Transportation Advisory Board
of the Metropolitan Council of the Twin Cities

ACTION TRANSMITTAL

No. 2010-34 (REVISED)

DATE: May 18, 2010

TO: Transportation Advisory Board

FROM: TAB Policy Committee

SUBJECT: MSP International Airport Long Term Comprehensive Plan Review.

MOTION: That the Transportation Advisory Board recommends the preferred development alternative defined in the Long Term Comprehensive Plan (LTCP) for Minneapolis-St. Paul International Airport (MSP) to the Metropolitan Council with the following two additional recommendations:

1. That the MAC review and update the MSP Airport LTCP every five years.
2. That the MAC identify an operational threshold at which time they will begin to look at long-term airfield capacity and alternative solutions to future needs.

BACKGROUND AND PURPOSE OF REVIEW: The Metropolitan Airports Commission (MAC) periodically updates the long-term comprehensive development plans, as defined in the TPP, for each airport it owns/operates. The LTCP is to be consistent with the Metro Development Framework and the Transportation Policy Plan (TPP). The MAC has completed the 2030 LTCP Update for MSP International Airport, selected a preferred development alternative, provided for public input, and has submitted it for Council review as required under MS 473.165. The LTCP is reviewed for adequacy of evaluations involving airport airside, landside and environmental development/mitigation within the context of conformity with local and regional plans, and consistency with regional policies, guidelines and criteria. Recommendations from the TAC/TAB review process on the MSP LTCP Update will be included in the final staff report for the Council's Transportation Committee and Council action.

The Aviation Task Force discussion checklist, copies of the public comments with responses from the MAC and the Executive Summary of the MSP LTCP are attached. To read the entire MSP LTCP, please copy this link into your web browser.
http://www.mspairport.com/about-msp/long-term-comp-plan.aspx

The TAB Policy Committee discussed comments and concerns raised during the public involvement process conducted by the MAC in developing the draft LTCP. These comments were included with the Executive Summary, and within letters from Minneapolis, Eagan and Richfield. The committee passed two amendments to the original motion forwarded by the TAC. They are included in the revised motion above.

ROUTING

TO	ACTION REQUESTED	DATE COMPLETED
TAC Aviation Technical Task Force	Review & Recommend	April 27, 2010
Technical Advisory Committee	Review & Recommend	May 5, 2010
TAB Policy Committee	Review & Recommend	May 13, 2010
Transportation Advisory Board	Review & Recommend	
Metropolitan Council	Approval	

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MSP INTERNATIONAL AIRPORT
LONG-TERM COMPREHENSIVE PLAN (LTCP)

Review Process

The TAC/TAB and Council staff are reviewing the LTCP for the MSP International Airport concurrently. The staff will review the LTCP in the context of policies, guidelines and criteria to determine conformity and consistency with the TPP and the Metro Development Framework. For the TAC Aviation Advisory Task Force the following LTCP content outline was used as a checklist to focus on several key questions/concerns raised by others and considered for discussion (bold text).

PLAN ELEMENT / CATEGORY	COMMENT
Inventory	Other Information Sources Appendix C : Costs Back-up
Forecasts - Socio-Economic - **Historical Activity/Current Trends** - **General Forecast Assumptions** - Domestic Passenger Forecast - International Passenger Forecast - Charter Enplanements/Operations - Air Cargo/Operations - General Aviation & Military - **Forecast Scenarios**	Concern with level of capital investment.
Facility Requirements - Gates - Two Terminal System - **Airside Requirements** - **Airfield Capacity & Delay** - Terminal Requirements - Landside Requirements - **Roadway Access** - Parking Requirements - Rental Car Requirements - Ground Transportation Center - Lighting & Navigational Aids - Security Requirements - Utility Requirements - Obstruction Related Requirements	Relies on technology/operational improvements. What is capacity threshold? Where needed; how to be provided?
Development Alternatives - Airfield - Terminal - Landside & Ground Transportation - Preferred Alternative	
Environmental Considerations - **Aircraft Noise** - Air Quality - Sanitary Sewer & Water - Water Quality - Wetlands	MSP communities want current mitigation program to be continued.
Land Use Compatibility - Noise Guidelines - Safety Zoning	
Facility Implementation - Phasing Strategy - Cost Estimates	

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

E.1 PURPOSE

The Metropolitan Council adopted guidelines to integrate information pertinent to planning, developing, and operating the region's airports in a manner compatible with their surrounding environs. The process to ensure this orderly development is documented in a Long Term Comprehensive Plan (LTCP) for each airport. In recognition of the dynamic nature of the aviation industry, the plans are to be updated regularly. The previous LTCP for the Minneapolis-St. Paul International Airport (MSP) was completed in 1996. The 2009 update will be the first revision to that LTCP and reflects substantial changes for MSP and the aviation industry over the past 13 years.

E.2 NEED

The aviation industry has changed since the previous LTCP for MSP was published in 1996. Airline consolidation, shifts in the aircraft fleet, new technologies, and evolving security protocols stemming from the September 11, 2001 terrorist attacks have resulted in many changes to operations that require new approaches to airport planning. These changes have affected airline service patterns, passenger processing and behavior, and have resulted in some development at MSP that was not part of the 1996 LTCP.

Airports work best when the capacities of their various elements are balanced and work in harmony to provide a safe, efficient system of facilities with a high level of customer service. Over time, some of MSP's facilities have become less efficient and some have not been improved to meet the dynamic needs of today's travelers.

While MSP's airfield was dramatically improved with the addition of a fourth runway in 2005, portions of the terminal and landside facilities have become outdated and need improvement. MSP's two-terminal system could be utilized more efficiently to provide better service to airlines and passengers alike. Terminal facilities, including the international arrivals hall, bag-claim hall, passenger security screening, and some concourses, need improvement. Access roads, parking, and terminal curb areas are also in need of enhancements to serve increasing passenger levels into the future. Finally, even with the new runway, MSP's airfield may require additional taxiways to improve aircraft circulation, especially around the terminal areas. These issues are the primary focuses of this updated LTCP.

The LTCP is a 20-year plan for MSP focused on developing facilities to accommodate forecast growth in a safe and efficient manner with a high level of customer service. Proposed improvements are phased to reflect the gradual growth of demand at MSP and to reflect lead time required for detailed planning, environmental analysis, design, and implementation.

E.3 PROCESS AND CONTENT

The LTCP consists of five primary tasks:

1. Assessing the condition and capacity of existing facilities
2. Forecasting long-range aviation demand
3. Determining future facility requirements
4. Identifying and evaluating various development options
5. Selecting a preferred comprehensive plan

The LTCP Update identifies the type and location of facility improvements needed to safely and efficiently accommodate aviation demand through the year 2030. The LTCP Update also provides guidance for phasing airport improvements during the development period. Noise contours were also generated for 2030 and are included in the full report.

The goals of this LTCP Update were established at the outset of the planning process and are listed here:

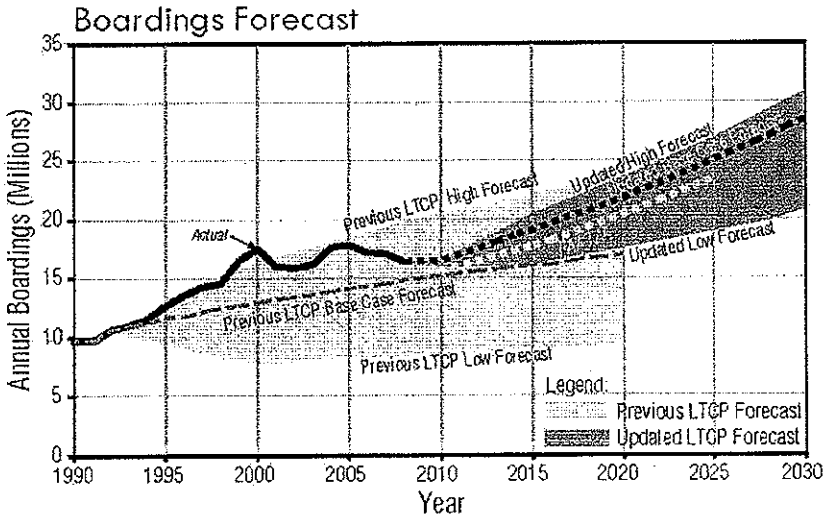
1. Provide sufficient, environmentally-friendly facilities to serve existing and future demand;
2. Provide improved energy efficiencies;
3. Encourage increased use of public transportation;
4. Minimize confusion associated with having two terminals and multiple access points;
5. Allow for flexibility in growth;
6. Utilize and maintain existing facilities to the fullest extent possible; and
7. Enhance aircraft operational safety and efficiency.

