2003

JUNE

Tier 2 Air Service Study

Minnesota in Partnership with Wisconsin
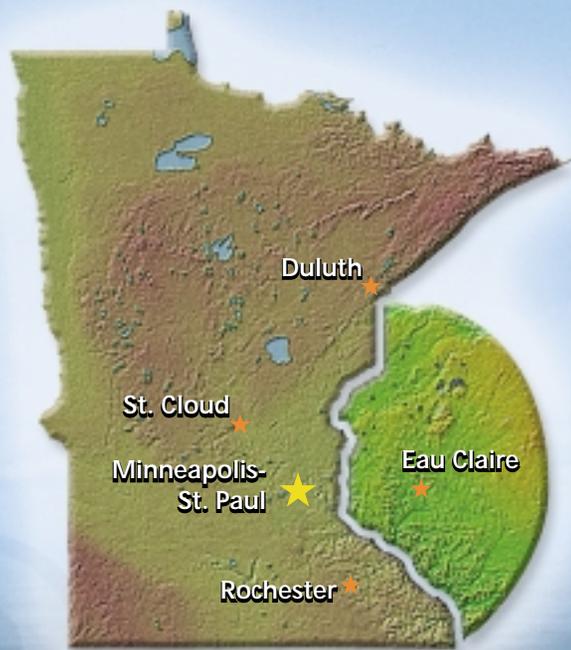
Duluth

St. Cloud

Minneapolis-
St. Paul

Eau Claire

Rochester

EXECUTIVE SUMMARY

Duluth

St. Cloud

Minneapolis-
St. Paul

Eau Claire

Rochester

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TIER 2 ADVISORY COMMITTEE

- Federal Aviation Authority

- Minnesota Department of Transportation, Office of Aeronautics

- Wisconsin Department of Transportation, Bureau of Aeronautics

- Metropolitan Council

- Metropolitan Airports Commission

- Chippewa Valley Regional Airport

- Duluth International Airport

- Rochester International Airport

- St. Cloud Regional Airport

In 2002, the Office of Aeronautics convened an Advisory Committee to explore ways to increase the commercial use of perimeter airports located just outside of the Minneapolis-St. Paul metropolitan area.

There were many important reasons to begin the dialogue. After a seven year planning effort, the Minnesota Legislature had directed the Metropolitan Airports Commission to set aside the concept of a replacement airport and implement a $3.1 billion airport improvement program at MSP. The new focus was on maximizing existing airport resources. While no capacity shortfalls exist at MSP near term, increased use of smaller jet aircraft opened the possibility for better utilization of perimeter airports and for relief from traffic congestion on the roads into the Metro area.

The Tier 2 Air Service Study was intended initially to identify long term capital improvement needs directly linked to an expanded role for perimeter airports. During the concept stage, September 11th intervened and challenged every aspect of air transportation in the country. Each member of the Tier 2 Advisory Committee is both a stakeholder and investor in aviation. In the midst of the crisis emerged the opportunity for real talk about the future of small airports.

The Tier 2 Air Service Study began as a detailed analysis. In the end, perhaps the greatest value of the effort was the regular meetings where Rochester, Duluth, Eau Claire, St. Cloud, MnDOT, WisDOT, and the MAC sat in the same room and discussed how to better cooperate, strengthen their respective business centers, and jointly market airport resources.

We look forward to continuing the discussions and fully expect that despite today's challenges imposed on air carriers and airports, a combined effort by Tier 2 airports, State agencies and the MAC will yield a better inter-regional system of airports.

Raymond J. Rought, Director
Office of Aeronautics
Minnesota Department of Transportation

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FINDINGS

Exciting New Roles for Tier 2 Airports

Tier 2 Airports can participate in the Minnesota System of Airports as:

- Gateways to mainline carrier networks
- Reliever airports for Minneapolis-St. Paul International Airport
- Business centers for aviation-related and commercial enterprises
- Regional triage centers
- Aircraft maintenance centers
- Cargo and cargo distribution facilities
- Recipients of MSP airport divestiture
- Multi-modal transportation hubs
- National guard headquarters and military training and deployment centers
- Incubator or test sites for new solutions for community air service.

Building Enplanements & Network Access

Individual airport proprietors will have much to do to attract additional air service or carriers to their airports. It is not enough these days to provide airlines with the opportunity to serve a potentially profitable market. Other incentives such as revenue guarantees and travel banks are becoming the norm rather than the exception for most new service. Hard times will require committed, community response. Even the mainline carriers are expecting communities to share the risk of new service.

