



Minnesota
A Collaborative Vision
for Transportation



State Aviation System Plan



LAST UPDATE JULY 2013

Acknowledgements

The preparation of this document was financed in part by a grant from the Federal Aviation Administration (Project No: 3-27-0000-07-10), with the financial support of the MnDOT Office of Aeronautics. The contents do not necessarily reflect the official views or the policy of the FAA. Acceptance of this report does not in any way constitute a commitment to fund the development depicted herein.

Document prepared by MnDOT Office of Aeronautics and HNTB Corporation.

TABLE OF CONTENTS

Chapter 1: Introduction and System Goals **1**

Chapter 2: Inventory **29**

Chapter 3: Forecast **43**

Chapter 4: Airline Service **63**

Chapter 5: Airport Facility Requirements **75**

Chapter 6: Performance Report **97**

Chapter 7: Investment Plan and System Recommendations **161**

Chapter 8: A Future Vision of Aviation **195**

Appendices **215**

This page intentionally left blank.



Chapter 4

AIRLINE SERVICE

This page intentionally left blank.

AIRLINE SERVICE

Minnesota's aviation system allows residents and businesses to utilize a safe, fast, and efficient mode of transportation which enriches quality of life and furthers economic growth in all regions of the state. Our largest airports host scheduled airline flights with destinations ranging from small remote communities to the world's largest cities. Smaller airports in the state provide a lifeline connecting the communities and their businesses to the Twin Cities, the U.S. and the world.

Airlines are in business to make a profit. Each airline makes service decisions based on its own business model and profit margin. As a whole, the airline industry is a major economic force, both in terms of its own operations and its impacts on related industries such as aircraft parts and materials manufacturing and tourism. The U.S. airline industry has approximately 100 certificated airlines operating over 11 million flight departures per year and carrying over one-third of the world's total air traffic. The economic impacts of the airline industry include direct effects on airline employment, the aircraft manufacturing industry, airports, and support functions such as: maintenance, catering, fixed-based operator (FBO) service, fuel, and tourism. It also impacts every other industry relying on airline air transportation on a daily basis. Airlines contribute approximately eight percent of the U.S. Gross Domestic Product.

Two other studies of airline service in Minnesota were conducted during the preparation of this Plan. One study evaluated airport services from an airline perspective. The other developed individual community profiles for five of Minnesota's airline served airport cities and recommended strategies for retaining airline service at those locations. This chapter considers airline service for the system as a whole and describes scheduled airline passenger service in Minnesota. It includes; a description of current airline service in the state, an overview of current airline trends and risk factors associated with ever-changing airline business and operating models, a discussion of the potential for future elimination of the Essential Air Service (EAS) program, and a high level airport profile¹⁶ for the airports with airline service. The primary focus of this chapter is to identify any major changes likely to occur in airline service within the state, and highlight changes that might suggest a need for modification of the Plan's goals and funding priorities.