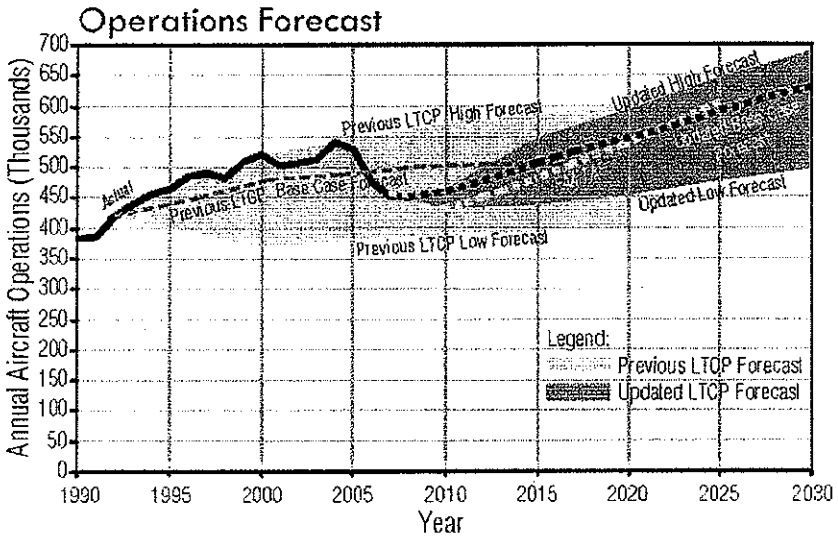
E.4 INVENTORY

Existing facilities at MSP were inventoried and their conditions and capacities assessed. The inventory shows that future plans for MSP will require consideration of balancing airfield capacity, terminal capacity, and landside capacity. In addition to properly balancing the capacities of these three functional elements of the airport, more efficient balance and utilization of the airport's two terminal complexes required consideration.

E.5 FORECAST

Forecasts of annual passenger boardings and aircraft operations (takeoffs and landings) were completed in June 2009. They show that passenger boardings are expected to increase by more than 73% by 2030, growing from 16.4 million to 28.4 million. Total aircraft operations at MSP are expected to grow by about 40% from 450,000 to 630,000 by 2030. While the current economic recession has resulted in declines in both boardings and operations at MSP since 2005, passenger boardings are expected to return to previous levels in 2013, and operations are expected to return to previous levels in 2019.





E.6 FACILITY REQUIREMENTS

Growth in the number of passengers and aircraft operations will require airport facilities to be improved in order to continue operating in a safe and efficient manner.

The inventory of airport facilities and existing capacity evaluation identified 15 key focus areas for the LTCP Update to evaluate. Each of these focus areas identified existing facilities that are operating inefficiently today or that are expected to operative inefficiently with moderate increases in passenger numbers. The 15 focus areas are:

1. Balancing passenger demand between the two terminals
2. Reallocation of airlines between the two terminals
3. Arrival curbside capacity (Lindbergh Terminal)
4. Public parking (Both Terminals)
5. Wayfinding / Signage for the airport roadways
6. Baggage claim facilities (Lindbergh Terminal)
7. Security Screening Check Points (Lindbergh Terminal)
8. International arrivals (Customs and Border Protection) facilities (Lindbergh Terminal)
9. Regional carrier aircraft gates (Lindbergh Terminal)
10. Refurbishing Concourses E and F (Lindbergh Terminal)
11. Rental car facilities (Both Terminals)
12. Airfield capacity and taxiways
13. The United States Post Office facility (Lindbergh Terminal)
14. Potential development of an airport hotel
15. Air Traffic Control Tower (ATCT) improvements

The analysis concluded that the existing passenger terminal complexes and their landside facilities are not able to accommodate planned forecast growth without expansion. Growth in passenger boardings will prompt additional aircraft gates, parking, roadway improvements and terminal space to allow passengers to enjoy a safe and comfortable airport environment. Balancing passenger demand between the Lindbergh and Humphrey Terminals will result in improved efficiency and customer service of both facilities. This balance can best be achieved

improved efficiency and customer service of both facilities. This balance can best be achieved by utilizing the Lindbergh Terminal to accommodate Delta Air Lines and its partner airlines while relocating all other airlines to the Humphrey Terminal. The aviation activity forecast suggests that this move should occur by 2015.

Though aircraft operations will be growing as well, the existing four-runway airfield is expected to be able to continue operating in a safe and efficient manner without the need for additional runways. Some improvements to taxiways are recommended to help aircraft move around the airfield as they taxi between the runways and the terminal complexes.

E.7 CONCEPTS

Though it is typical for an airport LTCP effort to provide a series of broad organizational concepts for airport development, the nature of this study was to focus on key facilities and develop concepts that would resolve existing and forecast facility deficiencies. A more detailed description, by subject area, is included in the full report and a summary of the recommendations is provided below and shown on **Figure E-1** located at the end of this Executive Summary.

Lindbergh Terminal

- *ADDITIONAL GATES* - Extending Concourse G would provide new gates capable of accommodating domestic or international flights.
- *EXPANDED INTERNATIONAL ARRIVALS (CBP) FACILITY* - New, larger facilities will be provided as part of the Concourse G expansion to accommodate forecasted growth in demand for international flights to MSP.
- *SECURITY SCREENING* - Reconfiguration of security screening areas would improve efficiency and reduce wait times.
- *BAGGAGE CLAIM* - The existing baggage claim hall would be reconfigured with larger, modern baggage claim systems.
- *PARKING* - Additional parking garages would be constructed adjacent to the existing garages to accommodate existing and future parking demand.
- *ARRIVALS CURB* - Enhancements to the curb area would improve capacity and efficiency for arriving passengers to reach shuttles, taxis, and private vehicles.
- *HOTEL* - A site has been identified that would be appropriate for hotel development.

Humphrey Terminal

- *ADDITIONAL GATES* - New gates would be added by extending the passenger concourses to the north and south accommodating up to 26 additional gates.
- *PASSENGER PROCESSING* - Ticketing and baggage claim facilities would be expanded to accommodate additional airlines and passengers.

- *PARKING* - Existing garages would be expanded to accommodate future parking demand.

- *RENTAL CAR FACILITIES* - Accommodations for rental cars would be provided by developing facilities in expanded existing parking garages.

- *ACCESS ROADS* - Post Road and 34th Avenue would be improved and signed to accommodate increasing traffic volumes and simplify circulation.

E.8 FACILITY IMPLEMENTATION SCHEDULE AND COSTS

Improvements must be phased and constructed in response to demand and with consideration for the capital improvement budget. A preliminary phasing plan prepared for the LTCP Update includes four 5-year phases along with very preliminary cost estimates. These costs are for new development only and do not include normal rehabilitation and maintenance efforts that will be required during this period. The costs are based upon planning concepts for the airport. Preliminary design has not been accomplished for any of these projects. The costs therefore, represent the general order of magnitude of costs that could be expected for the proposed development. They are expressed in 2009 dollars, with no allowance for inflation.

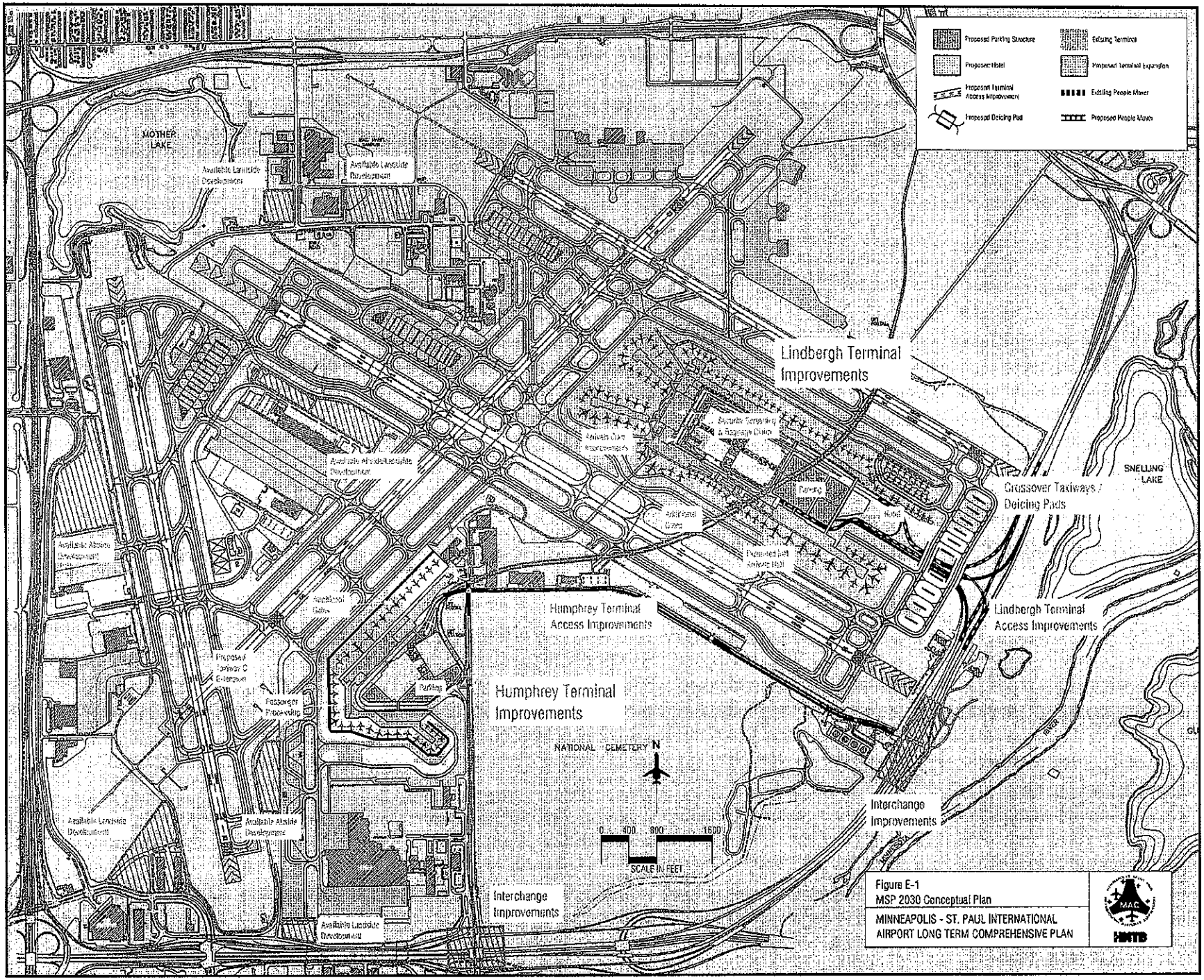
- Phase I (2010-2015): Expand Humphrey Terminal and relocate airlines.
  Cost Range - $380 Million - $445 Million