Low cost, low frequency carriers will continue operating from MSP where the passenger density is high. A Southwest entry is unlikely near term unless there is a major change in hub operations at Denver or MSP.

Time of Opportunity

The convergence of one time events, a cyclical downturn and structural problems has forced the airline industry to question basic operating assumptions. Because airline survival requires adaptation, this is one of the most open periods in airline history. Small and medium airports should view this as a time of opportunity.

Airports as Economic Engines

Those airports that have fully developed business plans and diverse revenue generating capability are better positioned to handle severe downturns in demand for air service. A goal for Tier 2 airports is to revise and expand their business models (and business plans) to maintain relevance and revenues in the face of an uncertain airline industry.

Coordination & Cooperation Needed

For the next stage of air service development, Tier 2 airports can accommodate additional service with some modifications to parking, loading bridges, and terminal configurations. A more extensive build-out of Tier 2 airports will require proactive leadership of individual airport sponsors and the support and cooperation of state DOT's, the Metropolitan Airports Commission, and the Metropolitan Council. Efficient use of system capacity at MSP and perimeter airports quickly becomes an inter-regional planning challenge that could involve the resources of multiple airports, multiple states, and various local governing groups. Highway access will be an issue at every Tier 2 airport as their roles significantly expand.

Strong Arguments for Inter-Regional Planning

Each Tier 2 airport offers unique capabilities and there will be ample opportunity near term to pursue individual airport visions. Long term, however, if the goal becomes how to make efficient use of existing capacity and limited State and Federal dollars, an inter- regional plan for MSP and Tier 2 airports will be money well spent.

RECOMMENDATIONS

An emerging system of mutually supportive metropolitan airports will come about through (1) individual airport initiatives, (2) the use of the 'force multiplier' for joint marketing, (3) strong and continuing roles for MAC, MnDOT, and WisDOT, and (4) several Legislative initiatives.

INDIVIDUAL AIRPORT INITIATIVES

Air Service. The initial goal should be to build an enplanement base through increased network service. Based on travel patterns, Tier 2 airports should pursue increased access to network hubs in the following order: a full complement of Northwest service to Minneapolis, service to Chicago, then service to Denver or Salt Lake.

Facilities. Most Tier 2 airports can accommodate near term developments. St. Cloud, as the newest airport, has some catch-up to do to reserve land for future airport expansion and to make initial concept plans for a parallel runway.

Business Plans. As Tier 2 airports evolve into Economic Activity Centers, it is critical to have both a Master Plan and a detailed Business Plan to guide the development of each sector of the airport's activities. The Business Plan will cover the financial planning, revenue development, marketing, operations development, capital development, and competition management of the airport.

Property Management. Airports should have a formal property management program that consists of lease and concession policies, development and performance standards, policies for determining and re-determining rents-fees-charges, and a standardized lease program. The Property Management Plan should be completed in conjunction with the Airport Business Plan.

AIR SERVICE INCUBATOR

The Air Service Incubator is proposed to assist MnDOT, WisDOT, MAC and the four Tier 2 airports as a framework to pursue common air service goals. The Incubator makes it possible to pool and use the collective influence airports can have with the airlines and others. The Incubator will serve as the forum to spell out the inter-regional concept of Tier 2 airports and MSP. It could also be the place where innovative programs for revenue guarantees, Travel Banks, interline agreements (Midway Shuttle concept) are shared or developed for mutual benefit.

MnDOT AND WisDOT ROLE

MnDOT's Office of Aeronautics and WisDOT's Bureau of Aeronautics will continue to support the planning, development and marketing of Tier 2 airports in their respective states. New Tier 2 functions will require interagency coordination to solve ground access issues, emergency triage efforts, multi-modal transportation issues, etc. While demand for interagency efforts is apparent, institutional boundaries make execution challenging. As individual airports take on new roles and functions, interagency coordination is extremely important and an appropriate role for MnDOT and WisDOT.

LEGISLATIVE INITIATIVES

Two principles of the Tier 2 Initiative are (1) to encourage efficient use of existing airport capability and (2) to improve the quality and convenience of air service at perimeter airports. In the past, appropriations for the Minnesota Air Service Program have not allowed funds for revenue guarantees or subsidies. Many small communities are pursuing airline recruitment programs that include some form of risk sharing with the airlines. The Legislature should reconsider its position on direct subsidies. At the Federal level, the FAA should support an inter-regional concept of airports, allowing individual airport sponsors to participate in coordinated planning and investment decisions.

