

The Economic Importance of Air Transportation in Wisconsin

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Summary

Excellence in air service and a first class infrastructure to support it are critical to the economic future of Wisconsin. Commercial and general aviation that effectively transports people and cargo are vital in today's technological age. The retention, expansion and attraction of job creators are greatly assisted with dependable and cost-effective air service.

Wisconsin has opportunities to enhance its position in aviation and thus boost its economy but has challenges to overcome. Some of these opportunities and challenges will be explored in the following pages. Particular emphasis will be placed on commercial aviation. This does not imply that general aviation is less important. The Statewide impact of commercial aviation has such a significant and measurable impact on our economy that it needs to be nurtured immediately in the fast changing age of technology.

The executive summary is at the end of the document and summarizes the challenges and opportunities. It contains recommendations.

Corporate Air Travel

The Federal Aviation Administration commissioned the Wisconsin Department of Transportation, Bureau of Aeronautics, to research the economic importance of aviation as an industry in Wisconsin. The study author, Robert Russell produced The Economic Impact of the Aviation Industry in Wisconsin (I) that was distributed June 17, 1998 by Charles H. Thompson then Secretary of Transportation, Wisconsin Department of Transportation. The report shows that aviation contributes to the overall economic vitality of the state by generating over \$2 billion of economic activity annually, and that airports, aviation, and related industries also provide for 38,000 jobs across Wisconsin. Of this, Commercial Service Airports generated over \$1.2 Billion dollars of economic activity and supported over 21,000 jobs. These numbers were based on 1995 figures, so the current impacts are significantly higher as the economy has boomed.

The study discusses the reliance of business on aviation with the point that the convenient use of corporate aircraft at a public airport is often a factor in selecting a business site. Air cargo is growing rapidly and in the technological age we are in, the rapid movement of high value products is increasingly important. In 1995 there were 1,128 airplanes registered to corporations doing business here. The report notes that between 1990 and 1996 over 72% of new or expanded manufacturing businesses in the state were located within 10 miles of a public airport capable of handling corporate jets. These manufacturers provided more than 28,155 jobs for Wisconsin residents. Military aviation activities also are a factor in the Wisconsin economy. **The commercial airports and air service at them will be the focus of this paper. Their impacts are huge as they form the foundation of travel for the general public and business community.**

Commercial Airline Hubs

Airlines use a hub and spoke system to deliver their services. The hub city draws in feeder services and provides services to other hubs or cities. The State of Wisconsin has two large hubs near it. ORD (O'Hare) in Chicago to the south and MSP (Minneapolis) to the west. These airports do have an influence on Wisconsin. MKE (Milwaukee County's Mitchell International Airport) is in Milwaukee and provides a hub for the region and to some degree the entire State. Its roll could be greatly enhanced, if it grows and becomes a greater focal point for the State. Its economic impact on the State's economy is very significant and could be even greater.

Nationally, hubs are found at geographic locations that lend themselves to collecting and distributing passengers. These locations generally have a significant population base. The economic impacts of these hubs have been studied and are very substantial. One such study is: The Benefits of Being a Hub Airport City, Convenient Travel and High-Tech Job Growth,(2) an extended analysis prepared by Kenneth Button, Professor of Public Policy at George Mason University in Fairfax, Virginia, and Roger Stough with the assistance of Somik Lall and Mark Trice in November, 1998. The following is taken from its executive summary:

Airline deregulation of the U.S. domestic market since 1978 has brought significant benefits to air travelers. The scheduled airlines have been given the freedom to improve their efficiency through being able to adopt efficient network strategies and more effective operating practices. Competition between airlines and airline networks has ensured that these benefits have largely been passed on to consumers. In particular, the advent of hub-and-spoke operations, where by airlines consolidate traffic at a number of large hub airports, has allowed air travelers more choice of routing and timing for their trips. Yield management provides air travelers with a wider combination of service fare options. Frequent flyer programs provide airlines with more stable demand for their services and bonuses for passengers

The body of this study examines empirically the advantages enjoyed by those passengers having access to a major hub airport. These often include more direct services, more frequent services and a wider range of interconnecting destinations. It seeks to examine the benefits that local urban areas enjoy as the result of a major airline selecting the region as the fulcrum point for its hub-and-spoke services.