- Phase II (2015-2020): Modernize and expand Lindbergh Terminal, including a new international arrivals facility.
  Cost Range - $810 Million - $960 Million

- Phase III (2020-2025): Complete expansion of Humphrey Terminal, balancing passenger loads between the two terminals.
  Cost Range - $620 Million - $735 Million

- Phase IV (2025-2030): Construct crossover taxiways and access road improvements at Lindbergh Terminal.
  Cost Range - $190 Million - $225 Million

This phasing plan allows improvements to be implemented over a 20-year period in response to gradual increases in demand. It also allows implementation of improvements to occur with minimal disruption to the day-to-day operation of the airport.


Proposed Parking Structure
Existing Terminal
Proposed Hotel
Proposed Terminal Expansion
Proposed Terminal Access Improvement
Existing People Mover
Proposed Deicing Pad
Proposed People Mover
MOTHER LAKE
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Available Landside Development
Lindbergh Terminal Improvements
Available Landside Development
Crossover Taxiways / Deicing Pads
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Figure E-1
MSP 2030 Conceptual Plan
MINNEAPOLIS - ST. PAUL INTERNATIONAL AIRPORT LONG TERM COMPREHENSIVE PLAN
MAC
HNTB

MEMORANDUM

ITEM 8

TO: Finance, Development and Environment Committee

FROM: Dennis Probst, Deputy Executive Director – Planning and Environment (612-726-8189)

SUBJECT: **MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT (MSP) LONG TERM COMPREHENSIVE PLAN (LTCP) UPDATE – AUTHORITY TO SUBMIT TO THE METROPOLITAN COUNCIL FOR REVIEW**

DATE: March 30, 2010

In January 2010, the Commission authorized staff to finalize the draft Long Term Comprehensive Plan with the recommendations as proposed by MAC staff. The draft document was published and made available for public review and comment. The comment period extended from January 20, 2010 through February 19, 2010. Five letters and one e-mail were received, and are attached to this memo with responses from MAC. The letters received were from the City of Bloomington, City of Eagan, City of Mendota Heights, City of Minneapolis, and the City of Richfield. The e-mail was received from a St. Paul resident.

The letters received and responses will be incorporated into the document, along with some minor text changes, and a revised LTCP document produced. Staff is requesting the authority to then submit the document to the Metropolitan Council for their review.

The Met Council has a 60-day review timeframe. As a part of their review, the Met Council will notify the adjacent communities of their process and schedule. Once Met Council staff completes their review and report, the item will be brought to their Transportation Advisory Board, Transportation Committee and the full Metropolitan Council.

Once the Metropolitan Council has completed their action, staff will return to the Commission with a request to adopt the new Long Term Comprehensive Plan for MSP.

COMMITTEE ACTION REQUESTED

RECOMMEND TO THE FULL COMMISSION THAT THE LONG TERM COMPREHENSIVE PLAN FOR THE MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT BE SUBMITTED TO THE METROPOLITAN COUNCIL FOR REVIEW.

CITY OF
BLOOMINGTON
MINNESOTA

February 1, 2010

Jenn Felger
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450

Re: Draft MSP 2030 Long Term Comprehensive Plan

Dear Ms. Felger:

The City of Bloomington appreciates the opportunity to comment on the draft of the MSP 2030 Long Term Comprehensive Plan (LTCP). On February 1, 2010, the Bloomington City Council approved the following comments.

Humphrey Terminal Expansion – Traffic Impacts on 34th Avenue

The draft LTCP anticipates expanding the Humphrey Terminal in two phases from 10 gates to 27 gates in 2015 and again to 37 gates by 2025. All non-Sky Team airlines are proposed to move from the Lindbergh Terminal to the Humphrey Terminal in 2015. This Humphrey Terminal expansion will increase traffic volumes on 34th Avenue and Post Road and require significant improvements to the 34th Avenue interchange with I-494. The draft LTCP anticipates the Metropolitan Airports Commission (MAC) funding $31 million in improvements for 34th Avenue and $95 million in improvements for Post Road.

1

Based on information presented in the *2015 MSP Terminal Expansion Project Environmental Assessment*, Bloomington understands that completing the Humphrey Terminal expansion prior to major improvements at the 34th Avenue/I-494 interchange would lead to "unacceptable" traffic conditions at the interchange. Bloomington therefore commends MAC for incorporating plans and proposed funding to improve the interchange. Given the challenges of having the improvements in place by 2015, the City is ready to work quickly and cooperatively with MAC and Mn/DOT to design the improvements and agree on an overall funding package.

Noise Impacts

The draft LTCP forecasts 40% growth in annual aircraft operations by 2030, from 450,000 to 630,000. Based on the increased operations, the draft plan includes 2030 projected noise contours (Figure 5-4). These projected 60 DNL noise contours depict noise levels in portions of Bloomington and other communities extending beyond blocks that qualified for noise mitigation funds in the past.

2

MAC has a history of proactively addressing noise impacts on residential areas through noise mitigation programs. However, the draft LTCP does not discuss additional residential noise

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2 mitigation, nor does it call out any MAC expenditures for noise mitigation through 2030. Bloomington believes that increased noise impacts need to be mitigated and strongly recommends that the final version of the LTCP outline a noise mitigation approach that would apply to newly impacted blocks.

Sustainability Initiatives

3 The first three stated goals of the draft LTCP discuss environmentally friendly facilities, improved energy efficiencies and increased use of public transportation, all of which the City of Bloomington strongly supports. As we have previously discussed, Bloomington is currently preparing plans for the South Loop District on MSP's southern border. The South Loop District Plan will focus on a variety of sustainability initiatives. Given our mutually shared goals, adjacent sites and similar plans, there are opportunities to work cooperatively on various sustainability initiatives, including district energy and shared parking during peak demand periods. Bloomington looks forward to additional discussion on these and other mutually beneficial projects.

Thank you in advance for consideration of Bloomington's comments. Should you have any questions regarding this letter, please contact Larry Lee, Community Development Director, at (952) 563-8947.

Sincerely,

Gene Winstead
Mayor

Copy: Lisa Peilen, Metropolitan Airports Commission
Dennis Probst, Metropolitan Airports Commission

City of Mendota Heights

February 16, 2010

Jenn Felger
Metropolitan Airports Commission
6040 28th Avenue South
Minneapolis, MN 55450

Dear Ms. Felger:

Thank you for the chance to review and comment on the Draft MSP 2030 Long Term Comprehensive Plan (LTCP). The City of Mendota Heights recognizes MSP as a significant contributor to the economic viability of the Minneapolis/St. Paul metropolitan area. As a community adjacent to the airport, we support these planning efforts as a means for us to better oversee land use and development within our own borders.

The City of Mendota Heights has the following comments regarding the Draft LTCP:

Planning for Capacity:

4 The LTCP forecasts operations up to 98.5% of estimated airfield capacity. Airport planning guidelines suggest that planning for an additional runway or supplemental airport should occur when an airport reaches 60-75% of capacity. The City of Mendota Heights requests that the LTCP include some framework for what the ongoing process for capacity planning would look like.

5 The City of Mendota Heights questions investing up to $2.4 Billion (on top of $3 Billion invested in the 2010 program) as the best use of resources. At best, the outcome can only be an airport functioning at full capacity with no plan or vision to address the congestion this will create.

Noise Contours:

The City of Mendota Heights is in compliance with recommendations for local government found in Chapter 6: Land Use Compatibility. The City relies upon accurate noise contour information to make land use decisions.

6 The noise contour presented at the January 20, 2010 Noise Oversight Committee meeting shows significant changes from the current noise contour. We regret the fact that this contour was not presented at the MAC presentation to our City Council. The City of Mendota Heights encourages the regular and accurate review of the noise contours.

Regional Impact:

7 The LTCP does not address regional impacts upon infrastructure. The plan forecasts increases in airport usage, but makes no mention of traffic volumes for roadways in and out of the airport.

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www.mendota-heights.com

7 The City of Mendota Heights requests that current and forecasted traffic volumes on roadways be included in the plan.

Third Parallel Runway:

8 The City of Mendota Heights would like to take this opportunity to restate our strong opposition to any consideration of a third parallel runway at MSP Airport. Our community has been guided and developed around the current configuration of the airport. A third parallel runway would be in direct conflict to the long held and well established vision of this community.

Thank you for your consideration of this matter, please contact David McKnight, City Administrator at (651) 452-1850 with questions you may have.