INDUSTRY DYNAMICS

The airline industry has always had its ups and downs, but since the end of 2000, the downs are particularly severe. A worldwide recession, war in the Middle East, the reality of terrorism and disease combined to amplify airline operating costs and diminish demand. The resulting financial crisis has forced airlines to scrutinize ever aspect of their business.

Revenue Pressures Exist On Many Fronts

- Low cost carriers have established a toehold in most markets, including Minneapolis-St. Paul.
- Airfares remain at historic lows.
- Business travelers are more price-sensitive and able to purchase competitive fares over the Internet.
- Increased costs for security have taken a larger bite out of airline revenues.

Airlines Respond Aggressively

- Every route is scrutinized for profitability. Carriers will abandon a station when alternate routes can yield higher returns.
- Airlines are retiring turboprop aircraft quickly because seat mile costs are high (fewer seats to sell; higher overhead per seat to cover).
- Regional jets are replacing larger aircraft on mainline routes.
- High density or high yield markets are maintained; thin, low density markets are in danger of extinction.

Communities And Airlines Forge New Relationships

- Communities rally to support existing service.
- Federal government participates in innovative programs to enhance small community air service.
- Revenue guarantees and travel banks established to reduce airline risk of financial loss.

LOCAL TRENDS

The Minneapolis-St. Paul International Airport (MSP) is the center of an air travel network that extends through Minnesota, western Wisconsin and across eastern North and South Dakota. In 2002, over 32 million passengers began a trip or connected at MSP. The dominance of Northwest Airlines and the concentration of traffic flows into the hub have made MSP the de facto airport of Minnesota, save service offered to Chicago out of Rochester.

Historically all of the smaller airports in Minnesota and on the western border of Wisconsin combined represent less than 3 percent of MSP traffic. High diversion rates to MSP, sometimes in excess of 80 percent, hide the real demographic changes taking place at the perimeter of the Metro area. According to the 2000 census, the largest growth in Minnesota occurred northwest of the Twin Cities, along I-94 toward St. Cloud. In fact, Sherburne County where St. Cloud Regional Airport is located is the second fastest growing county in the State. Olmsted County (Rochester) also experienced higher than average growth.

Positive growth trends in the Metro area and the current financial crisis in the airline industry suggest opposing futures for Minnesota's smaller airports.

Conditions favoring the loss of service to Greater Minnesota airports:

- A prolonged and difficult recovery for mainline network carriers (Northwest, American, United, Delta, Continental, US Airways).
- Continued retirement of turboprop aircraft and deployment of regional jets on mainline routes.
- A willingness of Minnesota and Wisconsin air passengers to drive to MSP.
- Absence of competition for incremental passengers at perimeter airports.

Conditions favoring a significant role for Greater Minnesota airports:

- Increased highway congestion.
- Time savings to drive, park, and clear security at the local airport.
- Community interest in sharing the financial risk of added service.
- A Tier 2 strategy to serve as competitive gateways to the national network of air transportation.

This is an important decision time for airlines and the Greater Minnesota system of airports. The future of local air service will turn on network decisions made by the airlines and the degree to which communities can partner with the airlines to sustain profitable air service.

TIER 2 DEMAND PROFILE

In 2002, Tier 2 airports enplaned 343,465 passengers. This is down 2.2 percent from a high in 1999 of 351,158. Minneapolis-St. Paul International Airport has experienced a greater decline and was down 6 percent from 1999 highs.

At Tier 2 airports a wide variance occurs between the number of airline passengers associated with local communities and the number of passengers that actually use the local airport. St. Cloud, the closest airport to MSP captures about 19% of local traffic. Eau Claire captures approximately 18%; Rochester, 43%; and Duluth, 51%. These capture rates are based on past ticket lift samples and telephone surveys of 1330 households conducted for this study.

If MSP did not exist, Tier 2 airports would serve a population base of 1.5 million people. Estimated air travel that is locally generated is approximately 877,000 enplanements. All of these passengers represent unconstrained demand. There are reasons to believe that 877,000 enplanements is a conservative number. The St. Cloud air service area continues to grow. Rochester is an important destination airport for Mayo Clinic patients.

