



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Great Lakes Region  
Minneapolis Airports District Office  
6020 28<sup>th</sup> Ave S, Room 102  
Minneapolis, MN 55450

May 23, 2008

Scott Heal, City Manager  
City of Eden Prairie  
8080 Mitchell Road  
Eden Prairie, MN 55344

Final Record of Decision (ROD)  
Flying Cloud Airport  
Eden Prairie, Minnesota

Dear Mr. Neal:

The Federal Aviation Administration (FAA) has announced approval of the enclosed Record of Decision on the Final Environmental Impact Statement (FEIS) and Section 4(f) Evaluation on the Flying Cloud Airport Expansion. The ROD provides for the extension of the main runway to 5,000 feet and the other parallel runway to 3,900 feet, the construction of a new building area, land acquisition and other associated development.

FAA approval of the ROD indicates the project and required mitigation are approved and eligible for federal funding. The Metropolitan Airports Commission is now authorized to proceed with the project. Two copies of the ROD are enclosed for your information.

A notice to inform the public of FAA's decision and the locations where the document is available will be issued. We request your cooperation in making the document available to the public.

If further information is needed, please contact Glen Orcutt at (612) 713-4354

Sincerely,

A handwritten signature in black ink that reads "Robert A. Huber".

Robert A. Huber  
Manager

Enclosure



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
GREAT LAKES REGION  
MINNEAPOLIS, MINNESOTA

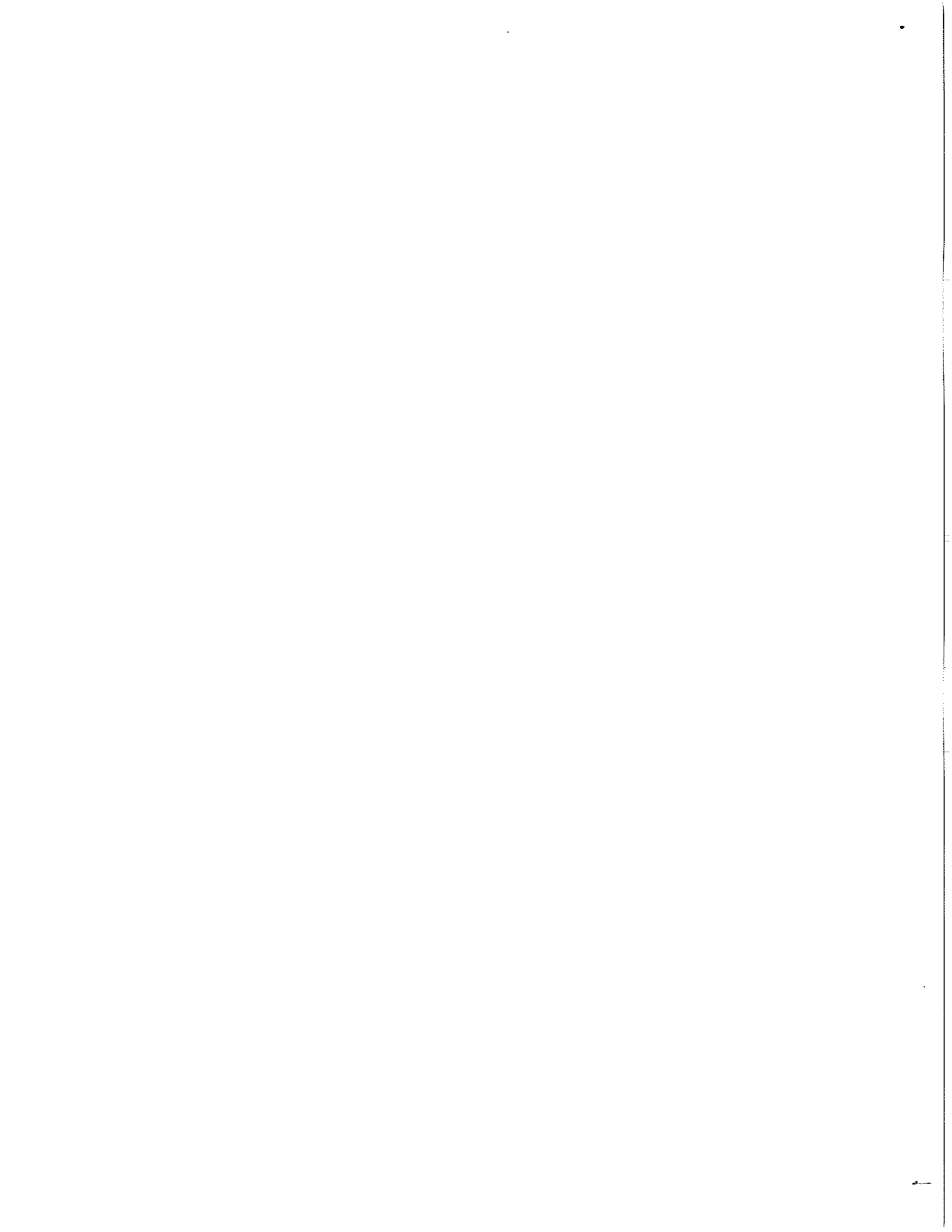


**RECORD OF DECISION**

**EXPANSION OF FLYING CLOUD AIRPORT**

**EDEN PRAIRIE, MINNESOTA**

May 2008



## Contents

I. Summary of Decision .....	1
II. Introduction and Background .....	2
A. Introduction.....	2
A.1. FAA Approvals and Actions.....	2
A.2. Airport Description .....	3
B. Project Background.....	4
B.1. Proposed Project .....	8
III. Purpose and Need for Action.....	9
A. Aviation Activity Forecasts .....	14
IV. Alternatives Analysis.....	16
A. Alternatives Considered and Eliminated .....	16
A.1. On-Site Alternatives.....	16
A.2. Off-Site Alternatives.....	18
B. Alternatives Considered in Detail.....	19
B.1. No Action Alternative.....	19
B.2. Alternative F .....	20
B.3. Alternative F with Mitigation/Proposed Project.....	21
C. Sponsor Preferred Alternative.....	28
D. Environmentally Preferred Alternative.....	28
E. Selected Alternative .....	28
V. Environmental Impacts and Mitigation .....	29
A. Summary of Findings by Impact Category or Issue .....	29
VI. Public and Agency Involvement.....	53
A. Comments on the DEIS and SDEIS and Responses.....	54
VII. Issues.....	55
VIII. Agency Findings .....	58
IX. Conditions of Approval.....	61
X. Agency Decision and Order.....	62

## Figures

Figure 1 No Action Alternative.....	5
Figure 2 Alternative F .....	22
Figure 3 Proposed Project .....	23

## Tables

Table 1 Business Jet Utilization of 3,900-Foot and 5,000-Foot Runways .....	11
Table 2 (Updated FEIS Table 2) Comparison of MAC and FAA Forecasts .....	15
Table 3 (Updated FEIS Table H-3) Estimated Development Costs of Alternatives .....	35
Table 4 (Updated FEIS Table H-5) Summary of Discounted Costs and Benefits.....	36
Table 5 (Updated FEIS Table H-6) Summary of Measured and Unmeasured Benefits and Costs.....	37

**Attachments**

Attachment A – Comments and Responses on the FEIS and Section 4(f) Evaluation

Attachment B – Correspondence

Attachment C – Final Agreement and Memorandum of Understanding between the City of  
Eden Prairie and the Metropolitan Airports Commission

Attachment D – Final General Conformity Determination

Attachment E – Memorandum of Agreement among the Federal Aviation Administration, the  
Minnesota Historic Preservation Officer and the Metropolitan Airports Commission

## **I. Summary of Decision**

Based on a review of the Administrative Record, including the Final Environmental Impact Statement (FEIS) and the Section 4(f) Evaluation approved by the Federal Aviation Administration (FAA) on June 8, 2004 and a subsequent written re-evaluation of the FEIS in May 2008, which determined that substantial changes have not occurred and the alternatives, the affected environment, environmental impacts and mitigation in the document remain applicable, adequate, accurate and valid, it is the final determination of the FAA to approve for construction and use, the Expansion of Flying Cloud Airport (FCM) as shown in the revised Airport Layout Plan (ALP) dated April 25, 2008 and included herein as Exhibit A in Attachment B. The FCM Expansion includes the extension of the primary runway 9R/27L<sup>1</sup> from 3,909 feet to 5,000 feet and the extension of parallel Runway 9L/27R from 3,600 feet to 3,900 feet, the development of a new South Building Area to accommodate new hangars, and associated taxiways and facilities and land acquisition described in Section IV.B.2 of this Record of Decision (ROD) and in the FEIS and shown in **Figure 3** on page 23 of this ROD, which is updated Figure 3 in Appendix D of the FEIS. The FAA Preferred Alternative is Alternative F with the Noise Mitigation Plan described in the FEIS and Section IV.B.3 of this ROD and the responsibilities and commitments of the project sponsor, the Metropolitan Airports Commission (MAC), contained in the Final Agreement and Memorandum of Understanding (MOU) between the MAC and the City of Eden Prairie, as presented in Attachment C of this ROD. Based on a review of the FEIS approved on June 8, 2004 and all applicable information, it is the FAA's final determination that the revised Airport Layout Plan (ALP), dated April 25, 2008 and included herein, for proposed improvements to Flying Cloud Airport is unconditionally approved. These improvements are environmentally approved as being eligible to participate in funding through use of Federal AIP funds or passenger facility charges (PFCs) for eligible projects, assuming the independent requirements of these programs are met. Implementation of the Preferred Alternative will require FAA approvals and actions described in the FEIS and Section IV.B.3 of this ROD. The MAC, as owner and operator of FCM and the project sponsor, has agreed to the terms of approval and the mitigation measures contained in this ROD.

In reaching this decision, the FAA has given careful consideration to: (a) the role of FCM in the national air transportation system, (b) the aviation safety and operational objectives of the project in light of the various aeronautical factors and judgments presented, and (c) the anticipated environmental impacts of the project.

The following is a discussion of the leading factors considered by the agency in reaching this decision.

---

<sup>1</sup> The designations of the parallel runways have changed from 9R/27L and 9L/27R to 10R/28L and 10L/28R to reflect the drift in magnetic declination from true north. However, for consistency with the previous scoping and EIS public and agency review documents, the runway designations have not been changed in this ROD.

## **II. Introduction and Background**

### **A. Introduction**

This ROD provides final agency determinations and approvals for those Federal actions by the FAA necessary for the proposed improvement of FCM. FAA identifies its preferred alternative in a Final EIS and designates the selected alternative in its ROD. The FAA identified its preferred alternative, as described above, in the Final EIS. The FAA's specific decision and order selecting the Preferred Alternative, required by 40 CFR 1505.2, is described in detail in Section X of this ROD. In addition to the FAA's extensive analysis of potential environmental impacts, the Final EIS, including the response to comments implicated by the Agency's duties under NEPA and related environmental statutes. The FAA's selection of the Preferred Alternative signifies that the projects meet FAA standards for approval of the Airport Layout Plan and other agency actions identified in this ROD. It does not, however, signify an FAA commitment to provide a specific level of financial support, which is a future decision that will be made in accordance with other FAA policies and procedures. This ROD completes the FAA's thorough and careful environmental decision-making process, including FAA's public disclosure and review by the FAA decisionmaker of the analysis of impacts described in the June 2004 Expansion of Flying Cloud Final EIS and Section 4(f) Evaluation. This ROD has been prepared and issued by the FAA in compliance with the National Environmental Policy Act of 1969 (NEPA) [42 U.S.C. Section 4321, et seq.], the implementing regulations of the Council on Environmental Quality (CEQ) [40 CFR Parts 1500-1508] and FAA directives [Order 1050.1E and Order 5050.4B]. The ROD is also used to demonstrate and document FAA's compliance with the procedural and substantive requirements and environmental, programmatic and related statutes and regulations that apply to FAA decisions and actions on proposed airport expansion projects.

#### **A.1. FAA Approvals and Actions**

This ROD provides final approval for the federal actions necessary to support the land acquisition, construction and operation of the new South Building Area and the extensions to Runways 27L and 27R as well as related facilities at FCM. Federal approval and implementation of the proposed action involve the following FAA Division approvals and actions.

**Air Traffic.** Air Traffic is responsible for establishing airspace structure, air traffic control sectors, flight routes and air traffic control procedures including the use of runways. Specific Air Traffic actions implementing the proposed action will depend on any proposed changes in existing flight routes or air traffic control procedures that could affect the air space requirements. These involve new or revised approach procedures for Runway 9R, new or revised departure procedures for Runway 27L and new or revised approach procedures for the relocation of the existing VOR facility (a very high frequency omni-directional range facility providing radio navigational guidance for the pilot).



**Airway Facilities.** The Airway Facilities Division is typically responsible for the installation, operation and maintenance of aids to navigation required to support the proposed action. For this project, MAC will be responsible through a reimbursable agreement between FAA and MAC. Development of FCM includes the replacement of landing aids serving the expanded runways. It involves new or revised approach procedures for Runway 9R, new or revised departure procedures for Runway 27L and new or revised approach procedures for the relocation of the existing VOR facility.

**Airports.** The Airports Division is responsible for approval of airport plans, administration of airport development grants and environmental approvals under NEPA. Development of the FCM project involves approval of the FEIS for the proposed project, approval of the revised airport layout plan (ALP) and issuance and administration of any grant-in-aid funds for airport development projects. The Proposed Project includes the transfer/release of airport property and the lease of airport property for non-airport uses, as described in Section IV.B.3 of this ROD, which require FAA approval.

**Flight Standards.** The Flight Standards Division is responsible for ensuring the adequacy of flight procedures and operating methods in addition to setting certification criteria for air carriers, commercial operators and airmen. Development of the FCM project involves new or revised approach procedures for Runway 9R and new or revised departure procedures for Runway 27L due to the relocation of the instrument landing system, and new or revised approach procedures for the relocation of the VOR.

The following is a list of FAA actions necessary for MAC to implement the proposed action:

- Issuance of Record of Decision,
- Determination of the environmental eligibility for the issuance of Federal funding eligibility,
- Location and design approval of revised Airport Layout Plan depicting the proposed project,
- Approval of land releases and the lease of airport property,
- Approval of airspace structure, air traffic control sectors, flight routes and air traffic control procedures including runway use, which involve new or revised approach procedures for Runway 9R, new or revised departure procedures for Runway 27L and new or revised approach procedures for the relocation of the existing VOR facility,
- Approval of landing aids and approach and departure procedures for the relocation of the instrument landing system and approach procedures for the relocation of the VOR, and
- Certifications as to the safety of instrumentation, procedures and airfield operations.

## **A.2. Airport Description**

FCM is located in the city of Eden Prairie in the southwestern portion of the Twin Cities Metropolitan Area, and encompassed 563.4 acres at the beginning of the EIS process in 1997. FCM is a reliever airport to the Minneapolis-Saint Paul International Airport (MSP) and is classified by FAA as a General Utility Airport. The MAC is the owner and operator of MSP and six reliever airports. FCM has three operational runways: two parallel runways

oriented in an east-west direction and one crosswind runway oriented in a north-south direction (**Figure 1**). Runway 9R/27L is 75 feet wide and 3,909 feet in length. Parallel and north of this runway is Runway 9L/27R, which is 75 feet wide and 3,600 feet in length. Crosswind Runway 18/36 is 75 feet wide and 2,691 feet in length. All runways are lighted and equipped with navigational aids to allow aircraft arrivals and departures under visual landing conditions. Runway 9R is equipped with navigational aids to allow aircraft arrivals and departures under precision instrument landing conditions. FCM has an Air Traffic Control Tower.

## **B. Project Background**

The FEIS is both a state and federal document; it was prepared in accordance with the National Environmental Policy Act (NEPA) and the Minnesota Environmental Policy Act (MEPA), and all portions apply to each unless stated otherwise in the text.

The FAA issued a Notice of Intent to prepare an EIS and to conduct public scoping in the October 31, 1997 *Federal Register*. The issues, impacts and alternatives to be analyzed and discussed in the EIS were presented in the March 1998 Scoping Decision, which was prepared jointly by FAA and MAC and in accordance with the Minnesota Environmental Quality Board (EQB) process.<sup>2</sup> A Draft Scoping Decision was distributed on November 4, 1997, for review and comment. A scoping public hearing was held on December 4, 1997 and the comment period ended on December 19, 1997. Responses to scoping comments were included in the Scoping Decision. The Scoping Decision was adopted by MAC on March 16, 1998 and was utilized by FAA and MAC in preparing the FEIS.

A Draft Environmental Impact Statement (DEIS) for the proposed expansion of FCM was distributed on January 7, 2000 for review and comment. A public hearing was held on February 9, 2000 and the comment period ended on February 21, 2000. The DEIS Noise Mitigation Plan contained mandatory nighttime restrictions on Stage 2 aircraft as a revision to the then existing Ordinance 51 that FAA determined would require the completion of the process contained in FAA Regulations, FAR Part 161. MAC prepared the required Part 161 Analysis and Notice, which was distributed in July 2000 and a public hearing held on August 15, 2000 and the extended comment period ended on October 16, 2000. Comments by FAA and others on the weight restrictions in the then existing MAC Ordinance 51, stated that mandatory restrictions on access to airports for the purpose of controlling noise appear to be discriminatory and, therefore, inconsistent with the conditions of receiving federal grants. As a result of these comments there were changes to the alternatives presented in the DEIS and new information was also obtained that changed the analysis of some of the environmental impacts presented in the DEIS.

---

<sup>2</sup> The Minnesota EQB issues rules that describe the process to implement MEPA. The rules required the preparation of an EIS for the proposed FCM expansion and the EQB agreed to determine the adequacy of the Final EIS.

A Supplement DEIS (SDEIS) was therefore prepared and distributed on August 8, 2001 for review and comment. The SDEIS presented the substantive changes to the DEIS and was subject to the same distribution and filing requirements as the DEIS. It was also distributed to those persons and agencies that made substantive comments on the DEIS. A public hearing was held on September 19, 2001 and the extended comment period ended on October 23, 2002. The FEIS/Section 4(f) Evaluation was distributed on June 9, 2004 and included comments on the DEIS and SDEIS. Comments on the FEIS and Section 4(f) Evaluation, including those filed late, and their responses are included in Attachment A of this ROD. On February 16, 2006 the FEIS was determined adequate by the EQB, which concluded the state MEPA process. In 2008 the FAA prepared a written re-evaluation of the FEIS to determine if substantial changes had occurred since June 2004. FAA determined in May 2008 that there have been no substantial changes to the alternatives, affected environment, environmental impacts and mitigation measures in the June 2004 FEIS. The written re-evaluation was performed consistent with FAA Order 1050.1E, Chapter 4, paragraph 410 and FAA Order 5050.4B, Chapter 14, paragraph 1401. The written re-evaluation found that substantial changes have not occurred and the alternatives, the affected environment, environmental impacts and mitigation in the June 2004 FEIS remain applicable, adequate, accurate and valid. A copy of the written re-evaluation is in the project's administrative file and is available upon request.

The following is a history of events related to the proposed project.

- 1947 – MAC acquires 134.2-acre site of privately-owned Flying Cloud Field airport.
- December 1976 – MAC adopts first FCM Master Plan, which includes lengthening Runway 9R/27L 485 feet to the west and 200 feet to the east for a total length of 3,900 feet.
- January 1978 – MAC adopts Ordinance 51 that limits use at FCM to jet aircraft of 20,000 pounds or less that meet the noise emission levels of Federal Aviation Regulations (FAR) Part 36.
- July 1978 – Flying Cloud Airport Advisory Commission formed to promote communication between the City of Eden Prairie and MAC.
- February 1979 -- Metropolitan Council finds the 1976 FCM Master Plan consistent with its Development Guide.
- August 1979 – Runway 9R/27L is lengthened to 3,900 feet.
- March 1988 – MAC initiates preparation of FCM Long Term Comprehensive Plan (LTCP), which updates 1976 FCM Master Plan.
- March 1989 – MAC holds public hearing on LTCP, which includes a new south building area and extension of Runway 9R/27L 1,100 feet to the west for a total length of 5,000 feet, and increases the allowable weight of jet aircraft to 30,000 pounds.
- October 1989 – FAA adopts new airport design criteria, which introduced “object-free” areas 1,000 feet in length at the ends of runways. Runway 9R/27L would have to shift 520 feet to the west and then extend 1,620 feet to the west in order to attain a 5,000-foot runway and comply with FAA standards.
- March 1991 – MAC adopts FCM Noise Abatement Plan, after consultation with Flying Cloud Airport Advisory Commission and FAA.

- May 1991 – MAC adopts revised LTCP. The LTCP includes the new south building area, the increase in the weight of jet aircraft to 30,000 pounds and the extension of Runway 9R/27L to 5,000 feet in accordance with FAA standards, which requires the 1,620-foot extension to the west.
- July 1991 – MAC completes Environmental Assessment Worksheet/Draft Scoping Decision Document (EAW/DSDD) on runway extension and new south building area, and distributes for review and comment.
- August 1991 – MAC holds scoping meeting on the EAW/DSDD at Hennepin Technical College. There was considerable opposition to the proposed 1,600-foot runway extension.
- August 1991 to September 1992 – MAC considers issues raised during scoping and consults with FAA on its runway design criteria as it relates to FCM.
- November 1991 – FAA revises its design criteria for the length of “object-free” areas at the ends of runways; reduces length from 1,000 to 600 feet for the design groups of general aviation aircraft that operate at FCM.
- October 1992 – MAC adopts revised FCM LTCP and submits it to the Metropolitan Council for approval. The LTCP includes the new south building area and extension of Runway 9R/27L 1,100 feet to the west for a total length of 5,000 feet (in accordance with FAA’s revised criteria on the size of “object-free” areas at the ends of runways), and increases the allowable weight of jet aircraft to 30,000 pounds, as originally proposed in March 1989. However, aircraft operating on Runway 9R/27L would have to use “declared distances” of less than 5,000 feet to comply with FAA’s standards.
- December 1992 – City of Eden Prairie objects to FCM LTCP and Metropolitan Council suspends the LTCP until the issues raised by Eden Prairie are addressed.
- January 1992 to March 1996 – Discussions between MAC, Eden Prairie and Metropolitan Council staff on the issues, including mediation sessions.
- April 1996 – Metropolitan Council finds the 1992 FCM LTCP consistent with its Development Guide.
- July 1996 – MAC and FAA begin preparation of joint federal/state EIS.
- July 1996 – MAC submits FCM Airport Layout Plan (ALP) to FAA and Mn/DOT for review and approval.
- October 31, 1997 – The FAA issued a Notice of Intent to prepare an EIS and to conduct public scoping in the October 31, 1997 *Federal Register*.
- October 1997 – Scoping Environmental Assessment Worksheet (EAW) and Draft Scoping Decision document is distributed for public and agency review and comment. A scoping public hearing was held on December 4, 1997, at the Pax Christi Catholic Community in Eden Prairie.
- November 1997 – FAA submits comments to MAC on the FCM ALP. FAA disagrees with the proposed declared distances for Runway 9R/27L.
- March 1998 – MAC responds to comments on Scoping EAW and Draft Scoping Decision document and adopts Scoping Decision for the EIS.
- August 1998 – Minnesota Environmental Quality Board (EQB) accepts MAC request to determine the adequacy of the Final EIS in regard to state rules.

- January 2000 – DEIS is distributed for public and agency review and comment. A DEIS public hearing was held on February 9, 2000, at the Hennepin Technical College in Eden Prairie.
- July 2000 – Part 161 Notice and Analysis of Proposed Restrictions on Nighttime Maintenance Run-ups and Nighttime Stage 2 Aircraft Operations is distributed for public review and comment. A Part 161 public hearing was held on August 15, 2000, at the Hennepin Technical College in Eden Prairie.
- August 2001 – SDEIS is distributed for public and agency review and comment. (The comment period was subsequently extended several times to January 22, 2003.) An SDEIS public hearing was held on September 19, 2001, at the Hennepin Technical College in Eden Prairie.
- December 4, 2002 – Representatives of MAC and Eden Prairie sign MOU that is subsequently endorsed by the City and MAC (see Attachment C).
- December 16, 2002 – MAC adopts Ordinance No. 97, which amends Ordinance 51 by eliminating the 20,000-pound maximum takeoff limit (see Attachment C).
- December 17, 2002 – MAC and City of Eden Prairie execute Final Agreement allowing expansion of FCM with commitments and amendments to Ordinance 51 (see Attachment C).
- September 24, 2003 – Northwest Airlines submits a letter to FAA raising revenue diversion issues with respect to certain real estate transactions between the MAC and the City of Eden Prairie in connection with the expansion of Flying Cloud Airport.
- June 2004 – FEIS is distributed for public and agency review and comment. (The comment period was extended to September 17, 2004.)
- February 2006 – Determination of adequacy of the FEIS by the Minnesota Environmental Quality Board (EQB) in accordance with State law and EQB rules.
- November 7, 2007 – Northwest advises FAA that they have reached a resolution of those issues with the MAC, and withdraws its pending complaint.
- February 2008 – FAA prepares a written re-evaluation of the FEIS and determines the FEIS remains applicable, adequate, accurate and valid and no supplementation of the FEIS or further environmental documentation is required.

## **B.1 Proposed Project**

The proposed project consists of the following:

- Runway 9R/27L would be extended 1,211 feet to the west for a total length of 5,000 feet and widened to 100 feet. This would require the existing Runway 9R precision instrument landing system to be relocated and a new parallel taxiway and other associated taxiways to be constructed.
- Runway 9L/27R would be extended 300 feet to the west to a final length of 3,900 feet.
- Eleven hangars would be removed.
- A service road would be provided around the east and west ends of Runways 9R/27L and 9L/27R.
- The existing VOR facility would be relocated.
- Approximately 72.7 acres of land would be acquired to prevent incompatible development and 14.8 acres of easements would be acquired.

- All necessary navigation aids to support the proposed development would be installed and flight checked.
- Air traffic control procedures necessary to support the proposed development would be implemented.
- The FEIS Noise Mitigation Plan<sup>3</sup> and the responsibilities and commitments in the Final Agreement and MOU between MAC and the City of Eden Prairie presented in Attachment C of this ROD would be implemented.

### **III. Purpose and Need for Action**

The *general* purpose of the project is to provide for the airport development plan that best satisfies the year 2010 aviation needs of Flying Cloud Airport (FCM) and the Metropolitan Airports System, as stated in the Aviation Chapter of the Metropolitan Development Guide of the Metropolitan Council, the regional planning agency. The *specific* purpose of the project is to implement the 1992 FCM Long-Term Comprehensive Plan (LTCP) approved by the Metropolitan Council, which includes the following actions:

- acquire sufficient land to protect the airport from incompatible development,
- provide sufficient hangar spaces to accommodate existing and year 2010 demand,
- provide a runway with an effective length of 5,000 feet for takeoffs and landings to induce appropriate general aviation aircraft to use FCM instead of the Minneapolis-Saint Paul International Airport (MSP) and provide the associated taxiways and navigational aids, consistent with FAA standards,
- provide a parallel 3,900-foot runway,
- revise the 1978 MAC Ordinance 51 to allow maximum utilization of the 5,000-foot runway by general aviation jet aircraft. (Ordinance 51 restricted use of FCM by jet aircraft to 20,000 pounds or less maximum takeoff weight; MAC rescinded Ordinance 51 and adopted Ordinance 97 in December 2002, which allows use of FCM by aircraft with certified maximum gross takeoff weight less than 60,000 pounds based on the runway pavement design strength and construction.)

#### Runway Length

The proposed 5,000-foot Runway 9R/27L is designed to accommodate B-II aircraft. The critical aircraft is the Cessna Citation III, which is forecast to have over 1,000 annual operations in 2010.

The Minnesota legislature, in its April 1996 decision to expand MSP instead of constructing a new replacement airport, mandated that MAC divert the maximum feasible number of general aviation operations from MSP to the reliever airports because the runway capacity of MSP is constrained by the size of the site.

---

<sup>3</sup> The mitigation plan was included in the formulation of the preferred alternative. Accordingly, the elements of the mitigation plan are requirements of the project. The mitigation in Measure 8 of the Plan is not eligible for Federal funding.

The existing primary runway (Runway 9R/27L) is approximately 3,909 feet in length. This runway length is inadequate to provide efficient general-aviation air taxi and business aircraft access to the nation. The FAA has developed runway length design curves for business jet aircraft of approximately 60,000 pounds and less maximum takeoff weight (MTOW). The minimum runway design length was derived from these design curves for 75 percent of the fleet at a 60 percent useful load. When applying this curve data to conditions at FCM, a runway length of 5,500 feet is required. At FCM, however, the maximum length of runway is limited by state law to 5,000 feet. A 5,000-foot runway at FCM will therefore be less than what is needed for full utilization under all conditions, by all of the light-to-medium size business jets represented by the FAA's design charts. A listing of the light-to-medium size business jet aircraft is presented in enclosed FEIS **Table 1**. Assuming effective utilization at 60% of load capacity, only 16 of the 43 jets can effectively operate at existing FCM because of the length of the runway and the conditions footnoted in **Table 1**. With a 5,000-foot runway, 41 of the jets could effectively operate at FCM under Ordinance 97 (amended Ordinance 51).

Six of the business jet aircraft types are currently based at FCM. Three of the six can operate at full load on the existing 3,909-foot runway (Cessna 500, 501 and 525). The other three (Cessna 550, Beechjet 400 and Beechjet 400A) are typically used to carry passengers and/or products to east coast destinations, such as New York, Washington, D.C., and Atlanta, as well as the Citation II to west coast destinations, such as Seattle, San Francisco and Los Angeles. These based aircraft types must reduce their weight (have less fuel, cargo and/or fewer passengers), especially during the summer months, in order to ensure a safe takeoff. The 3,909-foot runway length at FCM requires that these based aircraft stop at an airport with an adequate runway length to pick up additional fuel and/or passengers when making long distance trips. This intermediate stop is frequently made at MSP, which is inconsistent with the purpose of a reliever airport. Also, when the condition of the runway surface at FCM is such that braking distances for aircraft are increased (e.g., ice on the runway), these aircraft that can otherwise use the 3,909-foot runway stop at MSP if they can't safely land at FCM because the length of the runway is too short under these conditions. This can amount to several operations per day at MSP according to the FBOs, including transient aircraft destined for FCM. The number of days when these weather conditions occur varies from year to year.

