- 2) Restore the roof on Hangar #166.
- 3) Rehabilitate the roofs on the Terminal and Tower buildings (2016 funding was diverted to Runway 7-25 landfill relocation project).
- 4) Replace all asphalt adjacent to the Terminal and Tower buildings with new concrete on the north side of the Terminal and Tower Buildings to include a new sidewalk and decorative fence.
- 5) Replace the Air Traffic Control Tower Cab heating and air-conditioning roof top units.
- 6) Study the Terminal building heating controls systems for replacement. [The pneumatics are air driven and cannot be serviced.]
- 7) Schedule and fund replacement of snow displacement trucks.
- 8) Purchase and install video surveillance cameras to monitor airport entrances and large public areas (see appendix).
- 9) Research cost, feasibility and funding to extend municipal water from the current end point in the airport front lawn onto the main airport campus to supply municipal water to all buildings, strategically located fire hydrants and future hangar site areas.
- 10) Research the recommendation from the Airport Marketing Plan to install a digital sign board at the front entrance of the airport.

As stated previously, this list of concepts and needs should not be considered exhaustive, but it does represent a starting point for detailed research. The next logical step is to create action plans for any of the concepts that are given high priority. Each action plan should be specific as to timelines and responsible parties. It is also recommended that this Airport Business Plan be reviewed and updated every two years to reflect any changes or additions. The Airport Advisory Council should serve as a primary reviewing body with final review by the Airport Board.

Conclusion

This Business Plan represents a collective effort by the airport community, staff and governing/advisory boards to chart a future course for the airport. It is a succinct statement of the airport's decades-long history, current state of affairs, and includes recommendations for future planning which are intended to jump start specific planning efforts within each target concept.

This plan is a valuable tool for future transitions of airport staff and governing/advisory board members, whenever those occur. A person who is new to the airport can gain an excellent grasp of its history, current conditions, and projected needs in a very short time. The plan can also serve to inform the public about the critical role the airport plays in local and regional economics and future economic growth.

This plan is intended to be a "work in progress", both literally and figuratively. Continued involvement by a broad spectrum of airport, community and business representatives in the next steps of planning is encouraged.

There are many positive opportunities for future growth of our airport and this plan increases the likelihood of success by recognizing and capitalizing on those opportunities.

John Feldvary
Airport Board Chairperson
Jackson County Airport – Reynolds Field