The factors most often identified as important in determining airport choice are: (1) the price of the ticket; (2) schedule and frequency of flights; and (3) the drive time to a larger alternate airport. Capture rates at Tier 2 airports directly correspond to these factors. Duluth and Rochester have more air service and, as a consequence, higher capture rates than Eau Claire and St. Cloud.

It is not possible to change all of these factors. However, there is potential to recapture additional passengers with added service. Based on assumptions of improved service, Duluth and Rochester can recapture an additional 15% of their market; Eau Claire and St. Cloud with the introduction of a second carrier will achieve a higher recapture rate. Near-term potential for Tier 2 airports is close to 514,000 enplanements with enhancements to service.


TIER 2 ENPLANEMENTS

876,743

513.667

343,465

Unconstrained Demand

2002 Enplanements

Nearterm Potential
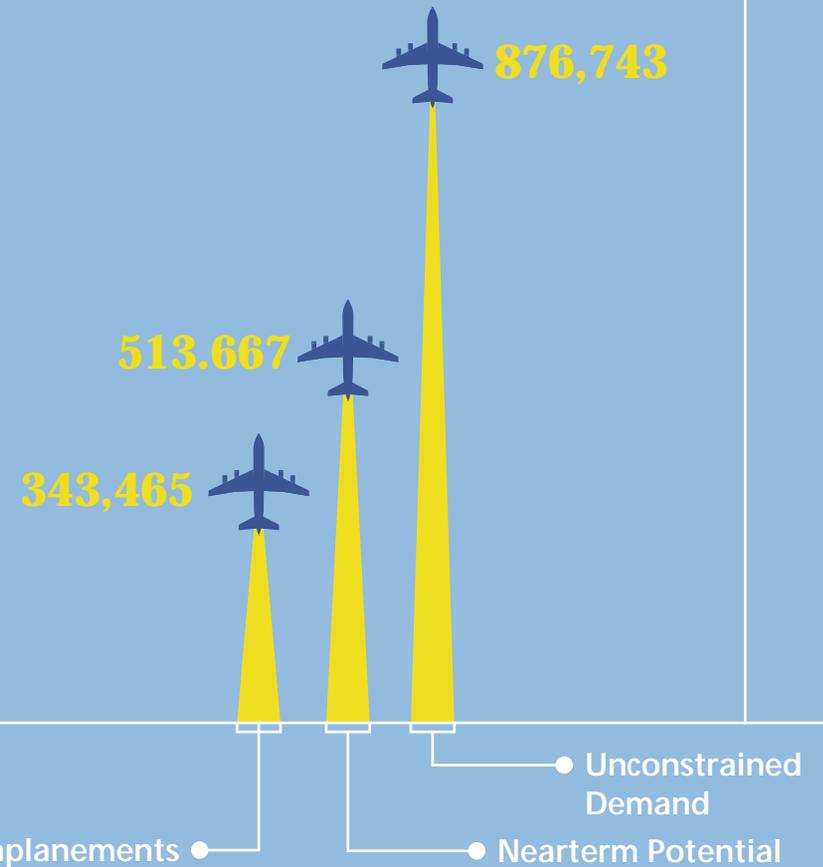
Local Capture
39%
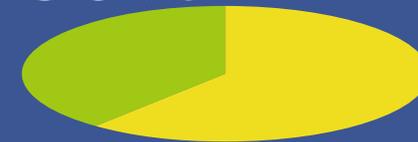
61%
Diversion to MSP