¹⁶ Flight schedules shown are from May, 2012



Present Service Pattern

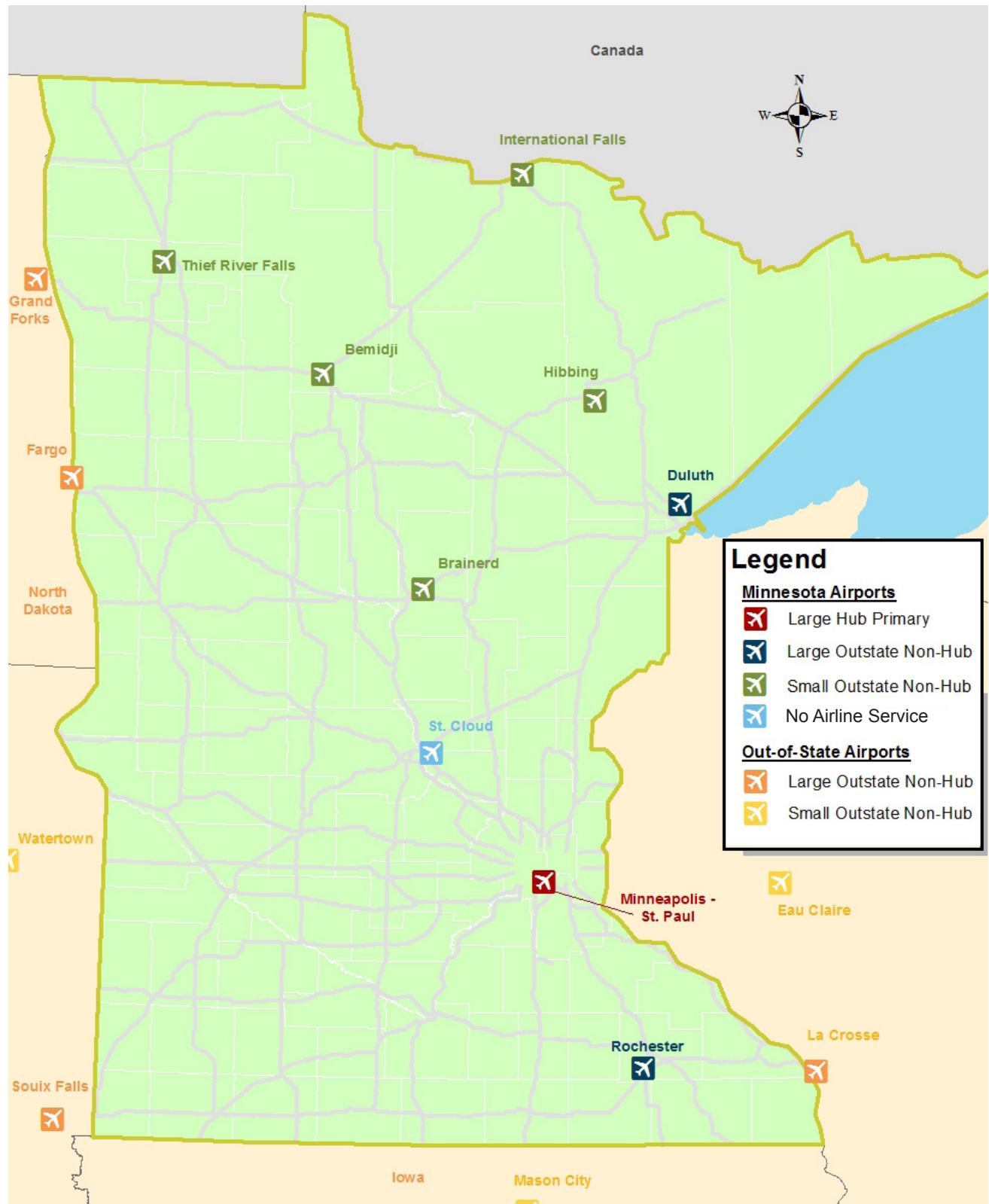
Eight airports in Minnesota presently have airline service, as illustrated in **Figure 4-1**. They include one large hub¹⁷ at Minneapolis-St. Paul International (MSP), six primary¹⁸ (nonhub) airports, including: Bemidji (BJI), Brainerd (BRD), Range Regional at Hibbing (HIB), Duluth (DLH), International Falls (INL), Rochester (RST), and one non-primary commercial service¹⁹ airport at Thief River Falls (TVF). Residents of the state also utilize airline service from locations in adjacent states; these airports are also shown in **Figure 4-1**. St. Cloud does not currently have airline service.

¹⁷ FAA defines a "Large Hub" airport as one that enplanes at least 1% of total U.S. passenger enplanements

¹⁸ FAA defines a "Primary" airport as one that enplanes at least 10,000 passengers, but less than .05% of the U.S. total

¹⁹ FAA defines a "Non-primary commercial Service" airport as one that enplanes at least 2,500, but fewer than 10,000 passengers annually

Figure 4-1: Airline Service Airport Categories



Source: National Plan of Integrated Airport Systems (NPIAS) & HNTB Analysis

Historic numbers of enplanements at each airport are shown in **Table 4-1** for the period 2005-2010. An enplanement occurs each time a paying passenger boards an aircraft. One passenger is counted as one enplanement at the beginning of a trip, and as one enplanement at subsequent transfer points along the way. The number of enplanements at MSP includes passengers that begin a trip there, and passengers who transfer from one plane to another at MSP as part of a multi-legged flight.