There have been some concerns expressed about the possibility that excessively high fares are being imposed on those living near hub airports and are, thus, seen as captive to it. Business fares have been a particular focus for concern. This study, while not directly concerned with the issue of fare levels, does suggest that there are major problems in comparing fares at hub and non-hub airports (for example, in terms of allowing for differing flight lengths and service attributes). The comparisons to date have seldom attempted to address all of the statistical problems involved. This is one of the main reasons why they have been unable to provide definitive assessments of any genuine fare differentials that may exist.

A key factor is that of the quality of service provided at hub airports. Hub airports offer a large number of direct services that give business travelers in particular flexibility in the timing of their trips and often the ability to avoid the costs of overnight stays. In technical terms, the “generalized costs” of traveling from a hub are lower than for non-hubs.

This assessment differs from most other studies in that it does not only seek opinions or attitudes, but rather looks at the way the economies in regions around hub airports behave and in particular, at the importance of being close to a hub airport for employment in these regions. A central concern of the study is with examining the positive interactions between airline hub locations and the growth of high-technology employment, this being a sector of growing importance in the national economy and one that is a high user of air transport services.

The attention here is at the national and local level and on the development benefits for an area of having a hub airport. While studying the benefits to individual travelers or those residing near an airport hub is possible, there are major aggregation problems. By looking carefully at the benefits enjoyed by the local economy, the assessment here encapsulates the aggregate gains for local individuals. The reason individuals travel is because they have employment, and the reason companies pay for business travel is because it benefits their commercial activities in the area.

Using fairly conventional statistical procedures, however, this study finds that in aggregate, and when allowance is made for a variety of differing economic factors, high technology employment in the U.S. gains particularly from proximity to a hub airport. In part this would seem to be because of the wider range of services and destinations that are offered to this travel intensive sector of industry.

*More detailed case study analysis compares the situation at three non-hub airports (Nashville, Indianapolis and Milwaukee) with the major hubs of Cincinnati and Pittsburgh. Basic statistical analysis confirms the more aggregate, national findings that the hub cities have benefited considerably from their status in a major airline network. **Given their characteristics, the hub cities enjoy a larger range of services and their high-technology sector has expanded faster.** The quantitative analysis provides support for the views of many employers in locations around the two hub airports.*

A particular concern of the study was to look at causation. Simply to show high-technology employment, for example, is highly correlated with proximity to a hub airport does not necessarily

demonstrate that the former is caused by the latter. Indeed, it could show exploitation of a market by a dominant carrier. Use of econometric analysis of causality, however, indicates that the direction of causation is from the development of a hub to economic development rather than the other way around. In other words, hub airports would seem to act as a magnet for high-technology development. The hub carriers are effectively both meeting the current travel needs of their areas and actively supporting the longer-term development of the local economies.

The Partnership for Greater Cincinnati commissioned a study. The Cincinnati/Northern Kentucky International Airport Economic Impact Analysis, prepared by the Economics Research Group at the University of Cincinnati November 24, 1999. (3) It states in its introduction:

The Cincinnati/Northern Kentucky International Airport (the Airport) is one of Greater Cincinnati's most important economic development assets. A number of companies in the greater Cincinnati region credit access to direct international and domestic flights as a determining factor in their decision to locate in the region. This confirms what site selection specialists consistently report – access to international transportation is one of the most important site characteristics global companies are looking for in new locations.

While it is essential to recognize the Airport as a magnet for regional economic growth, the Airport itself creates economic growth in the region through its own employment and economic activity. This study measures the importance of the Cincinnati/Northern Kentucky International Airport to the regional economy by quantifying its economic impact on business sales, household earnings, and employment in the Greater Cincinnati region.