ENPLANEMENTS
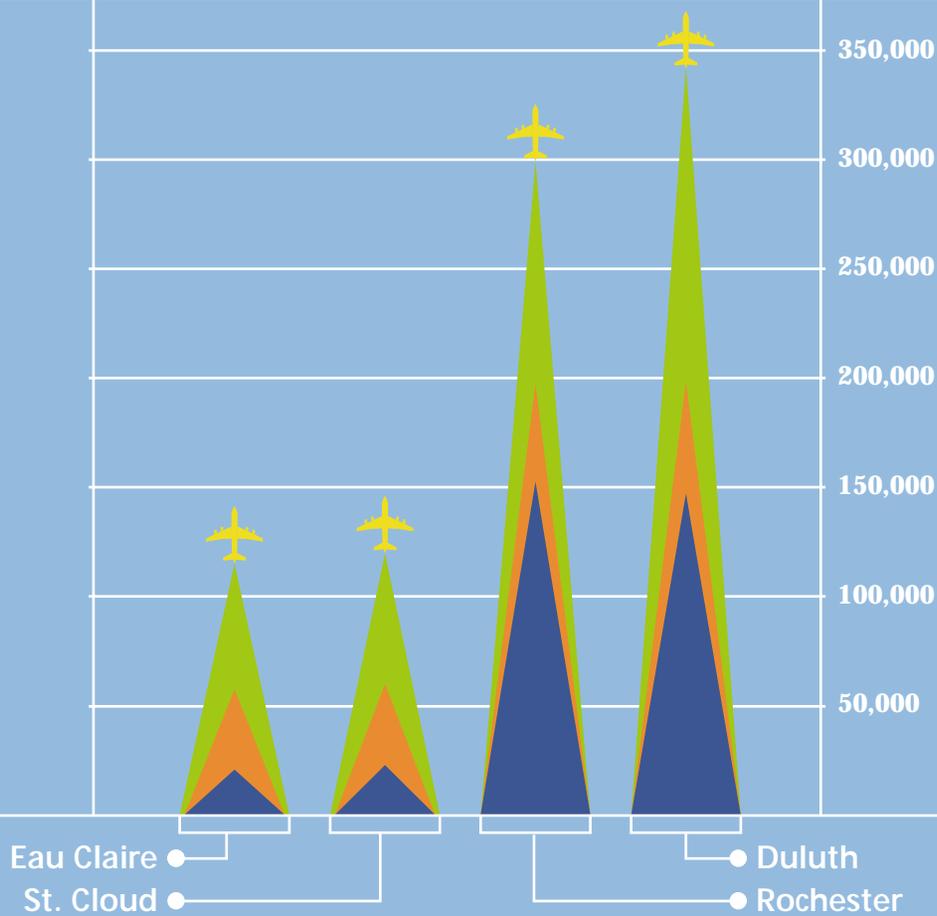
◄ **2002 Enplanements**   ◄ **Nearterm Potential**   ◄ **Unconstrained Demand**

AVERAGE ONE WAY FARE - ALL MARKETS	1999	2000	2001	2002
Tier 2 Airports	$203	$207	$195	$180
Minneapolis-St. Paul	$186	$181	$176	$174
Difference	**$17**	**$26**	**$19**	**$6**

	2002 Enplanements	Capture Rate	Unconstrained Demand	Service Area Population	Enplanements Per Population	Unconstrained Demand Per Population	Road Distance to MSP
Duluth	152,528	51%	299,075	351,000	43%	85%	157
Eau Claire	20,692	18%	114,953	304,000	7%	21%	90
Rochester	147,506	43%	343,037	449,000	33%	76%	94
St. Cloud	22,739	19%	119,679	383,000	6%	31%	72
Total	**343,465**	**42%**	**876,743**	**1,487,000**	**23%**	**55%**	**413**

Sources: USDOT O&D Survey and 298C Data. Includes air carriers and commuters.

TIER 2 SERVICE AREAS

TOP 15 DOMESTIC TOTAL O&D PASSENGERS, TIER 2 AIRPORTS

Market	YE 2002
1 O'Hare Intl, IL (ORD)	37,910
2 Sky Harbor Intl, AZ (PHX)	23,770
3 Denver Intl, CO (DEN)	18,590
4 Orlando Intl, FL (MCO)	17,620
5 McCarran Intl, NV (LAS)	15,830
6 Ronald Regan Natl, DC (DCA)	15,260
7 La Guardia, NY (LGA)	14,890
8 Dallas/Ft Wor Int, TX (DFW)	13,890
9 Los Angeles Intl, CA (LAX)	13,520
10 Seattle/Tacoma In, WA (SEA)	13,440
11 Wm B Hartsfield, GA (ATL)	13,420
12 San Francisco In, CA (SFO)	12,550
13 Logan Intl, MA (BOS)	12,470
14 Wayne County, MI (DTW)	11,210
15 Lindberg Field, CA (SAN)	9,850

Subtotal 244,220
Other Cities 353,430
Total 597,650

INDIVIDUAL AIRPORT PROFILES

The four Tier 2 airports each serve distinctive markets.

DULUTH

Duluth International Airport has a service area that includes Superior and extends into northern Wisconsin. Of all the Tier 2 airports, Duluth is the most self-contained. The 157 mile drive to MSP is a deterrent to would-be drivers if competitive service and fares are available at Duluth.

