



Airport Maintenance Shop  
2200 Pleasant Street  
DeKalb, Illinois 60115

**AGENDA**  
**AIRPORT ADVISORY BOARD**  
**2200 PLEASANT STREET**  
**(First Floor Conference Room)**  
**DEKALB, ILLINOIS 60115**  
Tuesday May 22, 2018  
**7:00 p.m.**

- A. Roll Call
- B. Approval of Agenda – Additions / Deletions
- C. Public Participation
- D. Approval of Minutes – April 24, 2018
- E. Old Business
  - 1. None
- F. New Business
  - 1. Approval of the Recommendation to Approve the Airport Strategic Plan for DeKalb Taylor Municipal Airport.
- G. Airport Managers Report
  - 1. Airport Operations
- I. Adjournment

# STRATEGIC PLAN

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DEKALB TAYLOR MUNICIPAL AIRPORT  
DEKALB, ILLINOIS



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# PURPOSE OF THIS REPORT



This report represents the culmination of more than one year of research and investigation into the structure, performance, and perceptions of DeKalb Taylor Municipal Airport. It is designed to explain the key findings of Volaire Aviation consultants and develop a list of key recommendations to position the Airport for growth and prosperity. This report also lays out the future vision, mission, and core values of the Airport.

This final report will not contain specific detail behind each finding and each recommendation. The research supporting the findings and recommendations is included in previous documents prepared as part of the overall project.

While the findings of the consultants authoring this report are, in most cases, facts about the Airport as it operates and as it is perceived at the writing of the report, the key recommendations are action items the authors believe are supported by the findings of fact. Each recommendation is designed to be actionable upon direction of the City of DeKalb. The financial impact of some of the recommendations is clear, while much more work will need to be completed before the financial impact of others is fully clear. This report recommends certain strategic options without a fully-vetted financial plan in order for work to commence quickly, and to avoid unnecessary delays in improving the operation of the Airport.

**“EACH RECOMMENDATION IS  
DESIGNED TO BE ACTIONABLE  
UPON DIRECTION OF THE  
CITY OF DEKALB.”**

The research compiled during the course of study for this collection of reports has uncovered challenges at the Airport, but the vast majority can be addressed through the recommendations in this final report. Some of the

challenges are structural, while some challenges are financial, and can be remedied through projects already commenced by current Airport and City management.

This project is guided by the language in Chapter 45 of the City of DeKalb Municipal Code, which established the Airport Advisory Board. The Municipal Code explicitly states that, “the purpose of the Airport Advisory Board shall be to advise the City on airport related business activities and ensure that the airport is a key economic

**“THE PURPOSE OF THE AIRPORT ADVISORY BOARD SHALL BE TO ADVISE THE CITY ON AIRPORT RELATED BUSINESS ACTIVITIES AND ENSURE THAT THE AIRPORT IS A KEY ECONOMIC ASSET TO THE REGION.”**

asset to the region.”

Additionally, the Code states that the role of the Airport Advisory Board is, “to ensure the airport remains a vital piece of the regional economic infrastructure by providing input and support in the mission of running

the airport as a business.” While it is true that the airport is a key governmental asset for the City of DeKalb, the Board is required, by Code, to run the airport as an enterprise fund and a stand-alone business. This report is designed to guide the Board in that mission.

DeKalb Taylor Municipal Airport is a key economic asset not only for the City, but also for a myriad of businesses throughout northern Illinois. This report, and the other documents supporting the conclusions written in the strategic plan, represent the first step in moving the Airport forward.

# EXECUTIVE SUMMARY OF RECOMMENDATIONS



The conclusions and recommendations included in this strategic plan are supported by the previous strategic options document delivered to the Airport as part of this project. The recommendations in this report are summarized. Much of the supporting documentation for the recommendations can be found in the previous document – and that document should be used as a support reference for these initiatives.

Volaire consultants recommend the City and the Airport begin work on nine key strategic recommendations, and one further research project that will lead to additional marketing recommendations. Consultants also recommend the Airport and City formally adopt the mission, vision, and core values statements found in the next section of this report. Detail on each of the recommendations can be found in the pages that follow. The recommendations in this report are designed to increase Airport revenue as the Airport works towards a balanced budget, protect the Airport from non-compatible future development, position the Airport and its facilities for future growth and expansion of services, and to allow the Airport to help spur economic development throughout the region. Specifically, this report recommends:

- > DeKalb Taylor Municipal Airport continue to price its jet fuel below surrounding airports to siphon business jet and other jet traffic away from other Chicago-collar airports. A current experiment in lower fuel pricing shows promising results, with potential to double the volume of fuel sold.
  
- > The Airport should begin work with Swift Fuels to be an early adopter of new Unleaded UL94 Avgas. This fuel will take the place of most 100LL fuel over the next decade, and there is little current

infrastructure in northern Illinois for its sale. It is recommended the Airport work with Swift on a potential deal in which Swift underwrites most of the cost of the installation of equipment for the sale of fuel, in exchange for a percentage of the revenue generated from the sale.

- > Due to its high cost and inadequate available resources, this report cannot recommend immediate work to achieve Part 139 commercial airline service certification on a quick timeline. Instead, it is recommended the Airport work with its engineering firm to prioritize the items that must be done before certification can be achieved, and to work to develop state and federal funding for each project, separately.
- > The Airport must ensure it is receiving appropriate revenue from the current hangars it owns and leases. It is recommended the Airport conduct a hangar rent survey, of similar hangars of similar size and condition, of peer northern Illinois Airports, to determine where DeKalb's lease costs rank. In the cases where DeKalb's hangar leases are undervalued, it is recommended the Airport increase lease rates to match the general market, and to increase revenue from the current facilities.
- > At current lease rates, it is not in the best interest of the Airport, itself, to build more hangars at that cost. However, it is recommended the Airport be open to private hangar development, by private companies or groups of pilots, who would simply enter in to a long-term land lease for the space. If the appropriate private developers have an interest in building additional hangars, and the Airport can ensure those developers will not undercut its current hangar pricing, it could be a solution to the lack of sufficient hangar space.
- > The Airport should work with solar energy development companies to identify and develop plans for solar panel deployment. Other airports throughout the country have been able to accomplish this and generate significant revenue from their solar arrays, with limited up-front investment. This could generate \$150,000 per year in utility savings.