The FEIS included an April 1997 survey of two FCM Fixed Base Operators (FBOs) which found that there were approximately 22.5 flights per week from FCM that stop at MSP because of the inadequate length of the runway, which does not include stopovers due to weather conditions. For the FEIS written re-evaluation, three FBOs were surveyed in July and August 2007, which found that there are approximately 29.7 stopovers per week at MSP (unrelated to weather) because of the inadequate length of the runway.<sup>4</sup> Each stopover at MSP results in 2 operations at MSP – a landing and a takeoff. Therefore, there are an average of approximately 59.4 operations per week (2 x 29.7) and approximately 3,088 operations per year at MSP because of insufficient runway length at FCM.<sup>5</sup> The FBOs said

<sup>4</sup> Personal communications of Joe Harris of MAC and/or Larry Dallam of HNTB with Executive Aviation, Elliott Aviation and ASI Jet Center, on July 23, August 1 and August 6, 2007, respectively.

<sup>5</sup> The FEIS stated 2,340 annual stopover operations at MSP.

Table 1 Business Jet Utilization of 3,900' and 5,000' Runways

No.	Business Jet Make and Model	Stage (1)	Aircraft Wgt. (2) (lbs.)	MTOW (3) (lbs.)	3900' Rwy. MTOW (4) (lbs.)	5000' Rwy. MTOW (4) (lbs.)	60% of Full Load (5) (lbs.)	Can Effectively Use Existing Runways?	Can Effectively Use 5000' Runway?
1	CESSNA 500 CITATION I #	3	6,782	11,850	11,850	11,850	9,823	Yes	Yes
2	CESSNA 501 CITATION I #	3	6,000	11,850	11,850	11,850	9,510	Yes	Yes
3	CESSNA 525 CITATION #	3	6,580	10,400	10,200	10,400	8,872	Yes	Yes
4	CESSNA 550 CITATION II #	3	7,416	14,100	12,000	13,500	11,426	Yes	Yes
5	CESSNA 560 CITATION V	3	9,250	15,900	15,500	15,900	13,240	Yes	Yes
6	CESSNA 650 CITATION III	3	11,811	21,000	16,000	18,000	17,324	No	Yes
7	CESSNA 650 CITATION VII	3	11,770	23,000	17,000	20,000	18,508	No	Yes
8	CESSNA 750 CITATION X	3	19,376	35,700	23,000	30,000	29,170	No	Yes
9	DASSAULT FALCON 10	3	10,800	19,400	16,800	18,800	15,960	Yes	Yes
10	DASSAULT FALCON 20-G	3	18,600	31,000	cannot use	cannot use	25,240	No	No
11	DASSAULT FALCON 50	3	21,125	38,800	32,000	36,800	31,730	Yes	Yes
12	DASSAULT FALCON 200	3	18,800	32,000	25,200	28,800	26,720	No	Yes
13	DASSAULT FALCON 900B	3	22,611	46,500	cannot use	37,800	36,944	No	Yes
14	DASSAULT FALCON 2000	3	20,735	36,000	27,600	32,000	29,894	No	Yes
15	ISRAEL 1124A WESTWIND 2	2	13,250	23,500	18,397	21,327	19,400	No	Yes
16	ISRAEL ASTRA SP	3	13,225	23,500	17,687	20,647	19,390	No	Yes
17	LEARJET 24F	2	7,130	13,500	13,500	13,500	10,952	Yes	Yes
18	LEARJET 25D	2	7,840	15,000	13,500	15,000	12,056	Yes	Yes
19	LEARJET 31A	3	10,588	16,500	15,000	17,000	14,135	Yes	Yes
20	LEARJET 35A/36A	3	9,838	18,000	14,000	16,000	14,735	No	Yes
21	LEARJET 55C	3	12,622	21,000	16,000	18,000	17,649	No	Yes
22	LEARJET 60	3	14,038	22,750	16,000	19,000	19,265	No	No
23	MITSUBISHI MU 300-10 DIAMOND II	3	8,248	15,780	14,052	15,780	12,767	Yes	Yes
24	RAYTHEON BEECHJET 400 #	3	9,900	15,780	14,502	15,780	13,428	Yes	Yes
25	RAYTHEON BEECHJET 400A #	3	10,450	16,100	14,868	16,100	13,840	Yes	Yes
26	RAYTHEON HAWKER 125-1000	3	18,000	31,000	cannot use	28,000	25,800	No	Yes
27	RAYTHEON HAWKER 125-F1A	3	11,600	21,450	19,200	21,450	17,510	Yes	Yes
28	RAYTHEON HAWKER 125-F3A/RA	3	12,800	23,600	19,200	21,450	19,280	Yes	Yes
29	RAYTHEON HAWKER 125-F400	3	12,800	23,600	19,200	21,450	19,280	Yes	Yes
30	RAYTHEON HAWKER 125-700	3	12,845	25,500	19,600	21,700	20,438	No	Yes
31	RAYTHEON HAWKER 125-800	3	14,720	27,400	20,400	23,200	22,328	No	Yes
32	RAYTHEON HAWKER 125-800XP	3	16,270	28,120	cannot use	25,670	23,380	No	Yes
33	ROCKWELL SABRELINER 40	2	11,250	18,650	15,500	17,800	15,690	No	Yes
34	ROCKWELL SABRELINER 65	3	13,754	24,000	18,600	20,600	19,902	No	Yes
35	ROCKWELL SABRELINER 80	2	13,600	23,300	19,200	22,000	19,420	No	Yes
36	CANADAIR CL-600	3	23,385	40,400	31,200*	36,100*	33,594	No	Yes
37	CANADAIR CL-600 (WINGLETS)	3	23,200	41,250	31,200*	36,500*	34,030	No	Yes
38	CANADAIR CL-601	3	23,200	42,100	33,000*	37,000*	34,540	No	Yes
39	CANADAIR CL-601-1A	3	23,200	45,100	33,000*	37,000*	36,340	No	Yes
40	CANADAIR CL-601-3A	3	23,200	45,100	34,250*	38,100*	36,340	No	Yes
41	CANADAIR CL-601-3R	3	23,200	45,100	34,250*	38,100*	36,340	No	Yes
42	CANADAIR CL-604	3	26,630	48,200	36,400*	41,000*	39,572	No	Yes
43	GULFSTREAM IV	3	42,500	74,800	57,360	66,920	61,760	No	Yes

\* BASED ON MANUFACTURER PERFORMANCE DATA FOR ISA CONDITIONS + 13° C

# - BASED AT FCM (10-99)

(1) SOURCE: FAA ADVISORY CIRCULAR 36-1G "NOISE LEVELS FOR U.S. CERTIFICATED & FOREIGN AIRCRAFT" APPENDIX 3.

(2) THIS WEIGHT IS GENERALLY SUPPLIED BY THE MANUFACTURER. THE CRITERIA USED TO DETERMINE THIS WEIGHT VARIES, BUT USUALLY INCLUDES THE BASIC MATERIALS AND INSTRUMENTATION (AND SOMETIMES CREW) NECESSARY FOR THE AIRCRAFT TO FLY.

(3) MAXIMUM TAKEOFF WEIGHT (MTOW) COMES FROM A VARIETY OF SOURCES, INCLUDING AC 150/5300-13 AIRPORT DESIGN APPENDIX 13, AEROSPACE SOURCE BOOK AS PUBLISHED BY AWST (JANUARY 11, 1999), A/C MANUFACTURERS' DATA, JANE'S ALL THE WORLD'S AIRCRAFT, BUSINESS & COMMERCIAL AVIATION (MAY, 1990) AND FAA ADV. CIRCULAR 36-1G "NOISE LEVELS FOR U.S. CERTIFICATED & FOREIGN AIRCRAFT," APPENDIX 3.

(4) THE SPECIFIC CRITERIA USED TO DETERMINE THIS WEIGHT VARIED FROM MANUFACTURER TO MANUFACTURER. IN MOST CASES, THESE CRITERIA INCLUDED FLAP SETTINGS OF 7 TO 15 DEGREES, ANTI-ICE OFF, NO WIND, AN ELEVATION OF 906' MSL, A TEMPERATURE OF 85 DEGREES F AND DRY RUNWAYS.

(5) 60% OF FULL LOAD = 0.60 x (MTOW - AIRCRAFT WEIGHT) + AIRCRAFT WEIGHT



that these stopovers at MSP are from aircraft based at FCM and therefore do not include transient aircraft that are destined for FCM but cannot land due to the runway length. The FBOs said that a 5,000-foot runway would eliminate the need for stopovers at MSP except under extreme weather conditions at FCM.

The inadequate length of the existing primary runway at FCM can also encourage businesses wanting efficient access to the nation and located in the southwestern area of the region to base their aircraft at MSP – which is inconsistent with the Aviation Chapter of the Metropolitan Development Guide. Policy 6 of the Aviation Chapter urges MAC *to provide the facilities needed by general aviation operators and to maintain all of its reliever airports at a high level of operational readiness. If experience indicates that further inducements are necessary to encourage greater use of reliever airports, the MAC should use financial inducements that would make it more economical to use the reliever airports than the major airport.* A 5,000-foot runway and additional hangar space are facility improvements that operators at FCM have repeatedly stated are needed for the airport to have a high level of operational readiness. These improvements would provide an inducement for business aircraft to not use MSP.

The other existing parallel runway (Runway 9L/27R) is 3,600 feet in length. The proposed runway extension to 3,900 feet would increase the capacity and improve the operation of FCM. The FAA classifies FCM as a General Utility Airport. The FAA required length for a General Utility 1 runway is 3,900 feet. Extending the runway and providing a taxiway connection between Runways 9L and 9R would enable the tower to utilize both runways and expedite departures of aircraft that require a 3,900-foot or less runway. The extension would be constructed first, thereby satisfying the need to accommodate the existing aircraft requiring a 3,900-foot runway during construction of the Runway 9R extension. It would also provide for these aircraft when Runway 9R is closed for maintenance and snow removal.

#### *Airfield Safety*

For every airport runway approach, an imaginary surface is defined as a trapezoidal plane into which there can be no obstructions. Approach surfaces are needed to protect the safety of pilots and persons on or near the airport. The surface of the trapezoid is a plane that slopes up and away from the runway end at a ratio of 34 horizontal to 1 vertical. The sides of the trapezoidal approach surface also extend up and away from the trapezoid at a ratio of 7 horizontal to 1 vertical and are called the transitional surface, which should also be free of obstructions. There are 11 hangars at FCM that penetrate one of these surfaces, as shown in **Figure 1**. Nine of the hangars penetrate the approach surface and 2 penetrate the transitional surface.

Each runway at an airport has an area that FAA standards require to be free of stationary objects, unless they are needed for air navigation or ground maneuvering purposes. This area is called the Object Free Area (OFA). The runway OFA at FCM is 800 feet wide centered on the runway and extends 600 feet from each end of the runway. Two hangars and a corner of a third hangar lie within the OFA, as shown in **Figure 1**.

FCM is listed as one of the top ten airports in the country for having the most runway incursions. A runway incursion occurs when an aircraft, vehicle or person enters the air operations area or crosses an active runway without permission from the Air Traffic Control Tower (ATCT). Runway incursions are severe safety hazards and a top priority of FAA is to reduce and prevent such occurrences. A major problem at FCM is the lack of a perimeter road between the southeast building area and the north building area, which requires maintenance and fuel vehicles of the fixed base operators (FBOs) to cross the FCM runways in order to access the building areas. The FBO vehicles cross an active runway without ATCT permission. The Proposed Action includes a new perimeter road that will eliminate these crossings.

#### Hangar Space

Currently, there is no hangar space available for new tenants at FCM. There is a waiting list of persons/businesses requesting space; the waiting list has fluctuated between 50 and 100 spaces over the past several years and currently is 119 spaces.<sup>6</sup> Some businesses with aircraft operating at MSP have told MAC staff they would relocate to FCM if hangar space is available and the runway is lengthened to 5,000 feet.

#### System Planning

The Metropolitan Council analyzed the demand and capacity of the reliever airport system in a 1990 Regional Reliever Airport Study and recommended needed improvements at individual airports based on that analysis. The study recommended an expanded building area and extension of the primary runway (Runway 9R/27L) at FCM. The Metropolitan Council also addressed the need for the expanded building area and extension of the primary runway to 5,000 feet in its approval of the FCM LTCP in April 1996 (see report in Appendix A.8 of the FEIS). The Council stated that FCM *was ... one of the first airports in the region and has had a more sophisticated mix of aircraft types than many of the other general aviation airports. It is projected that the mix will be increasingly more sophisticated, and will require improved services and longer runways.* The Council further stated that *...expansion at Flying Cloud is critical to meet the demand from growth in the western suburbs* – and cited the substantial private development that has occurred/is occurring in Edina, West Bloomington, Minnetonka, Eden Prairie, Chanhassen, Shakopee and Chaska. It also stated that the proposed expansion at FCM is in keeping with other public infrastructure expansion recently completed or planned in the southwest metro area – including I-494, I-35W, Trunk Highway (TH) 5, TH 62 Crosstown Highway extension, future TH 212 and the Lake Ann interceptor.

Another need for the proposed 5,000-foot runway is related to aircraft insurance policies. An aircraft owner requests insurance for his/her aircraft and the insurance company requests information on the aircraft, how it will be operated, the experience of the pilots, based airport, etc. The insurer sets the rate based on this information and holds the owner to it. Several owners operating jet aircraft have insurance based on runways of at least 5,000 feet in length. Because of this requirement, some transient aircraft that could utilize FCM must land and depart at other nearby airports, such as MSP.

---

<sup>6</sup> Flying Cloud Waiting List, July 5, 2007.

There is also a need for a service road around the east and west ends of Runways 9R/27L and 9L/27R and a need to acquire land to protect FCM from incompatible development. The service road would eliminate service and maintenance vehicles crossing the runways and reduce the occurrence of runway incursions. There are vacant lands west and south of FCM that were owned by developers and proposed for residential development. Close-in residential development is incompatible with long-term airport development plans and with noise generated by normal aircraft operations.

### **A. Aviation Activity Forecasts**

It is the FAA's policy that forecasts used to make decisions about the timing and scale of major investments must be accurate. In instances where the airport sponsor's forecast is too high, the result can be premature or unneeded development, and where the forecast is too low, the result can be an understatement of environmental impacts. It is therefore the policy of FAA to review the sponsor's forecasts to ensure that they are realistic and provide adequate justification for airport planning and development. Airport sponsor forecasts that vary considerably from the forecasts prepared by FAA must be resolved.

#### *FAA Forecasts*

Each year the FAA issues a national forecast of aviation activity, as well as forecasts of aviation activity at all towered airports. The specific airport forecast is called the FAA Terminal Area Forecast (TAF). The TAF is based in large part on current activity and trend analysis with some modifications based on local conditions. The forecast of operations is based on historical relationships between the airport's specific operations and national economic variables influencing aviation activity. The TAF assumes unconstrained demand but takes into account local and national conditions, as well as conditions within the aviation industry.

#### *Comparison of MAC and FAA TAF Forecasts*

The FEIS compared the MAC EIS forecast prepared in 1997 with the FAA TAF prepared in 2002. This was included in the SDEIS. The current TAF was finalized in December 2007. The existing and 2010 forecast levels of based aircraft and operations utilized in the FEIS are presented in updated Table 2 below for each of the alternatives described in FEIS Section III (ROD Section IV) and compared with the 2007 FAA TAF for FCM in the year 2020.

The EIS 2010 forecast is considerably higher than the TAF 2020 forecast. It is important to note that the purpose and need for the proposed expansion is not based on airfield capacity deficiencies in terms of the forecast *number* of operations. Rather, it is based on deficiencies in the length of the runways needed to accommodate the types of aircraft that operate at FCM and that can be diverted from MSP, as listed in **Table 1**. The existing runways could accommodate the EIS 2010 forecast *number* of operations for the proposed project; however, as noted above, many operations could not takeoff and land with all passengers, cargo and/or fuel aboard because of insufficient runway length. According to the FBOs interviewed in July and August 2007 as part of the written re-evaluation, the number of operations that can be diverted from MSP will either remain constant or increase in the future. Therefore, use of a forecast with fewer operations would not change the purpose and need for the proposed action.

Table 2 (Updated FEIS Table 2) Comparison of MAC and FAA Forecasts

Activity	1999		2010 Forecast		FAA TAF 2020 Forecast
	EIS Estimate	Reported in FAA TAF	EIS No Action	EIS Alt. F and Alt. F with Mitigation	
Based Aircraft	491	506	491	613	571
Total Operations	234,475	187,621	241,353	302,982	145,793
Nighttime Operations (2200 to 0700 hrs.)	8,294	NA	9,253	12,877	NA
Business Jet Operations	5,876	NA	8,659	24,440	NA

Source: FAA Final 2007 TAF; FCM Expansion Technical Report – Activity Forecasts, November 1999  
NA = not available

The forecasts prepared in 1997 for the EIS used 1996 operations as the base year for applying growth rates to forecast the future. The 1996 estimate of operations was very close to that reported by FAA in 1997 (225,997 vs. 221,309) considering that the FAA TAF operations are tower counts and therefore do not include nighttime activity between 10:00 p.m. and 6:00 a.m. when the tower is closed, whereas the MAC EIS estimate does. The difference between the EIS 2010 build forecast and the TAF 2020 forecast, in addition to nighttime operations, is likely due to the following: the TAF 2020 forecast does not fully incorporate the effects on operations of the proposed building area expansion and the proposed increase in runway length and the concomitant diversion of operations to FCM from MSP, and diversion of based aircraft and operations from other constrained reliever airports in the Metro Area. Furthermore, the TAF reflects the downturn in the economy and the effects of the events of 9/11/01, both of which were unexpected in the EIS forecast.

Reported FCM operations have decreased substantially from 1996 through 2006. Reported 2006 operations is a major factor in the decrease of the 2020 operations forecast in the 2007 TAF. Reported 2006 operations are not considered by MAC to be representative of future activity at FCM for the following reasons. Nighttime operations are not counted. The delay in the implementation of the proposed expansion has affected operations at FCM. The MAC forecast expected implementation of the proposed expansion to be completed by 2002. The delay has prevented some existing tenants from expanding at FCM due to the lack of hangar space and they have moved some of their operations to other reliever airports with available hangars. MAC expects these tenants to return to FCM after the expansion is completed.

MAC believes a high proportion of GA operations previously forecast for MSP will occur at an expanded FCM because of its location and facilities/services, and the constraints at other reliever airports. For these reasons and because the proposed expansion is not based on a forecast of operations, MAC believes the 2010 EIS forecast of operations for Alternative F

and Alternative F with Mitigation is reasonable for use in the analysis of environmental impacts in the EIS process.

*Sensitivity of Environmental Impacts to Forecast Levels*

A sensitivity analysis was performed for all of the environmental impact categories in the FEIS. An initial review determined that a detailed review should be performed for the following categories potentially affected by FCM operations: Air Quality, Bird-Aircraft Hazards, Compatible Land Use, Environmental Justice, Noise, Section 4(f) and wildlife refuge. In each category, proportionately lowering the 2010 forecast operations for the proposed expansion and no action alternatives to be consistent with the TAF 2020 forecast would result in less impact or no change in what was in the FEIS. Accordingly, there was no need for further review. See discussions in Section V of this ROD.

Based on the preceding analyses, the FAA has taken into consideration the MAC FEIS forecast and the current FAA TAF for 2020 and has determined that the MAC FEIS forecast is considered adequate for the following reasons:

- The forecast levels do not affect the timing or scale of the project
- The forecast levels do not affect the role of the Airport
- The TAF does not take into account the future diversion of GA operations from MSP and other constrained reliever airports to FCM
- The TAF does not include nighttime operations between 10:00 p.m. and 6:00 a.m. and the FEIS forecast does
- Use of the FEIS forecasts does not result in an increase in significant adverse impacts to the environment for the Proposed Action and alternatives compared to use of the TAF
- Use of the FEIS forecast results in less impact or no change in the values for noise, air quality and compatible land use impacts and flights over the wildlife refuge or any other impact categories contained in the FEIS.

The purpose and need for the Proposed Action does not change because the number of forecast operations is not a purpose or need for the Proposed Action. The aircraft and operations that form the primary need for the project are anticipated to remain constant or increase through the planning period.

## **IV. Alternatives Analysis**

### **A. Alternatives Considered and Eliminated**

#### **A.1. On-Site Alternatives**

Alternatives A and B. There were two alternatives identified in scoping that were eliminated in the DEIS – Alternatives A and B. Alternatives A and B would extend both parallel runways and utilize *declared distances* for some arrivals and departures on Runway 9R/27L. The longer of the two runways (Runway 9R/27L) would be extended 1,091 feet to the west for a final length of 5,000 feet; the existing length is 3,909 feet. The other runway, Runway

9L/27R, would be extended 300 feet to the west to a final length of 3,900 feet; the existing length is 3,600 feet. No extension of the existing crosswind Runway 18/36 is proposed. A FAA-required safety area would extend 600 feet off the east end of Runway 9R/27L and include a portion of TH 212. TH 212 and its fence intrude about 120 feet into this area. This area must be free of objects that could pose a safety problem for landing and departing aircraft. In order to maintain this 600-foot-long area without moving the end of the runway to the west, the east end of Runway 9R/27L would have to be striped for a distance of 120 feet, and departures and landings on 9R and landings on 27L would have 4,880 feet (5,000 - 120) of available runway. This is called a *declared distance* that pilots would have to observe for these operations. Only departures on 27L would have the full 5,000 feet available.

As in Alternative F presented in B.2 of this section, the new south building area would be developed and land would generally be acquired for expansion of state Safety Zones A and B and navigational aids at the west ends of the extended runways. The lights associated with the navigational aids include MALS lights at the west end of the south parallel runway.

Alternative A would have retained the limitation in Ordinance 51 on use of the airport to aircraft with not more than 20,000 pounds maximum gross takeoff weight and Alternative B would have allowed aircraft with not more than 30,000 pounds maximum gross takeoff weight.

The only physical difference between Alternatives A and B and Alternative F is the final location of the west end of the extension of Runway 9R/27L – which would be 120 feet farther west for Alternative F than for Alternatives A and B.

Alternatives A and B were eliminated in the DEIS as a result of a November 19, 1997, FAA letter to MAC commenting on MAC's proposed Airport Layout Plan (ALP) for Alternatives A and B. FAA stated that the use of declared distances is allowable at "constrained" airports on a case-by-case basis. FAA questioned the justification that FCM is constrained, since there is no physical impediment to shifting the runway 120 feet to the west and thereby achieving an unrestricted 5,000-foot runway. MAC agreed with FAA that the use of declared distances should not be allowed except in very unusual circumstances, and that FCM would have a higher level of safety without the use of striping and pilot notification for declared distances. Also, the purpose and need for the proposed action requires a runway with an effective length of 5,000 feet, which could not be achieved by Alternative A or B.

The land acquisition costs for Alternatives A and B would be the same as for Alternative F, and the environmental impacts would be similar to Alternative F.

Alternatives C, D and E. There were three alternatives identified in the DEIS that were eliminated in the SDEIS – Alternatives C, D and E. Alternatives C, D and E were identical to Alternative F except for the use of FCM by jet aircraft, which would have been restricted according to jet aircraft weight. Alternative C was proposed to maintain the restriction on use of the airport by jet aircraft to those with 20,000 pounds or less maximum takeoff weight, as specified in then existing Ordinance 51. Alternative D was proposed to restrict use of FCM to jet aircraft with 30,000 pounds or less maximum takeoff weight. Alternative E was proposed to restrict use of FCM to jet aircraft with 22,500 pounds or less basic empty weight.

Alternatives C, D and E would have restricted access to FCM based on aircraft weight for the purpose of controlling noise. Since there is no evidence that these weight limits are related to any legitimate noise objective at FCM, they are considered inconsistent with the FAA grant assurance of reasonable access to FCM, as stated in the FEIS on page I-1, and therefore were eliminated.

## A.2. Off-Site Alternatives

Relocate Existing FCM. It is considered impractical to find a suitable site in the metro area that would accommodate the users of FCM. The site would have to be in a rural area (similar to the current site when it was acquired in 1947) with the ability to control existing and future land use around the airport to ensure compatibility with airport operations. Potential sites could be in Carver County and southern Scott County; however, such sites would be too remote to attract the corporate users of FCM and divert users of MSP located in Hennepin County. Also, even if a suitable site could be found, the time to perform the site selection studies, prepare the Long-Term Comprehensive Plan (LTCP) and obtain the necessary approval of the Metropolitan Council, acquire the land and develop the airport would be well beyond the timeframe when the facilities are needed. Therefore, this alternative would not satisfy the purpose and need for the project.

Utilize Other Reliever Airports. The reliever airports were located in the Metropolitan Airports System Plan to accommodate general aviation users in each airport's service area. FCM is the airport of choice for most general aviation jet aircraft whose owner or operator is located in FCM's service area, the southwestern part of the Metro Area. Utilization of an airport is the choice of the aircraft owner/operator; neither FAA nor MAC can dictate what airport to use.

*St. Paul Downtown Airport.* The St. Paul Downtown Airport is located in downtown St. Paul. It encompasses 540 acres owned by the MAC. It has an Air Traffic Control Tower (ATCT) and 3 runways; the longest runway is 6,700 feet with a precision approach. The Airport is the primary reliever of MSP. However, St. Paul Downtown Airport does not have space for the hangar capacity needed to accommodate the forecast-based jets at FCM because the site is constrained by the Mississippi River, highway and rail facilities, and industrial development. Therefore, this alternative would not satisfy the purpose and need for the project.

*Airlake Airport.* Airlake Airport is located in Dakota County and encompasses 565 acres owned by the MAC. It has a 4,098-foot paved runway with a precision approach with rail and roadway constraints that currently would not allow an extension to 5,000 feet. There is an area graded for additional hangars, but there is insufficient space to provide for the hangar capacity needed to accommodate the forecast-based jets at FCM. Airlake does not have an ATCT. Expansion of Airlake to provide an ATCT and other facilities to accommodate the users of the proposed expansion of FCM would require the preparation of a new LTCP and obtain approval of it by the Metropolitan Council, acquisition of additional land, and development of the airport. The time required, assuming Metropolitan Council approval, would be beyond the 2010 timeframe when the facilities are needed. Also, Airlake is too

distant from FCM to attract the users of FCM and divert users of MSP located in Hennepin County. Therefore, this alternative would not satisfy the purpose and need for the project.

*Crystal Airport.* Crystal Airport is located in northern Hennepin County and encompasses 430 acres owned by the MAC. It has an ATCT and 4 runways; the longest is 3,266 feet without a precision approach. None of the runways can be extended to 5,000 feet due to lack of available space. In addition, there is no space available for new hangars. Therefore, this alternative would not satisfy the purpose and need for the project.

*Anoka County–Blaine Airport.* Anoka County–Blaine Airport is located in Anoka County and encompasses 1,900 acres owned by the MAC. It has an ATCT, a 4,855-foot primary runway without a precision approach, and a crosswind runway that was extended to 5,000 feet and a precision approach installed on July 1, 2006. A new building area is also proposed to accommodate the needs of the Airport's service area. However, the Airport is much too distant from FCM to attract the users of FCM and divert users of MSP located in Hennepin County. Therefore, this alternative would not satisfy the purpose and need for the project.

*Lake Elmo Airport.* Lake Elmo Airport is located in Washington County and encompasses 620 acres owned by the MAC. It has 2 runways; the longest is 2,850 feet without a precision approach. Lake Elmo does not have an ATCT. The Airport is much too distant from FCM to attract the users of FCM and divert users of MSP located in Hennepin County. Therefore, this alternative would not satisfy the purpose and need for the project.

*South St. Paul Municipal Airport.* South St. Paul Municipal Airport is located in Dakota County and encompasses 204 acres owned by the city of South St. Paul. It has one runway 4,000 feet in length without a precision approach and does not have an ATCT. The Airport is surrounded by urban development and could not be expanded to provide an ATCT and the other facilities needed to accommodate the users of the proposed expansion of FCM. Also, the Airport is too distant from FCM to attract the users of FCM and divert users of MSP located in Hennepin County. Therefore, this alternative would not satisfy the purpose and need for the project.

## **B. Alternatives Considered in Detail**

Three alternatives were considered in detail in the FEIS — No Action, Alternative F and Alternative F with Mitigation, the Proposed Action.

### **B.1. No Action Alternative**

The No Action Alternative would retain the existing runways and associated airfield and landside facilities except for 11 hangars, which will be removed. The removal of the 11 hangars shown in **Figure 1** is necessary to create the FAA-required OFA for Runway 27L and to clear the runway's approach and transitional surfaces, as discussed in the September 19, 2003 letter to Dennis Gimmestad from Glen Orcutt in Attachment B of this ROD. No Action also includes approximately 107.4 acres of land acquisition and 9.2 acres of easements to eliminate existing and future incompatible development within the existing Mn/DOT safety zones for Runway 9R east of Eden Prairie Road and Runway 36, and land acquisition of about 72.0 acres and 3.5 acres of easement to provide a buffer zone for development south of the



airport and to provide land for the new south building area development in Alternative F.<sup>7</sup> All of this land is vacant/undeveloped and has been acquired in order to prevent incompatible residential development during the preparation of the EIS. The No Action Alternative is shown in **Figure 1** of this ROD, which is updated Figure 4 in Appendix D of the FEIS. FEIS Figure 4 incorrectly included property west of Eden Prairie Rd. to be acquired by Alternative F.

## **B.2. Alternative F**

Alternative F is the development of a new south building area on the airport to accommodate the existing and future demand for additional hangars, and the increase in lengths of the existing parallel runways 9R/27L and 9L/27R and associated facilities. Runway 9R/27L is currently 3,909 feet in length and 75 feet in width and Runway 9L/27R is 3,600 feet in length. The 120 feet of existing pavement at the east end of Runway 9R/27L would be removed in order to provide an object-free area 600 feet in length off the east end of the runway. Runway 9R/27L would be extended 1,211 feet to the west for a total length of 5,000 feet and widened to 100 feet. This would require the existing Runway 9R precision instrument landing system to be relocated and a new parallel taxiway and other associated taxiways to be constructed. Alternative F would also require the existing VOR facility to be relocated. The proposed 5,000-foot Runway 9R/27L is designed to accommodate B-II aircraft. The critical aircraft is the Cessna Citation III, which is forecast to have over 1,000 annual operations in 2010. FAA standards for Category B-II aircraft require an object-free area of 600 feet in length to be free of objects that pose a safety problem for landing and departing aircraft. TH 212 and its fence would intrude about 120 feet into this area if the runway were not shifted to the west.

Runway 9L/27R would be extended 300 feet to the west to a final length of 3,900 feet. No extension of the existing crosswind Runway 18/36 is proposed. Eleven hangars would be removed, as discussed above in the No Action Alternative, and a service road would be provided around the east and west ends of Runways 9R/27L and 9L/27R, the timing of which is uncertain.