Duluth's service area population is estimated at 351,000, with a 2002 capture rate of 51%, the largest of all Greater Minnesota airports. Diversion of passengers to MSP is higher in 2003 because American Airlines ended its Chicago service in December, 2002 as part of a network reduction in capacity. A top priority of Duluth's is to restore Chicago service. Duluth has a full schedule of service to MSP. Northwest's maintenance base at the airport keeps a steady rotation of jet aircraft coming in and out.

Of Tier 2 airports, Duluth has the most airport infrastructure in place to serve as a commercial reliever to MSP for passenger, cargo or military operations.

ROCHESTER

Rochester International Airport is located 94 miles southeast of MSP on Highway 52 and serves a population base of approximately 449,000. The airport is owned by the City of Rochester and operated by the Rochester Airport Company, a wholly owned subsidiary of the Mayo Foundation. This unique structure has effectively developed the airport's air service and air cargo. Rochester flights to MSP meet all of Northwest connecting banks. American offers four daily flights to Chicago. FedEx, Airborne Express and DHL also operate at the airport. The Mayo Clinic and IBM, the region's two largest employers, are large users of air service.

Capture rate at Rochester is estimated at 43%. This airport because of the Mayo Clinic has the largest destination traffic base of the Tier 2 airports. Geographically, Rochester is well situated to capture air cargo traffic that is heading south to Chicago. However, improving access to the airport through roadway and interchange upgrades will enhance the appeal of Rochester International for cargo and passenger development. The airport has supported additional TWA service in the past and could effectively support a westbound service on a network carrier.

EAU CLAIRE

Chippewa Valley Regional Airport is an urban airport located four miles north of Eau Claire's central business district. The facility occupies nearly 1,000 acres of land and is surrounded by residential and light industrial activity. Several airfield improvements are underway that will result in a primary runway of 7,300 feet with 8,121 feet of pavement available in the event of an aircraft overrun. In addition, a new air traffic control tower will be on-line in 2005 and a passenger terminal study is underway. Airport management has effectively utilized the terminal as a revenue producing business center.

The airport supports a service area of approximately 304,000. Northwest turboprop service is available to MSP, 90 miles away. There is a large component of business travel that uses the local service, but the number of enplanements suggests that passenger activity is largely service driven rather than demand driven. A very low ratio of enplanements to population (7%) indicates high diversion rates and/or use of private aircraft. Menard's operates a substantial private air service out of the airport, transporting employees back and forth to its headquarters in Chippewa Valley.

Attraction of a second carrier to Chicago will improve access and create a competitive environment to discipline schedule stability and fares. However, given the financial difficulties of the mainline carriers, the community will need to demonstrate solidarity and financial support to offset the risk of entry.

ST. CLOUD

St. Cloud Regional Airport is the newest Tier 2 airport and the closest to MSP at 72 driving miles. Commercial air service began in 1994 and supports a population base of 383,000 people. Like Chippewa Valley Regional, use of St. Cloud Regional to MSP is largely schedule and frequency driven. The enplanement to population ratio is a very low 6%. Air service competes heavily with the automobile.

Despite its proximity to the Metro area, St. Cloud has the highest potential future as a Tier 2 airport. The airport is located in the second fastest growing corridor in the metropolitan area. As a new airport, St. Cloud Regional has some catching up to do. The City is taking effective action to acquire or reserve land for expansion. Recently, the airport extended its runway and taxiway to 7,000 feet. In 2003, construction began of an air traffic control tower. Because the airport is actually located in Sherburne County, there may come a time when multi-county governance will make sense to fulfill long range expansion plans.

St. Cloud is very active in its air service development activities. With its partner, Brainerd, the two cities were awarded one of the largest grants offered by the USDOT Small Community Air Service Pilot Program. The grant will fund development of a Flight Bank and efforts to improve existing service and attract a second carrier to Central Minnesota.

AIR SERVICE OPTIONS

The Tier 2 Air Service Study examined four paradigms of air service development:

1. Improved Network Access

Today, airlines operate from within two basic models:

- The network model used by mainline carriers in their hub and spoke systems; and,
- A mass market model used by low cost carriers to provide point-to-point service on the highest density routes.