- > The Airport should work with local economic development agencies to showcase available land to potential developers of small-scale business who could use subsidized airport landside access to develop small scale industrial businesses. There is significant demand in the DeKalb area for small spaces to attract growing companies to begin their work. As these companies shop for space, it is important Airport land be considered. It is also recommended Airport leadership consider contracting out property management to a private firm to reduce staff time and to have an interested party working on development within the already-approved land-use plan.
  
- > The Airport should work towards potential greenhouse development. The Airport, or its community economic development partners, should meet with each of the identified agricultural companies to better understand their appetite for expansion. Based on these conversations, it is recommended the Airport develop an incentive package tailored to this development. While the Airport does not have adequate staff to pursue recruitment of greenhouse business on its own, it should work with community partners to share in the recruitment burden. It could also consider hiring an outside property management firm on this project.
  
- > DeKalb Taylor Municipal Airport must continually review available land adjacent to the Airport listed for sale. In the case of compatible parcels, it is recommended the Airport work with the FAA to develop funding for the purchase to ensure development surrounding the Airport is consistent with aviation use.

Finally, this report recommends the City and Airport conduct an extensive set of accelerated survey work to help refine the future marketing plan. It is important that consultants better understand how the community views the Airport's current brand, how the Airport could best be branded so those in the region will understand its value, and how the Airport can better connect with the people it is designed to serve. Once this survey and interview work is completed, consultants will develop a full strategic marketing plan.

# VISION, MISSION, AND CORE VALUES



Every business must have a vision for what it strives to be, a mission that it works to accomplish on a daily basis, and a set of core values by which it operates. To develop a new vision, mission, and set of values for the Airport System, key stakeholders were gathered, on site, at DeKalb Taylor Municipal Airport. The Airport Advisory Board, along with interested stakeholders including the Mayor of DeKalb, worked through the mission and vision of the Airport system and to develop a set of core values that would assist in driving the Airport's future. In this session, the mission and vision were not written, but were fully defined.

The combined vision, mission, and core values make the direction of the Airport clear. The mission tells us who we are today while the vision is designed to take the Airport into the future. Core values support both.

Every business needs a strategy. It is important that DeKalb's Airport is viewed as a business, in addition to a community service asset. Business strategies must not be created in a vacuum. Strategies are developed only after a business has a clear mission, a clear vision, and core values to support future initiatives.

Voltaire Aviation consultants wrote multiple vision and mission statement options, along with a set of core values and a core value statement. These options were vetted by the DeKalb Taylor Municipal Airport Advisory Committee at an in-person, public meeting. Following this meeting, the Advisory Committee formally recommended a vision and mission statement for the City's adoption.

## AIRPORT VISION STATEMENT

The vision statement of an organization is its statement of what that organization wants to become. Vision statements are future-looking declarations of an organization's purpose for existing and aspirations. In addition to goals for the Airport's mission, the stakeholder group also developed ideas as to what should be included in the vision statement. It should be noted the Airport has no current vision statement, so the City of DeKalb and the Airport Advisory Board are starting from scratch.

The Board suggested several ideas for inclusion in a vision statement, including:

- > Community involvement
- > Economic (component)
- > Strengthen (component)
- > Preferred alternative airport
- > Sustainable
- > Responsive to business needs
- > Connecting/Connection
- > Economic Development
- > Business Partnerships
- > Magnet
- > Innovative/Future Minded
- > Technology/Tech Savvy
- > Cutting Edge/Inventive
- > Proactive
- > Growth
- > Convenience
- > Flexible and adaptive
- > Regional Advantage
- > Gateway
- > Welcoming
- > Bold
- > Opportunity
- > Pulls the region/community together
- > About more than 1 city or community
- > Transportation hub
- > Infrastructure
- > Persistent
- > Global
- > Market focus

A set of five vision statement options for the Airport has been developed for consideration based upon the strategic planning session. The vision statement is designed to be concise, much like the mission statement, but also to set a forward-looking tone.

Based on these core components, the Airport Advisory Board recommended the following vision statement be adopted:

DeKalb's regional airport seeks to provide innovative solutions to economic development  
dedicated to being a global gateway to prosperity.

## AIRPORT MISSION STATEMENT

The mission statement of an organization is its reason for being. It defines how that organization will aim to serve all its diverse stakeholders. In other words, the mission must define who DeKalb Taylor Municipal Airport is today and what the Airport values.

The Airport Advisory Board expressed a desire to ensure the Airport's mission was aspirational as they felt it is today. The Board also felt the mission statement should cover those in the region – including those beyond the City limits of DeKalb – who have little day-to-day interaction with the Airport. The Board wants to guarantee all in the region can understand the importance of the mission of the Airport. The Board and other interested stakeholders suggested several ideas for inclusion in a new mission statement. They include:

- > Safety and Security
- > Community involvement
- > Asset to the community
  - o Discussion about economic impact that the airport brings
- > Sustainability/sustainable
  - o The economic value
- > Self-sustaining
- > Efficient
  - o Efficient use of our tax dollars
  - o Efficient use of our efforts
- > High quality
- > Regional vs. City of DeKalb
- > Consistent quality airport services
- > Distinct Asset
- > Anticipating growth
- > Eye to the future

With these ideas in mind, a set of four mission statement options were offered from which the Airport Advisory Board chose the one it feels best stated the ongoing objectives of the Airport. The mission statement is designed to be clear, concise, and easy to remember, while incorporating as many of the Board's ideas as possible. The statement chosen reads:

The Airport is an economic driver for northern Illinois fostering development through  
innovation and engagement with our community and region.