Table 4-1: Enplanements at Minnesota Airports

AIRPORT	2005	2006	2007	2008	2009	2010	AVERAGE
MSP	17,971,771	17,192,410	16,962,563	16,369,324	15,551,206	15,512,487	16,596,294
DLH	146,394	139,480	169,971	147,793	125,451	150,556	146,608
RST	142,267	149,600	160,452	151,250	128,543	120,063	142,029
BJI	29,699	26,057	22,302	22,007	21,934	21,498	23,916
BRD	20,718	19,206	18,600	16,665	15,472	16,404	17,844
INL	21,861	18,475	17,923	16,590	15,861	14,051	17,460
HIB	10,619	10,197	8,716	8,896	8,926	11,227	9,764
TVF	4,611	3,392	3,373	3,092	2,721	2,479	3,278
STC	24,556	25,094	25,772	20,161	14,294	0	NA
Total	18,372,496	17,583,911	17,389,672	16,755,778	15,884,408	15,848,765	16,972,505

Source: FAA ACAIS

Minneapolis-St. Paul International Airport (MSP): MSP was the 15th busiest passenger airport in the U.S. in 2010²⁰ and the 33rd busiest airport in the world.²¹ Airlines serve 135 nonstop markets from MSP, including 114 domestic and 21 international markets. MSP is the third largest hub for Delta Air Lines and accounts for more than 80 percent of the airport’s passenger traffic. MSP also serves as the home base for Sun Country Airlines. A joint civil-military airport, MSP is home to the Joint Air Reserve Station, supporting both Air Force Reserve Command and Air National Guard flight operations.

Duluth International Airport (DLH): Duluth has service to five nonstop destinations with three airlines; including Delta Air Lines and United Airlines service to MSP, Detroit, and Chicago, and service on Allegiant to Phoenix and Las Vegas. Services are provided primarily by 50-seat regional jets. The airport has cargo services operated by FedEx Feeder and Bemidji Airservice. The Minnesota Air National Guard’s 148th Fighter Wing is also based at DLH.

Rochester International Airport (RST) : Airline service at RST is provided by American Eagle and Delta Air Lines, with flights to MSP and to Chicago. Allegiant will begin flights to Phoenix/Mesa in November. The airport also has a large FedEx terminal, a small ABX Air station, and a General Aviation arrival building with Customs to accommodate international private flights.

²⁰ Airports Council International-North America (ACI-NA)

²¹ Airports Council International (ACI)

Bemidji Regional Airport (BJI), Brainerd Lakes Regional Airport (BRD), Falls International Airport (INL), Range Regional Airport (HIB), and Thief River Falls Regional Airport (TVF): These cities have airline service with either non-stop or single-stop service, flying only to MSP.

St. Cloud Regional Airport (STC): The St. Cloud Airport had airline service until December of 2009 when Delta Air Lines stopped flying 34 seat regional airplanes from St. Cloud to Minneapolis. In August of 2012, Allegiant announced that it would begin service three days a week from St. Cloud to Phoenix/Mesa in December.

Essential Air Service (EAS)

EAS grants support service to five airports in greater Minnesota: BJI, BRD, HIB, INL, and TVF.²² The Essential Air Service program was established by the U.S. Congress after the airline industry was deregulated in 1978. It provides incentive for airline companies to serve airports which would otherwise be bypassed under normal market conditions, ensuring connections from mostly rural communities to the national air transportation system. The EAS program is used by 153 airports nationwide and has a current annual budget of \$199 million dollars each year in FY 2013 through FY 2015.

Congressional debate leading to the FAA Modernization and Reform Act of 2012 proposed major changes to the scope and funding of the EAS program. House and Senate leaders adopted EAS reforms to reach a compromise that preserves the program yet eliminates airports that average fewer than 10 enplanements per day. The compromise also prevents new communities from entering the program and provides funds only to those communities already in the program in FY 2011. While some EAS reductions were avoided, industry experts anticipate changes leading to future reduction or elimination of the program in the continental U.S. in the next 5 to 20 years.



²² As of May 2012

Airline Business Decisions

In July 2011, Delta Air Lines announced that it would adjust flying in 24 small markets across the country, impacting five cities in Minnesota. The airline announced that its regional partners would request EAS funding for service to communities they had been serving without subsidy, including two in Minnesota: Bemidji and Brainerd. Service at International Falls, Hibbing, and Thief River Falls was already subsidized at the time. Delta also announced an intention to eliminate the 34 seat SAAB 340 turboprop aircraft from its fleet. Since that announcement, four of the five cities have retained Delta-branded regional jet service with seamless connections through MSP.