In 1998, The Cincinnati/Northern Kentucky International Airport employed 15,241 people, accounting for two percent of employment in our 13-county area. The Airport directly contributed \$621 million in wages and salaries to its workers, accounting for two percent of earnings in the region. The Airport purchases \$489 million from local businesses in 1998 to keep the Airport and its tenants up and running. These purchases vary from uniforms to utilities to an assortment of Greater Cincinnati memorabilia.

The total economic impact of the Cincinnati/Northern Kentucky International Airport takes these direct effects of the Airport into account, along with the indirect economic activity that occurs due to the Airport. The total economic impact of the Airport in 1998 was over 69,000 jobs and \$3.9 billion in economic activity. By 2011 the employment impact will increase by 66 percent to over 114, 500 jobs, and the total economic impact will increase by 68 percent to \$6.5 billion.

This report outlines in detail the economic impact of the Cincinnati/Northern Kentucky International Airport. In the Introduction we outline the data sources and methodology used in our analysis. Part II focuses on the economic impact of Airport operations by reporting the direct impact of Airport operations and the economic impact of operations on business sales, income, and employment for the years 1998 to 2011. Part III discusses the economic impact that results from Airport construction, and Part IV focuses on the economic impact resulting from visitors to the Greater Cincinnati region that arrive via the Airport. Part V summarizes our findings and reports the benefits of the Airport to specific industries in the region.

We have three appendices in Part VI. Appendix 1 describes our economic impact methodology in more detail. Appendix 2 is a copy of the survey instrument that was sent to Airport tenants. Appendix 3 covers the technical notes of this analysis including issues such as data estimation techniques.

Milwaukee County commissioned Martin and Associates to prepare an economic impact report titled The Local and Regional Economic Impacts of General Mitchell International and Lawrence J. Timmerman Airports in October, 1997 (4) Martin and Associates has conducted economic impact studies for the following airports: Hartsfield Atlanta International Airport, San Francisco International Airport, Minneapolis/St Paul International Airport, Washington Dulles and National Airports and others. The Milwaukee analysis indicated that in 1996, 6,599 direct and induced jobs were generated for residents of the Milwaukee area and 3,265 indirect jobs were generated in the local economy due to \$84 million of local purchases by firms directly dependent on the airport. State and Local governments received \$34.4 million in tax revenues from airport activity.

The MMAC in June 1999 prepared a brief study on the economic benefits Midwest Express Airlines had on the metro area. This study, The Economic Benefits of Midwest Express Airlines to the Metro Milwaukee Business Community, (5) included an analysis of Hub Airport City Benefits and that Midwest Express indeed had a significant impact on the economy

A study was conducted by Martin Associates in 1999 on the economic impact of Midwest Express Airlines. This study estimated the employment, earnings, revenue and state and local tax impacts that passenger and air cargo activity of Midwest Express had on Wisconsin's economy in 1998. The total impact of activities related to Midwest Express' operations in Wisconsin is large and significant. Jobs supported by all such activity, both airport and visitor industry related, totaled 10,617. Personal earnings generated reached \$265.5 million and business revenue numbered \$459.4 million, while supported state and local tax revenue reached \$52.6 million.

A 1996 study by the University of Wisconsin-Madison's Bureau of Business Research identified factors important to a state's quality of business life through a survey of 251 Wisconsin manufacturing executives. Proximity to a company's markets was identified as one of the seven most important such factors.

While geographic proximity to markets has traditionally defined an area's nearness to markets, in the age of fax machines, e-mail, and air travel, time spent reaching a market is perhaps a more practical definition of proximity. In this sense, having a hub airline operation in a metro area can be critical in giving area businesses with a national or international presence timely and efficient access to their markets and operations.

Prior to Midwest's entry into Mitchell International Airport, Milwaukee's relative proximity to major hub airports in Chicago, Minneapolis-St. Paul, and Detroit inhibited Mitchell's development of an extensive and reliable network of nonstop destinations. Midwest Express's hubbing activities have significantly improved the situation. Among the 50 largest metro areas in the country, 30 are served nonstop by Mitchell International's 10 major and six regional carriers. These thirty markets represent more than 88.7 million people or 33% of the nation's resident population. Midwest Express serves 24 of these 30 markets, and 12 of these cities are served exclusively by Midwest Express. The 24 major metro areas covered by Midwest Express have a combined population of 66.4 million, or 25% of the nation.