## AIRPORT CORE VALUES

Core values are designed to be the elements that support both the mission and vision of an organization. Core values are the beliefs of the organization in which the organization is emotionally invested. Core values are also designed to lay out how an organization treats people – both employees and customers – and how an organization does business. The DeKalb Taylor Municipal Airport Advisory Board chose to match the Airport's core values with those of the city:

- > **Integrity:** We will be honest, fair, and ethical in every situation, even if it is unpopular.
  
- > **Professionalism:** We will serve the City, the Airport, and its residents with the highest level of skill, judgment, and respect in each situation.
  
- > **Excellence:** The expectation of engaging in outstanding levels of performance.
  
- > **Service:** Providing city services at the highest level for the betterment of the community.
  
- > **Collaboration:** Working together to benefit from the resources, knowledge, wisdom, and understanding of others.
  
- > **Accountability:** Taking responsibility for our decisions and actions while doing everything possible to achieve the desired results.

Together, the mission, vision, and core values of DeKalb Taylor Municipal Airport will help set expectations and guide thinking about future strategic business options. They also provide a clear indication to employees, of expectations, and a clear message to the region of what the Airport stands for.

It is recommended the City of DeKalb adopt the vision statement, mission statement, and core values statement.

# KEY RECOMMENDATIONS



The ultimate goal of this project is to develop a set of actionable items for the City of DeKalb and DeKalb Taylor Municipal Airport to immediately work on to better position the Airport for long-term financial viability. These key recommendations lay out Volaire’s favored course of action to achieve the City’s goals. These recommendations are made independently, outside of direct City influence, but based on nearly a year of detailed research, and more than 50-years of combined consulting experience in airport strategic planning.

The recommendations lay out the the future strategy of the Airport in developing business and balancing the budget. The report recommends specific business development strategies based on research and local stakeholder vetting, while omitting some initiatives researched for the business strategy document previously developed for this project. Initiatives omitted are not believed to be beneficial to the Airport or are believed to be unachievable.

This report does not include branding and marketing recommendations for the Airport. While that is a piece of the scope of work for this overall project, it was decided to complete the business strategy first, before developing a plan for the Airport’s brand, or developing specific marketing strategies for the business initiatives that are recommended. Volaire consultants will follow this document with community outreach and survey work, and ultimately a brand and marketing strategy document.

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## KEY STRATEGIC RECOMMENDATIONS

Volaire consultants vetted dozens of potential business development options for DeKalb Taylor Municipal Airport. Some options were determined to be ready for action in the short-term while others are better suited for long-term planning. There are a myriad of options available to develop new lines of business and to better manage current lines of business.

But the research compiled for this report also allowed certain business options to be removed from consideration due to their poor fit, their expense, or their potential lack of success. This report will not recommend the Airport move forward with building new hangars on its own, working to develop a formal university-level flight training and maintenance program, developing an industrial park, developing a rental car franchise, building an airport restaurant, or recruiting air cargo or scheduled passenger airline service. None of these options are considered viable at the time of the writing of this report, or in the next several years. Details

### “THERE ARE A MYRIAD OF OPTIONS AVAILABLE TO DEVELOP NEW LINES OF BUSINESS AND TO BETTER MANAGE CURRENT LINES OF

on each of these options can be found in the previous strategic options report.

The following recommended options represent the first set of initiatives the authors recommend the City of DeKalb and the Airport

plan for and work on. In many cases, there is much work still to be done to fully plan for these options. But this document is designed to lay out a strategy – not to detail each task that must be completed for each strategic initiative to be completed. These recommendations are clearly just that – recommendations. It will be up to the Airport Advisory Board and the City Council to formalize each strategic business option as part of the business plan for the Airport.

**KEY STRATEGY RECOMMENDATION ONE: TRANSIENT TRAFFIC/FUEL PRICING**

It is recommended DeKalb Taylor Municipal Airport continue to price its jet fuel below surrounding airports to siphon business jet and other jet traffic away from other Chicago-collar airports. A current experiment in lower fuel pricing shows promising results. Summer 2017 fuel sales were several times higher than the previous summer, largely due to increased transient traffic.

Most airports that do not have based corporate jets, like DeKalb Taylor Municipal Airport, must compete to service those aircraft. The most common competitive factor is the price for fuel, where airports compete to fuel jet aircraft that cannot fly transcontinental missions non-stop.

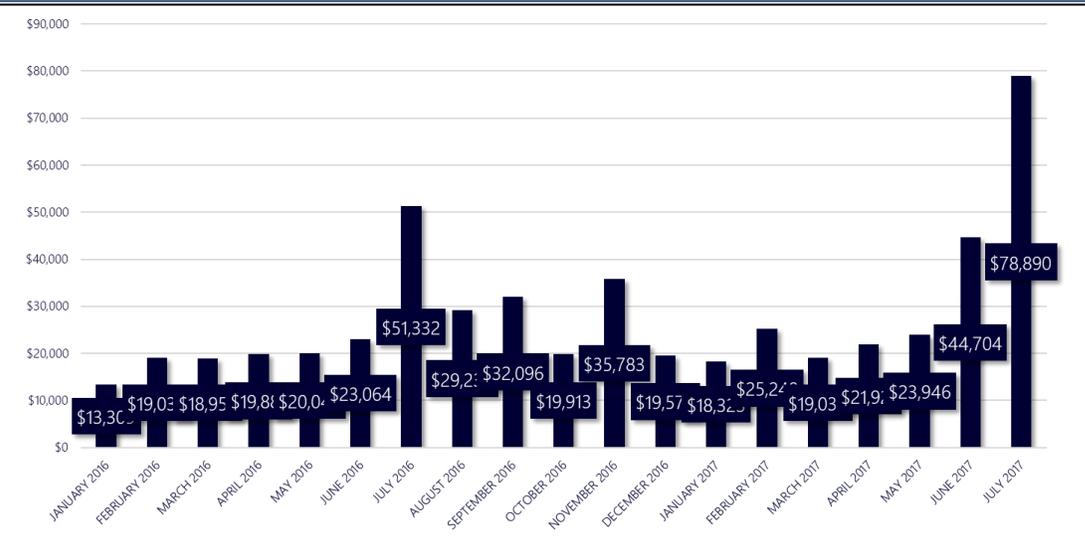
DeKalb's Airport has the advantage of having one of the longer runways in northern Illinois from which to handle larger corporate jet traffic. Only Chicago Rockford and DuPage airports have longer runways than DeKalb's 7,026-foot long main runway. Most larger corporate jets need at least 6,000 feet of runway for landing in poor weather conditions. Unfortunately for DeKalb, other airports are closer to Chicago. But DeKalb can offer a less crowded airspace for transient traffic that is only refueling.