All necessary navigation aids to support the proposed development would be installed and flight checked. Air traffic control procedures necessary to support the proposed development would be implemented.

Also included is the acquisition of approximately 87.49 acres of land and easements as follows:

- approximately 78.29 acres (64.31 acres of land and 13.98 acres of easements) for approach protection in the expanded Minnesota Department of Transportation (Mn/DOT) Safety Zone B west of the airport for Runway 9R,
- 8.4 acres of acquisition east of FCM in the expanded Mn/DOT Safety Zone B for Runway 27L, and
- an easement for 0.80 acres north of Runway 18-36.

---

<sup>7</sup> All land acquisition designated in the No Action Alternative and Alternative F is in the study area defined in the FEIS. The study area is shown in FEIS Figure 6. All environmental impact categories addressed this land acquisition in the assessment of impacts in the FEIS.

This is an update to the FEIS, which stated that 83 acres of land and 12 acres of easements would be acquired. The 13.98 acres of easements consists of 6 properties that MAC was unable to purchase easements on at a reasonable cost and therefore decided to acquire the properties, which will be resold with recorded easements. Approximately 72.71 acres of land have been acquired in order to prevent incompatible residential development during the preparation of the FEIS. The impacts of this land acquisition are included in the FEIS and this ROD. Alternative F is shown in **Figure 2**, which is updated FEIS Figure 3.

### **B.3. Alternative F with Mitigation (Proposed Project)**

The Proposed Project is Alternative F as described above together with the FEIS Noise Mitigation Plan<sup>8</sup> and the responsibilities and commitments in the Final Agreement and MOU between MAC and the City of Eden Prairie presented in Appendix A.4 of the FEIS and Attachment C of this ROD. The physical elements of the Proposed Project are shown in new **Figure 3**.

The Final Agreement contains Ordinance 97, which prohibits maintenance run-ups at FCM between 10:00 p.m. and 7:00 a.m. local time, and prohibits the takeoff or landing at FCM of aircraft with a certified maximum gross takeoff weight of 60,000 pounds or greater. The 60,000-pound limit is based on the design strength of the runway pavement; it is not a part of the Noise Mitigation Plan.

The MOU between MAC and the City contains commitments by MAC that will be subject to FAA approval prior to the transfer or use of MAC property to the City of Eden Prairie, which are included in Attachment C of this ROD. The following is a summary of the commitments in the MOU.

- Approximately 4 acres of MAC property to be conveyed to the City without compensation, as highlighted in yellow on Exhibit A of the MOU. This land was dedicated to the realignment of County Road 4 and was so stipulated in an agreement by the former owner of the property, Lynn L. Charlson, and successors and assigns. (MOU Item 1.A.(1)(a))

The MAC subsequently acquired the Charlson property and therefore as successor must fulfill the agreement.

- Approximately 4.1 acres (net) of MAC property to be conveyed to the City of Eden Prairie. This is the area highlighted in purple owned by MAC minus the area in red owned by the City that will be vacated to MAC, as shown on Exhibit A of the MOU. (MOU Item 1.A.(1)(b))

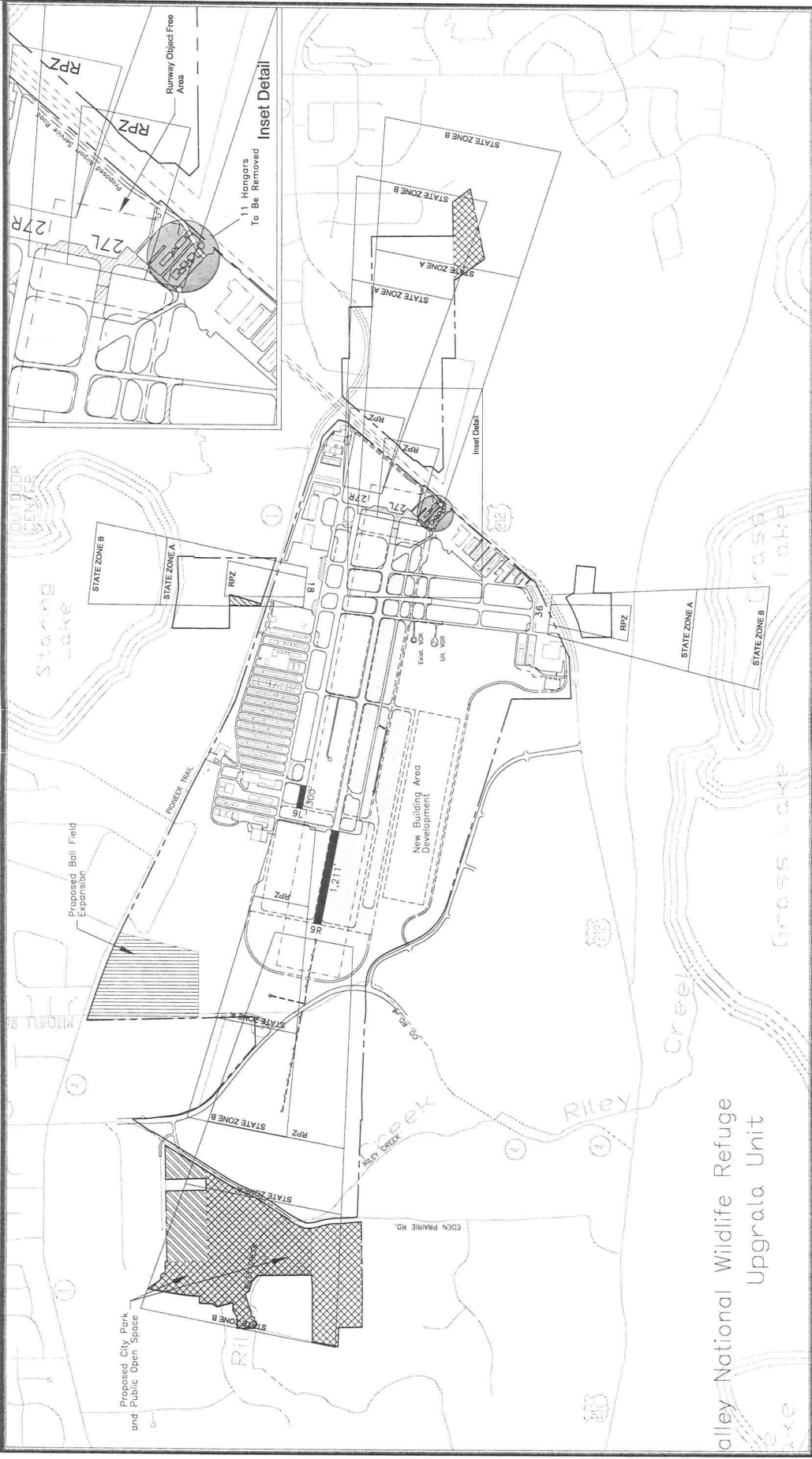
This land is needed for the realignment of County Road 4.

MAC will be reimbursed for the 8.1 acres described above, as specified in MOU Item B.(1).

---

<sup>8</sup> The mitigation plan was included in the formulation of the preferred alternative. Accordingly, the elements of the mitigation plan are requirements of the project. The mitigation in Measure 8 of the Plan is not eligible for Federal funding.

# Flying Cloud Airport Expansion



Source: HNTB, W.D. Schock

Figure 3  
Proposed Action

MAC shall, subject to the foregoing conditions, cooperate with Hennepin County at a future date to provide right-of-way at no monetary compensation for the anticipated expansion of CSAH 1 (Pioneer Trail) provided that the improvements do not compromise the use of the property by MAC or its tenants as determined by MAC. The conditions to MAC's cooperation are that there will be – no out-of-pocket costs or assessments to MAC – accommodation of MAC storm water – no net loss in parking spaces – fencing that may be required for relocation will be removed and replaced to provide continuous and ongoing security for the airport facility – complete restoration of the airport grounds to be equal or better than existing, and – final design approved by MAC. (MOU Item 5)

- Subject to FAA approval for compliance with land release and revenue diversion, MAC shall provide a permanent license in favor of Eden Prairie for approximately 42 acres of land acquired by MAC to protect the operation of the airport from incompatible development (see **Figure 3**). The City shall use the land for park and open space purposes. As compensation to MAC, the City would not levy pending assessments against the property estimated at \$1,140,685 or reassign or assess these costs to any other MAC or non-MAC property. (MOU Item 7)
- MAC shall lease approximately 25 acres of FCM property to the City (see **Figure 3**) solely for soccer and ball fields and associated ancillary uses, in addition to the approximately 31 leased acres currently used for soccer and ball fields and associated ancillary uses. The leases on the properties will be 3-year renewable leases subject to recapture by MAC upon 1-year written notice to the City with no monetary compensation to the City. Compensation to MAC by the City will be negotiated but will be of the same order of magnitude as the current lease payments and subject to FAA's existing and future revenue diversion policy. (MOU Item 10)

This recreational use of FCM property will not adversely affect the capacity, security, safety or operations of the airport and can be recaptured by MAC if needed for airport purposes. Airport revenue would not be used to support the capital or operating costs associated with the uses of the land.

The Proposed Project includes the following Noise Mitigation Plan

1. *Preferential Use of Runways* – When winds, weather or traffic conditions do not otherwise dictate the use of the runways at FCM, the FAA tower will normally use the runways for arrivals and departures of all aircraft in the following priority:
  - The calm wind runway is 9R
  - Arrivals – 9R, 9L, 27L, 27R, 36, 18
  - Departures – 9R, 9L, 27L, 27R, 18, 36
  - Jet Arrivals and Departures – 9R, 27L

Note: This does not apply to training operations in the traffic pattern.

2. *Preferential Departure Routes* – All departures on Runway 9R/27L (other than training operations) will be encouraged to use headings of 135 degrees clockwise to 230 degrees,

unless precluded by other traffic or weather considerations. Unless otherwise instructed by ATC, turbojet aircraft departing 9R/27L under visual flight rules (VFR) shall be encouraged to turn to the southerly headings after crossing the departure end of the runway and attaining an altitude of 500 feet above ground level (AGL).

Note: All *jet* departures are currently directed to headings of 135 degrees clockwise to 230 degrees, in accordance with a Letter of Agreement between Flying Cloud ATCT and Minneapolis TRACON (M98) and ATCT FCM Order 7220.3J unless precluded by other traffic or weather considerations. (A copy of the Letter and Order are in FEIS Appendix B1.)

3. *Stage 2 Operations* -- MAC will implement a voluntary program to discourage all operations at the Airport by Stage 2 Aircraft.
4. *Voluntary Nighttime Use Procedures* -- During the hours of 2200 to 0600 local time, pilots are asked to voluntarily comply with the following procedures:
  - All aircraft operators are encouraged not to fly during the nighttime hours of 2200 to 0600 local time, except for operations between 2200 and 2400 local time conducted to meet Nighttime Currency Requirements.
  - All aircraft operators are encouraged not to conduct training in the traffic pattern from midnight to 0600 local time (which allows pilots to maintain nighttime proficiency requirements according to FAR Part 91). Multiple training events by jet aircraft are especially discouraged.
  - Intersection takeoffs (takeoffs from mid-runway or from an intersecting runway) are discouraged at all times, especially from 2200 to 0600 local time.

In addition, MAC will identify and evaluate specific operational procedures that would limit the noise impact of early morning aircraft operations between 0600 and 0700 local time, including dispersion of departures, defined flight routes or noise abatement departure procedures. MAC will adopt those procedures mutually acceptable to MAC and Eden Prairie.

Note: MAC shall consult with the FAA on acceptable early morning operational procedures prior to their implementation.

5. *Maintenance Run-ups* -- Maintenance engine run-ups are prohibited from 2200 to 0700 hours local time. During the control tower's published hours of operation the tower should direct traffic to the following preferred run-up areas:
  - Runway 18/36 at the "No Name" taxiway (*taxiway abeam the VOR*)
  - Whenever practical, aircraft will conduct engine run-ups so the nose of the aircraft is on a 360 clockwise to 030-degree heading.

Exceptions: The prohibition does not apply in the case of an emergency, does not apply to aircraft owned and operated by the U.S. government, and does not apply to unscheduled maintenance run-ups performed between 2200 and 0700 hours local time

where strict compliance with the prohibition would not allow sufficient time to permit the aircraft to depart on schedule the following morning.

6. To encourage strict observance of the voluntary procedures and to obtain compliance with Ordinance 97 (amended Ordinance No. 51), MAC will take the following actions, as committed to in the Final Agreement:
- Prepare and distribute operating rules and regulations for FCM that contain these mitigation measures and procedures.
  - Use its best efforts to negotiate with Fixed Base Operators, Airport Users who base aircraft at the Airport and other Airport Users, as determined by MAC, voluntary letters of intent committing the Fixed Base Operator or Airport User to (1) adhere to the voluntary limits on aircraft operations contained in these mitigation measures, and (2) participate actively in implementing and monitoring compliance with Amended Ordinance No. 51 and the measures contained in Article 3 of the Agreement.
  - Inform current and future Airport Users and Fixed Base Operators about the commitments contained in these mitigation measures and Amended Ordinance No. 51 that affect aircraft operations at the Airport by publishing and keeping current notice in the following publications: Airport Facility Directory; Department of Defense Flight Information Manual; Jeppesen Information Manual; and relevant MAC publications.
  - Implement a Pilot Education Program designed to inform Airport Users and Fixed Base Operators about the commitments contained in these mitigation measures and in Amended Ordinance No. 51 that affect the actions of Airport Users and Fixed Base Operators, other operational requirements and noise abatement measures that MAC has adopted previously, and any additional operational requirements and noise abatement measures as MAC, in its sole discretion, may choose to adopt and include. The Pilot Education Program may include, but will not be limited to, posting and display of information in facilities maintained by Fixed Base Operators and airfield signage. MAC will consult on at least an annual basis with the Designated Representative of Eden Prairie on the curriculum for and implementation of the Pilot Education Program.
  - Publicly recognize through a certificate, award, or similar means, on an at least annual basis the actions and efforts of one or more Airport Users or Fixed Base Operators that avoid or promote avoidance of operations inconsistent with the voluntary limits contained in these mitigation measures.
  - Thoroughly investigate all credible complaints and information received from local residents, Eden Prairie, Airport Users, Fixed Base Operators, or any other source to determine whether a violation or failure to comply with a voluntary measure has occurred and take appropriate action as dictated by the violation.
  - Instruct all MAC employees working on a temporary or permanent basis at the Airport of the commitments in these mitigation measures and provide instructions on procedures for notifying the proper parties of a potential violation or failure to comply with a voluntary measure.
  - Send a written notice to the owner or operator of any aircraft known to have operated in a manner inconsistent with the voluntary restraints on Nighttime

Aircraft Operations, early morning departures and operations by Stage 2 Aircraft. The notice shall provide information about the inconsistent operation, state that MAC's policy is to limit voluntarily inconsistent operations, and request that the owner or operator provide a detailed response describing the reason for the inconsistent operation. MAC shall maintain a record of all such correspondence and provide copies of such correspondence to the Designated Representative of Eden Prairie.

- Perform on no less than a monthly basis, a review of the ANOMS flight track database to identify any and all Stage 2 Aircraft operations occurring at the Airport since the prior review. MAC shall keep a separate record of all Stage 2 Aircraft operations and provide the Designated Representative of Eden Prairie, on a quarterly basis, with a notice identifying the date and time of each Stage 2 Aircraft operation in the quarter and a total of all Stage 2 Aircraft operations in the preceding rolling twelve months.
7. *Incompatible New Development* – MAC will acquire the incompatible undeveloped properties or parcels in the current Eden Prairie Comprehensive Plan that are within the Proposed Action 2010 DNL 65 noise contour.
  8. *Incompatible Existing Land Use* – Existing noise-sensitive structures within the Proposed Action 2010 DNL 65 noise contour will have an exterior to interior sound reduction of 25 dBA. Existing noise-sensitive structures within the Proposed Action 2010 DNL 60 noise contour will have an exterior to interior sound reduction of 20 dBA. (The exterior to interior sound reduction of 20 dBA in the DNL 60 Noise contour is a local criterion.)

MAC will test the residences within the Proposed Action 2010 DNL 60 noise contour in accordance with a methodology agreed upon by MAC and Eden Prairie, to determine the existing exterior to interior noise reduction level. MAC will complete testing within two years from the date that the extended runways are made available for use. In the event that any affected residence has an exterior to interior noise attenuation of less than 20 dBA, MAC will provide sound insulation to achieve a noise reduction of at least 20 dBA. MAC will consult with Eden Prairie to determine the nature and extent of sound insulation to be provided for eligible residences. MAC will complete sound insulation of all eligible residences within two years from the date that the extended runways are made available for use. MAC will provide the testing and sound insulation regardless of whether funding is provided by the federal government. (This testing and sound insulation is part of a mitigation agreement between Eden Prairie and the MAC, to which the FAA is not a party, and which are not eligible for Federal Airport Improvement Program (AIP) funding.) No new residence for which final building permits were issued on or after December 4, 2001, shall be eligible to receive testing or sound insulation.

9. *Incompatible Infill Development and Reconstruction or Additions to Existing Structures* – Infill development and reconstruction or additions to existing noise-sensitive structures within the Proposed Action 2010 DNL 65 noise contour will be constructed to meet an interior sound level of 45 dBA. Infill development is a vacant parcel(s) of land surrounded by developed land as defined by the Aviation Policy Plan of the Metropolitan

Council. The City of Eden Prairie will be responsible for permitting the new construction.

### **C. Sponsor Preferred Alternative**

The alternative preferred by the MAC is the Proposed Project, Alternative F with Mitigation, as described in B.3 above.

### **D. Environmentally Preferred Alternative**

The environmentally preferred alternative is the alternative that achieves the purpose and need for the project and would cause the least damage to the biological and physical environment and would best protect, preserve and enhance historical, archaeological, cultural and natural resources. The Proposed Project is the only feasible and prudent alternative that can achieve the purpose and need for the project and have the least adverse impact on any of the 25 environmental impact categories evaluated in the FEIS. The major difference in impacts between the Proposed Project and Alternative F is noise. The Proposed Project would not adversely impact existing and future residents in the DNL 65 contour, whereas Alternative F would have an adverse impact on 42 existing and future residents in the DNL 65 contour.

The No Action Alternative would not have an adverse noise impact. It would have the least impact on the environment but would not achieve the purpose and need for the project. The FAA has determined that the preferred alternative is therefore the environmentally preferred alternative, which is the Proposed Project.

### **E. Selected Alternative**

The FAA has completed appropriate aviation technical review and has concluded that the preferred alternative can be implemented and is consistent with considerations of safety, efficiency and utility. The FAA has also considered that the preferred alternative evaluated in the FEIS has undergone extensive public scrutiny. In addition, the FAA has considered that the MAC and FAA have conducted negotiations with the U.S. Fish and Wildlife Service (FWS), the Minnesota Historic Preservation Officer and the city of Eden Prairie to resolve issues regarding impacts identified in the DEIS, SDEIS and FEIS.

After careful consideration of the analysis of the impacts of alternatives and the ability of these alternatives to achieve the identified purpose and need for this proposal, and after review and consideration of the testimony at public hearings and of comments submitted in response to the distribution of the DEIS, SDEIS and FEIS, and of coordination and consultation with federal, state and local agencies — the FAA finds the Proposed Project to be the only prudent and feasible alternative to achieve the purpose and need for satisfying and promoting current and future aviation at Flying Cloud Airport, and therefore is the Proposed Action. (See discussion of alternatives considered and eliminated in Section IV.A, which remains valid.) It is noted that the results of the benefit-cost analysis discussed in Section V, Economic, of this ROD was not a consideration in the selection of the preferred alternative/proposed action.



## V. Environmental Impacts and Mitigation

The issues and impact categories analyzed in the DEIS and FEIS were determined from the EQB-required scoping process as those warranting detailed analysis in the EIS for the alternatives selected for consideration in detail. The EQB scoping procedures allow for the elimination of issues and impact categories if they are not relevant or so minor that they need not be addressed in detail. This scoping process satisfied FAA requirements for determining the environmental consequences that would result from the proposed action. The published FEIS satisfies both the reporting requirements for state and federal purposes and for applicable state and national environmental policy acts in evaluating environmental impacts. This joint preparation approach was taken to reduce duplication between state and federal reporting requirements (Minnesota EQB Rule 4410.3900, Subpart 1; 40 CFR 1506.2).

### A. Summary of Findings by Impact Category or Issue

This section provides a brief summary of the major findings of the issues and impact categories addressed in the FEIS. See FEIS Section V for the detailed analyses, except as updated herein based on the May 2008 Written Re-evaluation of the June 2004 FEIS. Unless stated otherwise, the impacts of Alternative F and the Proposed Action are identical.

**Air Quality.** The pollutants considered in the FEIS are criteria pollutants — those pollutants for which ambient air quality standards have been established by the EPA and the Minnesota Pollution Control Agency (MPCA), and which have been identified by the FAA as potentially critical pollutants associated with airports.

The two criteria pollutants analyzed in this study are Carbon Monoxide (CO) and Sulfur Dioxide (SO<sub>2</sub>). These two pollutants are of critical interest to MPCA and EPA, since FCM is located within a designated maintenance area for CO and SO<sub>2</sub>. Federally sponsored airport development must conform with the Minnesota State Implementation Plan (SIP) in accordance with the criteria and procedures established in the SIP as specified by EPA in 40 CFR Part 51, Subpart W -- *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*. According to Subpart W, a conformity determination (with the SIP) is required for each criteria pollutant if the emissions in a nonattainment or maintenance area for that pollutant caused by a federal action (proposed action) would equal or exceed a specified annual emission rate when compared to the no action alternative or would be 10% or more of the nonattainment or maintenance area's emission inventory for that pollutant in the SIP.

Annual pollutant emissions for CO and SO<sub>x</sub> (instead of SO<sub>2</sub>) in the year 2010 for on-airport stationary and mobile sources were calculated using the FAA-required and EPA-approved Emissions and Dispersion Modeling System (EDMS), Version 3.11. The EDMS model estimates SO<sub>x</sub> emissions rather than SO<sub>2</sub> emissions, which therefore provides a conservative estimate of SO<sub>2</sub>, since SO<sub>x</sub> consists of SO<sub>2</sub> and SO<sub>3</sub>. Based on the emissions inventory, the Proposed Action and Alternative F are *de minimis* for SO<sub>2</sub> and have total emissions less than 10% of the SIP's SO<sub>2</sub> emission inventory, but exceed the 100 tons per year emission rate for CO and therefore a general conformity determination is required for CO for the Proposed Action. A General Conformity Determination was included in the January 2000 DEIS for

public and agency review. A Final General Conformity Determination was issued in Appendix C of the FEIS and is included in Attachment D of this ROD. A local air quality modeling analysis shows that the Proposed Action would not cause or contribute to any new violation of a CO standard in the 2010 forecast year. Therefore, FAA finds that the Proposed Action conforms to the Minnesota SIP for CO emissions, in accordance with 40 CFR Part 51, Subpart W, Paragraph 51.858, and Section 176(c) of the CAAA. EPA concurred with the FAA's Final General Conformity Determination in their FEIS comment letter (see Comment 1 in Attachment A). MPCA did not submit comments on the Final General Conformity Determination.

**Biotic Communities (Fish, Wildlife and Plants).** The affected environment for biotic communities at Flying Cloud Airport consists of the unpaved areas to be disturbed within the existing airport property and the land to be acquired. Also included are any biotic communities or wildlife-related recreational areas within the Minnesota Valley National Wildlife Refuge (MVNWR) that may be potentially affected by the project. The MVNWR, which lies south of the Airport, encompasses a broad range of vegetative communities including floodplain forests, wet meadows, emergent wetlands, aquatic communities, upland forests, savannahs, native prairies and cropland. A very broad range of wildlife species utilize the refuge. While the proposed airport improvements will not directly involve refuge lands, included in the APE are any sensitive resources within the MVNWR that might potentially incur indirect impacts from aircraft overflights. These resources include (1) the heronry and bald eagle nest site at Blue Lake, and (2) nearby wildlife-related human use areas within the MVNWR.

The Blue Lake heronry and bald eagle nest are discussed under Endangered and Threatened Species in this Section V of this ROD. Wildlife-related human use areas in the MVNWR are discussed under Wildlife Refuge in this Section V of this ROD.

Grading and paving for the Proposed Action would primarily affect mowed turf and existing pavement. However, approximately 1.8 acres of shrubby old field is within the safety area at the west end of Runway 9R/27L; this area would be graded and converted to mowed turf. The Proposed Action includes the construction of a building area on approximately 72 acres south of Runway 9R/27L acquired under the No Action Alternative. Of these 72 acres, about 34 acres consist of cropland and 38 acres are upland old field. This area would be developed for hangars and taxiways. The Proposed Action also entails the acquisition of about 76 acres of undeveloped land for approach protection west of Eden Prairie Road, which is expected to remain undeveloped. The Proposed Action would therefore result in the removal of approximately 73.8 acres of habitat for wildlife species common to agricultural land and old field plant communities. This impact is not considered significant because no rare, threatened or special concern species are affected, and because the habitat to be removed is considered a small percentage of the study area inventory.

**Bird-Aircraft Hazards.** The area of potential effect (APE) for bird strike hazards around Flying Cloud Airport consists of all major bird concentration areas that lie within 10,000 feet of existing and proposed runway ends and any active sanitary landfills within 5 miles of the airport site. No active sanitary landfill lies within the APE, the nearest being the Kraemer

Landfill approximately 6.4 miles to the southeast in Burnsville. There are a number of landforms or land uses near enough to Flying Cloud Airport to represent a potential bird-aircraft hazard (overflights at altitudes of less than 500 feet above ground level (AGL)). Flying Cloud Airport lies from 1/4 to 1/2 mile north of the Grass Lake wetland complex within the Minnesota Valley National Wildlife Refuge (MVNWR). Grass, Blue, Fisher and Rice Lakes are all managed for migratory waterfowl and appear to represent major bird concentration areas. A large, active heronry also exists at Blue Lake. Staring Lake also lies within 1/4 mile of the airport, but consists almost entirely of open water and does not appear to attract large numbers of waterfowl or other waterbirds. Other water bodies, such as Red Rock Lake and the Purgatory Creek floodplain north of Staring Lake designated by the City of Eden Prairie as the Purgatory Creek Recreation Area (PCRA), appear to provide suitable habitat for waterfowl during migration periods. The wooded hills west of Spring Road (County Road 4) provide habitat for a variety of songbirds and some raptors. However, this area contains no features that would attract large concentrations of birds that might represent a potential bird-aircraft hazard.

Alternative F would involve a 23.9% increase in overall monthly aircraft overflights of bird-concentration areas in 2010 from FCM compared to No Action. Compared to No Action, only 111 of the 2,065 additional monthly operations would overfly potential bird concentrations at altitudes of 500 feet or less and none of these operations would be by turbine-driven aircraft. Ninety of these additional low altitude operations would overfly Staring Lake. Of the 1,775 additional monthly overflights between 500 and 2,000 feet AGL, 716 would overfly Red Rock Lake, which has less potential for attracting waterfowl than most of the other areas analyzed. Additional moderate altitude monthly overflights of Grass, Rice, Blue and Fisher Lakes would total 458, 221, 144 and 200, respectively.

The Proposed Action would involve a 24.2% increase in overall monthly aircraft overflights of bird-concentration areas in 2010 from Flying Cloud Airport compared to No Action. Compared to No Action, only 67 of the 2,093 additional monthly operations would overfly potential bird concentrations at altitudes of 500 feet or less and 39 of these operations would be by turbine-driven aircraft. Of these additional low altitude operations, 46 would overfly Staring Lake. Of the 1,988 additional monthly overflights between 500 and 2,000 feet AGL, 147 would overfly Red Rock Lake, which has less potential for attracting waterfowl than most of the other areas analyzed. Additional moderate altitude monthly overflights of Grass, Rice, Blue and Fisher Lakes would total 1,326, 824, 200 and 1,123, respectively.

Radio advisories will be utilized as a mitigation measure to alert pilots during migration periods when large numbers of waterfowl may be in the Flying Cloud Airport area. If migratory birds are observed on or near the airport by the control tower, maintenance staff or other pilots, standard radio advisories may be supplemented with notifications to individual pilots. Also, the airport facility directory will continue to list migratory birds as a potential hazard at Flying Cloud Airport.

In addition to aircraft flights over areas where birds congregate, bird flights within the airspace of the airport is also a potential risk for bird strikes. While there currently is a resident flock of about 300-500 Canada geese that move between the MVNWR, crop fields west of the airport and other water bodies in the general area, these birds appear to be avoiding the airport property due to aggressive hazing and management efforts by airport

staff. The U.S. Fish and Wildlife Service has issued a permit to airport staff that allows the taking of Canada geese, mallards and gulls that enter airport property (Robert Pixley, Flying Cloud Airport maintenance supervisor, personal communication).

Airport property is under daytime observation by the control tower and airport maintenance staff in order to note any birds in the area as rapidly as possible. Shooting of one or more of the offending birds from any flock of waterfowl entering the airport has been found to be effective in causing Canada geese to avoid the airport property. In the past, airport staff utilized non-lethal methods (e.g., firing "cracker shells", propane cannons) to haze geese, but found that birds became somewhat habituated and ultimately did not equate the disturbance with danger. Despite the proximity of the MVNWR, use of the airport property by geese and other waterfowl appears to be negligible due to these active control efforts. Canada geese in particular have learned to avoid the airport because of these measures. Except for occasional small numbers of mallards, other waterfowl species do not appear to use the airport property due to the absence of wetland habitat. Gulls' use of the Flying Cloud Airport property is negligible since the closure of the Flying Cloud Landfill.

MAC leases several portions of the airport property for agricultural use. Farming on these areas is restricted to crops that are not attractive to geese (e.g., soybeans) and the tenant farmer is required to till under harvested fields within 2-3 days after the crop comes off in the fall. As part of the airport expansion, MAC is acquiring an area of cropland west of Eden Prairie Road that is currently in row crops and alfalfa. Since geese graze in harvested fields and on alfalfa after it is mowed, this area will be converted to another, less attractive crop or to native prairie. Over the years, MAC maintenance staff has reduced mowing on the turfed portions of the airport property to reduce the attractiveness of the area for geese. At the current time, the active control efforts being undertaken by airport maintenance staff are successfully keeping geese from using these mowed areas. Airport staff has indicated that, should the effectiveness of current goose control measures in mowed turf areas be observed to diminish, mowing will be cut back or eliminated.