The growth of corporate headquarters facilities may be particularly sensitive to air service availability. Recent decisions by two Fortune 1000 companies to locate headquarters in Milwaukee suggest that nonstop service from Mitchell, of which Midwest Express plays the largest part, is at a level sufficient for such headquarter operations. Loss of such service or the failure to develop new nonstop routes could diminish Milwaukee's standing as a national headquarters location.

The importance of headquarters operations to a community goes beyond prestige. Having a headquarters operation means that capital investment and employment decisions toward metro area facilities are made locally. The familiarity of headquarters executives with the local area and their business and social connections to the community can be critically important in the maintenance and expansion of local operations. In addition, headquarter facilities are significant consumers of business services, one of the fastest growing sectors of the local economy. Furthermore, fine arts, social service and non-profit organizations benefit from the community support of a headquarters operation in their "home town" in terms of financial and volunteer support.

In addition to the 13 Fortune 1000 companies headquartered in metro Milwaukee, more than 50 Fortune 1000 companies have major operations in the Milwaukee area. These companies (and other branch operations not on the Fortune list) by their very nature need ready access not only to their markets but also to their respective headquarters facilities.

The Wisconsin Policy Research Institute Inc. prepared a study titled The Roaring Nineties, Wisconsin's Regional Employment Growth, August, 2000, Volume 13, No.5. (6) The study used the Center for Urban Initiatives and Research UWM ES202 Longitudinal Database 1991-1999. On table 3 on page 9 it documents that Air Transportation was one of the Industries with the largest gain in employment in the 1991-1999 timeframe, a gain of 6,022 jobs in SIC 45(Air Transportation). On page 16 it states that "Milwaukee's growth in service industries dwarfs that in any other metro area. What is unique is Air Courier Services, Air Courier growth is attributable to the rapid expansion of the need for the rapid reception of an increasing number of items, be they manufacturing parts or retail."

This paper is limited in scope and additional discussion is very important about all commercial airports in the State. As a starting point in the discussion of improving the economic future of the State, this paper will focus on the primary commercial air hub in Wisconsin.

Wisconsin has a hub airport that greatly impacts the Milwaukee region as well as the entire State. The State of Wisconsin should encourage the growth and serviceability of this hub as it represents a major asset of the State.

What are the strengths and weaknesses of MKE?

The strengths of MKE are:

- 1) MKE has a master plan that qualifies it for federal funds to build a third parallel runway, this would increase the capacity of the airport and provide significant additional service options. The airlines must approve of this addition, as their money would be involved, as would federal funds. The new aviation bill (Air 21) that passed Congress should make the access of federal funds easier for the needed improvements of this and other airport infrastructures. Milwaukee County is the "owner" of MKE and also would have to approve of the expansion plans. Milwaukee County has approved the MKE master plan but parochial opposition to expansion could still occur, as is the rule for any infrastructure additions including roads, pipelines, transmission lines and airports.
- 2) MKE has a hubbing carrier, Midwest Express. MWX and Skyway (Midwest Express connection) serves about 50 cities from Milwaukee and is fed from other State commercial airports. MWX is a growing company that has its corporate headquarters in Oak Creek (Milwaukee). It is a first class airline that wins national awards for fine service including its excellent food services.
- 3) MKE is expanding its parking that will make it one of the nation's largest airport parking structures, with over 3,000 new spaces being added. There will be over 5 new gates added. Improvements in signage and interior space are ongoing.
- 4) MKE is well run. There are at times problems with availability of taxis, parking congestion at peak times, and a desire to have faster baggage delivery, but its overall delivery of service is good. People in other cities need to arrive with more spare time in case of logistical problems. They park further away at higher costs, and travel more significant distances to gates and baggage claim than patrons of MKE.
- 5) MKE has competitive airline services from a good mix of carriers and is not captive to one carrier. The leading carrier has about 30% of the market with close to 20 carriers serving the airport.