In fall of 2017, the average price per gallon of Jet A fuel in the region was \$4.06 according to research compiled for this project. DeKalb offered the lowest pricing in the region, at just \$2.59 per gallon. DeKalb's pricing was 36%, or \$1.47 per gallon, less than the regional average price. For a large corporate jet that buys 1,500 gallons of fuel, fueling at DeKalb would save more than \$2,200 over the regional average.

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The early results from DeKalb’s fuel pricing experiment are encouraging. With lower pricing, DeKalb saw its June 2017 fuel revenue increase by 94% over June of 2016, while its July fuel revenue jumped by 54% over the

**CHART 1: DKB MONTHLY FUEL REVENUE**  
JANUARY 2016 – JULY 2017; SOURCE: DEKALB TAYLOR MUNICIPAL AIRPORT

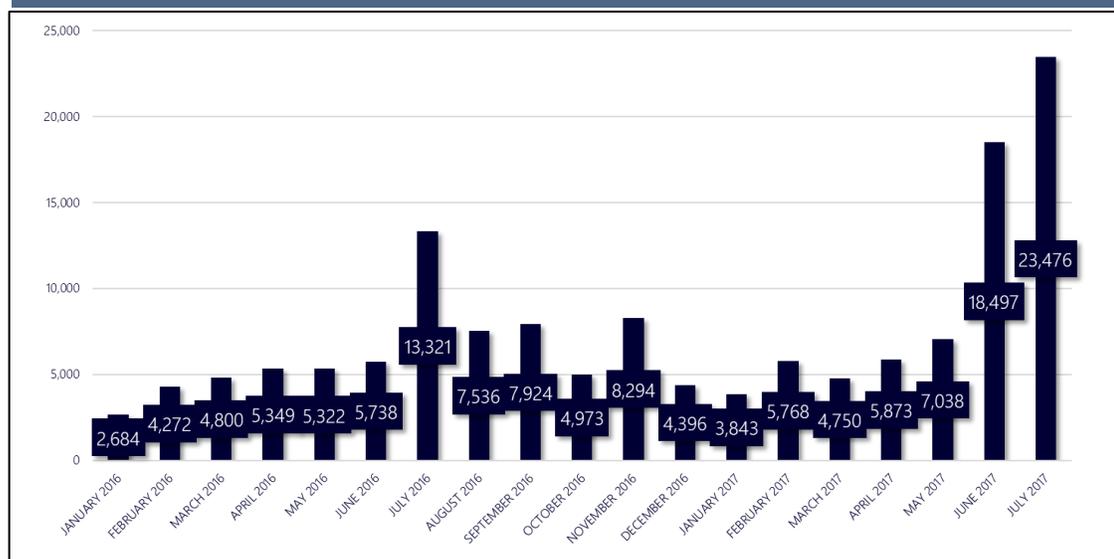


previous year (refer to chart 1). July fueling revenue neared \$80,000, which would be the highest monthly total in the last three years. Total net new revenue from fueling in June and July was \$49,197. Based on a conservative 50% annual

increase in fueling revenue, DeKalb would be expected to earn an additional \$151,000 in revenue over the course of a full year.

Lower pricing also resulted in a sharp increase in the number of gallons of fuel sold at the Airport. June gallons sold increased by 222% over the previous year, while July gallons were 76% higher than the

**CHART 2: DKB GALLONS OF FUEL SOLD PER MONTH**  
JANUARY 2016 – JULY 2017; SOURCE: DEKALB TAYLOR MUNICIPAL AIRPORT



year before – and the highest total gallons sold in three years (refer to chart 2). The profit per gallon has been

reduced with lower pricing, but is still estimated at 50-cents per gallon. Based on this estimate, the Airport generated a new profit of \$11,500 in the first two months of lower pricing. The estimated annual new profit from the pricing strategy would be \$28,000 if all months saw increased flowage of 75%.

With encouraging results, it is recommended that the Airport continue the strategy. The long-term impact should be even better than the early results, as more and more pilots and corporate dispatchers become aware of the savings they can realize by fueling at DeKalb. With additional sales per year in excess of \$150,000, and an additional profit per year of \$30,000, transient fueling is the most significant way to help close the budget gap in the short-term.

#### **KEY STRATEGY RECOMMENDATION TWO: UPDATED FUELING SYSTEMS**

It is recommended the Airport begin work with Swift Fuels to be an early adopter of new Unleaded UL94 Avgas. This fuel will take the place of most 100LL fuel over the next decade, and there is little current infrastructure in northern Illinois for its sale.

It is recommended the Airport work with Swift, the fueling provider, on a potential deal in which Swift underwrites most of the cost of the installation of equipment for the sale of fuel, in exchange for a percentage of the revenue generated from the sale. This should reduce the risk of investment, while still positioning DeKalb's Airport as one of the few in the region offering the next generation of general aviation fuel. The agreement with Swift should also include in-kind marketing to ensure pilots are aware fuel is available at DeKalb.