Sincerely,

John Huber
Mayor

Copy: Senator James Metzen
Representative Rick Hansen
John McDonald, Metropolitan Airports Commission
Richard Aguilar, Metropolitan Council

City of Eagan

Mike Maguire
Mayor

Paul Bakken
Cyndee Fields
Gary Hansen
Meg Tilley
Council Members

Thomas Hedges
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The Lone Oak Tree
The symbol of
strength and growth
in our community.

9

10

February 16, 2010

Ms. Jenn Felger
MAC Planning and Environment
6040 28th Avenue South
Minneapolis, MN 55450

Dear Ms. Felger:

Thank you for the opportunity to comment on the proposed 2030 MSP Long Term Comprehensive Plan (LTCP). The Eagan City Council, per the recommendation of the Eagan Airport Relations Commission, approved the following comments at the February 16, 2010 City Council meeting.

Noise Impacts

The draft LTCP forecasts 40% growth in annual aircraft operations by 2030, from 450,000 to 630,000 operations. Based on the increase in operations, the draft plan includes 2030 projected noise contours (Figure 5-4). These projected 60 DNL noise contours depict noise levels in portions of Eagan and other communities extending well beyond blocks that have previously qualified for noise mitigation funds.

The Metropolitan Airports Commission (MAC) has a history of proactively addressing noise impacts on residential area through noise mitigation programs. However, the draft LTCP does not discuss additional residential noise mitigation, nor does it state MAC's anticipated expenditures towards noise mitigation through 2030. According to the LTCP projections, an additional 536 single and multi family homes in Eagan would be added to the 60-64 DNL contours. Given the dramatic increase to the noise contours over southwest Eagan, which is made up of predominately residential homes that were built well before the decision was made to build Runway 17/35, the City of Eagan strongly recommends that the final version of the LTCP outline a noise mitigation approach that would apply to all newly impacted blocks. Specifically, the City advocates that those homes being added to the 60-64 DNL contours receive, at minimum, the same level of noise mitigation as those homes that received mitigation under the 2007 legal settlement (with an adjusted funding allocation per the CPI).

Moreover, the City of Eagan has understandable concerns with the extension of the noise contours, and corresponding increase in operations, using Runway 17/35. This concern is exacerbated when the noise contours over the Eagan/Mendota Heights Corridor are proposed to shrink significantly. How and why is it that the contour "lobe" is proposed to increase so dramatically off of 17/35, while decreasing over the Corridor? Is the proposed contour extension over southwest Eagan a direct result of additional gates being added to the Humphrey Terminal? Additionally, Figure 5.9 shows that projected runway use in 2030 calls for Runway 17 to be used for 30.3% of all departures, the highest percentage of all runways. Furthermore, Runway 17 is proposed to be used for 25.6% of all nighttime departures, which well exceeds the forecasted use of both 12L and 12R. These projections directly conflict with the approved Runway Use System (RUS) at MSP, which calls for the parallel runways to serve as the first priority for both day and evening departure operations. How will the MAC address this conflict between the 2030 runway use projections and the approved RUS?

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While the residents living in and around the Corridor would undoubtedly appreciate noise relief, the City of Eagan has taken the long held public policy decision to plan and guide the Eagan/Mendota Heights Corridor for noise compatible uses. Furthermore, the legal settlement in 2007 ensured that those residents living in and around the Corridor received the noise mitigation they deserved. As such, Eagan strongly encourages the MAC to work with the FAA in the coming years to ensure that the RUS is adhered to and the Corridor is used to the greatest extent possible so as not to place undue burden on the predominately residential areas of Eagan, including those homes under the flight paths of 17/35.

14

During discussions with the Noise Oversight Committee regarding the LTCP, MAC staff communicated their intent to revisit the LTCP operational forecasts and corresponding noise contours in five years (2015) in hopes that the economy and airline industry will have stabilized at that point so as to provide a more accurate forecast. The City of Eagan recognizes that forecasts are difficult during this time of economic upheaval, and will anticipate a thorough review of the operations and contours in five years, or as soon as the economy and airline industry stabilize. Once that stabilization has occurred, the City asks that the MAC undergo a formal Part 150 process to ensure that the noise environment and corresponding noise mitigation program can be evaluated accordingly.

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Land Use

In light of the proposed 2030 contours included in the LTCP, the City of Eagan reviewed its own Comprehensive Guide Plan, and specifically the City's Noise Attenuation Construction ordinance.

17 The City of Eagan has adopted land use policies through its Comprehensive Guide Plan and construction regulations through its zoning code to minimize the introduction of substantial new areas of noise sensitive uses within the 2008 Policy Contours and to require sound attenuation construction practices where appropriate. The City cannot implement modifications of the Policy Contours unless and until the Metropolitan Council takes action in that regard. The City will monitor the Met Council review of the MSP LTCP and revisit these topics as may be necessary once that review has been completed.

Airfield Capacity

The LTCP states that the existing four-runway airfield configuration is expected to be able to continue operating in a safe and efficient manner without the need for additional runways.

18 According to the operation projections in the LTCP, there were over 450,000 operations in 2008. Airport planning guidelines (FAA Order 5090.3c) state that an additional runway or supplemental airport planning process begins when the airfield reaches 60-75% of annual capacity, which is a threshold that would be reached at MSP when operations exceed 480,000 operations per year. Additionally, statements have been made to lead communities to believe that congestion levels at MSP Airport are on track to exceed delay levels of 10 minutes per operation. In light of the operation levels being predicted for MSP out to 2030, at what point will the MAC address airfield capacity concerns, and is there is a optimum size or activity level for MSP? Additionally, what

19 considerations have been made in the long term planning process regarding the possibility for the construction of a 3rd parallel runway?

MSP Infrastructure

20 The City of Eagan very much appreciates the ongoing commitment the MAC has made to improve the infrastructure at MSP Airport. Eagan continues to support the efforts of the MAC to strengthen the presence of MSP Airport through improvements to its facilities, parking structures, and transportation system. As an employment and transportation hub, Eagan stands to benefit significantly from an economic development standpoint, and

encourages the MAC to continue reinvesting in MSP Airport. Furthermore, as the City promotes its goal of reducing energy and promoting environmental sustainability, we encourage the MAC to continue its efforts to utilize sustainable building practices as expansion and reinvestment plans for MSP take shape. 20

Again, thank you for the opportunity to comment on the proposed 2030 LTCP. Should you have any questions about the comments made by the City of Eagan, please feel free to contact Dianne Miller, Assistant to the City Administrator, at 651/675-5014.

Sincerely,

Mike Maguire
Mayor

cc: Eagan's Legislative Delegation
Dan Wolter, District 15 Metropolitan Council Representative
Wendy Wulff, District 16 Metropolitan Council Representative
Governor Tim Pawlenty

RICHFIELD

City Manager's Office

February 18, 2010

MAC Planning & Environment
Attn: Ms. Jenn Felger
6040 28th Avenue South
Minneapolis, MN. 55450

Subject: MSP 2030 LTCP Comments

Dear Ms. Felger:

Thank you for the opportunity to comment on the proposed draft of the 2030 Minneapolis/St. Paul International Airport (MSP) Long Term Comprehensive Plan (LTCP). The City of Richfield has several comments related to the draft of the 2030 LTCP.

Noise

In 1996, when it was decided that MSP would expand at its current location, surrounding communities were presented with tremendous challenges as well as opportunities. The commitment to continue to reinvest in MSP infrastructure, facilities, and transportation systems provides a significant economic benefit to not only the City of Richfield, but all the surrounding communities. However, the noise impact to Richfield residents remains a concern.

The draft LTCP forecasts a 40% growth in annual aircraft operations by 2030, which is an increase from 450,000 in 2008 to 630,000 projected operations in 2030. As part of the increase in operations, the draft LTCP also includes projected 2030 noise contours (Figure 5-4) in which the projected 60-64 DNL noise contour extends well beyond portions of Richfield that had previously qualified for noise mitigation funds.

21

The City of Richfield is extremely concerned that the draft LTCP does not address future noise mitigation to the impacted residents of the projected 2030 noise contour. According to the LTCP projections (Table 5.11) an additional 2,830 Richfield single family and multi family homes in the 60-64 DNL would be impacted by the proposed 2030 DNL noise contours. After the difficulty experienced in getting Richfield homeowners in the 2007 DNL noise contour noise mitigation, the City of Richfield wants to see the final version of the LTCP provide a plan for noise mitigation for those homes projected to be impacted in the 2030 noise contours. At a minimum, the same level of noise mitigation as the homes received under the 2007 legal settlement should be provided.

Airport Capacity

The draft LTCP states, "Though aircraft operations will grow, the existing four-runway airfield is expected to be able to continue to operate in a safe and efficient manner without the need for additional runways."

The LTCP indicates that in 2008 there were over 450,000 operations at MSP. Airport planning guidelines (FAA Order 5090.3c) suggest that additional runway or supplemental airport planning process should begin when an airfield reaches 60%-75% of annual capacity, which would be reached by MSP when operations exceed 480,000 operations a year. Table 2.16 shows that MSP will exceed operations by at least 2015, well before the LTCP is required to be updated again by the Metropolitan Council.