Historically, white-tailed deer utilized the airport property and moved through it during seasonal migrations to and from the Minnesota River valley. There were occasional conflicts prior to the installation of the 12-foot deer fence that now follows the southern airport property boundary. Prior to the installation of the fence, periodic population reductions were necessary to keep deer-aircraft conflicts to a minimum. Airport maintenance staff has stated that the deer fence has been highly effective and that deer currently do not pose a hazard to aircraft operations.

Full-time observation will be continued and aggressive control measures will continue to be pursued by airport staff if waterfowl or other flocking migratory birds are observed on or adjacent to airport property. If necessary, further reductions in the amount of mowed turf on and adjacent to airport property will be made. If necessary, the portion of the airport property currently leased for agriculture will be converted to unmowed, native prairie. Coordination with the City of Eden Prairie and Grace Church staff will be ongoing to ensure that the City's leased athletic fields and the church grounds do not become attractants to Canada geese. If geese are observed using these areas, they will be hazed by airport staff in

cooperation with the city and the church. The in-place deer fence on the airport property will continue to be maintained and deer numbers and movements will be monitored.

**Coastal Resources.** The Coastal Barriers Resources Act of 1982 prohibits federal financing for development within the Coastal Barriers Resources System, which consists of undeveloped coastal barriers along the Atlantic and Gulf coasts. The legislation was amended by the Coastal Barrier Improvement Act in 1990 to include undeveloped coastal barriers along the shores of the Great Lakes, including Lake Superior in St. Louis County. Hennepin County is sufficiently distant from these designated lands along the shore of Lake Superior not to be included. FCM is not a coastal barrier as defined by the federal government; consequently, analysis of the alternatives with respect to the Coastal Barriers Resources Act is not required.

**Coastal Zone Management Program.** Coastal Zone Management Programs, prepared by states according to guidelines issued by the National Oceanic and Atmospheric Administration, are designed to address issues affecting coastal areas. While the Great Lakes are considered coastal areas for the purpose of preparing these programs, there is currently no Coastal Zone Management Program approved by the state of Minnesota for Lake Superior. Work is underway to produce an approved Coastal Zone Management Program within the next few years; it is unlikely Hennepin County would be included in the program. Flying Cloud Airport is not within a coastal area as defined by the federal government; consequently, analysis of the alternatives with respect to an approved Coastal Zone Management Program is not required.

**Compatible Land Use.** The compatibility of existing and planned land use in the vicinity of an airport is usually associated with noise impacts related to an airport, and was analyzed as such in the FEIS. Residential uses are incompatible at DNL 65 or greater. The Metropolitan Council's compatibility guidelines state that new development and major redevelopment of single family residential and multiplexes with individual entrances are incompatible at DNL 65 or greater and "Conditional" (potentially incompatible with aircraft noise) at DNL 60-65. Therefore, the APE is the land uses within the DNL 60+ noise contour.

The Proposed Action would acquire about 76 acres of residential land west of Eden Prairie Road in the Mn/DOT Safety Zone B, and about 9 acres of vacant land east of FCM in Safety Zone B, as shown in **Figure 3**. These lands are planned for residential use, a portion of which would be in the DNL 65 contour. Implementation of the Proposed Action will prevent incompatible development on these lands. There will be no existing or planned dwelling units in the DNL 65 contour of the Proposed Action. There would be 99 more existing and 13 more planned residential dwelling units in the DNL 60-65 contour, compared to the No Action Alternative.

Alternative F would have a significant adverse noise impact on 9 incompatible existing dwelling units in the DNL 65 contour and would expose 426 more dwelling units of existing residential to DNL 60-65 sound levels, compared to the No Action Alternative. It would

make 6 planned dwelling units in the DNL 65 contour incompatible with the airport and put 61 additional dwelling units in the DNL 60-65 contour as a conditional use.

In accordance with the Noise Mitigation Plan presented under Noise in this Section V, MAC will acquire any vacant land planned for residential development in the 2010 DNL 65 noise contour.

**Construction Impacts.** Construction activities involve grading, paving, installing utilities and constructing hangar buildings. These activities pose no unusual construction methods and are routinely carried out throughout the Metropolitan area without groundwater or surface water impact. The construction activity is not expected to generate any liquid or solid wastes that pose a threat to groundwater. The construction contractor is required to remove all waste materials generated during construction. Waste materials would likely include debris, demolition material, packaging, and excess construction materials, all typical of construction sites. Surface soil erosion would be managed with silt fence and hay bales as required to secure borrow sites and grading areas. Also, revegetation of areas disturbed by construction activity would take place as soon as possible.

Heavy equipment used during construction would require fueling, routine maintenance and, potentially minor repairs while on site. There is a risk of minor spills or leaks of petroleum products during maintenance and equipment refueling. This risk is typical of any construction project involving similar activities. The contractor is responsible for the implementation of measures to prevent petroleum spills and the reporting and clean-up requirements for any petroleum spills that occur during construction. The large depth to groundwater (approximately 100 feet) further reduces the concern for this type of impact since it would take a large spill or continuous release to overcome the absorption capacity of the soil column and reach the water table.

Potential air quality impacts from construction include fugitive dust associated with demolition and construction, fugitive dust along haul routes, exhaust and machinery-related emissions from construction equipment and haul vehicles on the site and along haul routes, and potential vehicular congestion in the vicinity of construction sites and on haul routes. On-airport CO emissions from construction activities are estimated at 16 tons for the year during which airfield improvements are made. Off-airport CO emissions are estimated at 20 tons during the year of airfield construction. The total of 36 tons of CO emissions is less than the 100 tons per year EPA *de minimis* level for CO.

**Economic.** Economic impacts include the costs of construction and land acquisition, the effect of the airport development on municipal tax base, and the other costs and benefits of developing the airport. The impact of the Proposed Action on the tax base of the city of Eden Prairie due to land acquisition is minimal — less than 0.07%.

After further review of the costs associated with the expansion proposed for FCM, the FEIS estimates of costs for developing the alternatives under consideration presented in FEIS Table H-3 are revised and the updated table is shown below as **Table 3**. The airfield construction cost estimate of \$16.49 million, as presented in the DEIS and unchanged in the

SDEIS, was incorrectly changed in the FEIS (see General Response 2 in Attachment A, Comments and Responses on the FEIS and Section 4(f) Evaluation, in this ROD). The estimated land acquisition costs in the FEIS are revised to reflect the actual costs.

The total cost in **Table 3** that is the responsibility of the MAC is \$46.7 million. The costs of constructing the hangars in the new south building area and hookups to the City municipal sewer system are the responsibility of future tenants and are estimated at \$8.1 million in 1999\$. The cumulative cost is \$54.8 million, if the costs of No Action and the hangars and hookups are included.

**Table 3 (Updated FEIS Table H-3) Estimated Development Costs of Alternatives (1999\$)**

Item	No Action	Alternative F / Proposed Action
Land Acquisition	19,627,000	10,478,000
Avigation Easement	70,000	70,000
Airfield Construction	0	16,490,000
Hangar Development	0	8,100,000
Total	19,697,000	35,138,000

Source: W.D. Schock Company; SEH; MAC

A benefit-cost analysis (BCA) is not required in an EIS if it is not a consideration in the selection of the preferred alternative, in accordance with CEQ Regulation 1502.23. However, an issue raised in scoping is the cost of the proposed project compared to its benefits. As a result, a BCA was prepared and performed in accordance with FAA guidance. The BCA was revised in August 2007 to incorporate the updated costs in **Table 3** above and the updated stopover and diverted transient operations from MSP in this ROD.<sup>9</sup> As a result, FEIS Tables H-5 and H-6 are updated in **Tables 4** and **5** below. When only aeronautical costs and benefits are considered, the Proposed Action generates a net present value (NPV) of \$42.5 million. It has a benefit-cost ratio of 2.19. If Eden Prairie costs and benefits are included, it generates an NPV of \$39.8 million. It would then have a 1.80 benefit-cost ratio. The results of the BCA were not considered in the selection of the Proposed Action, as presented in Section IV.E of this ROD.

The No Action Alternative includes a cost of \$10.5 million for acquisition of 72 acres of land that would be used for development of the new south building area in the Proposed Action. If this and associated costs of \$1.3 million were attributed to the Proposed Action, the benefit-cost ratio for aeronautical users would be 1.70, and 1.49 if Eden Prairie impacts are included.

The items in the BCA affected by the forecast of FCM operations are the airport O&M costs and FCM delay costs. Therefore, use of the DEIS Forecast overstates these costs compared

<sup>9</sup> The forecast of annual MSP GA transient operations was decreased by 40% in response to NWA FEIS Comment 27; the number of stopovers was revised to 3,088 per year as discussed in Section III, Purpose and Need, of this ROD.

**Table 4 (Corrected FEIS Table H-5) Summary of Discounted Benefits and Costs  
(Cost and Benefits in 1998 Dollars)**

	<b>Proposed Action</b>	
<b>Discounted Benefits (a)</b>		
MSP Delay Benefits	\$	62,466,845
Benefits to Aircraft Operators	\$	11,791,276
Ground Travel Time Savings	\$	4,059,522
Reduced Costs to Eden Prairie (f)	\$	11,393,466
<b>Total</b>	\$	89,711,109
<b>Discounted Costs (b)</b>		
Airport Capital Costs	\$	27,529,995
Airport O&M Costs	\$	2,294,834
FCM Delay Costs	\$	6,000,293
Lost Revenue to Eden Prairie (g)	\$	14,063,334
<b>Total</b>	\$	49,888,455
<b>Net Benefits - Aeronautical Users</b>		
Net Present Value (c)	\$	42,492,522
Benefit/Cost Ratio (d)		2.19
<b>Net Benefits - Including Eden Prairie Impacts</b>		
Net Present Value (e)	\$	39,822,654
Benefit/Cost Ratio (d)		1.80

(a) Table 18, Benefit-Cost Technical Report.

(b) Corrected Table 20, Benefit-Cost Technical Report.

(c) Discounted benefits less discounted costs, excluding reduced costs to Eden Prairie, and lost revenues to Eden Prairie.

(d) Discounted benefits divided by discounted costs.

(e) Discounted benefits less discounted costs, including reduced costs to Eden Prairie and lost revenues to Eden Prairie.

(f) Reduced costs of services for acquired land planned for residential development

(g) Lost revenue from acquired land planned for residential development, including building permits and annual property taxes and utility bills

Sources: As noted and HNTB analysis

Note: The MSP Delay Benefits were estimated using the delay curves in the Minneapolis-Saint Paul International Airport Capacity Enhancement Plan, published in 1993, and a MSP forecast of 640,000 operations in 2020. The February 2006 TAF for MSP in 2020 is 862,576 operations.



Table 5 (Corrected FEIS Table H-6) Summary of Measured and Unmeasured Benefits and Costs

	Proposed Action
<b>Benefits</b>	
MSP Delay Benefits	\$62.5 million NPV
Benefits to New Operators	\$11.8 million NPV
Ground Travel Time Savings	\$4.1 million NPV
Reduced Costs to Eden Prairie	\$8.7 million NPV
Deferred Capacity Improvements at MSP	minor
Additional FCM Airport Revenue	offset by revenue losses at other MAC airports
Construction Jobs	gain of 184 total man-years
Net Job Impact	gain of 366 to 749 jobs per year
Net Earnings Impact	\$119.5 million NPV
Net Output Impact	\$384.1 million NPV
Noise Benefits	reduced noise exposure at other MAC airports
Safety	will allow existing aircraft to operate with improved safety margins during less desirable, weather-induced runway conditions
<b>Costs</b>	
Land Acquisition Costs	\$9.21 million NPV
Construction Costs	\$18.3 million NPV
Net Airport O&M Costs	\$2.3 million NPV
Net FCM Delay Costs	\$6.0 million NPV
Lost Revenue to Eden Prairie	\$14.1 million NPV
Lost Revenue at Other MAC Airports	offset by revenue gains at FCM
Noise Impacts	increased daytime and nighttime noise exposure in areas not acquired by MAC

Sources: Benefit-Cost Technical Report, Corrected Tables 17, 18, and 21; HNTB analysis

to use of the FAA 2007 TAF (see discussion in Section III.A of this ROD). Benefits to aircraft operators and ground travel time savings are based on surveys of existing operators and operators that would relocate to FCM with a 5,000-foot runway and additional hangar space – and therefore they are not based on forecasts of operations. Consequently, use of the DEIS Forecast results in a smaller B-C ratio than what would be calculated with the FAA 2007 TAF. However, the B-C ratio would still be positive using the 2007 TAF.

**Endangered and Threatened Species.** This impact category consists of threatened, endangered, candidate and proposed federal- or state-listed animal and plant species and their habitats that exist in the APE. Plant or animal species with special status are also included. The APE is the area of FCM that would be directly disturbed by the proposed construction and the essential habitat areas of affected bird species that could have aircraft overflights. The Minnesota Valley National Wildlife Refuge (MVNWR) contained essential habitat areas of the bald eagle and heron rookery during preparation of the EIS. The bald eagle was listed as threatened and special concern on the federal and state lists of threatened and endangered species. No state or federally listed plant or animal species are known to inhabit existing or future airport property.

Blue Lake in the MVNWR is the location of a major heronry that is used for nesting by great blue herons (*Ardea herodias*), great egrets (*Casmerodius albus*), double-crested cormorants (*Phalacrocorax auritus*) and black-crowned night herons (*Nycticorax nycticorax*). None of these species are listed as endangered, threatened or special concern. However, colonial waterbird nesting sites are carefully monitored due to their sensitivity to disturbance. The estimated number of great blue heron nests actively used at the Blue Lake heronry has ranged from a low of 137 in 1998 to a high of 536 in 1995. Annual great blue heron nestling production has ranged from a low of 178 in 1998 to a high of 796 in 1993. Low nest usage and nestling production in 1998 are partially due to severe storms in the spring of 1998 that caused an abnormally high mortality rate among both chicks and adults (see FEIS Appendix A.6).

Bald eagles also nested adjacent to the Blue Lake heronry in 1995 and 1997. Accordingly, subsequent to the distribution of the DEIS, the U.S. Fish and Wildlife Service (FWS) requested that FAA enter into consultation with the FWS, as required by the Endangered Species Act, to reach agreement on project modifications that would preclude any potential adverse effects to the bald eagle. The FAA initiated consultation with the FWS to address their comments. The FAA had a Biological Assessment (BA) prepared for the bald eagle that concluded there would be no adverse effect of Alternative F with or without noise mitigation on the reproductive success of the affected bald eagles and their nesting territory. FAA submitted the BA to FWS who did not issue a Biological Opinion, but concurred with the conclusion of the BA that the Proposed Action is not likely to adversely affect the nesting bald eagles (see June 21, 2001 DOI letter in Attachment B).

The number of nesting bald eagle pairs in Minnesota increased from 1,480 in 1982 to 5,748 in 1995, an average annual increase of 11%. Nationwide, the bald eagle population increased at a rate of 8% per year over the past 10 years. In both Minnesota and nationwide, bald eagle populations have met all of the recovery goals set by FWS. Accordingly, the Service

proposed to remove the bald eagle from the federal threatened and endangered species list (see 64 Federal Register No. 28, pages 36453-35464, July 6, 1999). The final decision to delist the bald eagle was made on July 9, 2007. The bald eagle remains as a special concern species in Minnesota. FWS was subsequently requested to provide additional input and advised FAA that additional consultation was not required or needed.

**Energy Supply and Natural Resources.** Energy uses associated with airport development generally are of two types -- energy demands for stationary facilities (i.e., airfield lighting and terminal building heating) -- and fuel consumption from the movement of air and ground vehicles. Factors to be considered in the determination of impact are the availability of local power to accommodate the projected demand for power, and the availability and supply of fuel resources to accommodate the projected consumption of fuel.

The No Action Alternative is estimated to generate no additional daily vehicle trips and 42 more daily aircraft operations than the existing condition. The Proposed Action are estimated to generate about 510 additional daily vehicle trips and 169 additional daily aircraft operations compared to the No Action Alternative. The new building area is not expected to require significant additional supplies of energy that would exceed the available local supply. These increases are minor; the Proposed Action would not substantially increase fuel consumption or use natural resources in short supply. Consequently, as stated in the Scoping Decision, detailed analysis of the project with respect to energy supply is not necessary.

**Environmental Justice.** All of the environmental impact categories were reviewed and evaluated to determine whether there would be any disproportionate impacts to minority and low-income populations. EJ impacts of the alternatives for FCM involve the potential for displacement (social impacts) and noise impacts due to the action considered. None of the other environmental impact categories are projected to disproportionately adversely effect low income and minority individuals. The acquisition of lands considered within the expanded Mn/DOT Safety Zone B in the Proposed Action would require the displacement of 4 households. The households are not low-income or minority and therefore are not considered within the EJ analysis. There would be no households in the 2010 DNL 65+ noise contour for the No Action Alternative and the Proposed Action, and 15 households for Alternative F.

**Farmland.** The Farmland Protection Policy Act authorizes the Department of Agriculture (DOA) to develop criteria for identifying the effects of federal programs on the conversion of farmland to non-agricultural uses. The DOA was notified of the proposed action and assessed the APE for farmland eligibility. In their February 17, 1999 letter DOA determined that "The project area has no designated prime or unique farmland. Prime and unique soils under the Farmland Protection Policy Act are not included in the assessment if local designated land use does not include agricultural utilization." The Comprehensive Plan for the City of Eden Prairie was assessed for existing and future land uses surrounding FCM. Areas surrounding FCM are planned for residential use, commercial/industrial use or public open space; no existing or planned agricultural land uses in the APE were found in Eden Prairie's Comprehensive Plan. Therefore, there are no impacts on farmland from any of the alternatives.

**Floodplains and Floodways.** The APE is the area on FCM property classified as floodplain. Only a small portion of the Runway 18-36 protection zone (RPZ) north of Pioneer Trail is classified as floodplain by Eden Prairie. There are no impacts to floodplain; neither encroachment nor filling of floodplain is expected under any of the alternatives.

**Historic, Architectural, Archaeological and Cultural Resources.** No archaeological or cultural resources are affected. There are three historic properties eligible for the National Register in the vicinity of FCM – the J.R Cummins-Grill House, the Minnesota Valley Wayside and FCM Building Area No. 1 (see FEIS Figure N-1 and discussion in FEIS Section V.N, Historic, Architectural, Archaeological and Cultural Resources). None of the alternatives would have a significant adverse effect on the J.R Cummins-Grill House and the Minnesota Valley Wayside because they are not in the Area of Potential Effect (APE). The No Action Alternative and Proposed Action would remove the last 2 hangar rows (11 hangars) at the northeast end of Building Area No. 1. The removal of the 11 hangars shown in **Figures 1, 2 and 3** is necessary to create the FAA-required OFA for Runway 27L and to clear the runway's approach and transitional surfaces. Also, in order to reduce/prevent runway incursions, a perimeter road is needed around the ends of Runway 27L and 27R. The construction of a perimeter service road around the Runway 27L end would require the removal of the 11 hangars, as discussed in the September 19, 2003 letter to Dennis Gimmetad from Glen Orcutt in Attachment B of this ROD. Building Area No. 1 was assessed for significance and determined eligible for listing on the National Register of Historic Places (NRHP). The assessment and determination was submitted to the Minnesota State Historic Preservation Officer (SHPO) for review in accordance with Section 106 of the National Historic Preservation Act of 1966. The SHPO concurred with the determination that the Flying Cloud Airport Building Area No. 1 Historic District meets National Register criteria and the removal of the Mustang Lane Hangars will constitute an adverse effect (see Minnesota Historical Society letter dated November 19, 2003 in Attachment B). The MOA, included as Attachment E of this ROD, states that the MAC will develop and implement a mitigation plan for the Building Area No. 1 Historic District at FCM. To develop this plan, the MAC will hold an information-gathering meeting with persons familiar with the area's aviation history to identify alternatives for types of mitigation that would be most appropriate, historical themes that should be highlighted, and possible locations for the mitigation. The MAC, in consultation with the FAA and SHPO, will review these alternatives and determine which should be implemented. The Advisory Council on Historic Preservation concurred with the SHPO's comments on the Flying Cloud Airport Building Area No. 1 Historic District and declined to be a participant and signatory of the MOA.<sup>10</sup>

**Induced Socioeconomic Effects.** This impact category considers the potential for imposing induced or secondary effects on surrounding communities as a result of airport development. It includes any shifts in patterns of population movement and growth and the demand for public services that are influenced by airport development.

The development pattern in Eden Prairie in general, and around the airport in particular, would not change as a result of implementing the Proposed Action or alternatives.

<sup>10</sup> Telephone conversation between Glen Orcutt and Don Klima of ACHP, February 12, 2004.

Population movement and the growth and demand for public services would not change significantly beyond those patterns and levels currently experienced in the City of Eden Prairie.

**Light Emissions and Visual Impacts.** Impacts of extending the lighting system to the west to achieve flight safety standards for the extended Runway 9R/27L in Alternative F and the Proposed Action would be less than the No Action Alternative as a result of the land acquisition west of FCM. The sequenced flasher, or strobe, lights associated with an approach lighting system have the greatest potential to affect surrounding areas because of their intensity and distinctive visual character. The approach lights would be located on airport property and installed to minimize any adverse effects to residential areas.

Security and safety lights for the new building area would be installed to minimize or eliminate any adverse effects to off-airport property. This would be achieved through angling the lights and when necessary shielding light emissions.

**Noise.** Airport noise is one of the principal concerns of the proposed project. As a result, a comprehensive evaluation of the potential noise impacts was conducted and the MAC prepared a Noise Mitigation Plan in coordination with affected municipalities and FWS staff from the MVNWR. According to FAA and Metropolitan Council land use compatibility guidelines, DNL 65 dBA represents the threshold of significant impact for noise-sensitive land uses. The Metropolitan Council also considers noise-sensitive land uses in the DNL 60-65 contour as "Conditional" (potentially incompatible with aircraft noise). The Day-Night Sound Level (DNL) is therefore the primary noise metric for assessment of noise impacts. In addition to the DNL metric, the Sound Exposure Level (SEL), Peak Noise Level (L<sub>max</sub>) and Time Above (TA) 65 dBA metrics were calculated at 20 selected receptors. Also, the ambient DNL dBA was recorded from noise monitors placed at the 20 receptors in 1998.

FAA Order 1050.1E states that the noise analysis usually is based on timeframes/forecasts 5 to 10 years after implementation of the project. The FEIS noise assessment was based on a forecast of 241,353 operations for No Action and 302,983 operations for Alternative F and the Proposed Action in the year 2010, which is now probably the first full year of operation. The year 2015 or 2020 would therefore usually be selected for the future conditions noise analysis in the FEIS. The 2007 TAF forecasts 145,793 operations in 2020 for FCM. Since the FEIS assessment is based on a forecast more than 100% higher than the 2020 forecast in the 2007 TAF for Alternative F and the Proposed Action and 65% for No Action, the assessment of noise impacts in the FEIS represents conservatively high values of future noise conditions for Alternative F, Proposed Action and No Action.

In 2000 there were no homes in the DNL 65+ contour and about 150 persons living in 53 homes in the DNL 60-65 contour. By 2010 there would be 79 persons living in 28 additional dwelling units in the DNL 60-65 contour under the No Action Alternative, based on the FEIS forecast and the Eden Prairie Comprehensive Plan assuming existing household size. The No Action Alternative would not have an adverse noise impact because there would be no population in the DNL 65+ contour. Alternative F would have a significant adverse impact on 42 persons living in 15 homes in the DNL 65+ contour, of which 25 are existing residents

and 17 are planned residents, and would have 1,379 more persons in the DNL 60-65 contour than the No Action Alternative.

The significant adverse noise impacts of Alternative F would be mitigated by a number of measures. The MAC established an FCM EIS Noise Mitigation Committee described in FEIS Section VI to determine appropriate measures that would mitigate the impacts. The Committee recommended a Noise Mitigation Plan to MAC, and MAC approved the plan for inclusion in the DEIS for public review and comment. The plan was modified as a result of FAA's review of the Part 161 process and from discussions between MAC, FAA and the City of Eden Prairie during the SDEIS comment period, which resulted in the Final Agreement and the MOU presented in Attachment C of this ROD. The noise mitigation measures in the Final Agreement and MOU are incorporated in the following Noise Mitigation Plan, which is a part of the Proposed Action (Alternative F with Mitigation).

Noise Mitigation Plan The following mitigation measures are updated from those in Section V.Q.3 of the FEIS and will be implemented as part of the Proposed Action. Mitigation measure Number 3, *Maximum Takeoff Weights*, in the FEIS has been deleted. It was included as a part of the Final Agreement between MAC and Eden Prairie that contained Ordinance 97. However, the 60,000-pound prohibition in Ordinance 97 is based on runway pavement design strength and construction and is not a noise mitigation measure, as discussed in Section VII, Issues, in this ROD.

1. *Preferential Use of Runways* – When winds, weather or traffic conditions do not otherwise dictate the use of the runways at FCM, the FAA tower will normally use the runways for arrivals and departures of all aircraft in the following priority:

- The calm wind runway is 9R
- Arrivals – 9R, 9L, 27L, 27R, 36, 18
- Departures – 9R, 9L, 27L, 27R, 18, 36
- Jet Arrivals and Departures – 9R, 27L

Note: This does not apply to training operations in the traffic pattern.

2. *Preferential Departure Routes* – All departures on Runway 9R/27L (other than training operations) will be encouraged to use headings of 135 degrees clockwise to 230 degrees, unless precluded by other traffic or weather considerations. Unless otherwise instructed by ATC, turbojet aircraft departing 9R/27L under visual flight rules (VFR) shall be encouraged to turn to the southerly headings after crossing the departure end of the runway and attaining an altitude of 500 feet above ground level (AGL).

Note: All *jet* departures are currently directed to headings of 135 degrees clockwise to 230 degrees, in accordance with a Letter of Agreement between Flying Cloud ATCT and Minneapolis TRACON (M98) and ATCT FCM Order 7220.3J unless precluded by other traffic or weather considerations. (A copy of the Letter and Order are in FEIS Appendix B1.)

3. *Stage 2 Operations* -- MAC will implement a voluntary program to discourage all operations at the Airport by Stage 2 Aircraft.

4. *Voluntary Nighttime Use Procedures* -- During the hours of 2200 to 0600 local time, pilots are asked to voluntarily comply with the following procedures:

- All aircraft operators are encouraged not to fly during the nighttime hours of 2200 to 0600 local time, except for operations between 2200 and 2400 local time conducted to meet Nighttime Currency Requirements.
- All aircraft operators are encouraged not to conduct training in the traffic pattern from midnight to 0600 local time (which allows pilots to maintain nighttime proficiency requirements according to FAR Part 91). Multiple training events by jet aircraft are especially discouraged.
- Intersection takeoffs (takeoffs from mid-runway or from an intersecting runway) are discouraged at all times, especially from 2200 to 0600 local time.

In addition, MAC will identify and evaluate specific operational procedures that would limit the noise impact of early morning aircraft operations between 0600 and 0700 local time, including dispersion of departures, defined flight routes or noise abatement departure procedures. MAC will adopt those procedures mutually acceptable to MAC and Eden Prairie.

Note: MAC shall consult with the FAA on acceptable early morning operational procedures prior to their implementation.

5. *Maintenance Run-ups* -- Maintenance engine run-ups are prohibited from 2200 to 0700 hours local time. During the control tower's published hours of operation the tower should direct traffic to the following preferred run-up areas:

- Runway 18/36 at the "No Name" taxiway (*taxiway abeam the VOR*).
- Whenever practical, aircraft will conduct engine run-ups so the nose of the aircraft is on a 360 clockwise to 030-degree heading.

Exceptions: The prohibition does not apply in the case of an emergency, does not apply to aircraft owned and operated by the U.S. government, and does not apply to unscheduled maintenance run-ups performed between 2200 and 0700 hours local time where strict compliance with the prohibition would not allow sufficient time to permit the aircraft to depart on schedule the following morning.<sup>11</sup>

6. To encourage strict observance of the measures and procedures in this Noise Mitigation Plan, MAC will take the following actions:

- Prepare and distribute operating rules and regulations for FCM that contain these mitigation measures and procedures.

---

<sup>11</sup> Claimants for an exception, excluding the owner or operator of a U.S. government aircraft, must notify the MAC within 24 hours by submitting the form designated by the MAC's Director of Reliever Airports or designated representative for this purpose.

- Use its best efforts to negotiate with Fixed Base Operators, Airport Users who base aircraft at the Airport and other Airport Users, as determined by MAC, voluntary letters of intent committing the Fixed Base Operator or Airport User to adhere to the voluntary limits on aircraft operations contained in these mitigation measures.
- Inform current and future Airport Users and Fixed Base Operators about the commitments contained in these mitigation measures that affect aircraft operations at the Airport by publishing and keeping current notice in the following publications: Airport Facility Directory; Department of Defense Flight Information Manual; Jeppesen Information Manual; and relevant MAC publications.
- Implement a Pilot Education Program designed to inform Airport Users and Fixed Base Operators about the commitments contained in these mitigation measures that affect the actions of Airport Users and Fixed Base Operators, other operational requirements and noise abatement measures that MAC has adopted previously, and any additional operational requirements and noise abatement measures as MAC, in its sole discretion, may choose to adopt and include. The Pilot Education Program may include, but will not be limited to, posting and display of information in facilities maintained by Fixed Base Operators and airfield signage. MAC will consult on at least an annual basis with the Designated Representative of Eden Prairie on the curriculum for and implementation of the Pilot Education Program.
- Publicly recognize through a certificate, award, or similar means, on an at least annual basis the actions and efforts of one or more Airport Users or Fixed Base Operators that avoid or promote avoidance of operations inconsistent with the voluntary limits contained in these mitigation measures.
- Thoroughly investigate all credible complaints and information received from local residents, Eden Prairie, Airport Users, Fixed Base Operators, or any other source to determine whether a violation or failure to comply with a voluntary measure has occurred and take appropriate action as dictated by the violation.
- Instruct all MAC employees working on a temporary or permanent basis at the Airport of the commitments in these mitigation measures and provide instructions on procedures for notifying the proper parties of a potential violation or failure to comply with a voluntary measure.
- Send a written notice to the owner or operator of any aircraft known to have operated in a manner inconsistent with the voluntary restraints on Nighttime Aircraft Operations, early morning departures and operations by Stage 2 Aircraft. The notice shall provide information about the inconsistent operation, state that MAC's policy is to limit voluntarily inconsistent operations, and request that the owner or operator provide a detailed response describing the reason for the inconsistent operation. MAC shall maintain a record of all such correspondence and provide copies of such correspondence to the Designated Representative of Eden Prairie.
- Perform on no less than a monthly basis, a review of the ANOMS flight track database to identify any and all Stage 2 Aircraft operations occurring at the Airport since the prior review. MAC shall keep a separate record of all Stage 2



Aircraft operations and provide the Designated Representative of Eden Prairie, on a quarterly basis, with a notice identifying the date and time of each Stage 2 Aircraft operation in the quarter and a total of all Stage 2 Aircraft operations in the preceding rolling twelve months.