Based on the size of Tier 2 communities, network carriers offer the best access to the national transportation system. The major network carriers are: American, Continental, Delta, Northwest, United, and US Airways. Note that each of these carriers is experiencing financial difficulties and continue to pursue aggressive measures to cut costs. Under current conditions, service retention as well as service expansion are the highest priority for all Tier 2 airports.

Travel patterns at Tier 2 airports are similar. Chicago is the largest destination market. Phoenix and Denver are the second and third most important. Service to a different hub airport is a good strategy to recapture local passengers otherwise driving to MSP. Building the passenger base at the Tier 2 airports is the strongest argument to prove the local market.

Each of the Tier 2 airports is on a different stage of service development. Roughly speaking each airport should build its network connection in the following order: Minneapolis-St. Paul, Chicago O'Hare (ORD), Denver or Salt Lake City.

Under this paradigm, Rochester, since it has a full schedule to MSP and four flights to ORD, would begin immediately to recruit two or three regional jet frequencies to Denver or Salt Lake City. Duluth's highest priority is restoration of Chicago service followed by recruitment for Denver service. Eau Claire and St. Cloud would focus on Chicago service first, beginning with three regional jet frequencies.

2. Shuttle To Chicago's Midway Airport

Just over 300 miles away, Chicago's Midway Airport enjoys one of the highest concentrations of low cost carriers in the country. Here Southwest, Airtran, ATA, and Frontier provide low cost service in 75% of the top 10 markets. Some of these carriers operate regional jet service, but Southwest does not provide feed or interline with other carriers. In this paradigm, Tier 2 airports would work together with Chicago Midway Airport and Southwest to resolve issues of security and baggage transfer. Once these issues are solved, Tier 2 airports would recruit an airline or wet lease an aircraft to provide service to Midway Airport.

This model is outside the present structure of airline service. However, given the low fares offered out of Midway, a regional jet service from Tier 2 airports to Midway plus low fare tickets for the connecting segment could price competitively with a network carrier fare. This approach may result in connecting times similar to American's de-peaked hub at Chicago O'Hare where an average wait time between flights can be up to 90 minutes.

Because this service model does not exist, a joint effort by Tier 2 airports would make sense, first to examine feasibility and then to work out agreements with the airlines and airports.

3. Satellite Airports

Southwest Airlines is famous for entry into a metropolitan market through the doorway of a second tier airport. For example, Providence, RI and Manchester, NH were used as entry into the Boston metropolitan market. There are various rules-of-thumb that identify the market fundamentals needed to support a Southwest-type service. They include:

- A population of at least one million within 90 minutes of the airport; and

- An ability to profitably support at least 8 daily flights or approximately 265,000 enplaned passengers each year.

Currently, Southwest Airlines is concentrating on other markets in the United States. However, the Upper Midwest and Mountain states are the last regions in the U.S. without significant low cost carrier presence. Two futures are possible. In the normal course of events, entry of Southwest into this region may be as much as 5 to 15 years away. However, major changes in United or Northwest hub operations at MSP or Denver could accelerate low cost carrier entry into the region.

Development of a high volume, low cost operation would either go into MSP or a Tier 2 airport. Duluth is not a likely candidate given its distance from MSP. However, Rochester, St. Cloud and Eau Claire are potential satellite sites provided that the airports can solve highway access, parking, terminal and runway capacity issues.

4. Alternate Airport

According to a recently published USDOT study, 10 to 12 million originating passengers appear to be the threshold value where a second airport can be viable in a metropolitan area. Minneapolis-St. Paul International Airport enplanes more than 16 million passengers. However, less than half originate from the region. The majority of passengers are connecting from other Northwest flights.

The potential development of a Tier 2 airport as an alternate metropolitan airport will happen when:

- Originating local passengers increase substantially by 4 to 5 million;

- A carrier uses Tier 2 airports as a low-cost satellite airport and diverts metro area passengers; or,

- Significant capacity and delay issues develop at MSP because of Northwest connecting activity. Such delays might warrant use of Tier 2 airports as gateways to the national network.

In all cases, the synergy between MSP and Tier 2 airports is very important from a planning, timing, and investment standpoint. Typically alternate airports are located within 75 miles of the major airport. This would indicate St. Cloud as an attractive candidate should the right conditions develop. However, given the resources required to build out this airport, it will be important to reserve the option for development, but not over invest until the need becomes more apparent. An alternate airport will require major capital investment and cooperation amongst airport sponsors, the Metropolitan Airport Commission and all levels of government.