Research found that while demand for Jet A fuel is steady, if not growing, demand for 100LL fuel will decline over time. Unleaded UL94 Avgas, also called "swift fuel," will take the place of 100LL fuel over the next decade. Not only is UL94 often cheaper, the removal of lead from the mix results in reduced engine maintenance costs for virtually all general aviation aircraft.

The Airport could also choose to offer lower general aviation fuel prices by offering UL94 fuel. It could also have a competitive edge over other airports in northern Illinois by being one of the first to offer UL94 fuel, which could help to prolong the lives of aging general aviation aircraft and engines. It could also work with Swift Fuel to potentially share risk to help Swift grow in the northern Illinois market.

### **KEY STRATEGY RECOMMENDATION THREE: PART 139 CERTIFICATION**

It is clear in the research for this report that neither the Airport, nor the City of DeKalb, will have the financial resources to accomplish an immediate and full FAA Part 139 certification. While projected new revenue could offset about half of the ongoing cost of maintaining certification, the upfront cost, which could exceed \$1 million for the City, will be difficult to justify in the short-term.

Part 139 is an Airport certification granted by the Federal Aviation Administration (FAA). Any airport that has commercial airline service must have Part 139 certification. DeKalb Taylor Municipal Airport does not currently meet Part 139 certification standards, as it does not have scheduled airline service nor host charters with more than 30 seats. The lack of Part 139 certification means Northern Illinois University (NIU) charters, for groups like the football team, must use other airports. NIU would be able to shift its charters to DeKalb if the Airport gained Part 139 certification.

Part 139 requires the FAA to issue airport operating certificates to airports that meet the following criteria:

- > Serve scheduled and unscheduled air carrier aircraft with more than 30 seats;
- > Serve scheduled air carrier operations in aircraft with more than 9 seats but less than 31 seats; and
- > The FAA Administrator requires to have a certificate.

Airport Operating Certificates serve to ensure safety in air transportation. To obtain a certificate, an airport must agree to certain operational and safety standards and provide for such things as firefighting and rescue equipment. These requirements vary depending on the size of the airport and the type of flights available. The regulation, however, does allow FAA to issue certain exemptions to airports that serve few passengers yearly and for which some requirements might create a financial hardship, which could be the case in DeKalb.

Many of the facilities at DeKalb Taylor Municipal Airport are up to Part 139 standards already, including its main runway, its navigational aids, and its snow removal plan. There are a few weaknesses the Airport would need to correct to achieve Part 139 certification. These include stronger pavement on the main runway, taxiways, and apron to support a 150 to 180-seat passenger aircraft used for NIU charters. The Airport's

fencing would also have to be replaced, as it is not high enough for Part 139 certification security standards.

The low-end cost of the required improvements would be more than \$9.5 million while the high-end cost would be more than \$13.6 million, according to estimates from the Airport's engineering firm. The City of DeKalb, or other local funding

sources, would not be responsible for this full amount. Federal and state agencies would be the main funding sources through established grant programs. Assuming normal funding formulas for projects like this Part 139 certification, the City, Airport, and/or other local funding sources would have to pay between \$500,000 and \$700,000 for the certification work. But that is not the extent of the cost to the Airport.

Once the airfield is certified for Part 139 operations, the Airport will need to purchase equipment to handle the larger charter aircraft that it will be able to serve, along with certain equipment to comply with Part 139 rules.

The Airport already has the firefighting equipment required – which would be the most expensive item to

**“MANY OF THE FACILITIES AT DEKALB TAYLOR MUNICIPAL AIRPORT ARE UP TO PART 139 STANDARDS ALREADY, INCLUDING ITS MAIN RUNWAY, ITS NAVIGATIONAL AIDS, AND ITS SNOW REMOVAL PLAN.”**

purchase. But it will need some ground handling equipment, friction measuring test equipment, and at least one new vehicle. This new equipment is estimated to cost between \$300,000 and \$450,000, paid through Airport sources.

The Airport will not be able to accomplish certification, with the work required, with current staff. The workload would be too extreme. The Airport would need hire at least one full time employee to oversee the Part 139 certification process, which could take several years. The increased cost of staffing is estimated at \$200,000 over two years, or \$100,000 per year, before the cost of expert consultants is factored in.

Beyond certification, the Airport will need additional staff to ensure Part 139 compliance. The Airport will need additional annual training for staff to comply with Part 139 regulations. The annual cost of these additional staff members and their training is estimated between \$200,000 and \$300,000.

The total “start-up” cost of Part 139 certification, to the Airport, and not including federal and state sources of funding, would be between \$1 million and \$1.5 million. The annual cost beyond certification would be between \$200,000 and \$300,000. The total cost of Part 139 certification and operation for ten years would be between \$3 million and \$4.5 million, according to estimates from the Airport’s engineering firm. This would work out to a cost of between \$300,000 and \$450,000 per year, for the first ten years of certification and operation.

**“THE TOTAL COST OF  
PART 139 CERTIFICATION  
AND OPERATION FOR  
TEN YEARS WOULD BE  
BETWEEN \$3 MILLION  
AND \$4.5 MILLION...”**

Volaire consultants estimated the net new revenue Part 139 certification could generate through the handling of football charters for Northern Illinois University (NIU) and the teams it hosts in DeKalb. Based on data from other airports serving charters of a similar type, it is estimated DeKalb’s Airport would generate a profit of more than \$6,500 per charter. The annual profit for each season is estimated at \$104,000.

New NIU football charters will not generate sufficient new revenue to offset the ongoing cost of Part 139 operations. The Airport could develop other business with the certification that it would not be able to secure without it. NIU football charters would generate enough revenue to offset a little less than half of the ongoing annual cost of Part 139 operation.

It was clear in meetings with the Airport Advisory Board the City does not have the available capital to immediately invest into Part 139 certification for the Airport. Therefore, the report cannot recommend immediate work to achieve certification on a quick timeline. Instead, it is recommended the Airport work with its

engineering firm to prioritize the items that must be done before certification can be achieved, and to work to develop state and federal funding for each project, separately.