The weaknesses of the MKE hub are:

- 1) MKE is in the shadow of (Chicago O'Hare) ORD and is not often in the conversation at a national or regional level. It has the federally approved plan to add a runway and should be considered when 3rd airport discussions occur about ORD. Illinois interests are politically mixed, but there is little recognition that federal solutions to overcrowding at ORD could be lessened by having a more vibrant hub at MKE. This would benefit the northern part of the Chicago metro and Wisconsin by providing more service options to the users of MKE.
- 2) MKE's top commercial carrier MWX is not supported to the degree it should be by State policies. The disincentive of the ad valorem tax is influencing MWX to expand elsewhere. MWX pays over \$85M in taxes and fees to various political entities so it hardly can be accused of failing to pay taxes. The airline needs to avoid significant State tax increases as it grows so it can remain competitive.
- 3) MKE has been slow at times to embrace expansion. The current governance has been local in its viewpoint, even though it has a statewide impact and significant regional usage. This governance is currently led by a positive, proactive County Executive and Chairman of the County Board and has been a positive force in recent years. It is important that the most recent approach to operating the airport continues into the future.
- 4) MKE has fewer passengers from other State cities than its size may warrant due to the proximity of ORD and MSP. This is a mixed blessing, as most people want the best service and do not care as much about where they change planes. But MKE is certainly less crowded and likely to experience non-weather-related delays, which makes MKE desirable, if service levels are adequate.

Executive summary and recommendations

Aviation is vital to the economic growth of the State of Wisconsin. Airports are vital to aviation. Commercial air service operates in a hub and spoke system in this country. The State of Wisconsin has one of its most important economic assets in Milwaukee County's Mitchell International Airport (MKE). The state and local governments should do whatever is logical and cost effective to promote the growth of MKE. Weaknesses that surround MKE represent opportunities that if corrected or addressed in a positive way will certainly result in economic growth for the state and local economies.

1. A short-term measure would be to **encourage Midwest Express to further expand in the state and strengthen its headquarters and major hub at MKE**. Tax changes are needed that would not penalize the airline for modernizing and adding to its fleet. The legislature has a great opportunity to address this in the upcoming session. The governor could include this action in his budget. The bottom line is to encourage MWX (or any airline) to make Wisconsin its home and primary hub. Tax increases occur under the current system when its property value (value of its fleet) increases. This ad valorem tax is a disincentive to expand and modernize its fleet that flies into and out of the State.
2. A long-term measure is to **get MKE in conversations at a national level when expansion of service needs in Chicago occur**. The State's Congressional delegation should insure that the best interests of this state and taxpayers in general are best served by insuring MKE receive consideration in any federal solutions to the capacity issues in and around ORD. The Chicago third airport debate (Peotone is the likely location of a new Chicago area airport) is torn by politics. Expanding ORD is opposed by its neighborhood. The airlines generally do not support a third airport, as it negatively affects the feed that is critical to ORD's success. Certain politicians see economic development opportunities by creating a new airport. Whatever occurs, there needs to be a better recognition that Milwaukee has a significant airport that could be utilized at a much lower cost through expansion than building a new airport whose need is questioned on numerous fronts. If an airport were to be built, billions of federal dollars would be needed. MKE is in a position to serve northern Illinois at a high level of service that would benefit all MKE users.
3. A possible measure in the future would be **a change in governance at MKE**. The Milwaukee County operation of the airport has been very positive during the last decade. There is no recommendation to change that. But there should be a continued awareness that positive governance is critical to the future of MKE. The airport affects a much greater area of the state than Milwaukee County alone. Chicago has begun the process of having Midway Airport managed by a private contractor. Many airports have regional authorities, and some have private operators contracted by governmental bodies. This is an area that needs to be watched, so that MKE can always be run in the most effective way possible for the best interests of the State.
4. This paper has not discussed in any detail the important matter of building a stronger general aviation system. It also has not discussed the importance of other Wisconsin commercial airports. These are subjects that should be looked at seriously as they affect the ability of many communities to compete in the 21st century. This paper could be viewed as a starting point in the conversation to improved aviation in Wisconsin for the benefit of its citizens.

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