7. *Incompatible New Development* – MAC will acquire the incompatible undeveloped properties or parcels in the current Eden Prairie Comprehensive Plan that are within the Proposed Action 2010 DNL 65 noise contour.

8. *Incompatible Existing Land Use* – Existing noise-sensitive structures within the Proposed Action 2010 DNL 65 noise contour will have an exterior to interior sound reduction of 25 dBA. Existing noise-sensitive structures within the Proposed Action 2010 DNL 60 noise contour will have an exterior to interior sound reduction of 20 dBA. (The exterior to interior sound reduction of 20 dBA in the DNL 60 Noise contour is a local criterion.) FAA is not a party to the following activities related to residences in the DNL 60-65 contour and these activities are not included as a part of FAA mitigation. These activities are not eligible for Federal Airport Improvement Program (AIP) funding.

MAC will test the residences within the Proposed Action 2010 DNL 60 noise contour in accordance with a methodology agreed upon by MAC and Eden Prairie, to determine the existing exterior to interior noise reduction level. MAC will complete testing within two years from the date that the extended runways are made available for use. In the event that any affected residence has an exterior to interior noise attenuation of less than 20 dBA, MAC will provide sound insulation to achieve a noise reduction of at least 20 dBA.<sup>12</sup> MAC will consult with Eden Prairie to determine the nature and extent of sound insulation to be provided for eligible residences. MAC will complete sound insulation of all eligible residences within two years from the date that the extended runways are made available for use. MAC will provide the testing and sound insulation regardless of whether funding is provided by the federal government. No new residence for which final building permits were issued on or after December 4, 2001, shall be eligible to receive testing or sound insulation.

9. *Incompatible Infill Development and Reconstruction or Additions to Existing Structures* – Infill development and reconstruction or additions to existing noise-sensitive structures within the Proposed Action 2010 DNL 65 noise contour will be constructed to meet an interior sound level of 45 dBA. Infill development is a vacant parcel(s) of land surrounded by developed land as defined by the Aviation Policy Plan of the Metropolitan Council. The City of Eden Prairie will be responsible for permitting the new construction.

In 2010, the Proposed Action (Alternative F with Mitigation, which includes the above Noise Mitigation Plan) would not have any persons residing in the DNL 65+ contour. It would have 317 more persons in the DNL 60-65 contour than the No Action Alternative. The DNL

<sup>12</sup> Buildings built in cold climates have typical reductions of 27 dBA with the windows closed (24 dBA with windows open). "Protective Noise Levels, Condensed Version of EPA Levels Document", Table II, EPA November 1978.

values and contours with mitigation assume compliance with the voluntary nighttime operation measures in the mitigation plan 50 percent of the time.<sup>13</sup>

The agreement between MAC and the City of Eden Prairie in Attachment C outlines several of the above-mentioned voluntary procedures aimed at reducing noise impact from airport operations. These procedures include a voluntary nighttime operations restriction, a voluntary restriction on Stage II aircraft, preferred departure and arrival procedures at the airport and a pilot education program aimed at communicating the provisions of the agreement to the airport users to help minimizing noise impact.

Starting in 2004, the MAC has held two pilot briefings per year, one in the spring and one in the fall. The briefings provide a comprehensive review of noise issues around FCM and the operational procedures included in the voluntary noise program. The most recent pilot briefing was held in June 2007 and was attended by approximately 70 people. The briefings have been a key element in educating FCM users about the voluntary procedures aimed at reducing noise impacts around the airport.

The voluntary nighttime operations restriction requests that users do not operate at the airport between the hours of 10:00 p.m. and 6:00 a.m. If operators use the airport during these hours they are asked to use the south parallel runway and execute turns to the south of the airport over the Minnesota River as soon as operationally practical. Additionally, users are asked to adhere to the southbound turn procedure between the hours of 6:00 a.m. and 7:00 a.m. to minimize noise impact from early-morning departure operations. The MAC investigates all operations that do not follow the voluntary noise abatement procedures for nighttime operations and early-morning departures and which generate a complaint from an Eden Prairie resident. If the MAC determines that a violation of the voluntary procedures has occurred, a letter is sent to the appropriate owner/operator. The letter notifies an owner/operator that they have operated in a manner inconsistent with the voluntary procedures and that it is the MAC's policy to limit inconsistent operations. The MAC has sent over 180 letters to aircraft owners/operators notifying them of the voluntary operations restrictions and procedures since 2004.

The MAC has also implemented a voluntary restriction on Stage II aircraft operations at FCM consistent with the agreement between the MAC and the City of Eden Prairie. The MAC committed that, if the total number of Stage II aircraft operations at FCM exceeded 75 in any rolling twelve-month period, a process to implement a mandatory ban on Stage II aircraft at FCM would be initiated. The last Stage II aircraft operation at FCM documented by the MAC Airport Noise and Operations Monitoring System (ANOMS) took place on May 13, 2004. No Stage II aircraft operations were documented by ANOMS in 2005, 2006, and none have been documented, to date, in 2007.

---

<sup>13</sup> 50% voluntary compliance is based on a 1999 HNTB survey of FCM users and a 2000 HNTB survey of the compliance experience of US airports with voluntary nighttime measures.

**Section 4(f).** Section 4(f)<sup>14</sup> of the 1966 Department of Transportation Act states that the Secretary of the U.S. Department of Transportation may not approve a project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land in an historic site of national, state or local significance. The act requires that no project be approved unless there is no feasible and prudent alternative to using that land and planning for the project includes all possible measures to minimize harm resulting from the use of the land.

The area of potential effect is the airport property, land to be acquired, the DNL 65+ contours and the Minnesota Valley National Wildlife Refuge (MVNWR).

There are three historic properties eligible for the National Register in the vicinity of FCM – the J.R Cummins-Grill House, the Minnesota Valley Wayside and FCM Building Area No. 1 (see FEIS Figure N-1 and discussion in FEIS Section V.N, Historic, Architectural, Archaeological and Cultural Resources). None of the alternatives would have a significant adverse effect on the J.R Cummins-Grill House and the Minnesota Valley Wayside because they are not in the APE. The No Action Alternative and Proposed Action would remove the last 2 hangar rows (11 hangars) at the northeast end of Building Area No. 1 because all of the 11 Mustang Lane hangars penetrate either the approach or transitional surfaces. Nine of the 11 hangars penetrate the approach surface and the other 2 penetrate the transitional surface, and 2 and a portion of another lie within the object free area. Also, in order to reduce/prevent runway incursions, a perimeter road is needed around the ends of Runway 27L and 27R. The construction of a perimeter service road around the Runway 27L end requires the removal of the 11 hangars, as discussed in the September 19, 2003 letter to Dennis Gimmetstad from Glen Orcutt in Attachment B of this ROD. Removal of the hangars required consultation with SHPO on appropriate mitigation and the preparation of a Section 4(f) Evaluation. See discussion in Section V, Historic, Architectural, Archaeological and Cultural Resources.

The FAA and MAC consulted with SHPO, the Advisory Council on Historic Preservation (ACHP) and other affected parties and prepared a Memorandum of Agreement (MOA) on the development of appropriate mitigation measures, which is presented in Attachment E.

A Section 4(f) Evaluation was prepared and presented in Section V.R.1 of the FEIS. The Section 4(f) Evaluation was sent to the Department of the Interior and other federal, state and local agencies. No comments on the Section 4(f) Evaluation have been received. Execution by MAC of the MOA provides a commitment to implement the stipulations in the MOA.

None of the alternatives would have an adverse effect on the MVNWR (see Wildlife Refuges in this Section V of this ROD). The USDOJ has concurred that the Proposed Action will not result in constructive use of the Refuge provided that the estimates of future noise levels are not significantly greater than estimated in the SDEIS. See USDOJ letter dated June 21, 2001, in Attachment B. The estimates of future noise levels in the FEIS have not changed from the estimates presented in the SDEIS.

---

<sup>14</sup> In January 1983, as part of an overall recodification of the DOT Act, Section 4(f) was amended and codified in 49 U.S.C, Section 303. This regulation is commonly known as "Section 4(f)."

**Social.** Social impacts consider the relocation of residences and businesses and other community disruption, including the alteration of surface transportation patterns. The only residential displacement of any of the alternatives would occur from Alternative F and the Proposed Action, which would relocate 3 residences in the Mn/DOT Safety Zone B west of Eden Prairie Road. This is a correction to FEIS Section V.S, which stated that 4 residences would be relocated. The residents are neither low income nor minority. The residential relocations will be performed in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), 49 CFR Part 24, and the FAA Advisory Circular/150/5100-17, dated September 7, 2001. There is an adequate supply of replacement land and housing available in Eden Prairie and surrounding municipalities to accommodate the displaced residents. No businesses would be displaced under any of the alternatives. Impacts on businesses, recreational areas, community institutions, social services, surface transportation patterns and emergency vehicle response time would be minimal for any of the alternatives.

**Solid and Hazardous Waste; Wastewater.** The airport generates solid waste that is collected by commercial collection service providers and hauled to either a processing facility or landfill. Hazardous waste is generated by FCM tenants of whom five are fixed base operators (FBOs). Businesses that generate hazardous waste are required to be licensed by Hennepin County and are subject to all local, state, and federal rules and regulations. In a system that classifies generators by the amount of waste produced, the five FBOs are "Very Small Quantity Generators". Generators placed in this category produce no more than 220 pounds of hazardous waste per month. Whether these classifications will change in the future depends on the volume of hazardous material each handles. Commercial haulers are used to transport hazardous waste to licensed facilities for final disposal. According to past MAC inspections, there were 38 septic systems present at the airport on leased tenant properties. All existing and proposed future buildings on the airport that will utilize sewer and water service in the future will be connected to the Eden Prairie municipal utility system on a reasonable time schedule, as established by MAC "Policy for Sanitary Sewer and Water Installation at the Reliever Airports", as amended October 16, 2000 (see paragraph 6 of the MOU in FEIS Appendix A.4). MAC will install trunk and lateral water and sanitary sewer mains to tenant service areas. Tenants are responsible for the extensions of the lateral lines and hookup to the municipal system. Existing wells and septic systems should be abandoned within 24 months of the availability of the trunk and lateral water and sanitary sewer mains.

There would be an increase in solid waste generation at FCM. Commercial haulers would continue to collect the waste. There are sufficient processing and landfill capacities in the metro area to accommodate the increase in MSW. There would be an increase in hazardous waste generation at FCM. Commercial haulers would continue to collect and transport the waste to facilities licensed to properly dispose of or recycle these materials.

As of June 2003, MAC has connected to the Eden Prairie municipal water and sewer system and airport properties along TH 212 have hooked up to the connection; properties along Pioneer Trail are to be hooked up in the near future. Once hookups are completed, the septic systems will be abandoned according to the Minnesota Department of Health requirements

and no new septic systems will be permitted. The owners of the septic systems are MAC tenants and they will be responsible for proper abandonment.

There would be no significant adverse impacts on solid and hazardous waste and wastewater by any of the alternatives.

**Water Quality.** This impact category addresses surface water quality and groundwater quality. There would be an increase in runoff and less storage capacity compared with the No Action Alternative; however, an excess of storage capacity in on-site detention ponds would still be available to accommodate the runoff from a 100-year, 24-hour storm producing 5.9 inches of rainfall. The Proposed Action would therefore not have a significant adverse impact on the storage of storm water runoff. Although the total annual volume of stormwater run-off from FCM will increase under the Proposed Action, none of the pollutant loading rates would exceed the MPCA levels for residential and commercial land uses and therefore no significant adverse impacts are expected.

Groundwater quality considers the hydrogeology of the site and potential impacts to the groundwater and water supply from petroleum storage, waste handling and urea usage for pavement deicing. FCM is underlain by approximately 250 feet of soil consisting of glacial drift and reworked glacial drift from the Des Moines lobe glaciation, with some of the reworked material originally deposited by the earlier Superior lobe. Texturally, these soils consist of inter-bedded sand and gravel outwash deposits, stratified sand and silt alluvial and lacustrine deposits, and clayey tills.

According to the Hennepin County Soil Atlas, the soils at the site are of the Estherville-Dickman-Dakota association. These soils are generally level to hilly, moderate to medium textured soils underlain by sand and gravel. Typical compositions of these soils are silty to sandy loams. These soils are classified as Group A or Group B hydrologic soils having moderate to high infiltration rates.

The City of Eden Prairie water supply is from a municipal well field located approximately 2 miles north of FCM, and the City has implemented a Well Head Protection Plan (WHPP). The WHPP delineates the protection area for the 11 Eden Prairie municipal wells. FCM is located outside of the defined well head protection zone. Furthermore, groundwater flows to the southeast, indicating that the airport is down gradient of the municipal well field. Thus, groundwater at the airport does not flow toward the Eden Prairie municipal water supply.

According to the Hennepin Conservation District well inventory completed in 1994, there are 15 private water supply wells at the airport. Two of these are registered with the state of Minnesota (Minnesota Unique numbers 224079 and 205953) and 13 are permitted by the City of Eden Prairie. The MAC connected to the Eden Prairie municipal water system at FCM in June 2003. The private wells will be abandoned according to the Minnesota Department of Health requirements. The well owners are MAC tenants and they will be responsible for abandoning the wells.

The amount of groundwater currently withdrawn by these users does not require an appropriation permit from the Minnesota Department of Natural Resources (i.e., less than 10,000 gallons per day). Since the airport has connected to the municipal water system, groundwater will no longer be appropriated by the airport tenants. The construction activity would not require de-watering or other appropriation of groundwater.

According to the MPCA storage tank database, there are 11 active underground storage tanks (USTs) and 4 active above ground storage tanks (ASTs). These tanks range in size from 250 gallons to 20,000 gallons. Seven active USTs are used to store aviation fuel, 2 for gasoline, one for diesel and 1 for kerosene. The 4 ASTs are for used oil. The MPCA database lists 31 USTs as removed, 3 as "abandoned/filled in" and 2 as "inactive". According to the MPCA Leaking Underground Storage Tank database, there are no active petroleum releases under investigation or clean up at the airport. There are five past releases on record and each of these is listed as closed, which means the MPCA is requiring no further action and the releases are considered remediated. At this time it is not known how many additional Underground Storage Tanks or Above Storage Tanks will be installed under No Action and Proposed Action. All new tanks are required to meet Minnesota leak detection and secondary containment standards, which were promulgated explicitly to prevent groundwater contamination from petroleum storage tanks.

The potential chemical pollutant sources at the airport are managed by standard procedures described in two documents: the Spill Prevention Control and Countermeasure (SPCC) and the Storm Water Pollution Prevention (SWPP) plans for the facility. The SPCC is required by the EPA for owners of non-transportation related oil and petroleum products facilities. The plan identifies source control and cleanup measures.

Since MAC's used oil storage at FCM does not exceed the threshold amount of the SPCC plan, MAC has prepared the document in general accordance with Title 40, Code of Federal Regulations (CFR) Part 112 and the requirements of the Minnesota Pollution Control Agency (MPCA). A SWPP plan was prepared by MAC for facilities owned and operated by MAC in conformance with the National Pollutant Discharge Elimination System (NPDES) permit program administered by the Minnesota Pollution Control Agency. The purpose of the program is to eliminate or minimize contact of storm water with significant material that may result in the discharge of pollutants to storm water runoff.

Airport tenants conduct deicing of aircraft, when it occurs, almost entirely inside heated hangars without the use of chemicals. Deicing chemicals are infrequently used and any excess should be collected for disposal and therefore do not pose a groundwater contamination concern. The tenants' SWPP plans discuss the best management practices for handling deicing materials.

Urea is used to remove ice from runways during winter months. 'Road salt' is not used due to corrosion concerns with aircraft. The concern with urea use is the potential nitrate loading to the aquifer. The applicable water quality standards are the Minnesota Health Risk limits (HRL) and Federal Maximum Contaminant Level (MCL), both of which are 10 mg/l or 10 ppm for nitrate as nitrogen, which apply to potable water wells in Minnesota.

A total of 2,500 pounds per year of urea is currently used for runway deicing. Under the No Action Alternative, about 2,500 pounds per year of urea would continue to be used for runway deicing. Under Alternative F and the Proposed Action, the overall urea loading to the storm water detention ponds would increase to about 2,800 pounds per year. The nitrogen concentrations are estimated to range from 2.0 to 3.3 mg/L for the four basins. These concentration levels are well below the Minnesota Human Risk Level (HRL) and Federal Maximum Contaminant Level (MCL) of 10 mg/L for nitrogen as nitrate. As in the case of the existing condition, this concentration is conservative because it does not consider de-nitrification or uptake by vegetation, which will serve to reduce the amount of mobile nitrogen moving through the soil. Based on this estimate, there is a minimum nitrate impact due to usage of urea under No Action, Alternative F and the Proposed Action.

**Wetlands.** The Flying Cloud Airport property and land that would be acquired for the new building area have been field reviewed in their entirety and found to encompass no jurisdictional wetland that would be regulated under state or federal law, no non-jurisdictional wetland or water of the United States or any other wetland. Storm water ponding facilities on the airport property were reviewed and found to lie in areas that lacked hydric soils under natural conditions. The National Wetland Inventory (NWI) shows a Palustrine Emergent/Seasonally Flooded (PEMC) wetland off the west terminus of existing runway 9R-27L; however, no wetland was found in this location when it was field reviewed. Accordingly, the Lower Minnesota River Watershed District issued a Wetland Conservation Act certificate of exemption for impacts to storm water ponds to be affected by the airport project. Similarly, the U.S. Army Corps of Engineers provided written concurrence October 1, 1999 that the airport property encompasses no waters of the United States that would be regulated under the Clean Water Act (see Attachment B). Therefore, no wetland permits are required.

**Wild and Scenic Rivers.** No portion of the Minnesota River in the APE is considered wild, scenic or recreational as defined by the Wild and Scenic Rivers Act and the Minnesota Wild and Scenic Rivers System. Therefore, the alternatives under consideration would not adversely affect a wild or scenic river.

**Wildlife Refuges.** Wildlife and waterfowl habitat areas of wildlife refuges, as well as public-use areas, are considered in this impact category. The factors and criteria used to assess existing and future conditions of wildlife and human activities in the MVNWR are described in FEIS Table X-1.

The only portion of the refuge that would be within the DNL 60 noise contour from the Proposed Action is a very small area directly south of the cross-wind Runway 18-36. The only existing and planned public uses in this contour are a hiking/cross-country skiing trail and an old farm building that is planned for modification to function as a duck hunting clubhouse and indoor interpretive and education facility. The Proposed Action would increase sound levels by DNL 1.1 dBA compared to the No Action Alternative, and therefore would not significantly affect outdoor wildlife recreation activities in the refuge.

**FEIS Table X-1 Factors and Criteria used to Describe Existing and Future Conditions in MVNWR**

Factor	Criterion
Potential disturbance of wildlife due to overflights	Number of monthly aircraft overflights less than 2,000 feet above ground level (AGL). (In 1993 the FAA signed an Interagency Agreement with the National Park Service and the USFWS establishing an advisory 2,000-foot altitude threshold over National Parks and National Wildlife Refuges with the express intent of reducing potential interference with wildlife.)
Disturbance of wildlife due to aircraft noise	No criterion. There is little scientific analysis available on the effect of aircraft noise on waterfowl. However, waterfowl appear to routinely habituate to areas near airports with noise levels of DNL 65 and higher.
Interference with outdoor wildlife recreation activities involving environmental education, nature walks and bird watching/listening	Increase of 3 dBA or more within the DNL 60-65 noise contour.
Interference with outdoor non-wildlife recreation activities including biking, hunting, cross-country skiing and snowmobiling	No criterion. These activities are not significantly affected by aircraft noise and overflights.

There are no anticipated significant adverse impacts on the refuge by the Proposed Action and No Action. In its February 29, 2000 comment letter on the DEIS, the FWS stated that they believed the proposed project will constitute a "constructive use" of Refuge lands and public activities, and contact should be made as soon as possible to discuss appropriate means to achieve compliance with Section 4(f). FAA and MAC initiated consultation with FWS Refuge staff and addressed their concerns. The USDOJ has concurred that the Proposed Action will not result in constructive use of the Refuge provided that the estimates of future noise levels are not significantly greater than estimated in the SDEIS. See June 21, 2001 DOI letter in Attachment B.

**Cumulative Impacts.** Cumulative impact is the effect on the environment that results from the incremental effect of a proposed action/alternative when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions.

The FAA and MAC have considered the effects of the Proposed Action taken together with past, present and known future actions that would be cumulative with the Proposed Action. All potentially affected impact categories were considered. Those potentially affected are



Air Quality, Compatible Land Use, Noise and Water Quality. The other impact categories were not considered to be potentially affected by past, present and known future actions that would be cumulative with the Proposed Action.

The following future actions were identified and their potential effects considered.

- Development consistent with Eden Prairie's Comprehensive Plan,
- 2010 Expansion of MSP,
- Expansion of Pioneer Trail (CSAH 1),
- Expansion of Interstate 494, and
- Construction of Trunk Highway 312.

Based on the analyses in FEIS Section V.Y, Cumulative Impacts, the FAA and MAC have determined that all of the above actions/projects would not result in any significant cumulative impact, and are independent of the Proposed Action based on their evaluation of the purpose and relationship of these projects to the Proposed Action.

## **VI. Public and Agency Involvement**

As discussed in Section II.C of this ROD, there were four public hearings jointly held by FAA and MAC on the project — scoping, DEIS, Part 161 and SDEIS. The MAC established two committees of affected agencies, jurisdictions, airport users and local groups to provide input and advice on the preparation of the Draft EIS — the Flying Cloud Airport EIS Advisory Committee and the Flying Cloud Airport EIS Noise Mitigation Committee. The EIS Advisory Committee was principally comprised of staff members and the Noise Mitigation Committee was principally comprised of policy representatives. Representation on the committees is listed in the table below.

The MAC has periodically published and distributed newsletters to inform agencies and the public on the progress of the study. In addition, MAC established a web page on the internet.

The FAA and MAC have coordinated with relevant agencies concerning the planned development of FCM. Those agencies include the following:

- U.S. Environmental Protection Agency
- State Historic Preservation Officer
- U.S. Fish and Wildlife Service
- Minnesota Department of Transportation
- Minnesota Department of Natural Resources
- Minnesota Pollution Control Agency

- Metropolitan Council
- Minnesota Board of Water and Soil Resources
- Riley-Purgatory-Bluff Creek Watershed District
- Lower Minnesota River Watershed District
- Minnesota Department of Health
- City of Eden Prairie

The FAA and MAC coordinated and consulted with the U.S. Fish and Wildlife Service (FWS) on the potential effects of the alternatives on the Upgrala and Wilkie Units of the Minnesota Valley National Wildlife Refuge. The FWS did not submit comments on the FEIS. In fact, only one federal agency, EPA, and only one state agency, Mn/DOT, submitted comments on the FEIS (see Attachment A), neither of which expressed concerns with the Proposed Action. The regional planning agency, the Metropolitan Council, stated that the FEIS adequately addressed their concerns.

### EIS Committees

<b>Flying Cloud Airport EIS Advisory Committee</b>	<b>Flying Cloud Airport EIS Noise Mitigation Committee</b>
MAC Airport Planner, Chair	MAC Commissioner, Chair
FAA Airport Planner	Metropolitan Council Member
EQB Planner	City of Eden Prairie Mayor
Mn/DOT Aeronautics Planner	City of Bloomington Appointee
Metropolitan Council Aviation Planner	City of Shakopee Appointee
Eden Prairie Planner	US Fish and Wildlife Service Staff
FCM Fixed Base Operator	FAA Airports Division
Zero Expansion member (Eden Prairie citizen group opposed to FCM expansion)	FAA Air Traffic Control Tower at FCM
Flying Cloud Airport Advisory Commission Member (members appointed by Eden Prairie)	2 FCM users – Grand Casinos, Inc. and TCB Air Inc.

### **A. Comments on the FEIS and Responses**

The FAA and MAC prepared responses to comments received on the DEIS and SDEIS and presented them in the FEIS and Section 4(f) Volume II. The response prepared for Eden Prairie Comment 267 regarding air toxics emissions on page 42 of FEIS Volume II is revised to read — “See General Response 6 in Attachment A of the FAA Record of Decision on the expansion of Flying Cloud Airport.”

The FAA and MAC prepared responses to comments received on the FEIS, which are presented in Attachment A of this ROD. In general, the comments focused on the following:

- The need for the project is misrepresented
- The costs of the project far outweigh its benefits
- Off-site alternatives are not adequately considered

- Use of 60,000-pound weight restriction as a noise mitigation measure violates FAA policy
- The proposed project will decrease residential property values
- FEIS forecasts greatly overstate the need for the proposed project
- The impacts of toxic emissions from aircraft are not adequately addressed

Responses to these comments are presented in General Responses in Attachment A of this ROD.

## **VII. Issues**

1. **60,000-POUND WEIGHT PROHIBITION.** Several commenters state that the 60,000-pound weight prohibition in MAC Ordinance 97 is a noise mitigation measure that violates FAA policy on discrimination and FAA will require MAC to remove the prohibition as a condition of grant assurance in the future.

The 60,000-pound weight prohibition is not a noise mitigation measure and was incorrectly stated as such in the FEIS, which has been revised in this ROD in Section V, Noise. Although aircraft in the FEIS fleet mix did not include those with a certified maximum gross takeoff weight of 60,000 pounds or greater, the SDEIS did -- and Alternative F with the Noise Mitigation Plan (Proposed Project) in the SDEIS did not result in a significant adverse noise impact (i.e., no noise-sensitive use in the DNL 65 contour), which shows that the weight prohibition is not needed as a noise mitigation measure. Also, the Proposed Project fleet mix in the SDEIS included 1.54 daily Stage 2 aircraft operations compared to 0.02 in the FEIS.

FAA had informed MAC that a weight-based prohibition on aircraft for the purpose of mitigating noise at FCM was discriminatory and violated Federal law <sup>15</sup>and for that reason MAC amended Ordinance 51, which prohibited jet aircraft with a maximum takeoff weight greater than 20,000 pounds. MAC consulted with FAA on weight-based prohibitions consistent with Federal law and subsequently adopted Ordinance 97, which is based on the design strength of the runway pavement. As stated in the FEIS, the FAA will allow the 60,000-pound takeoff weight limit (30,000 pounds per wheel) contained in Ordinance 97 for the following reasons:

- The limit is consistent with the runway pavement design strength and construction
- It replaces an artificial weight restriction previously in effect that the FAA stated was illegal.
- The substitute weight limit provides substantial relief to operators from the restriction it replaces.
- The MAC manages a multi-airport system, guaranteeing access to other airports in its system.

2. **REVENUE DIVERSION.** On September 24, 2003, Northwest Airlines submitted a letter raising revenue diversion issues with respect to certain real estate transactions between

---

<sup>15</sup> FAA position stated on p. 3 in the FAA letter to Mr. Ryan of MAC dated Sept. 27, 2000, in Appendix B of the FEIS.

the MAC and the City of Eden Prairie in connection with the expansion of Flying Cloud Airport. In their letter of November 7, 2007 to Robert Huber, Manager Minneapolis Airports District Office, Northwest advised that they have reached a resolution of those issues with the MAC, and Northwest hereby withdraws its pending complaint. There are no further FAA or MAC actions regarding this matter.

3. **AIR TOXIC EMISSIONS.** Several commenting parties stated that the direct and cumulative impacts of air toxic emissions from FCM and MSP aircraft have not been adequately addressed. EPA's National-Scale Air Toxics Assessment uses computer models from emission information in each state and has determined that in Minnesota, 1,3-butadiene, acrolein, benzene, formaldehyde, and POM were at levels in excess of health benchmarks. Recent monitoring measurements taken by MPCA in Minnesota confirm that formaldehyde and benzene in our air are in excess of health benchmarks.

The results of the National-Scale Air Toxics Assessment (NATA) by the EPA computer models for each state are not sufficiently refined to compare risks at the local level within the state — county to county, for example. Also, state-to-state results may not be directly comparable because states use different methods to estimate emissions. Furthermore, the risk values are not intended to accurately predict actual health impacts, but rather to assist in the prioritization of chemicals. (See <http://www.pca.state.mn.us/air/nata.html>). Of the pollutants listed that are in excess of health benchmarks, two are compounds associated with aircraft emissions — formaldehyde and benzene. The major sources of formaldehyde emissions are forests and wildfires, stationary internal combustion engines and turbines, pulp and paper plants, petroleum refineries, power plants, manufacturing facilities, incinerators and automobile exhaust emissions. The primary source of formaldehyde in aircraft emissions is from unburnt aviation fuel (kerosene), as is the case with diesel engine emissions. Benzene emissions are from oil and natural gas production, petroleum refining, burning coal and oil, gasoline service stations, pulp and paper production, coke ovens and motor vehicle exhaust. Benzene is used as a constituent in motor fuels.

Sources of air toxics emissions are grouped into four principal source categories — *Point* (mining, petroleum refining and distribution, electric services, other), *Area* (fires, residential wood burning, gasoline service stations, other), *On-road Mobile* (cars and trucks) and *Non-road Mobile* (aircraft, locomotives, construction equipment, lawnmowers, recreational vehicles, other). The major emission sources of the total emissions of formaldehyde and benzene in the Twin Cities Metropolitan Area (metro area) are cars and trucks, according to the most recent (1999) MPCA air toxics emissions inventory. Formaldehyde and benzene were monitored in 2002 by MPCA at several sites in the metro area, including a new site at MSP. All sites were below the health benchmark for benzene, but exceeded the health benchmark for formaldehyde by a factor of about 3. An estimate of the emissions of formaldehyde and benzene at FCM was made by using data from the MPCA air toxics emissions inventory for 1999. That inventory computed FCM formaldehyde emissions to be 2.02% of those for MSP.