Smaller airports have been steadily losing seating capacity as well as numbers of total passengers. Recent years have been especially volatile due to a fall in demand in response to a recessionary economic period beginning in 2008 and a reduction in capacity in response to the rise in fuel prices. Given the lower passenger numbers and market conditions at the small outstate airports, Delta responded by reducing the number of seats available to the market. For the year-over-year periods ending in 2008, 2009 and 2010, Delta reduced seats at the small outstate airports (excluding STC in 2010) by 5.8 percent, 12.2 percent, and 2.6 percent respectively. In turn passengers used larger airports, thereby further reducing demand at the small outstate airports.

Airlines use load factors to measure seat capacity utilization in a market area and efficiency of aircraft use. Bemidji (BJI) recorded the highest load factor of the smaller Minnesota airports in 2010 with 59.3 percent. The higher the load factor, the greater the number of passengers to spread operating costs (crews, fuel, maintenance, etc.) across and more opportunity for a market to be profitable. An airline considers the minimum load factor required to break even, which influences scheduling decisions. A reduction in passenger numbers becomes a downward spiral. A decrease in load factors makes each ticket's operating costs and fares higher, and higher fares reduce demand for air service. Airlines respond to a reduction in demand by reducing aircraft size and frequencies. Fewer frequencies then make a market less convenient to customers, who seek out alternative airports or transportation modes. The EAS program subsidies are designed to offset airline operating costs and break this cycle by maintaining seat count and frequencies into smaller communities, reducing the load factor required to break even. Despite the subsidies, service to smaller outstate airports is at risk due to increasing airline cost pressures and a need to create positive shareholder returns. This trend is not limited to Minnesota or Delta Air Lines; smaller communities across the country are facing the same issues with maintaining airline service.

Factors Affecting Aviation Demand at Outstate Airports

DRIVING DISTANCE TO MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT

Driving distances between MSP and most outstate airports are long with surface travel times that can range from one and a half to six hours. However, with a lack of competition and high airfares from the outstate airports, travelers outside of the Twin Cities area are willing to drive a longer distance for lower fares and more travel schedule choices. When an airline passenger chooses to drive or vanpool to a larger airport rather than connect from their local airport, the smaller airport experiences a lost passenger enplanement, which is referred to as passenger leakage. The leakage rate at some smaller Minnesota airports exceeds 80 percent due to the ease of access to MSP through other modes. However, in some instances the outstate airports provide lower fares to certain markets and more convenient access.

REGIONAL AIRCRAFT

The majority of Minnesota's outstate airports are currently only served by regional aircraft, either Delta Air Lines' 50-seat regional jets (RJs) or Great Lakes Airlines' 19-seat or 33-seat turboprop airplanes. Since these aircraft form the backbone of the small airport service routes, it is important to understand the trends in the regional aircraft industry over the short and medium term. In 2011, Delta retired its 34-seat Saab 340B turboprop fleet and permanently halted the operations of 70 50-seat RJs, and has announced further, significant 50-seat RJ fleet reductions through 2015. The number of small RJs in service has dramatically dropped. Due to the fact that these aircraft are not economical for US legacy carriers or their partners, they are no longer being manufactured, and many equipment leases are set to expire, further retirements and groundings are inevitable.



System-wide Airline Service Maintenance Strategies

Although the changing status of the airline industry provides challenges, there are things that local communities, in some instances with the assistance of MnDOT, may be able to do to improve or maintain the current level of airline service in Minnesota. This section summarizes potential strategies, developed as part of a technical assessment of air service in Minnesota, which could be implemented on a system wide level. The complete assessment, which was developed to inform the SASP and serve as a “road map” to help anticipate air service opportunities and challenges is included as **Appendix D: Commercial Air Service Technical Report** of this plan.