22

Additionally, the draft LTCP states that by 2030, when the annual operations reach 630,000, an average delay of 10 minutes per operation is acceptable. Comments have been made to the City of Richfield and the surrounding communities of MSP that a delay ranging from 9 to 12 minutes per operation is considered congested to severely congested. Based on all the information given to the communities, a number of questions arise. Why doesn't the LTCP address the need for ongoing planning for capacity? Shouldn't the LTCP for MSP address the optimum size and capacity for levels out to 2030? Since the LTCP is for future development goals and policies what is the future plan?

23

Since the draft LTCP proposes an additional $2-2.4 billion in investment for the suggested airport expansion improvements on top of the recent $3 billion invested in the 2010 program, the City of Richfield questions whether this sets the stage for discussions on the potential planning process for the construction of a third parallel runway. If an additional runway is a potential viability in the future, than this is the setting in which it should be discussed and planned.

24

The City of Richfield realizes that forecasting is a difficult task, especially when attempting to forecast over an extended period of time. At the January 20, 2010 Noise Oversight Committee meeting, MAC staff stated that they would review operation forecasts and noise contours every five years to ensure they are as accurate as possible for all future planning. We look forward to receiving continuous updates.

Land Use

The City of Richfield has adopted land use goals and policies in its Comprehensive Plan as well as adopting into our Zoning Code an airport overlay district that includes the Joint Airport Zoning Board ordinance and additional recommendations for new residential construction in areas where the noise contour is 60 DNL or higher.

25

The recommendations in the draft LTCP to use the Metropolitan Builders Guide in airport impact areas for construction that is consistent with the MSP Part 150 program goals needs clarification. The concern for the City of Richfield is that the Builders Guide is for only new residential construction. The Builders Guide does not address additions and alterations which are a large percentage of home improvements for residential properties located in airport noise impacted areas in Richfield. Also, the Builders Guide provides examples of wall construction for noise mitigation, but there are no examples for roof/ceiling construction which would assist in noise reduction. If this is to be a viable document that the City of Richfield would feel comfortable handing out to homeowners and contractors than it needs to address residential additions/alterations, include roof/ceiling examples, and be updated and/or reviewed more often, since the most recent Builders Guide is dated March 2006.

26 In Section 1.4.7, regarding support facilities, the draft LTCP references that there are three additional airline maintenance hangers on the western edge of the airfield with approximately 247,000 square feet for hangers, shops, and offices. The City of Richfield would like to draw to the MAC's attention a concern with the hangers in 2007 that resulted in a reduction on noise impacts that the City would hope future users would consider. In 2007, the City worked closely with MAC staff and the NOC to monitor the noise impacts that were affecting residents directly west of the hangers in Richfield. Procedures were developed with the businesses at the time to change the way and direction in which aircraft where removed from the hangers. The changes in operation produced no measurable noise impacts west of Cedar Avenue in Richfield during the late night/early morning time period, thus solving operational noise problems. The City realizes that at the time these practices were put into place the hangers were being used and most of the aircraft were Stage 3 hushkitted aircraft. Yet it is hoped that when future users occupy these hangers that they consider the same practices for aircraft operations on the west side.

27 Lastly, in Section 1.5.1, Figure 1-9 depicts the inventory of the wetlands within airport property. The figure is very difficult to distinguish where the border of the City of Richfield is located. The City would request that you revise the map to indicate that the border of Richfield is west of Trunk Highway 77 (TH 77), but includes the Richfield Public Works Maintenance Facility which is located east of the northbound on-ramp onto 66th Street. And, the northern border of Richfield is from 62nd Street south, while north of 62nd Street is the City of Minneapolis. We would like to see this area more clearly defined as Richfield property.

Again, thank you for the opportunity to comment on the proposed 2030 LTCP. Should you have any questions about the comments made by the City of Richfield, please feel free to contact Pam Dmytrenko, Assistant to the City Manager at 612-861-9708 or via email at pdmytrenko@cityofrichfield.org.

Sincerely,

Steven L. Devich
Richfield City Manager

SD:ds

Copy: Richfield Mayor and City Council
State Representative Paul Thissen, District 63A
State Representative Linda Slocum, District 63B
State Senator Kenneth Kelash, District 63
MAC Commissioner Lisa Pelen, District C
Metropolitan Council Representative Polly Bowles, District 5
Metropolitan Council Sector Representative Denise Pedersen Engen
Governor Tim Pawlenty

Felger, Jenn

From: Paul Sabourin (paul.sabourin@gmail.com)
Sent: Friday, February 19, 2010 12:52 AM
To: Felger, Jenn
Subject: Comprehensive Plan Comments

Ms. Felger -

I'd like to make a couple of comments on the MSP Airport Comprehensive Plan Update.

I'm especially interested especially in traffic movement on Eastbound Highway 5, and the weaving problems currently resulting from the left-side entrance to and exit from Glumack Drive to this Highway 5, especially when combined with the close spacing between interchanges in this area. Based on the discussion in Chapter 4 of the Comprehensive Plan Update, and as depicted on Figure 4-12, the plan apparently envisions a major reconstruction of this interchange, but maintains these nonstandard entrances and exits from Highway 5.

28

At the present time, the left-exit from Highway 5 causes traffic flow problems. Part of the problem here is due simply to the typical issues with left-hand exits, idrivers in the left lane of Highway 5 changing to the center lane to avoid having to exit at the airport. This is compounded by the numerous taxis coming from the waiting area on Post Road that enter Highway 5 on the right hand side, at relatively slow speed, and then must not only merge to the right hand traffic lane but also move left another lane in order to get to the Lindbergh terminal exit, all in a distance of about a quarter of a mile.

A similar problem exists with vehicles entering eastbound Highway 5 from Glumack Drive. A large proportion of the cars entering Highway 5 from the left at this point are destined for Minneapolis via Highway 55. Of course, the Highway 55 exit is only just over a quarter mile away, and is a the right-side exit from Highway 5. The large number of cars making this lane change, including many who are apparently unfamiliar with highways in this area and who are consulting maps or their GPS as they drive, results in regular problems in this section of highway.

Given the projections for increased traffic at the airport contained in the draft plan, it seems clear that if the interchange between Glumack Drive and Highway 5 is to be completely reconstructed, I believe that MAC should use this opportunity to relocate the exit from and entrance to eastbound Highway 5 to the right-hand side and improve traffic flow and safety in this area.

Paul Sabourin
1917 Fairmount Ave
St. Paul, Minnesota

Minnesota Department of Transportation Road Design Manual
http://www.dot.state.mn.us/design/rdm/

Minneapolis
City of Lakes

Office of the Mayor

R. T. Rybak
Mayor

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February 19, 2010

Ms. Jenn Felger
MAC Planning and Environment
6040 28th Avenue South
Minneapolis, MN 55450

Re: MSP LTCP Update

Dear Ms. Felger;

Thank you for the opportunity to review the draft update of the MSP Long Term Comprehensive Plan. We appreciate the opportunity to comment on the draft representing the Metropolitan Airports Commission's first update since the 2010 plan was approved in 1996. We further look forward to more regularly scheduled updates each five years as has been expressed by MAC staff in presentations to elected officials.

The City remains concerned, however, about the integrally related issues of airport capacity, delay and infrastructure investment. As we expressed in our October, 2009 letter forecast operational activity is expected to be 98.5% of airfield capacity in 2030, virtually assuring a congested airport. The LTCP update projects an average delay of 10 minutes per operation while the 2030 regional benchmark for aircraft delay is 7.1 minutes for 2030. The LTCP projection thus is more than 40% over the regional benchmark for 2030.

29 MAC's January 15, 2010 response to the City's initial comments states,"...the anticipated benefits from implementing the NextGen Air Traffic Control system, we believe that the airfield capacity at MSP will actually increase by 2030." Our understanding is that implementation of NextGen would, however, at best result in possibly up to a 15% increase in capacity. If this were actually the case, MSP would still be operating at over 85% of capacity, significantly above the threshold of when planning should be addressing this constraint.

The 1993 *MSP Capacity Enhancement Plan* recommended action was to add both new runways 17/35 and 11N/29N (now 12N/30N) at "Future 2" operational levels of 600,000 annual operations. How or why has this changed? Knowing that the future airfield (even under fairly conservative forecasts) will be significantly constrained, it begs the question how much additional investment should be made in MSP. It seems prudent that the MAC knowing that this is going to be an issue within this planning horizon should be addressing that particular problem in this update.

30 As elected stewards of our community, we are sorely disappointed that once again MSP is proposed to be expanded increasing the impacts on neighboring communities and making no attempt to address mitigating noise impacts. We are quite aware that the FAA's threshold for significant noise impacts is at noise levels above 65 DNL. However, this regional community set its airport noise threshold at 60DNL in 1998 by action of the Noise Mitigation Committee and subsequently

30 by MAC action. The expansion of MSP approved for the 2010 program was predicated on addressing noise impacts in neighboring communities. Why would this new expansion plan be proposed without addressing mitigation of noise impacts?

31 The trend toward addressing airport noise at levels beyond 65 DNL is increasing and is very likely to change within this planning timeframe. The recent European HYENA studies are being discussed at FAA's Aviation Research Roadmap Workshops in terms of issues of annoyance and sleep interference. The International Standards Organization is likely to adopt a dose/response curve predicting community annoyance to aircraft noise will show that twice as many people are highly annoyed than with the Schultz noise curve. The point at which 12.3 percent of people are highly annoyed (FAA's current 65 DNL threshold) would be pushed out to the 55 DNL level.