For example, should funding become available for new fencing at the Airport, the Airport should ensure new fencing will meet Part

139 certification requirements. Similarly, as the Airport re-surfaces both taxiways and runways, it should ensure they are built to the strength requirements for commercial aircraft that would be used in charter operations. As the Airport is able to work through the items through the normal course of maintenance and replacement, it will slowly complete items on the certification checklist, while keeping the financial burden to the City as low as possible.

Once the majority of certification requirements for the Airport's physical plant have been met, it should re-evaluate the ongoing cost of certification, and work with the City to develop funding to begin the formal process. At the same time, it should work with NIU to ensure it will be able to host the University's charters once certification is complete.

**"...IT WILL SLOWLY COMPLETE ITEMS ON THE CERTIFICATION CHECKLIST, WHILE KEEPING THE FINANCIAL BURDEN TO THE CITY AS LOW AS POSSIBLE."**

#### KEY STRATEGY RECOMMENDATION FOUR: HANGAR RENT

While it is true general aviation traffic is declining, the number of private pilots has fallen, and the number of aircraft based in Illinois is in decline, there is still strong demand for aircraft hangars at airports across northern Illinois. DeKalb's hangars are 100% full.

Moreover, DeKalb Taylor Municipal Airport has better facilities than most other northern Illinois airports. Its main runway is longer than all but three other airports in the region. Pilots naturally prefer to use airports with better facilities. Despite DeKalb's facility advantage, it has fewer based aircraft and fewer aircraft operations than airports with much shorter runways. Interestingly, Morris, which is significantly farther from Chicago than DeKalb and a much smaller community, still has 37% more based aircraft than DeKalb. These numbers support the theory that DeKalb's demand for hangars is strong.

**“BEFORE CONSIDERING BUILDING  
ADDITIONAL HANGARS, IT IS  
RECOMMENDED THAT THE AIRPORT  
ENSURE IT IS RECEIVING APPROPRIATE  
REVENUE FROM THE CURRENT  
HANGARS IT OWNS AND LEASES.”**

Before considering building additional hangars, it is recommended the Airport ensure it is receiving appropriate revenue from the current hangars it owns and leases. It is recommended the Airport conduct a hangar rent survey, of similar hangars of similar size and condition, of peer northern Illinois Airports, to determine where DeKalb's lease costs rank. It is likely that other airports are charging significantly more for the same hangar space than DeKalb. In the cases where DeKalb's hangar leases are undervalued, it is recommended the Airport increase lease rates to match the general market and to increase revenue from the current facilities.

While this might upset some current tenants, there is limited available hangar space at other airports in the region. If tenants do choose to relocate, the Airport can begin to offer space to the 20 aircraft owners that are

currently on the hangar waiting list. Those potential tenants are all willing to pay higher than the current lease rates.

It is additionally recommended the Airport consider a hangar census and inspection to ensure each hangar has a primary aviation use. In the case of hangars being used for storage of items other than aircraft and parts, the Airport should work to move those tenants to other storage facilities and begin to clear those on the hangar waiting list into hangars that become available.

#### **KEY STRATEGY RECOMMENDATION FIVE: HANGAR DEVELOPMENT**

As mentioned in the previous recommendation, there is a waiting list for hangar space at DeKalb Taylor Municipal Airport. The list was last vetted on September 7, 2017, so it is considered highly accurate. The list includes 20 people waiting for hangar space. All have requested smaller “T-hangars.” One of those on the list currently stores his aircraft in a privately-owned hangar on the field but would like to move. All of the others use hangars at other airports and would like to move to DeKalb.

The estimated cost of T-hangar development in Illinois is \$133 per square foot, with each hangar encompassing 1,200 square feet. It will cost an estimated \$160,000 per hangar to build new. The cost to build 20 hangars, to accommodate all of those on the waiting list, would be at least \$3.2 million. At current lease rates, it is not in the best interest of the Airport, itself, to build more hangars at that cost. It would simply take too much time for the Airport to recoup its investment.