The formaldehyde concentrations monitored at MSP were  $2.5 \mu\text{g}/\text{m}^3$ , which is similar to other monitored sites in the metro area. Therefore, with only 2.02% of the emissions from

MSP, concentrations of this pollutant at FCM would be approximately  $0.05 \mu\text{g}/\text{m}^3$ , which is well below the health benchmark of  $0.8 \mu\text{g}/\text{m}^3$ , and FCM operations should have minimal impact on formaldehyde concentrations around the airport. With measured benzene concentrations at MSP below the health benchmark and below average for the metro area, benzene concentrations at FCM should be negligible. The cumulative effect of MSP on air toxics emissions at FCM should also be negligible because concentrations are highest near MSP taxiways and idling aircraft, and airborne emissions are distributed over the entire approach and departure paths. Sources other than aircraft, particularly cars and trucks, point and area sources and non-road sources other than aircraft, contribute over 99% of the air toxics emissions in the Twin Cities Metropolitan Area. See General Response 7 in Attachment A of this ROD for additional discussion of FCM and MSP air toxic emissions.

4. MINNEAPOLIS CLASS B AIRSPACE. A late-filed comment letter states that FAA modified the Minneapolis Class B airspace to accommodate operations on the new MSP Runway 17/35 effective September 15, 2005 and amended the airspace designation as of November 16, 2005. The amendment increased the ceiling for MSP arrivals from 8,000 feet to 10,000 feet. This affects the smaller GA aircraft that are not suited or efficient to fly at altitudes greater than 10,000 feet, and therefore would fly under the "floor" or lower limit of the new Class B airspace, which is 3,000 feet for aircraft operating from FCM. The FAA has essentially lowered the ceiling to 3,000 feet over FCM, which forces many GA aircraft that would normally fly over the MSP airspace, to fly under the new FCM "ceiling" of 3,000 feet. These lower flying aircraft will adversely affect noise and air quality and these impacts were not addressed in the FEIS. This altitude constraint could also make FCM a less convenient airport for GA pilots because it essentially shuts off operations over 3,000 feet at FCM.

The existing Class B Airspace consists of 4 areas – Area A, B, C and D. Area C extends horizontally from 8.5 to 12 nm from MSP and extends vertically from 3,000 to 8,000 feet above mean sea level (MSL). Area D extends horizontally from 12 to 20 nm from MSP and extends vertically from 4,000 to 8,000 feet MSL. FCM is located approximately 11 nautical miles (nm) southwest of MSP and therefore lies within Area C. The new Class B Airspace increased the ceiling from 8,000 to 10,000 feet MSL in all Areas, but did not change the horizontal distances or the lower limit of 3,000 feet MSL in Area C and 4,000 feet MSL in Area D. Note that GA and any other aircraft are not prohibited from flying within the Class B Airspace, but must be in contact with and under the control of FAA Approach Control while within the Class B Airspace. The MAC analyzed available FAA radar flight track data for FCM in the fourth quarter of 2005. The data shows that the aircraft that departed FCM and transitioned the Class B Airspace in close proximity to MSP were at an average altitude of 3,888 feet MSL and therefore in contact with FAA Approach Control. There were no FCM aircraft that were climbing to 8,000 feet MSL or greater to transition over MSP and avoid contact with FAA Approach Control.

Based on the above, the new Class B Airspace should have little or no effect on FCM operations by the smaller GA aircraft, and the analysis of impacts in the FEIS based on runway use and departure profiles is adequate. See also the MAC January 11, 2006 letter from Nigel Finney to Jon Larsen in Attachment A, Late Filed Comment Letters and Responses, in this ROD.

## **VIII. Agency Findings**

In accordance with applicable law, the FAA makes the following determinations for this project, based upon the appropriate information and data contained in the Final EIS and the EIS record.

### **A. Clean Air Act, Section 176(c)(1) Conformity Determination Regarding Expansion of Flying Cloud Airport Actions [42 U.S.C. Section 7506(c)].**

The determination prescribed by this statutory provision is a precondition for Federal Agency support or approval of airport development projects. The USEPA regulations generally governing the conformity determination process are found at 40 CFR Part 93, Subpart B, Sections 93.154 through 93.159, 40 CFR Part 50, and 40 CFR Part 51, Appendix W.

FCM is located in Hennepin County, which is designated as a maintenance area for carbon monoxide (CO). An emissions inventory of net project-related annual emission levels of CO exceeded the de minimis levels published in the General Conformity Rules and included in the Minnesota SIP. As a result, a local air quality modeling analysis was performed, which found that the 1-hour and 8-hour CO concentration levels at critical locations in the affected environment were well below the Federal and Minnesota standards.

The FAA published a Draft General Conformity Determination in the Draft EIS. Responses to comments on the Draft document are provided in Volume II of the Final EIS. The Final General Conformity Determination is provided in Section V.A of the Final EIS and Attachment D of this ROD. The US EPA concurred with the FAA's Final General Conformity Determination in their FEIS comment letter (see Comment 1 in Attachment A). The Minnesota Pollution Control Agency has not submitted comments on the Final General Conformity Determination.

### **B. For actions that include the use of lands subject to Section 4(f) of the DOT Act including significant historic sites, there is no prudent and feasible alternative to using that land, and the project includes all possible planning to minimize harm resulting from the use [49 U.S.C. Section 303(c)].**

The selected alternative would trigger the application of 49 U.S.C. Section 303(c), commonly known as Section 4(f) of the Department of Transportation Act, with regard to properties protected under that act. The selected alternative would demolish 11 hangars in Building Area No. 1, a historic district eligible for the National Register of Historic Places (NRHP). There are no prudent and feasible alternatives to the acquisition and removal of this Section 4(f) resource.

The Agency initiated the National Historic Preservation Act (NHPA) Section 106 process and consulted with the Advisory Council on Historic Preservation, the Minnesota State Historic Preservation Officer and other affected parties regarding impacts to the 11 hangars eligible for listing on the National Register of Historic Places. The FAA evaluated alternatives to minimize the use of these hangars. A Memorandum of Agreement (MOA) resulting from the NHPA Section 106 consultation appears in Appendix C of the Final EIS and Attachment E of this ROD.

**C. The interests of the communities in or near where the project may be located were given fair consideration [49 U.S.C. 47106(b)(2)]**

The determination prescribed by this statutory provision is a precondition to agency approval of airport development project funding applications. The regional planning process over the past decade and the environmental process for this project-specific EIS, which began in 1997 and extended to this point of decision, provided numerous opportunities for the expression of and response to issues put forward by communities in and near the project location. Nearby communities and their residents have had the opportunity to express their views during scoping, the Draft EIS and SDEIS public comment periods, at public hearings, as well as during the review period following public issuance of the Final EIS. Representatives of the affected municipalities and community interest groups served on policy or technical advisory committees during the preparation of the Draft EIS. Thus, the FAA has determined that throughout the environmental process, beginning at its earliest planning stages, fair consideration was given to the interest of communities in or near the project location.

**D. There are no disproportionately high or adverse human health or environmental effects from the project on minority or low-income populations (Executive Order 12898).**

Environmental justice concerns were addressed in Section V.K of the Final EIS, and it was determined in the Final EIS that there would be no minorities that would be disproportionately affected by the selected alternative.

**E. The FAA has given this proposal the independent and objective evaluation required by the Council on Environmental Quality (40 C.F.R. Section 1506.5).**

As the Final EIS outlined, a lengthy process led to the ultimate identification of the selected alternative, disclosure of potential impacts, and selection of appropriate mitigation measures. This process began with the FAA's competitive selection of an independent EIS contractor, continuing throughout the preparation of the Draft EIS and Final EIS, and culminating in this ROD. The FAA provided input, advice, and expertise throughout the planning and technical analysis, along with administrative direction and legal review of the project. From its inception, the FAA has taken a strong leadership role in the environmental evaluation of this project and has maintained its objectivity.

**F. The project is consistent with existing plans of public agencies for development of the area surrounding the airport [49 U.S.C. 47106(a)(1)] and Executive Order 12372.**

The determination prescribed by this statutory provision is a precondition to agency approval of airport project funding applications. It has been the long-standing policy of the FAA to rely heavily upon actions of metropolitan planning organizations (MPOs) to satisfy the project consistency requirement of 49 U.S.C. 47106(a)(1) [ e.g., see *Suburban O'Hare Com'n v. Dole*, 787 F.2d 186, 199 (7<sup>th</sup> Cir., 1986)]. Furthermore, both the legislative history and consistent agency interpretations of this statutory provision make it clear that reasonable, rather than absolute, consistency with these plans is all that is required.

Under provisions of both Federal and state law, the Metropolitan Council of the Twin Cities has been designated as the MPO for the Twin Cities metropolitan area and given primary responsibility for transportation planning in the region. Minnesota law requires the MAC to prepare long-term comprehensive plans for each of its airports to be consistent with the plans of the Metropolitan Council. The Metropolitan Council approved the expansion of FCM in MAC's long-term comprehensive plan for FCM in April 1996. The Council stated that FCM *was ... one of the first airports in the region and has had a more sophisticated mix of aircraft types than many of the other general aviation airports. It is projected that the mix will be increasingly more sophisticated, and will require improved services and longer runways.* The Council further stated that...*expansion at Flying Cloud is critical to meet the demand from growth in the western suburbs.* The proposed project lies entirely within the boundaries of the City of Eden Prairie. Under state law the cities in the region must prepare comprehensive plans that are consistent with the plans of the Metropolitan Council. Therefore, the proposed project will be consistent with the comprehensive plan of the City of Eden Prairie.

**G. Relocation assistance will be provided in accordance with the Uniform Relocation and Real Property Acquisition Policies Act (42 U.S.C. Section 4601 et seq)**

These statutory provisions, imposed by Title II of the Uniform Relocation and Real Property Acquisition Policies Act of 1970, require that state or local agencies, undertaking Federally-assisted projects that cause the involuntary displacement of persons or businesses, must make relocation benefits available to those persons or businesses impacted.

As detailed in FEIS Section V.S and updated in this ROD, the proposed project will displace three (3) residences. The FAA will require the MAC to provide fair and reasonable relocation payments and assistance payments pursuant to the provisions of the Uniform Relocation and Real Property Acquisition Policies Act. Comparable decent, safe and sanitary replacement properties are available on the open market.

**H. Appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations [49 U.S.C. 47107(a)(10)].**

In accordance with state law, the Minnesota Department of Transportation (Mn/DOT) has promulgated rules that establish Safety Zones A and B at each runway end. The required zones for the proposed project are shown in Figure 3 of this ROD. No development is permitted in Zone A and only low density development is permitted in Zone B. The MAC is required to establish a zoning board comprised of the affected jurisdictions to adopt zoning for these zones. As shown in Figure 3, the MAC has or will acquire almost all of the land in Safety Zone A and a majority of the land in Safety Zone B at each of the runways to be expanded in order to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. The MAC will request the City of Eden Prairie to participate in the adoption of zoning consistent with Mn/DOT's rules for the remainder of the zones.



## **IX. Conditions of Approval**

The approvals contained in this ROD are specifically conditioned on full implementation of the following measures. These conditions of approval will be included as special grant conditions in future Federal airport grants to MAC.

1. The mitigation measures that will be implemented are those listed in Section V of the FEIS and Section V of this ROD. These measures are hereby adopted in this ROD. The principal measures are the following.
  - Compliance with the stipulations in the Memorandum of Agreement among the Federal Aviation Administration, the Minnesota Historic Preservation Officer and the Metropolitan Airports Commission (see Attachment E) that includes the preparation and implementation of a mitigation plan for the Building Area No. 1 Historic District at FCM.
  - Implementation of noise mitigation Measures 1 through 9 except for Measure 8 in the Noise Mitigation Plan in Section V, page 42, of this ROD.
  - Implementation of, and compliance with, the commitments of MAC specified in the Final Agreement and Memorandum of Understanding between the City of Eden Prairie and the Metropolitan Airports Commission (see Attachment C).
  - Adherence to the MPCA construction permit and local ordinances to avoid and minimize impacts during construction of the proposed project.
  - Compliance with applicable water quality standards.
  - Compliance with environmental control measures in a currently issued National Pollutant Discharge Elimination System (NPDES) permit.

These mitigation measures constitute the practicable means to avoid or minimize environmental harm from the project and are hereby adopted. The FAA will monitor their implementation as necessary to assure that they are carried out as project commitments.

2. Upon completion of the projects contained in the preferred alternative, MAC will prepare 5-year forecasts of operations and noise levels over the Minnesota Valley National Wildlife Refuge and report the results in comparison with the values in the FEIS to the Refuge staff.
3. MAC and project contractors will obtain the appropriate permits prior to construction. FAA grant agreements with MAC will ensure that these standard permits are obtained prior to commencement of construction.

4. Provisions set out in a NPDES General Construction Storm Water Permit will be adhered to and incorporated into development plans for the proposed project. All conditions of the NPDES permit are made conditions of the approval of this ROD.
5. Development of an erosion control plan during the design phase will be required by FAA (FAA Advisory Circular 150/5370-10A) prior to commencement of construction.

## **X. Agency Decision and Order**

Having determined that the Proposed Project is the only possible, prudent, and practicable alternative, the remaining decision is whether to approve or not approve the agency action necessary for implementation of the Proposed Project. Approval would signify that applicable Federal requirements relating to airport development planning have been met, and would permit the MAC to proceed with the proposed development and possibly receive Federal funding for eligible items. Not approving these actions would prevent the MAC from proceeding with federally supported development in a timely way.

I have carefully considered the FAA's goals and objectives in relation to various aeronautical aspects of the proposed development action discussed in the FEIS. These include the purposes and needs to be served by the Proposed Project, the alternative means of achieving them, the environmental impacts of the alternatives, the mitigation necessary to preserve and enhance the environment, and the costs and benefits of achieving these purposes and needs in terms of effective and fiscally responsible expenditure of Federal funds. I have also considered comments received by the FAA on the social, environmental, and economic impacts of the Proposed Project.

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2) (C) of NEPA.

Therefore, under the authority delegated to me by the Administrator of the FAA, I find that the Proposed Project in this ROD is reasonably supported and approved. For this project, I therefore, direct that action be taken to carry out the agency actions discussed herein, including:

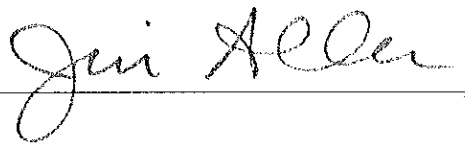
- Unconditional approval of the revised Airport Layout Plan (ALP) for the projects summarized in Section III of the Final EIS, which constitute the proposed development.
- Federal environmental approval for the MAC to establish eligibility to participate in funding through use of Federal AIP funds or PFCs for eligible projects, assuming the independent requirements of these programs are met (49 U.S.C. Section 47101 *et seq.*, 49 U.S.C. Section 40117).

- FAA review and issuance of findings on requests for conversion of airport property, "federally obligated land," for the non-aviation related development that is part of the Proposed Project. Airport land becomes federally obligated when an airport owner accepts FAA grants. Before conversion of airport property for non-aviation use, FAA must grant a land release. This federal environmental approval enables the FAA to approve the release of federally obligated land for non-aviation related projects. Subsequent to this environmental approval, the FAA must review and issue a finding on any request for the conversion of airport property for non-aviation use. (49 U.S.C. Section 47107, Section 47125).
- Determination and actions, through the aeronautical study process of any off-airport obstacles that might be obstructions to the navigable airspace under the standards and criteria of 14 CFR Part 77 and evaluate the appropriateness of proposals for on-airport development from an airspace utilization and safety perspective based on aeronautical studies conducted pursuant to the processes under the standards and criteria of 14 CFR Part 157.
- Development of air traffic control and airspace management procedures to establish and maintain safe and efficient handling and movement of air traffic into and out of the airport under 49 U.S.C. Sections 40103 and 40113; development and approval of revision to Standard Instrument Approach Procedures (SIAP), Standard Instrument Departure Procedures (SID) and Standard Approach Routes (STAR) procedures for the reconfigured runways (14 CFR Part 97).
- Determinations that the proposed new airfield alignment, including runways and taxiways, conform to FAA design criteria. Approval of protocols for maintaining coordination among sponsor offices, construction personnel, and appropriate FAA program offices, ensuring safety during construction.

Finally, based upon the Administrative Record of this project, I certify, as prescribed by 49 U.S.C. 44502 (b), that implementation of the Proposed Project is reasonably necessary for use in air commerce.

Having met all relevant requirements for environmental consideration and consultation, the proposed action is authorized to be taken at such time as other requirements have been met.

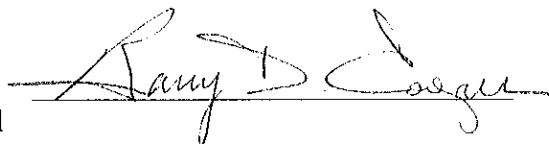
RECOMMENDED BY:  
Jeri Alles  
Manager, Airports Division  
Great Lakes Region



MAY 15 2008

Date

APPROVED BY:  
Barry D. Cooper, AGL-1  
Regional Administrator  
Great Lakes Region



MAY 15 2008

Date

**RIGHT OF APPEAL**

This decision constitutes the Federal approval for the actions identified above and any subsequent actions approving a grant of Federal funds to the MAC. Today's action is taken pursuant to 49 U.S.C. Subtitle VII, Parts A and B, and constitutes a final order of the Administrator subject to review by the Courts of Appeals of the United States in accordance with the provisions of 49 U.S.C. Section 46110. Any party seeking to stay the implementation of this ROD must file an application with the FAA prior to seeking judicial relief, as provided in Rule 18(a), Federal Rules of Appellate Procedure.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

**ATTACHMENT A**

**COMMENTS AND RESPONSES ON THE FEIS AND  
SECTION 4(f) EVALUATION**



## General FEIS Comments and Responses

The following are comments received on the FEIS from several persons or agencies and the responses.

General Comment	General Response
<p>1. Purpose and Need</p> <p>MAC continues to misrepresent need by stating the expansion will divert traffic away from MSP and relieve congestion and delays at MSP.</p>	<p>1. The purpose of this expansion project is to satisfy the 2010 aviation needs of the Flying Cloud Airport (FCM) and the metropolitan airports system by implementing the Airport's Long Term Comprehensive Plan (LTCP) approved by the Metropolitan Council. In 1996 the Minnesota Legislature elected to keep the MSP International Airport at its present site. As part of that legislation, the MAC was also directed to maximize the potential use of the Reliever Airports. The FCM LTCP identified specific improvements to be made at the airport to meet the forecast demand. The proposed project is consistent with the needs identified in the LTCP, and is consistent with the legislative directive.</p> <p>The following is a statement of the need for this project, which is a summary of the material presented in Section II of the FEIS and Section III of this ROD:</p> <ul style="list-style-type: none"> <li>• Enhance the safety and efficiency of FCM;</li> <li>• Provide adequate runway length for the critical aircraft using FCM (B-II, light to medium size business jet);</li> <li>• Improve FCM so that it provides general aviation (GA) and business aircraft full access to the region and the nation;</li> <li>• Expand FCM to meet the demands from growth in the western suburbs, as evidenced by improvements to other public infrastructure and roadways within the service area of Flying Cloud;</li> <li>• Construct a new hangar area to meet the current demand and the projected growth of based aircraft within the service area;</li> <li>• Meet the legislative mandate to divert GA operations away from MSP because the runway capacity at MSP is limited by the size of the site.</li> </ul> <p>Diverting general aviation activity away from MSP is one of the reasons FCM is proposed for expansion and the primary reason for the existence of the Reliever Airport system, but it is neither the only reason nor the only benefit of completing the project.</p> <p>The additional runway length will improve safety by providing more runway pavement for landing overruns and under runs at FCM due to pilot error or inclement weather and by providing more runway stop distance to abort takeoffs when experiencing aircraft malfunction. The expansion of hangar space will benefit owners/operators located in the FCM service area desiring but unable to base their aircraft at FCM, by reducing ground travel time to access their aircraft based at other, more distant airports. The proposed expansion will benefit existing and new owner/operators at FCM by eliminating the costs of stopovers at MSP or other Metro airports to refuel or pick up and drop off passengers because of inadequate existing runway length at FCM. It will benefit airlines operating at MSP by eliminating stopovers from FCM and thereby reducing costs of additional delays in taking off and landing. The MSP Delay Benefits were estimated using the delay curves in the Minneapolis-Saint Paul International Airport Capacity Enhancement</p>



General Comment	General Response																																																															
	<p>Plan, published in 1993, and a MSP forecast of 640,000 operations in 2020. The 2007 TAF for MSP in 2020 is 608,771 operations. A written re-evaluation of the FEIS was performed by the FAA in May 2008. It was determined in this process that substantial changes have not occurred and the purpose and need for the project, the alternatives, the affected environment, environmental impacts and mitigation in the document remain applicable, adequate, accurate and valid.</p>																																																															
<p>2. Cost</p> <p>The \$82.9 million expenditure of taxpayer dollars for the proposed expansion far outweighs the benefits.</p>	<p>2. The \$82.9 million expenditure stated in the FEIS is not correct. The correct numbers for the proposed cost of the project are shown below. The numbers in the "Correct Value" column have been adjusted to reflect actual costs spent for land acquisition, but are shown in 1999 dollars to match all other numbers in the tables. Also note that the land acquisition in the No Action Alternative represents different properties than the land acquisition properties in the Proposed Action. Therefore, the total project cost includes land acquisition for both.</p> <p>In addition, the FEIS document contained a mistake for the MAC cost of construction. It should have remained at the \$16,490,100, which is the 1999 MAC estimate,<sup>1</sup> that was presented in the DEIS and unchanged in the SDEIS, instead of the \$30,876,100 incorrectly stated in the FEIS.</p> <p>Also, no expenditure of taxpayer dollars would be involved with this project. The dollars for land acquisition and for proposed construction have already, or will come from, federal and/or state funding and MAC revenues generated from non-airline fees at MSP.</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">FEIS No Action</td> <td style="text-align: center;">Correct Value</td> </tr> <tr> <td>Land Acquisition</td> <td style="text-align: right;">\$22,773,400</td> <td style="text-align: right;">\$19,627,000</td> </tr> <tr> <td>Easement</td> <td style="text-align: right;">\$70,000</td> <td style="text-align: right;">\$70,000</td> </tr> <tr> <td>Construction</td> <td style="text-align: right;"><u>0</u></td> <td style="text-align: right;"><u>0</u></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">\$22,843,400</td> <td style="text-align: right;">\$19,697,000</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td></td> <td style="text-align: center;">FEIS Proposed Action</td> <td style="text-align: center;">Correct Value</td> </tr> <tr> <td>Land Acquisition</td> <td style="text-align: right;">\$21,050,000</td> <td style="text-align: right;">\$10,478,000</td> </tr> <tr> <td>Easement</td> <td style="text-align: right;">\$70,000</td> <td style="text-align: right;">\$70,000</td> </tr> <tr> <td>Construction</td> <td style="text-align: right;"><u>\$38,976,100</u></td> <td style="text-align: right;"><u>\$24,590,100</u></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">\$60,096,100</td> <td style="text-align: right;">\$35,138,100</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td colspan="3">COMBINED NO ACTION and PROPOSED ACTION COSTS:</td> </tr> <tr> <td></td> <td style="text-align: center;">FEIS</td> <td style="text-align: center;">Correct Value</td> </tr> <tr> <td>Land Acquisition</td> <td style="text-align: right;">\$43,823,400</td> <td style="text-align: right;">\$30,105,000</td> </tr> <tr> <td>Easement</td> <td style="text-align: right;">\$140,000</td> <td style="text-align: right;">\$140,000</td> </tr> <tr> <td>Airfield Construction</td> <td style="text-align: right;">\$30,876,100</td> <td style="text-align: right;">\$16,490,100</td> </tr> <tr> <td>Hangar Construction</td> <td style="text-align: right;"><u>\$8,100,000</u></td> <td style="text-align: right;"><u>\$8,100,000</u></td> </tr> <tr> <td>Total</td> <td style="text-align: right;">\$82,939,500</td> <td style="text-align: right;">\$54,835,100</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td colspan="3"> <p>Of the combined estimate of \$54.8 million, the MAC cost is \$46.7 million in 1999 dollars, of which \$30.1 million has been spent for land acquisition. The MAC is capable of paying for the estimated MAC costs. An additional \$8.1 million is estimated for hangar construction and hookup costs to the City municipal sewer system that will be paid</p> </td> </tr> </table>		FEIS No Action	Correct Value	Land Acquisition	\$22,773,400	\$19,627,000	Easement	\$70,000	\$70,000	Construction	<u>0</u>	<u>0</u>	Total	\$22,843,400	\$19,697,000					FEIS Proposed Action	Correct Value	Land Acquisition	\$21,050,000	\$10,478,000	Easement	\$70,000	\$70,000	Construction	<u>\$38,976,100</u>	<u>\$24,590,100</u>	Total	\$60,096,100	\$35,138,100				COMBINED NO ACTION and PROPOSED ACTION COSTS:				FEIS	Correct Value	Land Acquisition	\$43,823,400	\$30,105,000	Easement	\$140,000	\$140,000	Airfield Construction	\$30,876,100	\$16,490,100	Hangar Construction	<u>\$8,100,000</u>	<u>\$8,100,000</u>	Total	\$82,939,500	\$54,835,100				<p>Of the combined estimate of \$54.8 million, the MAC cost is \$46.7 million in 1999 dollars, of which \$30.1 million has been spent for land acquisition. The MAC is capable of paying for the estimated MAC costs. An additional \$8.1 million is estimated for hangar construction and hookup costs to the City municipal sewer system that will be paid</p>		
	FEIS No Action	Correct Value																																																														
Land Acquisition	\$22,773,400	\$19,627,000																																																														
Easement	\$70,000	\$70,000																																																														
Construction	<u>0</u>	<u>0</u>																																																														
Total	\$22,843,400	\$19,697,000																																																														
	FEIS Proposed Action	Correct Value																																																														
Land Acquisition	\$21,050,000	\$10,478,000																																																														
Easement	\$70,000	\$70,000																																																														
Construction	<u>\$38,976,100</u>	<u>\$24,590,100</u>																																																														
Total	\$60,096,100	\$35,138,100																																																														
COMBINED NO ACTION and PROPOSED ACTION COSTS:																																																																
	FEIS	Correct Value																																																														
Land Acquisition	\$43,823,400	\$30,105,000																																																														
Easement	\$140,000	\$140,000																																																														
Airfield Construction	\$30,876,100	\$16,490,100																																																														
Hangar Construction	<u>\$8,100,000</u>	<u>\$8,100,000</u>																																																														
Total	\$82,939,500	\$54,835,100																																																														
<p>Of the combined estimate of \$54.8 million, the MAC cost is \$46.7 million in 1999 dollars, of which \$30.1 million has been spent for land acquisition. The MAC is capable of paying for the estimated MAC costs. An additional \$8.1 million is estimated for hangar construction and hookup costs to the City municipal sewer system that will be paid</p>																																																																

<sup>1</sup> The MAC estimated construction cost is \$16,490,000 as determined in the "Conceptual Design Report, Runway Improvements (and) South Building Area Development, Flying Cloud Airport", SEH December 4, 1998.