Quoting from the article in *Airport Noise Report*, "The Federal Interagency Committee on Aviation Noise (FICAN), which FICON evolved into, will be under pressure to adopt the revised ISO standard, which is voluntary but represents the consensus of world experts, and FAA will be under pressure to recognize the revision as a significant change."

32 As MAC continues to grow the airport and with the likelihood that noise impacts are going to continue to be a significant annoyance to residents, the LTCP update must address how noise associated with the expanded airport would be mitigated and include a budget recognizing the costs.

We look forward to your responses as you continue through this process. If you have any questions regarding our comments, please contact Marland Otto, Principal Planner, at 612-673-2576.

Sincerely,

Mayor R.T. Rybak
City of Minneapolis

CC: Glen Orcutt, FAA ADO
Peter Bell, Metropolitan Council
Chauncey Case, MC Sr. Aviation Planner
Minneapolis Legislative Delegation

General Comments and Responses

Index	General Topic	General Response
GR-1	The Draft MSP 2030 LTCP forecasts increased noise levels around MSP in 2030. As such, the LTCP should specify the planned mitigation for newly-impacted properties, including those located in the 64-60 DNL noise contours.	NEPA/MEPA environmental review documentation will precede implementation of any project that may arise from the Draft MSP 2030 LTCP. Such environmental review is the appropriate mechanism for evaluating any environmental impact of the project and possible mitigation measures. In the case of airport noise, mitigation may include a noise analysis under 14 C.F.R. Part 150. The MAC is currently implementing an aggressive residential noise mitigation program providing mitigation to homes located in the 2005 and 2007 60 DNL noise contours. The FAA and the MAC developed these noise contours based on a forecasted annual operations level of 582,366. The MAC will complete the ongoing mitigation effort in 2014. Based on the forecast contained in the Draft MSP 2030 LTCP, operational levels at MSP are not anticipated to reach the annual levels presently being mitigated (that is, the 2005 and 2007 60 DNL noise contours developed based on a forecasted annual operations level of 582,366) until approximately 2020.
GR-2	The Draft MSP 2030 LTCP forecasts annual operations to reach 630,000 by 2030. As such, the LTCP should address the need for ongoing planning for capacity and/or a supplemental airport. Airport planning guidelines (FAA Order 5090.3c) state that an additional runway or supplemental airport planning process begins when the airfield reaches 60-75% of annual capacity.	The Draft MSP 2030 LTCP evaluated the planning and capacity needs for both landside and airside facilities during the planning period through 2030. MSP is anticipated to reach approximately 630,837 operations by 2030. Based on this forecast, no additional runway capacity is necessary to meet the forecasted growth. The 1993 Minneapolis-St. Paul International Airport Capacity Enhancement Plan evaluated various capacity levels and developed delay curves for the existing airport configuration with alternative airfield improvements, facilities and equipment improvements and operational improvements. These delay curves did not establish a maximum airfield capacity, but provided anticipated delay with a given operational level. Additional airfield operational level analysis was also reported in the 2015 Terminal Expansion Project Draft Environmental Assessment. In this study, operational levels up to 723,000 annual operations were evaluated with an average anticipated delay of 12.7 minutes per operation. Again, this level of delay does not establish an airfield capacity limit, but a level of delay that is considered to be the maximum level tolerable based on a review of the nation's

		most congested airports. In 2004, prior to the opening of Runway 17-35, MSP recorded over 541,000 annual operations with an approximate delay of seven minutes per aircraft. Annual operational levels have declined every year since this peak and declined to 432,604 operations in 2009. The 1998 FEIS estimated that the construction of Runway 17-35 could add approximately 25% airfield capacity at MSP. Additional capacity enhancements are also expected with the implementation of elements of the FAA's NextGen Air Traffic Control system. Improvements in the NextGen Air Traffic Control system include: (1) advanced Traffic Management Advisor (TMA) to allow controllers to sequence aircraft more efficiently; (2) Cockpit Display of Traffic Information (CDIT) – Enhanced Flight rules which will enable specially-equipped aircraft to maintain visual approaches even in marginal weather conditions; and (3) RNAV and Required Navigation Performance (RNP) procedures that will enable aircraft to fly precision departure and approach paths. The Draft MSP 2030 LTCP anticipates operational level recovery to the 2004 level of approximately 541,000 annual operations to occur in 2019 to 2020 time period. An FAA Capacity Study may be appropriate when the operations levels recover to previous high historical levels of approximately 540,000 operations and a clear upward trend is established. The FAA's planning guidelines will be considered as part of the MAC's future planning process. Finally, the MAC will continue to conduct periodic updates of the LTCP, which will include updated forecasts for operations and delay, and through this process will identify future airfield capacity needs and potential solutions.

Comments and Responses

Commenter	ID	Subject	Response
Mayor Gene Winstead City of Bloomington 1800 W Old Shakopee Rd Bloomington MN 55431-3027	1	The draft LTCP anticipates expanding the Humphrey Terminal in two phases from 10 gates to 27 gates in 2015 and again to 37 gates by 2025. All non-Sky Team airlines are proposed to move from the Lindbergh Terminal to the Humphrey Terminal in 2015. This Humphrey Terminal expansion will increase traffic volumes on 34th Avenue and Post Road and require significant improvements to the 34th Avenue interchanges with I-494. The draft LTCP anticipates the Metropolitan Airports Commission (MAC) funding $31 million in improvements for 34th Avenue and $95 million in improvements for Post Road. Based on information presented in the 2015 MSP Terminal Expansion Project Environmental Assessment, Bloomington understands that completing the Humphrey Terminal expansion prior to major improvements at the 34th Avenue/I-494 interchange would lead to "unacceptable" traffic conditions at the interchange. Bloomington therefore commends the MAC for incorporating plans and proposed funding to improve the interchange. Given the challenges of having the improvements in place by 2015, the City is ready to work quickly and cooperatively with the MAC and Mn/DOT to design the improvements and agree on an overall funding package.	In the past, the MAC worked cooperatively with the City of Bloomington and MnDOT to proactively address roadway congestion on 34th Avenue and the I-494 Interchange. A tri-agency analysis was completed in June 2008 which incorporated the traffic demand expected from the airport, the Bloomington South Loop development, including the Mall of America expansion, and MnDOT's mainline demands. Several options were identified that could be undertaken to improve the situation. Since the completion of the 2015 Draft EA there has been a softening in the 34th Avenue traffic demand based on the depressed economy, airline bankruptcy and out-sourcing, etc. The MAC looks forward to continuing its cooperative relationship to find funding solutions for all of these mainline challenges in concert with the demand. As with the South Loop development, the Terminal 2-Humphrey expansion includes growth capacity for the future so the total demand will likely not be present until sometime after 2015. Never the less, the MAC understands that these solutions take significant planning and implementation resources and will require inter-governmental cooperation and support to be accomplished. The MAC looks forward to working with all benefiting partners to provide time-sensitive transportation solutions in sync with demand requirements. The MAC has identified costs in the Draft MSP 2030 LTCP in an attempt to identify the magnitude of resources that likely will be required, not the source of funding. Certainly the reasonable expectation is that all benefiting parties will contribute in proportion to the benefit received. Similarly all Federal, State and local transportation funding sources must be pursued.

	2	The draft LTCP forecasts 40% growth in annual aircraft operations by 2030, from 450,000 to 630,000. Based on the increased operations, the draft plan includes 2030 projected noise contours (Figure 5-4). These projected 60 DNL noise contours depict noise levels in portions of Bloomington and other communities extending beyond blocks that qualified for noise mitigation funds in the past. The MAC has a history of proactively addressing noise impacts on residential areas through noise mitigations programs. However, the draft LTCP does not discuss additional residential noise mitigation, nor does it call out any MAC expenditures for noise mitigation through 2030. Bloomington believes that increased noise impacts need to be mitigated and strongly recommends that the final version of the LTCP outline a noise mitigation approach that would apply to newly impacted blocks.	See GR-1.
	3	The first three stated goals of the draft LTCP discuss environmentally friendly activities, improved energy efficiencies and increased use of public transportation, all of which the City of Bloomington strongly supports. As we have previously discussed, Bloomington is currently preparing plans for the South Loop District on MSP's southern border. The South Loop District Plan will focus on a variety of sustainability initiatives. Given our mutually	The MAC concurs with the comments and looks forward to additional discussion on these topics.