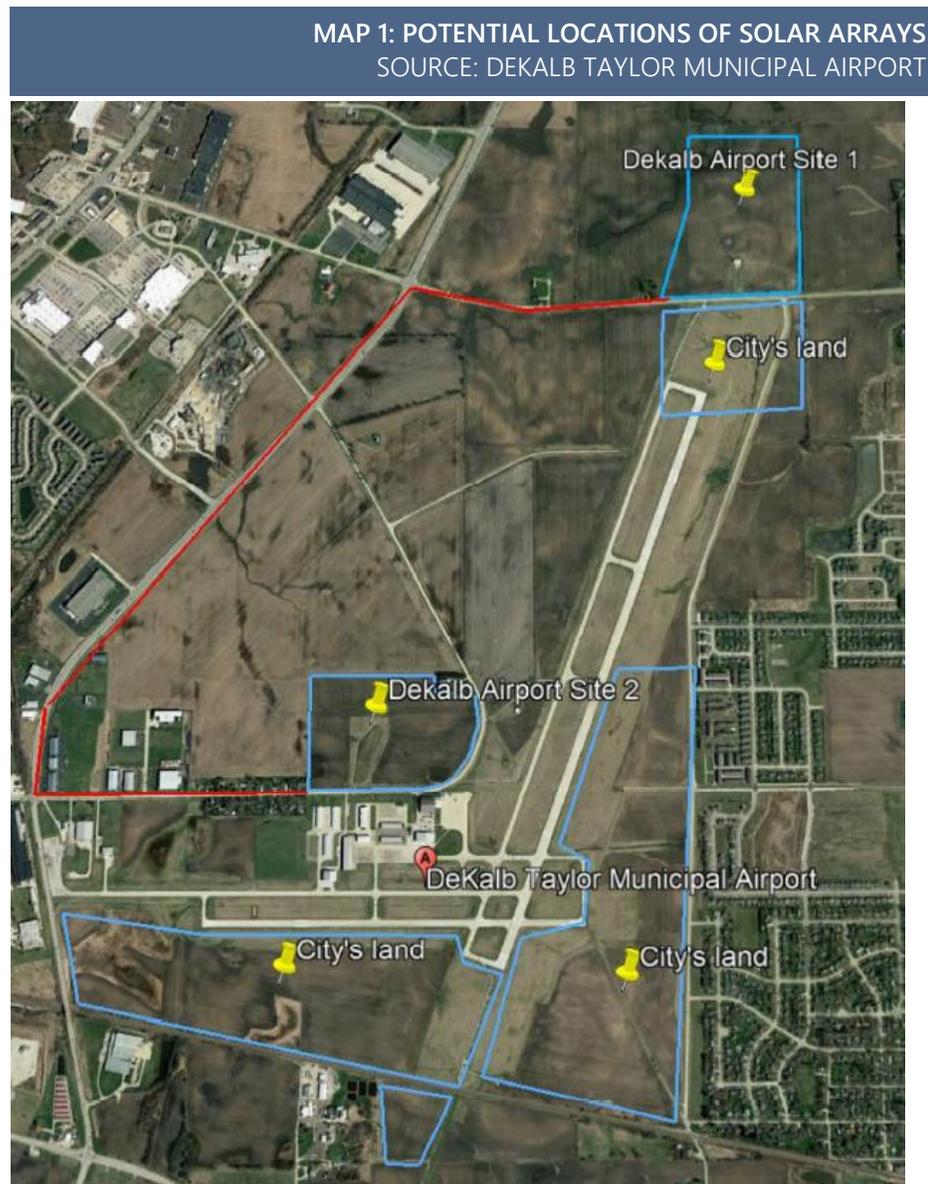
However, the Airport should be open to private hangar development, by private companies or groups of pilots, who would simply enter in to a long-term land lease for the space. If the appropriate private developers have an interest in building additional hangars, and the Airport can ensure those developers will not undercut its current hangar pricing, it could be a solution to the lack of adequate hangar space.

**KEY STRATEGY RECOMMENDATION SIX: SOLAR DEVELOPMENT**

Leaders in Illinois want to aggressively grow the State’s renewable energy portfolio. But with so much of the land in the State used for agricultural purposes, available land for solar power is limited. At the same time ComEd, DeKalb’s electric provider, has established a rebate program. This program is attracting other solar power developers to install solar grids on available land.

DeKalb Taylor Municipal Airport has potential land available for solar development. The Airport already owns two sites that could be suited to solar, seen in Map 1 as DeKalb Airport Sites 1 and 2. Additionally, the City of DeKalb owns two larger plots, seen in Map 1 as City’s Land, that could also be used for solar that could benefit the Airport.

Solar is particularly well-suited to airports because of available space and unobstructed terrains. And it does not need unobstructed sunshine to generate electricity. It can work in continental climates with frequency changes in the weather, like the climate in northern Illinois.



Based on research at other airports, a 100-acre solar farm at DeKalb Taylor Municipal Airport would generate about \$150,000 worth of energy per year once it is fully operational. Maintenance of the system would likely be the responsibility of the developer. The solar farm would, essentially, reduce the Airport's energy cost to zero and put money back into the system.

It is recommended the Airport work with potential developers to identify and develop plans for solar panel deployment. The Airport will also need to work with the FAA to ensure any solar arrays meet luminescence requirements and are compatible with the aviation uses of the Airport and its pilots. Other airports throughout the country have been able to accomplish this and generate significant revenue from their solar arrays, with limited up-front investment.

#### **KEY STRATEGY RECOMMENDATION SEVEN: INDUSTRIAL PARK AND BUSINESS DEVELOPMENT**

In research for this document, the authors determined there are a number of vacancies in industrial developments surrounding DeKalb. This precludes the need for an additional large industrial park in the region, a fact confirmed by local economic development leaders. It is not recommended the Airport or the City invest in a large-scale industrial development.

However, research, interviews, and Airport Advisory Board meetings confirmed there is a specific need for small industrial parks. Smaller developments typically offer between one and five acres for development rather than a large park which will use as many as 100 or more acres.

It is clear that the innovation economy is pushing west from Chicago proper, and that, as congestion in the immediate Chicago area grows, there will be demand for growing companies to have access to lower cost land in the Chicago collar. DeKalb's Airport is well positioned to offer low cost land, and potential shareable office/development space for multiple growing companies, with its air access and its proximity to the tollway system.

The theory behind this small-scale industrial business development is that a community that can offer a start-up site and a small building that will help a company get established and grow. It then helps the company relocate to a larger location in the city in the future. The Airport offers a significant portfolio of land and potentially under-utilized buildings that could be developed for new companies looking for a supportive

**“THE AIRPORT OFFERS A SIGNIFICANT PORTFOLIO OF LAND AND POTENTIALLY UNDER-UTILIZED BUILDINGS THAT COULD BE DEVELOPED FOR NEW COMPANIES...”**

community in which to launch. The Airport also has the benefit of its proximity to Northern Illinois University, and the new ideas such an institution generates.

The challenge lies in building the infrastructure to house a small-scale industrial facility. Companies may not need an actual building to be standing before they commit to a location. Instead, the Airport might need only to provide access to general infrastructure, such as utilities, roads, and a runway, while allowing the small, innovative company the option to build to suit. The Airport can use its affordable land lease options to subsidize and attract this kind of development.

This kind of development will not generate a large amount of revenue for the Airport, only nominal land lease revenue. However, it has the potential to generate a large amount of economic activity over time, as new companies get established in DeKalb and grow.