General Comment	General Response
	by airport tenants, which is why it is a non-MAC cost.
<p>3. Alternatives</p> <p>The FEIS fails to adequately consider off-site alternatives including development of a new airport and use of other airports in the system with runways of 5000 feet or greater such as the St. Paul Downtown and Anoka County-Blaine reliever airports.</p>	<p>3. The FEIS addresses off-site alternatives on FEIS page III-3. There are many comments on the FEIS that question the potential expenditure of \$82.9 million (which has been corrected to \$54.8 million in General Response 2 above) for the proposed expansion of FCM in relation to the benefits, but recommend development of a new airport in a rural area that would cost much, much more for land acquisition, construction of the airport and infrastructure. (As an example, the MAC airports that can accommodate a 5,000-foot runway consist of 550 acres or more of land compared to the 76 acres needed for the FCM expansion.) Based on the assessment of impacts of a new airport in the Metro Area for the Dual Track Airport Planning Process 1998 FEIS, a new FCM airport would have adverse impacts on farmland and the natural environment (wetlands, wildlife and plants) — assuming a suitable site could be found and supported by the affected municipalities, townships and Metro Council and funded by MAC (probably without FAA funding because the benefits could not exceed the costs). Development of a new airport is a major, time consuming endeavor. A search area in western Hennepin County for a new general aviation airport has been a part of Metro-related aviation planning since before 1969. All Metro Council System Plans have included a Search Area A for an additional reliever airport in rural west/northwest Hennepin County. The current (1996) System Plan calls for the investigation of the feasibility of providing an additional reliever airport in Search Area A that could help resolve the operational deficiencies at FCM, Crystal and Anoka County-Blaine airports. However, there is no indication that this investigation by the Metropolitan Council will be undertaken in the foreseeable future. Even if started now, a new airport could not be operational by 2010, and so could not satisfy the 2010 needs of FCM. Therefore, this alternative does not meet the purpose and need for the Flying Cloud project.</p> <p>St. Paul Downtown Airport (STP) is the one and only Intermediate Airport in the Metropolitan Airport System and the primary reliever of MSP (FCM is a Minor Airport or secondary reliever airport). The role of STP is to accommodate large corporate and regional/commuter aircraft that cannot operate at the smaller Reliever Airports in addition to the types of business and other aircraft that do operate at the secondary relievers. Because of its limited size and constrained location, STP is not capable of providing the space for hangars to accommodate the demand from FCM or the other secondary reliever airports, as discussed on page III-3 of the FEIS. Therefore, this alternative does not meet the purpose and need of the FCM project.</p> <p>Regarding the Anoka County-Blaine Airport, an EIS has been completed for the extension of a runway to 5000 feet and development of a new building area to accommodate the users in its service area. However, this airport is too distant from FCM to attract the users in the FCM service area or users of MSP in Hennepin County, as discussed on page III-3 of the FEIS. Therefore, this alternative does not meet the purpose and need of the project.</p>

General Comment	General Response
<p>4. Prohibition of Aircraft Above 60,000 Pounds</p> <p>MAC'S agreement to ban all aircraft above 60,000 pounds and its use of the 60,000 pound limit as a noise mitigation measure violate FAA policy.</p>	<p>4. The 60,000-pound prohibition is not a noise mitigation measure as stated in the FEIS and has been eliminated as such in this ROD (see Section V, Noise). As stated in the FEIS approved by the FAA on June 8, 2004, the FAA will allow the 60,000-pound takeoff weight limit (30,000 pounds per wheel) contained in Ordinance 97 for the following reasons:</p> <ul style="list-style-type: none"> <li>• The limit is consistent with the runway pavement design and construction (FAA position stated on p. 3 in the FAA letter to Mr. Ryan of MAC dated Sept. 27, 2000, in Appendix B of the FEIS).</li> <li>• It replaces an artificial weight restriction previously in effect that the FAA stated was illegal.</li> <li>• The substitute weight limit provides substantial relief to operators from the restriction it replaces.</li> <li>• The MAC manages a multi-airport system, guaranteeing access to other airports in its system.</li> </ul> <p>Note that MAC cannot increase the runway pavement weight-bearing strength unless required by state law (see Final Agreement, Article 3.3 in Appendix A.4).</p>
<p>5. Property Values</p> <p>The proposed expansion will result in a decrease of property values.</p>	<p>5. The relationship between cumulative noise levels and residential property values is complex. Several studies have been conducted in communities around major commercial airports.<sup>2</sup> In these studies, the marginal price effect from noise exposure is estimated by looking at the difference in price between a noisy house and a less noisy house, other things being equal. As developed in these studies (hedonic price model) noise is evaluated as a housing price determinant for an observed level of noise exposure (level and frequency of the noise) at the identified commercial service airport. The identified noise exposure is not evaluated in isolation, but is considered one attribute along with other identified property amenities and disamenities of an affected neighborhood/community that are shown to directly relate to the market price of housing.</p> <p>At FCM, any noise exposure by the Proposed Action on neighboring homes would fall below the 65 DNL level. FCM has been in its existing configuration since the late 1960's. Neither MAC nor the FAA control land use zoning decisions made in Eden Prairie or other cities. The proposed airport expansion has been a point of discussion since the 1980's. In the interim and at present, market demand is evident for the purchase of homes that are located very close or adjacent to the airport and under one or more of the flight paths of jets operating at FCM (e.g., see Comment 145). Given that the only increase in noise exposure proposed at FCM is below significance levels, i.e., below DNL 65, any conceivable impact on housing price would fall within a nominal range at best (less than 2% of value). Such nominal impact on housing values is expected to be immediately offset by ongoing market demand for that property as well as normal marketing efforts to continue to attract purchasers to a property such as normal maintenance and care of the property. No indication is evident that the increase in noise exposure at FCM will result in any permanent value loss or depreciation in local housing values.</p>

<sup>2</sup> Jon P. Nelson, "Meta-Analysis of Airport Noise and Hedonic Property Values: Problems and Prospects", *Journal of Transport Economics and Policy*, vol. 38 (no. 1), January 2004

General Comment	General Response
<p>6. Forecasts</p> <p>The FEIS grossly overstates the need for and likely benefits of the proposed expansion, because it relies on outdated and inaccurate forecasts of General Aviation operations and based aircraft at FCM.</p>	<p>6. Although the DEIS forecast levels for operations are high compared to the FAA Terminal Area Forecast (TAF), FAA and MAC continued to use these forecasts because they do not affect the timing or scale of the project or the role of the airport, and the use of lower forecast levels would not result in an increase in adverse impacts to the environment or change the mitigation measures identified in the FEIS.</p> <p>As stated in the FEIS at II-5, the need for the proposed runway expansion is not based on runway capacity deficiencies in terms of the <i>number</i> of operations forecast for the future – i.e., no additional runways are proposed or needed to accommodate future operational forecasts regardless of their accuracy. The need is for a runway <i>length</i> that can effectively accommodate the types of general aviation aircraft of owners doing business in the southwest metro area that may otherwise utilize MSP, which includes some jet aircraft currently based at FCM that cannot takeoff or land with a full load because the runway length is too short. Although the DEIS forecasts of operations of piston and turboprop are higher than the 2007 TAF, the forecast of jet aircraft operations appears to be reasonable. Based on the Mn/DOT October 2007 Registration Files, there were 28 jets based at FCM compared to 14 in 1999 and 35 forecast for 2010 (which assumed the runway would be lengthened).</p> <p>The need for additional hangar space for based aircraft is based on existing as well as future demand. No hangar space is available and as of July 5, 2007, there is a list of 119 persons/businesses that have requested hangar space at FCM. Based on the Mn/DOT October 2007 Registration Files there are approximately 477 based aircraft at FCM. The FEIS forecast 613 based aircraft by 2010, whereas the Final 2007 FAA TAF forecasts 525 based aircraft by 2015 and 571 by 2020 at FCM. See also the response to Comment 31 on the management of current leased hangars.</p> <p>The role of the forecast of operations in the FEIS is to assess the environmental effects of the proposed action and alternatives. The FEIS acknowledges that the forecast of operations is high, which means that the environmental effects based on the forecast are overstated. See discussion on page II-6 of the FEIS.</p>
<p>7. Toxic Emissions</p> <p>The impacts of air toxic emissions from aircraft have not been adequately addressed. EPA's National-Scale Air Toxics Assessment uses computer models from emission information in each state and has determined that in Minnesota, 1,3-butadiene, acrolein, benzene, formaldehyde, and POM were at levels in excess of health benchmarks. Recent monitoring measurements taken by MPCA in Minnesota confirm that formaldehyde and benzene in our air are in excess of health benchmarks.</p> <p>It is also a known fact that there is a cumulative effect from air toxics that increases harm to</p>	<p>See General Response 7 below.</p>

General Comment	General Response
human health. See MPCA 1999 Staff Paper on Air Toxics and Air Quality in Minnesota 2001 Legislative Report. Toxic aircraft emissions do exist and it is clear that NEPA and MEPA require an evaluation of the air quality impact, including cumulative effects from sources other than Flying Cloud including MSP, especially given that the baseline in Minnesota, before any proposed expansion at Flying Cloud, is already at levels that impact health.	

**General Response 7.** The results of the National-Scale Air Toxics Assessment (NATA) by the EPA computer models for each state are not sufficiently refined to compare risks at the local level within the state — county to county, for example. Also, state-to-state results may not be directly comparable because states use different methods to estimate emissions. Furthermore, the risk values are not intended to accurately predict actual health impacts, but rather to assist in the prioritization of chemicals. (See <http://www.pca.state.mn.us/air/nata.html>). Of the pollutants listed that are in excess of health benchmarks, two are compounds associated with aircraft emissions — formaldehyde and benzene. The major sources of formaldehyde emissions are forests and wildfires, stationary internal combustion engines and turbines, pulp and paper plants, petroleum refineries, power plants, manufacturing facilities, incinerators and automobile exhaust emissions. The primary source of formaldehyde in aircraft emissions is from unburnt aviation fuel (kerosene), as is the case with diesel engine emissions. Benzene emissions are from oil and natural gas production, petroleum refining, burning coal and oil, gasoline service stations, pulp and paper production, coke ovens and motor vehicle exhaust. Benzene is used as a constituent in motor fuels.

Sources of air toxics emissions are grouped into four principal source categories — *Point* (mining, petroleum refining and distribution, electric services, other), *Area* (fires, residential wood burning, gasoline service stations, other), *On-road Mobile* (cars and trucks) and *Non-road Mobile* (aircraft, locomotives, construction equipment, lawnmowers, recreational vehicles, other). Table 7-1 shows the contribution of each source category to the total emissions of formaldehyde and benzene in the Twin Cities Metropolitan Area (metro area) according to the most recent (1999) MPCA air toxics emissions inventory. The major emission sources are cars and trucks.

**Table 7-1**

Source Category	Formaldehyde		Benzene	
	Annual Tons	% of Total	Annual Tons	% of Total
Point	19.54	1.49	29.74	1.31
Area	254.93	19.50	297.77	13.13
On-road Mobile	676.98	51.79	1,626.37	71.73
Non-road Mobile	355.84	27.22	313.52	13.83
Metro Area Total	1,307.29	100.00	2,267.40	100.00

Source: MPCA 1999 Emissions Inventory

Formaldehyde and benzene were monitored in 2002 by MPCA at several sites in the metro area, including a new site at MSP. The measured concentrations at representative monitoring sites are compared to the MPCA health benchmark in Table 7-2.

Table 7-2

Monitoring Site	Formaldehyde		Benzene	
	Average Concentration ( $\mu\text{g}/\text{m}^3$ )	Health Benchmark ( $\mu\text{g}/\text{m}^3$ )	Average Concentration ( $\mu\text{g}/\text{m}^3$ )	Health Benchmark ( $\mu\text{g}/\text{m}^3$ )
North Mpls	2.3	0.8	1.1	1.3-4.5
NE Mpls	2.5	0.8	1.2	1.3-4.5
Phillips	2.5	0.8	1.1	1.3-4.5
MSP Airport	2.5	0.8	0.81	1.3-4.5
Putnam School	2.8	0.8	0.98	1.3-4.5

Source: Air Toxics Monitoring in the Twin Cities, MPCA, January 2003

All sites were below the health benchmark for benzene, but exceeded the health benchmark for formaldehyde by a factor of about 3. An estimate of the emissions of formaldehyde and benzene at FCM can be made by using data from the MPCA air toxics emissions inventory for 1999. That inventory computed FCM air toxics emissions, which are compared with total metro area air toxics emissions and non-road and MSP air toxics emissions in Table 7-3.

Table 7-3

	Air Toxics Emissions (tons/year)	% of Metro Area	% of Non-road Mobile	% of MSP
Metro area total	36,172			
Non-road mobile sources	3,044	8.4		
MSP	155	0.43	5.09	
FCM	2.06	0.0057	0.07	1.3

Source: MPCA 1999 Emissions Inventory

As shown in Table 7-3, MSP contributes less than 0.5% and FCM less than 0.01% to the air toxics emissions in the metro area. The breakdown in emissions in tons per year by source at FCM and MSP are presented Table 7-4. The predominant source is air carrier aircraft at MSP.

Table 7-4

Source	MSP (tons/year)	FCM (tons/year)
AT (Air Taxi)	9.99	0.11
AC (Air Carrier)	141.56	0
ACFCC	1.07	0
GA (General Aviation)	1.91	1.95
Total	154.53	2.06

Source: MPCA 1999 Emissions Inventory

Comparisons of emissions (tons per year) of benzene and formaldehyde, between MSP and FCM are shown in Table 7-5.

Table 7-5

Pollutant	MSP (tons/year)	FCM (tons/year)	FCM % of MSP
Formaldehyde	10.94	0.221	2.02
Benzene	76.51	0.241	0.31

Source: MPCA 1999 Emissions Inventory

As shown in Table 7-2, the formaldehyde concentrations monitored at MSP were  $2.5\mu\text{g}/\text{m}^3$ , which is similar to other monitored sites in the metro area. Therefore, with only 2.02% of the emissions from MSP, concentrations of this pollutant at FCM would be approximately  $0.05\mu\text{g}/\text{m}^3$ , which is well below the health benchmark of  $0.8\mu\text{g}/\text{m}^3$ , and FCM should have

minimal impact on formaldehyde concentrations around the airport. With measured benzene concentrations at MSP below the health benchmark and below average for the metro area, benzene concentrations at FCM should be negligible. The cumulative effect of MSP on air toxics emissions at FCM should also be negligible because concentrations are highest near MSP taxiways and idling aircraft, and airborne emissions are distributed over the entire approach and departure paths. Sources other than aircraft, particularly cars and trucks, point and area sources and non-road sources other than aircraft, contribute over 99% of the air toxics emissions in the Twin Cities Metropolitan Area (Table 7-3).

### Summary of Comments on the FEIS and Responses

The following table includes a summary of comments received during the comment period, which are listed in the order that the actual written comments are presented in this appendix. All written comments received during the comment period are included, and written comments received after the close of the comment period are also included with responses.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
EPA	1	General Conformity	Concurs with Final General Conformity Determination.	Comment noted.
EPA	2	Air Quality	EPA has not conducted "preliminary research that concentrations of air toxics are not significantly influenced by aircraft activity" as stated in FEIS response to comment #267 in FEIS Volume II, page 42. The statement that "most air toxic emissions are generated by ground transportation and by manufacturing and chemical plants" is a little too broad and no supporting reference is given. These statements should be appropriately modified in the ROD.	The FAA response to Comment 267 by Eden Prairie is modified as a correction to the FEIS in General Response 7 above.
EPA	3	Noise	Pleased to see that the FEIS mitigation measures and Final Agreement prohibit nighttime run-ups. The ROD should include the FEIS and Final Agreement mitigation measures.	Comment noted. The ROD includes, and requires as a condition of approval, the FEIS and Final Agreement mitigation measures.
EPA	4	FEIS Mitigation	As long as all FEIS mitigation measures and appropriate modifications to response #267 are included in the ROD, EPA has no further concerns with NEPA documentation at this point.	See responses to Comments 2 and 3 above.
EPA	5	ROD	Please provide us with a copy.	A copy of the ROD will be provided to EPA.
Mn/DOT	6	DEIS Comments	Mn/DOT's concerns have been addressed.	Comment noted.
Metro Council	7	FEIS	FEIS adequately addresses regional concerns and the potential for significant environmental impact.	Comment noted.
Lower Minnesota River Watershed District (LMRWD)	8	Water Quality	It appears that the water supply and sanitary waste issues previously raised will be resolved with the hookup to City of Eden Prairie services and some hookups have occurred. LMRWD supports the continued hookup of airport properties and encourages proper abandonment of the old facilities prior to the start of airport expansion activities.	Comment noted. MAC tracks the abandonment process for compliance and potential tenant reimbursement for closure of private well and septic systems.
LMRWD	9	Deicing	The LMRWD acknowledges that the use of deicing chemicals at the Flying Cloud Airport is less than that at the MSP International Airport, and that the method in which those chemicals	Tenants that apply limited aircraft deicing fluids (ADFs) are required by the MPCA to obtain, and comply with the provisions in, a general storm water

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>are applied is somewhat different. In particular, we note that the use of deicing chemicals is minimized with the use of heated hangars and indoor storage of planes. We also note that when needed, deicing is conducted in isolated apron areas. However, we reiterate that the use of these chemicals in any amount for deicing planes and runways poses a potential contamination issue and that a glycol/deicing management plan should be prepared for the airport. Specific information related to the capture and disposal of these chemicals was not provided in the environmental documents nor was specific information provided in the responses to our previous comments.</p>	<p>permit. The ADFs at the airport can be managed by non-structural Best Management Practices (BMPs). Application of runway deicing is limited to 2-3 times per year. As always, safety is the first concern in considering application. Anticipation of snowstorm events and proper application methods, based on need, assist in minimizing wasteful usage. Most runway runoff is directed to and contained within the natural depressions on site.</p> <p>It should be noted that there is little or no direct discharge to the MN River from the airport. The airport has natural infiltration basins with permeable soils making it unlikely that surface water discharge from these depressions would ever occur.</p> <p>Infiltration basins are an effective treatment system as long as the water table is far enough below the basin. The depth to groundwater from the bottom of the existing natural depressions at the airport range from 70 to 140 feet. Therefore, the potential for groundwater impacts from the infiltration basins is anticipated to be very low.</p> <p>Also note that the Met Council Model Storm Water Management Ordinance, Section 8.7, gives consideration to reducing the need for storm water management facilities by incorporating the use of natural topography and ground cover.</p> <p>Per the MPCA report, <i>Protecting Water Quality in Urban Areas</i>, March 1, 2000, facilities that spray glycol are required to obtain an Industrial Storm Water General Permit from the MPCA.</p> <p>Aircraft safety concerns limit the available BMPs for deicing operations. Review and training in applications required for safe aircraft operation would be considered a BMP related to aircraft deicing operations.</p>
LMRWD	10	Surface Water Runoff	<p>The LMRWD is pleased to see that storm water management at the airport will comply with the LMRWD Water Management Plan in that it will limit runoff rates from the site to the pre-development rate. We also note the inclusion in the FEIS of existing and proposed drainage scenarios for the airport and are looking forward to the formal submittal of the project's storm water drainage design for review and permit. We would like to see more specific information as to</p>	<p>MAC will provide the requested information as part of the storm water permit process, and will meet with LMRWD during the project design phase.</p> <p>BMPs have been included in MAC's SPCC (see response to Comment 11 below).</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>the Best Management Practices that will be implemented and the temporary and permanent erosion and sediment control measures that will be utilized. We would appreciate the opportunity to work with MAC on the design of appropriate storm water management and erosion and sediment control plans that will ensure the protection of the Minnesota River and other surface waters in the area.</p>	
LMRWD	11	Spills	<p>The environmental documents and responses to comments did not provide specific information as to methods that are being used and/or will be used to prevent and contain potential spills, and manage other pollutants routinely generated during operation of the airport. The LMRWD acknowledges that the airport and some of its tenants are required to prepare SPCC and SWPP plans for MPCA approval, and that several tenants are registered hazardous waste generators. Given this, it seems possible that more detailed information could be provided as to how spills will be prevented, how they will be contained if they occur, and how other pollutants generated at the airport (deicing chemicals for planes and runways, chemicals used in routine maintenance and repair activities, wash water from plane washing, fuel, etc.) will be handled, stored and/or disposed of.</p>	<p>The MAC elected to prepare a SPCC plan, for MAC owned and operated facilities, as an environmental best management practice, even though the MAC is not required by law or regulation to do so.</p> <p>The MAC provides baseline and refresher training sessions for its airport personnel who are involved in the handling, storage or petroleum/chemical usage. Training includes briefings on oil spill and discharge prevention, containment and retrieval methods, as well as general guidelines for handling other regulated substances.</p> <p>MAC airport maintenance staff maintains spill materials, such as sand, corncob fraction, absorbent spill booms and pads.</p> <p>Generally, if a spill occurs and there is no imminent danger, MAC maintenance crews will proceed to terminate the source of the spill (if possible) and attempt to impede the spill with the absorbent materials on hand.</p> <p>Proper notification procedures have been built into the spill response procedures, including calling, as necessary, the State Duty Officer (SDO), MAC Operation/Communications, and an emergency response contractor (for additional containment actions).</p> <p>Tenants and/or users of the airport, if required by law or regulation, must prepare a site-specific plan for their individual facilities. It should be noted that tenants complying with the basic requirements of 40 CFR 112 will be maintaining and following the same general format as the MAC indicated above.</p>
LMRWD	12	Water Quality	<p>Has MAC had any previous discharge violations, historically, with glycol into the Minnesota River?</p>	<p>No, not related to the Flying Cloud Airport.</p>
LMRWD	13	Water Quality	<p>Do the measures you are proposing to take eliminate future discharges?</p>	<p>There have been no past direct discharges to the Minnesota River related to FCM. The proposed</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
				improvements continue to utilize existing infiltration basins such that the discharge to the river will remain unchanged.
LMRWD	14		Requests that MAC respond to each of the comments specifically stated in this letter.	MAC will send a separate response letter to the LMRWD summarizing these paragraphs.
LMRWD	15		We want to hear back from you that you have implemented these standards and, if not, why not, and have them send us a copy of the final plan or conditions adopted.	It is unclear which standards are being referenced here. MAC intends to meet standards for the LMRWD and the City of Eden Prairie for surface water drainage.
Eden Prairie	16	Air Quality	MAC's response in the FEIS on our request to have an air quality receptor located at the approach end of the runway 9R is not adequate. The air quality receptor is necessary to evaluate emissions and its effect on the environment regardless of being within a runway clear zone. According to the FEIS this runway will experience the greatest number of takeoffs and landings. Further analysis is essential to fully evaluate the potential impact of the proposed expansion, and that the general conformity determination has been satisfied.	The Final General Conformity Determination has been issued and EPA has concurred; see EPA Comment 1. Therefore, further analysis is not necessary or required. The location and monitoring of air emission receptors is the responsibility of the MPCA.
Eden Prairie	17	Operations Forecast and Runway Use	FEIS fails to provide the factual documentation to support the changes made in the operations forecasts and runway use patterns.	The reasons for the changes in the FEIS of the proposed action fleet mix/operations forecasts are discussed in Section I.B on page I-2 of the FEIS. There are no changes in the FEIS to the runway use tables in Appendix A.3, compared to the SDEIS.
Eden Prairie	18	Noise	INM version used for the DEIS not stated. Version 5.2 stated in the FEIS is different from version 6.0 stated in the SDEIS	The same version was used in the SDEIS and FEIS – which actually was version 6.0a. Version 5.2a was used in the DEIS.
Eden Prairie	19	Light Emissions and Visual Impact	<p>The use of a 20-foot berm to screen the proposed new hangar area has been eliminated from the FEIS. This is not acceptable. MAC's response in the FEIS states that "current plans do not include the construction of the berm...". The 20-foot berm identified in the Draft EIS as mitigation for the new hangar area is critical in providing the necessary screening as well as noise mitigation for taxiing aircraft within this hangar area. Preliminary plans for the berm have been reviewed by MAC and the City, and must remain as part of the mitigation for the new hangar area.</p> <p>The proposed alteration of the existing wooded knoll west of the airport for the relocation of the MALSR lighting system as depicted in Figure P-1 will cause significant impact for existing residential properties to the west. The westerly shift of the lighting system results in the excavation of the top 20 feet of the knoll. The</p>	<p>The alignment of Charlson Road, agreed to and permitted by Eden Prairie, sets the limit for berm construction in the new south building area. The preliminary plans reviewed by the City indicate a berm of varying height, especially in the area near the City's new drainage pond on MAC property. It is MAC's intent to construct a berm, although the location and elevation of Charlson Road will not allow a berm to be 20-feet in height. The berm will probably be 4 - 6 feet high and will have landscape plantings for additional screening.</p> <p>Upon completion of the MALSR relocation, the closest houses to the westernmost light will be approximately 2,600-feet (1/2 mile) away, and either significantly lower in elevation or across the heavily wooded creek. Furthermore,</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			existing knoll provides a natural buffer from the approach lighting system currently located over 2,000 feet to the east.	grading and tree removal will be limited to the MALS light corridor only. MAC will not remove the entire top of the hill.
Eden Prairie	20	Solid and Hazardous Waste	Evaluation of existing wastewater systems is not adequate. While MAC has identified 38 septic systems on the field, they fail to indicate their location, determine proper functioning, and compliance with MPCA 7080 rules, or for possible ground water contamination.	Current and previous inspection reports indicate proper functioning and compliance of tenant septic systems on the airport. There are no indications of non-compliance and/or a release to the environment from these systems, based on previous geoprobe investigations. The majority of the 38 systems are private tenant leaseholds, which are distributed throughout the airport; the remainders of the systems are located at commercial facilities. Compliance of these systems with MPCA 7080 rules remains in the purview of the MPCA.
Eden Prairie	21	Water Quality	According to the FEIS, MPCA records indicate 31 underground storage tanks being removed, 3 as abandoned/filled in, and 2 as inactive. However, Table U-8 lists all 36 underground storage tanks as being removed. MAC needs to evaluate the accuracy of this information and whether additional investigation on the location and condition of these 5 storage tanks is warranted to determine the potential for ground water impacts.	MAC staff interviews indicate that there are no abandoned/filled or inactive tanks at the airport. Subsequent review of the MPCA database, updated August 2004, confirms this data. The MPCA also indicated that there are two active tenant used oil ASTs not previously noted in Table U-8 Thunderbird Aviation - 300 gallon Used Oil AST Beech Transportation - 285 gallon Used Oil AST
Northwest Airlines (NWA) via Dorsey & Whitney LLP	22	Benefit-Cost; Alternatives	NEPA "was intended to ensure that decisions about federal actions would be made only after responsible decision makers had fully adverted to the environmental consequences of the actions, and had decided that the public benefits flowing from the actions outweighed their environmental costs." Jones v. District of Columbia Redev. Land Agency, 499 F.2d 502, 512 (D.C. Cir. 1974) (emphasis added). See also 42 U.S.C. 4332. In this case, the mandates of NEPA have not been met because the purported benefits of the proposed expansion are hugely overstated in the FEIS. Without a fair and sensible assessment of the benefits, the proper comparison of those benefits to the environmental costs is not possible. Additionally, MAC has not adequately considered feasible alternatives to the proposal that may fulfill the same objectives with far less adverse environmental impacts and at much lower economic costs.	CEQ Regulation 1502.23 does not require the preparation of a benefit-cost analysis unless benefits and costs are a factor in the selection of the preferred alternative, which was not the case in the FEIS. Also, "A formal cost-benefit analysis need be included in the EIS itself only if the agency relies on such analysis in reaching the decision to which the EIS relies." SOC v. Dole 787 F.2d at 191 at footnote 8. See also General Responses 1 and 3, and responses to Comments 29-37 below.  The cited case was decided in 1974, before the adoption of the 1978 CEQ rules that state there is no requirement to do a benefit-cost analysis.
NWA	23	Purpose and Need	As you know, Northwest has serious reservations about the need for the proposed expansion, the accuracy of data and forecasts relied upon to demonstrate that need, the analysis of alternatives in the FEIS, and the	See General Responses 1 and 6, and responses to Comments 26-39 below.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			benefit-cost analysis for the project. See Northwest Airlines, January 22, 2003 Comments on Flying Cloud Airport Expansion SDEIS; April 9, 2004 Reliever Airports Seminar Report. Additionally, Northwest does not believe that the noise analysis and mitigation plan presented in the FEIS is consistent with Federal Aviation Administration ("FAA") requirements.	
NWA	24	Purpose and Need	<p>These concerns, as discussed further below, lead to a conclusion that the FEIS is inadequate, and that moving forward with the expansion is not warranted. At a minimum, more accurate analysis of the need for the proposed expansion and alternative to the expansion, as well as a noise analysis and mitigation plan that comply with FAA policy, should be conducted through supplementation of the environmental review.</p> <p>Ultimately, Northwest believes that an up-to-date, even-handed and complete analysis will only confirm what is already plainly evident based on current data - that the potential benefits of the proposed expansion do not justify its environmental or financial impacts. Northwest therefore urges MAC to terminate this project, divest itself of its \$34 million of land acquisitions associated with the project, and return all proceeds to the MSP construction fund.</p>	See General Responses 1 and 3, and responses to Comments 26-39 below.
NWA	25	Purpose and Need	<p>The description of a proposed project's purpose and need in an FEIS is crucial because it forms the basis for consideration of alternatives and evaluation of the project under NEPA. If an agency does not "make a reasonably adequate compilation of relevant information" or "the EIS sets forth statements that are materially false or inaccurate," then "the EIS does not satisfy the requirements of NEPA, in that it cannot provide the basis for an informed evaluation or a reasoned decision." <u>North Carolina Alliance for Transp. Reform, Inc. v. Dep't of Transp.</u>, 151 F. Supp.2d 661, 688 (holding EIS inadequate because traffic projections used in the FEIS were overstated and considerably higher than updated estimates).</p> <p>Northwest was one of several parties that questioned MAC's analysis of the need for the proposed expansion and the benefit-cost ratio of the project in comments on the Supplemental Draft Environmental Impact Statement. MAC responded in the FEIS that: The reason for the proposed expansion is not based on economic need or on a positive benefit-cost ratio. It is based on minimizing the use of MSP by (general aviation) traffic and providing hangars to meet the existing and future demand. FEIS Vol. II at 1. This justification is inadequate for the</p>	See responses to Comments 26 - 28 below.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
NWA	26	Forecasts	<p>following reasons.</p> <p>The FEIS grossly overstates the need for and likely benefits of the proposed expansion, because it relies on outdated and inaccurate forecasts of General Aviation operations at FCM.</p> <p>As MAC notes in the FEIS, "it is the FAA's policy that forecasts used to make decisions about the timing and scale of major investments must be accurate." FEIS at II-4. Yet the forecasts that MAC uses in the FEIS to demonstrate the need for expansion of FCM, last updated in 1997, are woefully inaccurate. FAA's most recent Total Activity Forecast (TAF) for FCM, issued in 2003, estimate total FCM operations in 2010 at 168,999, compared to MAC's estimate in the FEIS of 302,982 operations in 2010 with the expansion or 241,353 operations in 2010 without expansion.</p> <p>While acknowledging that its forecasts fail to take into account the significant decline in GA that has occurred in the past decade, MAC attempts to explain away the discrepancies between its out-dated forecasts and the up-to-date FAA forecasts by claiming that the TAF forecasts do not include nighttime FCM operations and that they underestimate the diversion of aircraft from MSP after the expansion. See FEIS at II-5. Neither of these factors can explain away the inaccuracy of MAC's forecasts. MAC itself estimates 2010 nighttime FCM operations at less than 13,000 and operations diverted from MSP at less than 7,000 – clearly not enough to account for a difference in forecast operations of 134,000.</p> <p>Northwest's previous comments on the draft EIS also questioned the accuracy of MAC's forecasts and their failure to take recent declines in GA into account. MAC's response – that the purpose of the proposed expansion "is to accommodate GA activity in the year 2010 and beyond" – is inadequate. See FEIS Vol. II at 46. Even out to 2020, FAA is forecasting total operations at FCM that are well below what the airport had in</p>	<p>See General Response 6.</p> <p>The FEIS forecast of operations was not used as a demonstration of need for the runway expansion. As clearly stated at FEIS II-1, a purpose of the project is to provide a runway with an effective length of 5,000 feet for takeoffs and landings to induce appropriate general aviation aircraft to use FCM instead of MSP.</p> <p>The recent decline in GA operations is taken into account – see response to Comment 27 below. See also response to Laura Neuman Comment 41.</p> <p>See General Response 6. Although the DEIS forecast levels are higher than the FAA TAF, FAA and MAC continued to use these forecasts in accordance with CEQ Regulation 1502.9. CEQ Regulation 1502.9 (c)(1), states that agencies shall prepare supplements to either draft or final environmental impact statements if ... "(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts". Although the FAA and MAC include future diversions of GA operations from MSP and nighttime operations as a consideration in the difference between the forecasts in the FEIS compared to the TAF, the FAA recognizes these operations account for a small number of the total difference. The TAF reflects the events of 9/11/01 and the resultant financial problems of the aviation industry, both of which were unexpected in the EIS forecast.</p> <p>The forecasts of operations have no bearing on the proposed action and would not increase adverse impacts on the environment. Full disclosure of the entire range of MAC forecasts and FAA TAF is provided in the FEIS and this ROD.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
NWA	27		<p>1976.</p> <p>Expanding FCM to accommodate additional GA traffic will not relieve congestion at MSP.</p> <p>MAC claims that expansion of FCM to accommodate additional GA traffic is necessary to relieve congestion at MSP. See FEIS at II-1. Yet as far back as 1994, the General Accounting Office issued a report analyzing the impact of General Aviation on air traffic congestion at hub airports in the United States concluding that general aviation "is not a major cause of delay." FAA analysis showed that the dominant cause for delays was weather conditions, followed by terminal volume, closed runways and taxiways, and equipment problems. The report concluded that, "although congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now." See GAO Report to the Chairman, Subcommittee on Transportation and Related Agencies, Committee in Appropriations, U.S. Senate (June 1994). Given the significant decline in general aviation operations that has occurred over the past ten years, these statements are even more true today.</p> <p>In its Benefit-Cost Analysis on the FCM expansion, MAC estimated 2002 GA operations at MSP at 51,560. The actual number of GA operations at MSP in 2002 was 25,075 – less than half of the estimate MAC relies on to demonstrate a need for the FCM expansion. MAC's own consultant, HNTB, estimated in October 2003 that GA operation at MSP in 2007 would total 28,846, compared to the 49,800 estimate of total operations cited in the Benefit-Cost Analysis. The number of GA flights that could potentially be diverted from MSP is therefore significantly lower than MAC claims in the FEIS and the Benefit-Cost Analysis for the FCM expansion. Further, as MAC admits, the GA operators themselves has the ultimate choice as whether to use MSP or FCM, and many GA operations at MSP connect passengers to commercial flights or have passenger using the Signature Service at MSP, which is not available at FCM.</p>	<p>The analysis of the benefit of transferring general aviation from MSP to FCM was not based on national factors and trends but on data specific to the Twin Cities metropolitan area. Consequently, the findings of the GAO Report, which addresses national rather than local trends, are not relevant to this study. In addition, the FEIS showed that the percentage of general aviation attracted from MSP would be relatively small (about 1 percent of total MSP operations). Nevertheless, this percentage is sufficient to provide measurable delay relief to MSP, as shown in the Flying Cloud Airport Expansion Technical Report, Benefit Cost Analysis.</p> <p>As noted in the comment, general aviation operations at MSP in 2002 were significantly less than had been projected in the MSP LTCP forecast. More relevant is the number of jet operations, since these are the aircraft more likely to be attracted by the longer runway proposed at FCM. The LTCP had projected approximately 27,000 general aviation jet operations in 2000 and 2005, whereas the Part 150 study published earlier this year identified 18,862 general aviation jet operations in 2002, a decrease of approximately 30 percent from the original forecast. The BCA analysis was revised in August 2007 and incorporated in this ROD. The numbers of transient aircraft operations assumed to be diverted from MSP to FCM were conservatively decreased by 40% each year of the analysis. As stated in Section V, Economic of this ROD, approximately 3,088 stopovers per year will be eliminated by the Proposed Action, which is well over 65% of the diverted GA operations in the revised BCA and are therefore not based on MSP GA forecasts.</p>
NWA	28	Need	<p>The other key data cited by MAC in the FEIS to demonstrate that expansion of FCM would relieve congestion at MSP is a 1997 survey of six FCM-based aircraft operators regarding stopovers they made at MSP. FEIS at II-2. MAC claims, based on this survey, that FCM based</p>	