		shared goals, adjacent sites and similar plans, there are opportunities to work cooperatively on various sustainability initiatives, including district energy and shared parking during peak demand periods. 'Bloomington looks forward to additional discussion on these and other mutually beneficial projects.	
Mayor John Huber City of Mendota Heights 1101 Victoria Curve Mendota Heights MN 55118	4	The LTCP forecasts operations up to 98.5% of estimated airfield capacity. Airport planning guidelines suggest that planning for an additional runway or supplemental airport should occur when an airport reaches 60-75% of capacity. The City of Mendota Heights requests that the LTCP include some framework for what the ongoing process for capacity planning would look like.	See GR-2.
	5	The City of Mendota Heights questions investing up to $2.4 billion (on top of $3 billion invested in the 2010 program) as the best use of resources. At best, the outcome can only be an airport functioning at full capacity with no plan or vision to address the congestion this will create.	Capital expenditures to construct the facilities identified in the Draft MSP 2030 LTCP are paid with airport revenues. The Draft LTCP alternatives are designed to maximize the utilization of the existing facilities to the fullest extent possible and to enhance aircraft operational safety and efficiency while providing sufficient, environmentally-friendly facilities to serve existing and future demand through the year 2030.
	6	The noise contour presented in the January 20, 2010 Noise Oversight Committee meeting shows significant changes from the current noise contour. We regret the fact that this contour was not presented at the MAC presentation to our City Council. The City of Mendota Heights encourages the regular and accurate review of the noise contours.	As the MAC explained on April 28, 2009, and August 26, 2009, in meetings with Mendota Heights City Representatives, and to the Mendota City Heights Council on October 6, 2009, the MAC conducted the noise contour development process in parallel with the Draft MSP 2030 LTCP document planning activities. Noise contours were not available at the time of the MAC's meetings with the City of Mendota Height. However, as soon as the contours were available, the MAC presented them

			to the City of Mendota Heights and other interested cities. The MAC also made a detailed presentation on the noise contours at the January 20, 2010, Noise Oversight Committee meeting.
	7	The LTCP does not address regional impacts upon infrastructure. The plan forecasts increases in airport usage, but makes no mention of traffic volumes for roadways in and out of the airport. The City of Mendota Heights requests that current and forecasted traffic volumes on roadways be included in the plan.	As noted, the Draft MSP 2030 LTCP is a phased plan of development positioned to respond on a phased basis to future demands. Regional infrastructure impacts will be assessed moving forward on a phased basis, in concert with the respective regional agencies to provide them input for their use in responding to the total needs of the regional system.
	8	The City of Mendota Heights would like to take this opportunity to restate our strong opposition to any consideration of a third parallel runway at MSP Airport. Our community has been guided and developed around the current configuration of the airport. A third parallel runway would be in direct conflict to the long held and well established vision of this community.	The Draft MSP 2030 LTCP does not identify a need for additional runway capacity to meet the forecasted growth at MSP through 2030.
Mayor Mike Maguire, City of Eagan 3830 Pilot Knob Road Eagan MN 55122-1810	9	The draft LTCP forecasts 40% growth in annual aircraft operations by 2030, from 450,000 to 630,000 operations. Based on the increase in operations, the draft plan includes 2030 projected noise contours (Figure 5-4). These projected 60 DNL noise contours depict noise levels in portions of Eagan and other communities extending well beyond blocks that have previously qualified for noise mitigation funds.	Comment noted. See also GR-1.

	10	Given the dramatic increase to the noise contours over southwest Eagan, which is made up of predominately residential homes that were built well before the decision was made to build Runway 17/35, the City of Eagan strongly recommends that the final version of the LTCP outline a noise mitigation approach that would apply to all newly impacted blocks. Specifically, the City advocates that those homes being added to the 60-64 DNL contours receive, at minimum, the same level of noise mitigation as those homes that received mitigation under the 2007 legal settlement (with an adjusted funding allocation per the CPI).	See GR-1.
	11	How and why is it that the contour "lobe" is proposed to increase dramatically off of 17/35, while decreasing over the Corridor?	Based on the overall increase in operations forecasted to occur by 2030, the use of Runway 17 for departure operations is predicted to increase to 30.3% by 2030, from 18.2% in 2009; and arrivals on Runway 35 are predicted to increase to 28.1% by 2030, from 22.8% in 2009. This is largely due to the anticipated operational levels forecast at MSP by 2030. While runway use percentages are forecasted to increase on Runway 17-35, the departure percentages to the southeast in the Eagan/Mendota Heights Departure Corridor remain relatively consistent with present levels. Additionally, the operations to the southeast of MSP are distributed on two runways with varying headings causing the contour in that area to be much wider and less elongated than is the case to the south of Runway 17-35.
	12	Is the proposed contour extension over southwest Eagan a direct result of additional	No. The contour extension is primarily a result of an overall increase in forecasted aircraft operations at MSP through

		gates being added to the Humphrey Terminal?	2030. See also response to comment #11 above.
	13	Figure 5-9 shows that projected runway use in 2030 calls for Runway 17 to be used for 30.3% of all departures, the highest percentage of all runways. Furthermore, Runway 17 is proposed to be used for 25.6% of all nighttime departures, which well exceeds the forecasted use of both 12L and 12R. These projections directly conflict with the approved Runway Use System (RUS) at MSP, which calls for the parallel runways to serve as the first priority for both day and evening departure operations. How will the MAC address this conflict between the 2030 runway use projections and the approved RUS?	The Runway Use System (RUS) at MSP details runway use preference in order of priority for departure and arrival operations to reduce noise impacts. There is no proposed change to the RUS. Departure operations to the southeast off either Runway 12L or Runway 12R will continue to be the first priority for runway selection from a noise abatement perspective. However, the final decision on runway selection is the responsibility and province of FAA Air Traffic Control, regardless of the RUS. Factors such as capacity and safety take priority over the RUS when the FAA is making runway use determinations. The NEPA/MEPA environmental review documentation will precede implementation of any project that may arise from the Draft 2030 MSP LTCP. Such environmental review will provide more detailed analysis of forecasted runway use. Based on this analysis, if concerns remain related to the RUS and the associated runway use percentages in the context of environmental impacts, additional discussion and analysis may be required. In the case of airport noise, this may include a noise analysis under 14 C.F.R. Part 150.
	14	Eagan strongly encourages the MAC to work with the FAA in the coming years to ensure that the RUS is adhered to and the Corridor is used to the greatest extend possible so as not to place undue burden on the predominately residential areas of Eagan, including those homes under the flight paths of 17/35.	Comment noted. The MAC will continue to work with the cities located around MSP and the FAA to address noise concerns. The MSP Noise Oversight Committee will continue to be a critical element in this ongoing effort into the future.
	15	The City of Eagan recognizes that forecasts are difficult during this time of economic	The MAC concurs with this comment.

		upheaval, and will anticipate a thorough review of the operations and contours in five years, or as soon as the economy and airline industry stabilize.	
	16	Once that stabilization has occurred, the City asks that the MAC undergo a formal Part 150 process to ensure that the noise environment and corresponding noise mitigation program can be evaluated accordingly.	See GR-1.
	17	The City of Eagan has adopted land use policies through its Comprehensive Guide Plan and construction regulations through its zoning code to minimize the introduction of substantial new areas of noise sensitive uses within the 2008 Policy Contours and to require sound attenuation construction practices where appropriate. The City cannot implement modifications of the Policy Contours unless and until the Metropolitan Council takes action in that regard. The City will monitor the Met Council review of the MSP LTCP and revisit these topics as may be necessary once that review has been completed.	Comment noted.
	18	The LTCP states that the existing four-runway airfield configuration is expected to be able to continue operating in a safe and efficient manner without the need for additional runways. According to the operation projections in the	See GR-2.

		LTCP, there were over 450,000 operations in 2008. Airport planning guidelines (FAA Order 5090.3c) state that an additional runway or supplemental airport planning process begins when the airfield reaches 60-75% of annual capacity, which is a threshold that would be reached at MSP when operations exceed 480,000 operations per year. Additionally, statements have been made to lead communities to believe that congestion levels at MSP Airport are on track to exceed delay levels of 10 minutes per operation. In light of the operation levels being predicted for MSP out to 2030, at what point will the MAC address airfield capacity concerns, and is there an optimum size or activity level for MSP?	
	19	Additionally, what considerations have been made in the long term planning process regarding the possibility for the construction of a 3rd parallel runway?	The Draft MSP 2030 LTCP does not identify a need for additional runway capacity to meet the forecasted growth at MSP through 2030.
	20	The City of Eagan very much appreciates the ongoing commitment the MAC has made to improve the infrastructure at MSP Airport. Eagan continues to support the efforts of the MAC to strengthen the presence of MSP Airport through improvements to its facilities, parking structures and transportation system. As an employment and transportation hub, Eagan stands to benefit significantly from an economic development standpoint, and encourages the MAC to continue reinvesting	Comment noted. The MAC will continue to incorporate sustainable building practices into future facilities.

		in MSP Airport. Furthermore, as the City promotes its goal of reducing energy and promoting environmental sustainability, we encourage the MAC to continue its efforts to utilize sustainable building practices as expansion and reinvestment plans for MSP take shape.	
Mr. Steven Devich City Manager City of Richfield 6700 Portland Avenue Richfield MN 55423	21	The draft LTCP forecasts a 40% growth in annual aircraft operations by 2030, which is an increase from 450,000 in 2008 to 630,000 projected operations in 2030. As part of the increase in operations, the draft LTCP also includes projected 2030 noise contours (Figure 5-4) in which the projected 60-64 DNL noise contour extends well beyond portions of Richfield that had previously qualified for noise mitigation funds. The City of Richfield is extremely concerned that the draft LTCP does not address future noise mitigation to the impacted residents of the projected 2030 noise contour...the City of Richfield wants to see the final version of the LTCP provide a plan for noise mitigation for those homes projected to be impacted in the 2030 noise contours. At a minimum, the same level of noise mitigation as the homes received under the 2007 legal settlement should be provided.	See GR-1.
	22	The LTCP indicates that in 2008 there were over 450,000 operations at MSP. Airport planning guidelines (FAA Order 5090.3c)	See GR-2.