SMALL OUTSTATE AIRPORTS

Essential Air Service: Even with Delta’s announcement of flight reductions in the state, the EAS program will continue for the near-term with no immediate impact to the state’s airports. Small Outstate airports should continue to pursue services through this program and call on their local and state legislators for continued support. New and established small regional air-carriers, like Great Lakes, Cape Air and Silver Airways have business models that allow them to cater to small regional airports and their communities. These airlines use smaller turboprop aircraft and leverage the EAS program to provide the link to MSP that Delta is unable to economically serve with its jet fleet.

Multimodalism: Multimodalism is the idea that transportation should be looked as one integrated system versus independent sectors. As fuel prices rise, communities, counties, and states should consider mitigating the impacts of oil prices and regaining control of their mobility. Creating a plan integrating different modes of transportation may be a key to the future movement of people and goods in an efficient and price-effective manner. This concept is discussed in further detail in **Chapter 8: A Future Vision of Aviation.**

Local Airline Service Action Committee (LASAC): All airports should continue supporting LASAC efforts to communicate, promote, and negotiate on behalf of their member communities. Additionally, LASAC may pursue joint marketing efforts, lobbying efforts with law makers, joint efforts on multi-modal initiatives, joint meetings to procure air carriers, and information sharing.

Outstate Airport Ground-Handling Coalition: Ground handling for luggage, ticketing, and aircraft fueling can add high costs to operating a route, especially for regional and smaller airlines. Outstate airports may consider a strategy to provide low-cost ground services at their airports to reduce operating costs for the airlines.

Small Community Air Service Development Program Grants: The U.S. DOT implemented a program in 2000 to help small communities improve air service. The grants are awarded at the discretion of the Secretary of Transportation. The objective of the program is to secure airline service enhancements that meet a community's air transportation needs with benefits that can be expected to continue after the grant expires.

Approach New Carriers: Approaching new carriers to request air service is a traditional practice in the airline industry. Most airlines have an open door policy when communicating with airports, and welcome community presentations and the exchange of information that will help the airline understand the community in order to tailor service that will grow the market.

LARGE OUTSTATE AIRPORTS

Airline Partnerships or Incentive Policies: Airports may develop a package to reduce airline rates and charges incurred during an initial promotional period consistent with federal rules. Incentives are clearly a double-edged sword, and can present risk if not properly designed and executed. However, they are also an accepted (and often required) element of airline negotiations, particularly as the competition for new airline services has intensified over the past several years. Well-designed policies should reward high-priority targets, avoid any appearance of discrimination and should offer both up-front support for a new service and continuing assistance.

Airport Partnerships a "Tag Team" Approach: "Tag Team" is a strategy where an airport engages with one or more other airports to jointly participate in a route proposal and marketing presentation to an airline. This technique allows the airports to present combined incentives and market data.

Leakage Analysis: A comprehensive leakage analysis can calculate how many passengers living in the catchment area of an airport are driving to another airport for their travel needs. The analysis can also identify those passengers and provide a target for direct marketing campaigns.

Sustainability of Existing Service: It is paramount to demonstrate existing positive airline performance to attract potential new entrants. Supporting incumbent airlines with cooperative marketing, sales leads, market data, and other strategies is critical to the sustainability of existing airline service.



Strategies for Community Relations

Proactive use of Conference Opportunities: Key airline-airport conferences enhance the effectiveness of on-site presentations, and maintain dialog and top-of-mind awareness among airline executives.

Executive-level Involvement and Proactive Support: Airport staff and community leaders should meet regularly with airline staff and leadership.

Board, Community, and Business Leadership Participation and Support: The support of community and business leaders can be a crucial success factor at meetings with airlines, especially for discussing new service. Community support is vital for new or expanded service, and airlines can benefit from any and all tangible evidence.

Proactive Partnerships for Cooperative Marketing and Advertising: As airline marketing resources dwindle under cost pressures, airports and communities should assume a growing responsibility. In-kind or cooperative marketing and advertising with local media outlets can range from general advertising to specially targeted ads for the launch of new service or other events.

Proactive Engagement of Local Press, Including Editorial Boards: Regular interviews or “Industry Updates” can build strong partnerships with media representatives, and foster mutual communication and awareness.

Survey/Monitoring of Customer Satisfaction and Competitive Results: Regular surveys of consumers can provide competitive feedback as well as input on many customer satisfaction issues.

Ongoing Web Site Updates and Enhancements: Web sites provide excellent opportunities to give and collect information and feedback from the user community.