With current staffing, the Airport does not have extra time to work on land development and to recruit new users to a small-scale industrial plot. It is recommended the Airport work with local economic development agencies to showcase available land to potential users. It is also recommended Airport leadership consider contracting out property management to a private firm to reduce staff time and to have an interested party working on development within the already-approved land-use plan.

**KEY STRATEGY RECOMMENDATION EIGHT: GREENHOUSE DEVELOPMENT**

While the FAA discourages continued development of crops near airports because of wildlife hazards to aircraft, several airports in the Midwest have been able to use large portfolios of land to put crops under glass, with greenhouse development. In DeKalb, a large greenhouse operation would also potentially generate high value produce that could be a catalyst for the development of air cargo.

There are a number of companies growing produce in greenhouses in northern Illinois already. MightyVine already operates in the region growing high value produce, such as tomatoes. N.G. Heimos Greenhouses, Inc. located in Millstadt, Illinois, and Richardson Brothers Greenhouses are also large northern Illinois agricultural companies that could be looking for sites for expansion.

The cost for setting up and maintaining a greenhouse farm operation varies greatly with the type of product grown. For example, the MightyVine facility is estimated to have cost roughly \$20 million dollars at the outset. There are ongoing maintenance costs to consider as well. Using the estimate of \$20 million for a 15-acre greenhouse site for initial costs, the fee comes to \$1.3 million per acre. While the Airport would not be responsible for the cost of the development and building of the greenhouse, it should consider developing an incentive program to help a company offset the cost of development. Given Dekalb Taylor Municipal Airport's 300 acres of developable land, access to I-88, proximity to a major population center (Chicago), and available labor pool, greenhouse farming has an opportunity to succeed.

It is recommended the Airport, or its community economic development partners, meet with each of the identified agricultural companies to better understand their appetite for expansion. Based on these conversations, it is recommended the Airport develop an incentive package tailored to this development. While the Airport does not have adequate staff to pursue recruitment of greenhouse business on its own, it should

work with community partners to share in the recruitment burden. It could also consider hiring an outside property management firm on this project.

#### **KEY STRATEGY RECOMMENDATION NINE: PURCHASE OF ADJACENT LAND**

It is always recommended that an Airport review adjacent and nearby land as it comes available for purchase. DeKalb's Airport benefits from a large buffer of farmland surrounding it today, but as DeKalb and surrounding cities grow, there will be pressure from developers to build on Airport-adjacent land. DeKalb's Airport must protect itself from development that does not mesh with the aviation uses of the Airport.

In DeKalb adjacent land could also be used for many different types of development and could provide new revenue sources for the Airport and City. But airports are limited in how they are allowed to purchase land, and in the funding, they are allowed to use to make the purchase. It is important to review Federal Aviation Administration (FAA) rules on land acquisition.

Airports that receive Federal financial assistance, such as Airport Improvement Program (AIP) grants, must follow certain rules when acquiring this property and help private property owners relocate. The Uniform Act is the Federal law that provides minimum real property acquisition policies and requires the uniform and equitable treatment of persons displaced because of a Federally assisted project. An AIP-assisted airport project or program cannot proceed or receive FAA approval until the airport sponsor provides assurance of conformance to the Uniform Act. Also, for development projects, the sponsor must provide assurance, satisfactory to the Secretary of the Department of Transportation, that good title is held to the landing area of the airport or that the airport will acquire the site. The Airport must also follow a number of regulations.

Despite FAA regulatory challenges, it is recommended DeKalb Taylor Municipal Airport continually review available land adjacent to the Airport that is listed for sale. In the case of compatible parcels, it is recommended the Airport work with the FAA to develop funding for the purchase. It is important FAA guidelines are followed,

but the Airport must be aware that the delays caused by those guidelines could result in private purchasers being able to buy available land before the Airport gets approval and develop that land with goals not consistent with aviation use.

#### **FUTURE PROJECT: BRANDING AND MARKETING PLAN**

It is clear through research and interviews on-site, in DeKalb, that the Airport needs to do much more in terms of marketing and outreach to ensure the community understands the value the Airport brings to the City and the surrounding region. It is also clear there is no general knowledge of the airport's current brand: "DeKalb Taylor Municipal Airport." In meetings and interviews, many have complained they do not understand why the Airport is considered "municipal" when it serves a much larger region than just the City of DeKalb.

In the research and discovery process for this report, Volaire consultants, working with the City, made the decision to separate out the marketing plan for the strategic options, and for the Airport as a whole, from this strategic planning document. The authors believe there is a need for much more robust research into the Airport's brand and current name, and the Airport's connection to the region, before making marketing recommendations.

It is recommended the City and Airport conduct an extensive set of survey work to better understand how the community views the Airport's current brand, how the Airport could best be branded so that those in the region will understand its value, and how the Airport can better connect with the people it is designed to serve. Once this survey and interview work is completed, consultants will develop a full strategic marketing plan that will include:

- > A recommendation on the Airport's brand and name;
- > A set of recommendations on how to better connect the Airport to the community through both traditional marketing, social media, and direct outreach;
- > A set of recommendations on how to market the strategic initiatives contained in this document.

This work should begin as soon as practical so as not to delay the marketing of the strategic initiatives that are recommended in this report. However, even while the marketing research is being conducted, the Airport can begin working with its community economic development partners on the research portions recommended in this strategic plan.

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**AGENDA**  
**AIRPORT ADVISORY BOARD**  
**2200 PLEASANT STREET**  
**(First Floor Conference Room)**  
**DEKALB, ILLINOIS 60115**  
**Monday, May 22, 2017**  
**7:00 p.m.**

- A. Roll Call
- B. Approval of Agenda – Additions / Deletions
- C. Public Participation
- D. Approval of Minutes – April 24, 2017
- E. Old Business
  - 1. None
- F. New Business
  - 1. Approval of the Recommendation to Approve the Airport Strategic Plan for DeKalb Taylor Municipal Airport.
- G. Airport Managers Report
  - 1. Airport Operations
- H. Adjournment