		suggest that additional runway or supplemental airport planning process should begin when an airfield reaches 60%-75% of annual capacity, which would be reached by MSP when operations exceed 480,000 operations a year. Table 2.16 shows that MSP will exceed operations by at least 2015, well before the LTCP is required to be updated again by the Metropolitan Council. Additionally, the draft LTCP states that by 2030, when the annual operations reach 630,000, an average delay of 10 minutes per operation is acceptable. Comments have been made to the City of Richfield and the surrounding communities of MSP that a delay ranging from 9 to 12 minutes per operation is considered congested to severely-congested. Based on all the information given to the communities, a number of questions arise. Why doesn't the LTCP address the need for ongoing planning for capacity? Shouldn't the LTCP for MSP address the optimum size and capacity for levels out to 2030? Since the LTCP is for future development goals and policies what is the future plan?	
	23	Since the draft LTCP proposes an additional $2-2.4. billion in investment for the suggested airport expansion improvement on top of the recent $3 billion invested in the 2010 program, the City of Richfield questions whether this sets the stage for discussions on the potential planning process for the construction of a third	The Draft MSP 2030 LTCP does not identify a need for additional runway capacity to meet the forecasted growth at MSP through 2030.

		parallel runway. If an additional runway is a potential viability in the future, than this is the setting in which it should be discussed and planned.	
	24	The City of Richfield realizes that forecasting is a difficult task, especially when attempting to forecast over an extended period of time. At the January 20, 2010 Noise Oversight Committee meeting, MAC staff stated that they would review operation forecasts and noise contours every five years to ensure they are as accurate as possible for all future planning. We look forward to receiving continuous updates.	Comment noted.
	25	The recommendations in the draft LTCP to use the Metropolitan Builders Guide in airport impact areas for construction that is consistent with the MPS Part 150 program goals needs clarification. The concern for the City of Richfield is that the Builders Guide is for only new residential construction. The Builders Guide does not address additions and alterations which are a large percentage of home improvements for residential properties located in airport noise impacted areas in Richfield. Also, the Builders Guide provides examples of wall construction for noise mitigation, but there are no examples for roof/ceiling construction which would assist in noise reduction. If this is to be a viable document that the City of Richfield would feel comfortable handing out to homeowners and	Comment noted. The MAC does not have control over the development of, or updates to, the Metropolitan Council's Builders' Guide. The Draft MSP 2030 LTCP does not limit the City of Richfield from adopting construction standards to address additions and alterations consistent with the new residential construction standards in the Builders Guide.

		contractors than it needs to address residential additions/alterations, include roof/ceiling examples, and be updated and/or reviewed more often, since the most recent Builders Guide is dated March 2006.	
	26	...the draft LTCP references that there are three additional airline maintenance hangars on the western edge of the airfield with approximately 247,000 square feet for hangars, shops and offices. The City of Richfield would like to draw the MAC's attention to a concern with the hangars in 2007 that resulted in a reduction on noise impacts that the City would hope future users would consider. In 2007, the City worked closely with MAC staff and the NOC to monitor the noise impacts that were affecting residents directly west of the hangers in Richfield. Procedures were developed with the businesses at the time to change the way and direction in which aircraft where removed from the hangers. The changes in operation produced no measurable noise impacts west of Cedar Avenue in Richfield during the late night/early morning time period, thus solving operational noise problems. The City realizes that at the time these practices were put into place the hangers were being used and most of the aircraft were Stage 3 hushkitted aircraft. Yet it is hoped that when future users occupy these hangers that they consider the same practices for aircraft operations on the west side.	The MAC remains committed to the ongoing use of the west side aircraft engine start procedure that was developed in consultation with the Noise Oversight Committee and the City of Richfield. The procedure was implemented in 2007 via agreements with west side tenants at MSP. The MAC intends to enact that same agreement in similar cases with future new tenants on the west side.

	27	...Figure 1-9 depicts the inventory of the wetlands within airport property. The figure is very difficult to distinguish where the border of the City of Richfield is located. The City would request that you revise the map to indicate that the border of Richfield is west of Trunk Highway 77 (TH 77), but includes the Richfield Public Works Maintenance Facility which is located east of the northbound on-ramp onto 66th Street. And, the northern border of Richfield is from 62nd Street south, while north of 62nd Street is the City of Minneapolis. We would like to see this area more clearly defined as Richfield property.	The map was revised to better distinguish the MSP airport property boundary as originally intended.
Mr. Paul Sabourin 1917 Fairmount Avenue St Paul MN 55105-1539	28	...traffic movement on Eastbound Highway 5, and the weaving problems currently resulting from the left-side entrance to and exit from Glumack Drive to this Highway 5, especially when combined with the close spacing between interchanges in this area. Based on the discussion in Chapter 4 of the Comprehensive Plan Update, and as depicted on Figure 4-12, the plan apparently envisions a major reconstruction of this interchange, but maintains these nonstandard entrances and exits from Highway 5. ... the left-exit from Highway 5 causes traffic flow problems. ...A similar problem exists with vehicles entering eastbound on Highway 5 from	Future planning phases of the general improvements identified in the Draft MSP 2030 LTCP will take into consideration a number of key criteria. These criteria include total daily and peak hour traffic volumes, roadway capacity analysis, weaving movements, merge and diverge conditions, and numerous other traffic operations criteria important to improved roadway operations and safety. To the extent possible and within the constraints of available right of way, natural resources, funding, and other considerations, design geometrics for the roadway itself will also be critical and will meet the design criteria as set forth in the Mn/DOT Road Design Manual, and in the *Roadside Design Guide* and *A Policy on Geometric Design of Highways and Streets* published by the American Association of State Highway and Transportation Officials.

		Glumack Drive. ... Given the projections for increased traffic at the airport contained in the draft plan, it seems clear that if the interchange between Glumack Drive and Highway 5 is to be completely reconstructed, I believe that MAC should use this opportunity to relocate the exit from and entrance to eastbound Highway 5 to the right-hand side and improve traffic flow and safety in this area.	
Mayor R.T. Rybak City of Minneapolis Office of the Mayor 350 South 5th St – Room 331 Minneapolis MN 55415-1393	29	The City remains concerned, however, about the integrally related issues of airport capacity, delay and infrastructure investment. As we expressed in our October 2009 letter forecast operational activity is expected to be 98.5% of airfield capacity in 2030, virtually assuring a congested airport. The LTCP update projects an average delay of 10 minutes per operation while the 2030 regional benchmark for aircraft delay is 7.1 minutes for 2030. The LCTP projection is thus more than 40% over the regional benchmark for 2030. MAC's January 15, 2010 response to the City's initial comment states, "...the anticipated benefits from implementing the NextGen Air Traffic Control system, we believe that the airfield capacity at MSP will actually increase by 2030." Our understanding is that implementation of NextGen would, however, at best result in possibly up to a 15% increase in capacity. If	See GR-2.

		this were actually the case, MSP would still be operating at over 85% of capacity, significantly above the threshold of when planning should be addressing this constraint. The 1993 *MSP Capacity Enhancement Plan* recommended action was to add **both** new runways 17/35 and 11N/29N (now 12N/30N) at "Future 2" operational levels of 600,000 annual operations. How or why has this changed? Knowing that the future airfield (even under fairly conservative forecasts) will be significantly constrained, it begs the question how much additional investment should be made in MSP. It seems prudent that the MAC knowing that this is going to be an issue within this planning horizon should be addressing that particular problem in this update.	
	30	As elected stewards of our community, we are sorely disappointed that once again MSP is proposed to be expanded increasing the impacts on neighboring communities and making no attempt to address mitigating noise impacts. We are quite aware that the FAA's threshold for significant noise impacts is at noise levels above 65 DNL. However, this regional community set its airport noise threshold at 60 DNL in 1998 by action of the Noise Mitigation Committee and subsequently by MAC action. The expansion of MSP approved for the 2010 program was predicated on addressing noise impacts in	See GR-1. The MAC disagrees with the commentor's assertion that the MAC has established an airport noise threshold of significance of 60 DNL.

		neighboring communities. Why would this new expansion plan be proposed without addressing mitigation of noise impacts?	
	31	The trend toward addressing airport noise levels beyond 65 DNL is increasing and is very likely to change within this planning timeframe. The recent European HYENA studies are being discussed at FAA's Aviation Research Roadmap Workshops in terms of issues of annoyance and sleep interference. The International Standards Organization is likely to adopt a dose/response curve predicting community annoyance to aircraft noise will show that twice as many people are highly annoyed than with the Schultz noise curve. The point at which 12.3 percent of people are highly annoyed (FAA's current 65 DNL threshold) would be pushed out to the 55 DNL level. Quoting from the article in *Airport Noise Report*, "The Federal Interagency Committee on Aviation Noise (FICAN), which FICON evolved into, will be under pressure to adopt the revised ISO standard, which is voluntary but represents the consensus of world experts, and FAA will be under pressure to recognize the revision as a significant change".	Comment noted.
	32	As MAC continues to grow the airport and with the likelihood that noise impacts are going to continue to be a significant annoyance to	See GR-1.

		residents, the LTCP updated must address how noise associated with the expanded airport would be mitigated and include a budget recognizing the costs.	