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>aircraft frequently stopover at MSP to pick up passengers or fuel that could not be loaded at FCM because the inadequate runway length at FCM cannot accommodate the additional weight. <u>Id.</u> In the Draft EIS, MAC claimed that this survey indicated 8300 stopovers at MSP per year, or approximately 23 per day. In response to comments questioning the accuracy of this information, MAC acknowledged "confusion" about these survey results and significantly reduced the estimated number of stopovers to 2340 per year, or just over six per day. See FEIS Vol. II at 70-71.</p> <p>Even those six stopovers per day may have resulted more from the 20,000 pound weight restriction imposed for noise control purposes rather than from inadequate runway length. MAC's reliance on this anecdotal evidence of a small number of stopovers at MSP to demonstrate the need for an \$82.9 million expansion at FCM is unjustified.</p>	<p>See discussion of stopovers in Section III of this ROD.</p> <p>The commenter's statement regarding the 20,000-pound weight limit is not accurate. As shown in FEIS Table 1, all of the jets based at FCM have a maximum takeoff weight less than 20,000 lbs. The evidence is not "anecdotal"; it is based on survey data obtained from operators at FCM in 2007.</p>
NWA	29	Alternatives	<p>Under NEPA, the consideration of alternatives to a proposed project is "the heart of the environmental impact statement." 40 CFR 1502.14. It is "absolutely essential to the NEPA process that the decision maker is provided with a detailed and careful analysis of the relative environmental merits and demerits of the proposed action and possible alternatives, requirement... characterized as "the linchpin of the entire impact statement." <i>DuBois v. Dep't of Agriculture</i>, 102 F.3d 1273, 1287 (1<sup>st</sup> Cir. 1996) (quoting <i>NRDC v. Callaway</i>, 524 F.2d 79, 92 (2d Cir. 1975)). Further, "the existence of a viable but unexamined alternative renders an environmental impact statement inadequate." <u>Id.</u> See also <i>Simmons v. Army Corps of Engineers</i>, 120 F.3d 664, 666 (Under NEPA, "no decision is more important than delimiting what these 'reasonable alternatives' are").</p> <p>Here, MAC evaluates only two alternatives in the FEIS: (1) the proposed expansion, which includes acquisition of land, construction of new hangars, and extension of the runways; and (2) a "No Action" alternative that includes acquisition of the land and construction of new hangars but not extension of the runways. In response to Northwest's prior comments, the FEIS quickly dismisses "off-site alternatives to address the congestion issues at MSP that MAC claims are the primary basis for the proposed expansion. 1 FEIS at III-3. This unduly limited consideration of alternatives violated the requirements of NEPA. See <i>DuBois</i>, 102 F.3d at 1287.</p>	<p>See General Response 3.</p> <p>See General Response 3.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>There are feasible alternatives that MAC failed to consider in the FEIS, which would have far less environmental impact and be more cost-effective than the proposed expansion.</p>	<p>The proposed action does not have a significant adverse impact on the environment compared to the no action alternative. A full range of alternatives was considered in the FEIS. See FEIS Section III, Alternatives.</p>
NWA	30	Alternatives	<p>GA traffic could be diverted from MSP to the reliever airports more successfully using far more cost-effective options. A 2004 report studying the cost of operating GA traffic at the reliever airports versus MSP concluded that MSP is already an economically unattractive alternative for GA operators because of the landing fees, higher fuel costs, greater taxi delays and higher storage costs. GCW Consulting Report (Mar. 2004).</p> <p>These higher costs are a natural deterrent to increased GA traffic at MSP.</p> <p>Additional financial incentives, such as a minimum landing fee at MSP, could be used to further motivate corporate traffic to use the reliever airports and better reflect the relative cost of using the MSP airfield as opposed to the relievers. See FEIS at v (citing Metropolitan Council 1996 Aviation Policy Plan) ("If experience indicates that further inducements are necessary to encourage greater use of reliever airports, the MAC should use financial inducements that would make it more economical to use the reliever airports than the major airport").</p> <p>This alternative is particularly attractive because it would not require the \$82.9 million capital investment that the FCM expansion will require. Applying this capital toward deferred capital improvements at MSP would do far more to alleviate congestion at MSP than its proposed use to expand FCM.</p>	<p>Alleviating congestion at MSP is certainly one of the benefits to the FCM expansion, but it is not the only need identified for completing the project. See General Response 1. Addressing this one issue without considering or alleviating the others does not meet the purpose and need of the project.</p> <p>Of all the alternatives mentioned in comments and those considered in the EIS process, the preferred alternative is the only one that meets the full purpose and need for the project.</p> <p>See General Response 2. Improvements at MSP do nothing to provide safe, efficient and convenient facilities at FCM, and do not meet the purpose and need for the project.</p>
NWA	31	Alternatives	<p>The demand for hangar space at FCM could be resolved by more efficient leasing of current hangar space rather than construction of additional space.</p> <p>One of the primary factors cited by MAC to justify the need for the proposed FCM expansion is the waitlist for hangar space at FCM. FEIS at II-4. MAC claims that the existence of the waitlist is evidence of pent-up demand for additional hangar space. MAC fails to acknowledge in the FEIS that the FCM waitlist is also a result of inefficient pricing and leasing practices, including:</p> <ul style="list-style-type: none"> <li>• under-pricing of leases, such that demand exceeds supply;</li> <li>• granting of 30-year leases, with rights to one to two additional lease terms of varying length,</li> </ul>	<p>The large number of based aircraft and lack of space is what creates the demand for additional hangar space, not the under-pricing of leases. As it stands today, many aircraft owners share space, which is both inconvenient and can potentially cause damage to aircraft when they are moved for ingress and egress from the hangar.</p> <p>The standard lease term is ten years, not thirty. Renewals are conditional in part on the tenant's compliance with the</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>which prevents turnover and precludes optimal utilization of hangar space; and</p> <ul style="list-style-type: none"> <li>• failure to manage the property with reversionary leases, as is the norm in the industry, such that tenants retain ownership of all improvements at lease termination.</li> </ul> <p>As a result, hangars at FCM are in some cases being used for storage of boats and recreational vehicles rather than aircraft. MAC'S own consultants, Airport Business Solutions, concluded that changes in the leasing practices would result in more efficient use of the hangar space. See Nov. 12, 2003 ABS Memorandum.</p> <p>Given that the current number of based aircraft at FCM is approximately 490 - 116 less than FCM current aircraft capacity of 606 - changing these inefficient leasing practices could potentially eliminate the waitlist of 50 to 100 aircraft desiring hangar space at FCM.</p>	<p>lease terms. There is no basis to claim that lack of turnover nor the lack of a reversionary clause precludes optimal use of the space.</p> <p>The leases allow the tenant a maximum of 25% of the hangar space for storage of non-airport-related items. Every leasehold is subject to inspection for compliance with the terms of the lease, and MAC performs periodic compliance inspections. Based on inspections of over 160 hangars on the Reliever Airports in 2004, the overwhelming use of space is consistent with Commission policy.</p> <p>The 1992 LTCP stated that the airport is adequate for approximately 564 aircraft, assuming that every hangar is used to its optimum. It also stated that 606 can be accommodated if maintenance space is utilized. That statement is incorrect since maintenance space is not used for extended storage of based aircraft. Also, hangar space requirements have substantively changed since the 1992 LTCP was prepared. The number of hangars for based aircraft has increased. The major increase in demand for hangar space is for business jets that require more space and fewer aircraft per hangar.</p>
NWA	32	Alternatives	<p>MAC fails to adequately consider alternatives for accommodating business jets within the Metropolitan Airport System.</p> <p>MAC also concludes that expansion of FCM is necessary in order to accommodate larger business jets and divert those aircraft from MSP. See FEIS at II-2. However, business jets already have the option of the St. Paul Downtown Airport, which is located in close proximity to MSP and has a runway of 6,700 feet with a precision approach.</p> <p>Moreover, only 20 of the 122 additional aircraft that MAC estimates would base at FCM by 2010 if the expansion occurs are business jets. See Benefit Cost Analysis Table 5. In essence, based on MAC'S own numbers, the purpose of expanding the FCM runway is to provide an opportunity for the owners of 20 business jets to</p>	<p>See General Response 3.</p> <p>See General Response 1 and 3.</p> <p>Enhancing safety by extending the runways will benefit all of the existing and future based aircraft, as well as all transient traffic. The key for business jets is not the number of based aircraft but the number of operations. The small business jet is the critical aircraft at</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>base at FCM instead of MSP, STP, or other feasible airports in the reliever system like the Anoka County-Blaine Airport.</p> <p>This benefit to 20 business jet owners simply does not outweigh the costs of the numerous adverse environmental and cultural impacts identified in the FEIS, not to mention the \$82.9 million to be spent on the project.</p>	<p>FCM, and the airport should be improved to meet the needs of the critical aircraft.</p> <p>There are no significant adverse environmental and cultural impacts due to the proposed action identified in the FEIS compared to no action. Regarding the project cost, see General Response 2.</p>
NWA	33	Benefit-Cost	<p>In response to Northwest's comment that MAC was required to include its Benefit-Cost Analysis of the project in the EIS, MAC asserts that 40 CFR 1502.23 does not require the analysis of costs and benefits and claims that such an analysis "was not relevant to a choice among alternatives that satisfy the purpose and need for the proposed expansion project." See FEIS Vol. II at 44. MAC'S dismissal of this comment is inadequate and contrary to the mandates of NEPA.</p>	<p>See response to Comment 34 below.</p>
NWA	34	Benefit-Cost	<p>The Benefit-Cost Analysis for the expansion conducted by MAC and FAA must be included in the FEIS.</p> <p>As explained by the United States Court of Appeals for the Fourth Circuit: Misleading economic assumptions can defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of a proposed project. NEPA requires agencies to balance a project's economic benefits against its adverse environmental effects. The use of inflated economic benefits in this balancing process may result in approval of a project that otherwise would not have been approved because of its adverse environmental effects. Hughes River Watershed Conservancy v. Glickman. 81 F.3d 437, 446 (4th Cir. 1996) (citations omitted).</p> <p>For this reason, "if a cost-benefit analysis relevant to the choice of alternatives is conducted, the analysis must be incorporated by reference or appended to the statement as an aid in evaluating environmental consequences." City of Sausalito v. O'Neill. 211 F. Supp. 2d 1175. 1195 (N.D. Cal. 2002) (emphasis added). Here, MAC and FAA prepared a cost-benefit analysis that specifically analyzes alternatives contemplated in the environmental review process. See Flying Cloud Airport Expansion Benefit-Cost Analysis (Revised, Jan. 2004). Under NEPA, MAC is required to incorporate that analysis into the FEIS, and the accuracy of the cost-benefit analysis must be considered in evaluating the adequacy of the FEIS.</p>	<p>The benefit-cost analysis is included in the EIS because it was identified as an issue in scoping – <u>not</u> because it is relevant to the choice of alternatives. The basis for the selection of the preferred alternative is presented in Section III.C at FEIS III-4, which does not include the results of the benefit-cost analysis. There is no attempt in the FEIS to "balance" the economic benefits of an alternative against potential adverse environmental effects.</p> <p>As previously stated, the benefit-cost analysis (BCA) is not relevant to the choice of alternatives and therefore need not be included, in accordance with the CEQ Regulation 1502.23. The BCA was included in the FEIS because it was an issue raised in scoping. The BCA is summarized in the FEIS at V-24 and the technical report is referenced in Appendix A. The BCA technical report has been updated and the results included in this ROD. See also response to Comment 54 below.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
NWA	35	Benefit-Cost	<p>The Benefit-Cost Analysis improperly inflates the economic benefits of the project by relying on outdated and inaccurate information.</p> <p>Although the Benefit-Cost Analysis for the FCM Expansion was "revised" in January 2004, it continues to calculate costs and benefits in terms of 1998 dollars and to calculate the benefits of the expansion as if the project was completed prior to 2004. It also relies on exceedingly outdated forecasts proven inaccurate by actual data. For example, as discussed above, the Benefit-Cost Analysis for the FCM Expansion relies on grossly overstated forecasts of GA operations at FCM and at MSP. The Analysis relies on an estimate of 51,560 total 2002 GA operations at MSP, when the actual number in 2002 was less than half that, at 25,075. See Benefit-Cost Analysis Table 6; HTNB Oct. 14, 2003 Memorandum. The Analysis relies on a forecast of 49,800 total GA operations at MSP in 2007, whereas MAC'S consultant, HNTB, now forecasts 28,846 total GA operations at MSP in 2007. See id.</p> <p>As a result, the Benefit-Cost Analysis dramatically overestimates the likely number of diversions of GA aircraft from MSP to FCM and the possible savings in aircraft and passenger delay at MSP. In 2007, MAC claims that 6,700 of 49,800 GA operations would be diverted to FCM. See Benefit-Cost Analysis Table 7. Even assuming that MAC'S claimed number of diversions is proportionally correct, only 3,880 operations would be diverted in 2007 based on the current forecast of GA operations at MSP. Moreover, MAC'S claimed number of diversions from MSP and increase in operations at FCM are overstated. Although not mentioned in the Benefit-Cost Analysis, MAC'S own study of similar expansions at seven reliever airports comparable to FCM, such as Chicago DuPage and Atlanta Peachtree Airport, MAC found that "there were no major changes in total operations attributable to the runway extension." FCM Expansion Activity Forecasts Report at 13.</p>	<p>The comment addresses two issues, costs and forecasts.</p> <p>Since both costs and benefits are presented in 1998 dollars, converting both sets of data to 2004 dollars would increase the numbers but would not change the benefit-cost ratio.</p> <p>The impact of the change in general aviation numbers is addressed in the response to Comment 27.</p> <p>See response to Comment 27.</p>
NWA	36	Benefit-Cost	<p>The next step in the Benefit-Cost Analysis causes even greater inflation in the benefits of the project. MAC takes the already inflated number of diversions from MSP and calculates the amount of delay at MSP that those diversions would relieve. FAA guidance states that, for projects which would cost \$50 million or more, sophisticated simulation modeling should be used to accurately calculate the impact of the project on airfield delay. See FAA Airport</p>	<p>As noted in the comment, the delay analysis was based on the Minneapolis-St. Paul Capacity Enhancement Plan. The delay curves in that study were prepared using the Airport and Airspace</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>Benefit-Cost Analysis Guidance § 10.4.1 (1999). In this case, however, MAC conducted no simulation modeling to calculate impacts on delay, instead relying on a convoluted interpretation of a single chart in the 1993 MSP Capacity Enhancement Plan to estimate that delay would be reduced by twelve seconds per passenger at MSP, which MAC claims would amount to a benefit of nine cents per passenger. See Benefit-Cost Analysis at 5; 1993 MSP Capacity Enhancement Plan, Figure 17. MAC then claims that this nine cents per passenger delay savings at MSP, over a period of twenty years, represents a \$67.8 million benefit- over two-thirds of the total benefit that MAC claims would result from the FCM expansion. See Benefit-Cost Analysis, Table 21.</p> <p>Not only is this flawed analysis contrary to FAA guidance, but it is precisely the kind of "misleading economic assumption" that can "defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of a proposed project." Hughes. 81F.3d at 446. MAC'S reliance on this analysis to support the FCM expansion is not reasonable.</p>	<p>Simulation Model (SIMMOD), precisely the sophisticated simulation modeling called for in the FAA Guidance.</p>
NWA	37	Benefit-Cost	<p>The Benefit-Cost Analysis improperly excludes the cost of MAC'S land acquisitions from the costs of the expansion.</p> <p>MAC'S failure to include the cost of acquiring the land necessary for the proposed expansion as a cost of the expansion is also improper, resulting in further inflation of the economic benefit of the project. MAC attempts to justify exclusion of that cost by claiming that "MAC plans to acquire that land whether or not the hangar expansion and runway extension plans are implemented." Benefit-Cost Analysis at 10. At the same time, however, MAC includes the benefits of the land acquisition, such as the ability to build the new hangars, in the benefit-cost ratio.</p> <p>In the FEIS, MAC acknowledges that the cost of the land acquisition was considered part of the proposed expansion (and not the No Action alternative) during the scoping portion of the environmental review process. FEIS at viii. After MAC decided to proceed with the acquisition before completing the environmental review process, MAC decided to include the acquisition as part of the "No Action" alternative in the FEIS and exclude it as a cost of the proposed expansion in the benefit-cost analysis.</p>	<p>As stated in FEIS Section V.H.3 and Section V. Economic of this ROD, the BCA was performed both without and with the costs of land acquisition contained in the no action alternative and the benefit-to-cost ratio was found to be positive in each instance.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>MAC's reliance on the fact that it completed the acquisition before obtaining final approval for the project as a reason to exclude the acquisition as a cost of the expansion is misleading and inappropriate. See Benefit-Cost Analysis at 10.</p>	
NWA	38	Noise	<p>MAC states that it will "preclude" all Stage 2 aircraft operations at FCM and improperly uses this preclusion of Stage 2 aircraft as a noise mitigation measure.</p> <p>Northwest commented previously that, through the environmental review process, MAC was improperly restricting Stage 2 aircraft operations at FCM without first meeting the notice and analysis requirements of the 1990 Airport Noise and Capacity Act, 49 U.S.C. §§ 47521-47533 ("ANCA") and 14 CFR Part 161. In the FEIS, MAC responds that the FAA review requirements do not apply because no restrictions are being imposed at FCM on Stage 2 aircraft: the final Agreement [between the City of Eden Prairie and MAC] and amendment to Ordinance 51 do not contain restrictions on Stage 2 or other aircraft operations, except the gross weight cannot exceed the runway bearing capacity. . . . The FAA has determined that the proposed amendment does not require a Part 161 review. FEIS Vol. II at 46.</p> <p>In the FEIS, however, MAC significantly decreases the estimated noise impacts of the proposed expansion by reducing the estimate of the 2010 fleet mix from 1.54 to 0.02 daily operations by Stage 2 jet aircraft. MAC explains that "the decrease in Proposed Action Stage 2 operations is based on the aggressive measures in the Final Agreement that MAC will employ to discourage the use of Stage 2 aircraft at FCM." FEIS at ii. The "aggressive measures" to discourage Stage 2 aircraft are not discussed in any detail in the FEIS. The noise mitigation measures simply include a statement that "MAC will implement a voluntary program to preclude all operations at the Airport by Stage 2 Aircraft." FEIS at V-47.</p> <p>The Final Agreement between the City of Eden Prairie and MAC includes a similar statement that MAC "shall implement a voluntary program to preclude all operations at the Airport by Stage 2 Aircraft," but also requires that MAC "complete any necessary procedural steps as required under federal law, including a study required by 14 CFR Part 161." FEIS Vol. I. App. A, Final Agreement § 3.6. MAC'S failure to explain the "voluntary" program that will</p>	<p>The comment on Stage 2 aircraft is taken out of context. Article 3.6.1 of the Final Agreement states that "MAC shall implement a <u>voluntary program</u> to preclude all operations at the Airport by Stage 2 Aircraft." (Emphasis added.) A voluntary program does not require review under the 1990 Airport Noise and Capacity Act and 14 CFR Part 161.</p> <p>Reducing the 2010 fleet mix from 1.54 to 0.02 daily operations by Stage 2 jet aircraft did not significantly decrease the noise impact. The fleet mix in the SDEIS included 1.54 daily Stage 2 aircraft operations for Alternative F with the Noise Mitigation Plan and did not result in a significant adverse impact.</p> <p>The "aggressive measures" to discourage Stage 2 aircraft are included in the noise mitigation measures in the FEIS and discussed in detail at V-48.</p> <p>See above responses.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>"preclude" Stage 2 aircraft from using FCM, and its determination that a Part 161 study is not necessary to institute these "aggressive measures," are glaring omissions from the FEIS noise analysis and violate the requirements of ANCA and 14 CFR Part 161.</p>	
NWA	39	Final Agreement	<p>MAC'S agreement to ban all aircraft above 60,000 pounds and its use of the 60,000 pound limit as a noise mitigation measure violate FAA policy.</p> <p>MAC also notes that "operations by aircraft with certified maximum gross takeoff weights of 60,000 pounds or greater. . . were eliminated" from the noise analysis, and cites to the 60,000 pound weight restriction as a noise mitigation measure. FEIS at V-47. This absolute restriction of aircraft above the 60,000 pound weight-bearing capacity of the runway – and reliance on that restriction as a noise mitigation measure - is contrary to current FAA policy.</p> <p>Under a July 2003 Proposed Policy, which FAA has deemed in effect until the Final Policy is issued, airports receiving federal funding cannot merely establish the designated weight-bearing capacity of a runway as a weight restriction, but must demonstrate that this weight restriction is truly necessary to protect pavement life. See 68 Fed. Reg. 39176. Even further, the airport authority must consider alternative ways to protect the pavement while allowing some aircraft over the official weight-bearing, such as the Gulfstream IV in this case, to operate at the airport. See id.</p> <p>MAC relies on this prohibition of aircraft above 60,000 pounds in its noise analysis and as one of ten noise mitigation measures. FEIS at V-47. FAA states in the July 2003 Proposed Policy that "if there is no showing of need to protect pavement life, or the limit on airport use appears motivated by interest in mitigating noise without going through processes that exist for such restrictions, an attempt to limit aircraft by weight will be considered unreasonable." 68 Fed. Reg. 39176. In order to accurately analyze the noise impacts of the proposed expansion, assuming the expansion will be carried out in compliance with FAA policy, the noise analysis and mitigation plan in the FEIS must be conducted without reliance on the 60,000 pound weight restriction.</p>	<p>See General Response 4.</p> <p>The FAA agrees that the 60,000 pound weight restriction is not a noise mitigation measure and has eliminated it from the Noise Mitigation Plan in this ROD in Section V, Noise. See General Response 4.</p> <p>The 60,000-pound weight prohibition is not a noise mitigation measure and was incorrectly stated as such in the FEIS, which has been corrected in this ROD in Section V, Noise. Although aircraft in the FEIS fleet mix did not include those with a certified maximum gross takeoff weight of 60,000 pounds or greater, the SDEIS did -- and Alternative F with the Noise Mitigation Plan in the SDEIS did not result in a significant adverse noise impact (i.e., no noise-sensitive use in the DNL 65 contour). It is noted that the fleet mix in the SDEIS also included 1.54 daily Stage 2 aircraft operations compared to 0.02 in the FEIS.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
NWA	40	NEPA	<p>The Final Environmental Impact Statement for the proposed expansion of Flying Cloud Airport does not meet the requirements of NEPA, because the analysis of purpose and need for the project relies on outdated and inaccurate data, reasonable alternatives are not adequately considered, the benefits of the project are dramatically overstated in the benefit-cost analysis, and the noise analysis and mitigation plan violate FAA policy and regulations.</p> <p>MAC claims that the FCM expansion is necessary because of 1996 legislation mandating that MAC "divert the maximum feasible number of general aviation operations" from MSP to the reliever airports. However, spending \$82.9 million to divert such a small number of operations from MSP is not a feasible alternative. An honest evaluation of the public benefit of this project and a weighing of that benefit against its adverse environmental, cultural and financial impacts demonstrates that the project should be terminated. At the very least, a supplemental EIS should be conducted to take into consideration significant new information regarding GA activity forecasts in the Metropolitan Airport System and to rectify the failure to consider alternatives, the overstatement of benefits versus costs of the project, and the improper noise analysis and mitigation in the FEIS.</p>	See responses to Comments 26 – 39 above.
Laura Neuman	41	Timeframe	First the FEIS does not provide an adequate time frame for evaluation of the proposed expansion. The expansion is supposed to be completed in 2007, and in the FEIS, impacts are evaluated only for the 2010 timeframe. FAA itself recommends noise evaluation for 5 to 10 years post-project completion in its environmental policy 1050.1e, Appendix A at pg. 63. The FEIS should evaluate impacts for the year 2017 instead of the year 2010. This FEIS provides only a 3-year post completion evaluation. The impacts from the proposed expansion cannot be reasonably evaluated with such a short timeframe after completion, and therefore the FEIS is inadequate.	The 2010 timeframe was re-considered in the Written Re-evaluation of the FEIS. The project is now expected to be completed by 2010, which means that forecasts for 2015 or 2020 should be used in assessing noise effects.. The FEIS 2010 forecast of 302,982 operations is 108% greater than the Final 2007 FAA forecast of 145,793 operations for the year 2020. Proportionately lowering the 2010 forecast operations for the proposed expansion and no action alternatives to be consistent with the FAA 2020 forecast would result in less impact or no change in what was in the FEIS.
Laura Neuman	42	Alternatives	Second, the FEIS fails to evaluate alternatives as required in Minnesota Rules Chapter 4410 and Federal law. Several alternatives were identified to MAC before the completion of the FEIS, which were not included in the FEIS. These alternatives include, but are not limited to, financial incentives to encourage the use of FCM over MSP, financial incentives for stopovers from FCM to use St. Paul Holman	See General Responses 1 and 3 and response to NWA Comment 30.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			Field where an adequate runway exists instead of MSP, and eliminating subsidies at the reliever airports so that demand reflects true market demand at FCM.	
Laura Neuman	43	Cumulative Impacts	Third, the FEIS fails to evaluate cumulative impacts as required in Minnesota Rules Chapter 4410 and Federal law. There are several construction projects in the Eden Prairie area that will contribute to noise, air quality, and water run-off that have not even been identified by MAC in the FEIS, such as (1) construction of 494 and increased resulting traffic; (2) construction and increased traffic from Highway 312 extension; (3) construction and increased traffic from Pioneer Trail expansion; (4) construction and increased traffic from Highway 212; (5) MSP expansion and over-flights (including both criteria pollutants and toxic (HAPS) emissions). Most importantly on the issue of air quality, MAC has not provided information on the background levels of air toxics in the Eden Prairie area. Current air quality levels of some airport-associated emissions are already in excess of health benchmarks for adults and way in excess for children. MAC must evaluate the increase in toxic emissions the proposed expansion will have in addition to the increases from other projects, such as MSP and 494 expansions.	<p>The effects of MSP expansion and Pioneer Trail expansion are included in the FEIS at V-80 and 81. The I-494 and TH 212 construction projects will have no effect on the noise analysis in the FEIS because they are too distant from the homes in the DNL 60 contour to have a noticeable effect of approximately 3 dBA (which results when the noise from two sources are of equal value). Highway noise is much more localized than aircraft noise. Highway noise values of 60 dBA or greater occur within approximately 600 feet of the roadway centerline. I-494 and TH 212 are over a mile away from the proposed action DNL 60 contour and therefore have no cumulative effect.</p> <p>The traffic volumes used in the air quality analysis at the critical intersections include projected traffic from I-494 and TH 212 (which includes traffic from TH 312). Storm water run-off from these projects is not cumulative with FCM; they are in different drainage areas than FCM and the run-off is collected and treated in ponds designed for each project.</p> <p>See General Response 7 for discussion of air toxics.</p>
Laura Neuman	44	Cumulative Impacts	MAC'S cursory dismissal of the cumulative impact of noise from MSP in the FEIS for Eden Prairie flies in the face of reality. MAC admits 9 times in its own documents that in Eden Prairie, "A major source of noise impact during the hours monitored was commercial jet aircraft overflight from the Minneapolis-Saint Paul International Airport." This statement is made in every noise monitoring summary for noise monitoring conducted in Eden Prairie from 1993 to 2001 (after 2001 actual monitoring ceased). MAC must evaluate the impact its proposed expansion will have given the current state of the environment and other projects in the area, including noise from MSP.	See response to Comment 69 below.
Laura Neuman	45	Impacts	Fourth, the FEIS fails to reasonably evaluate several impacts; specifically (1) noise impacts (2) air emissions impacts, (3) a cost/benefit analysis, and (4) security and safety. Information on noise impacts in the FEIS DO NOT inform	See responses to your Comments 66-69, 71-94, 100-103, 107 and 108 below on noise impacts, air emissions impacts, cost/benefit analysis, and security and safety.



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>residents how noise will change with expansion. The only thing noise curves show is a range of DNL dBA 60 - 65, and obviously noise affects the environment at levels below 60 dBA. FAA itself states that supplemental noise metrics can be used to evaluate the noise impact in its environmental policy 1050.1e Appendix A at pg. 64.</p>	<p>Supplemental noise metrics were used in the FEIS (DNL, Peak SEL, Lmax and TA at 20 selected grid points).</p>
<p>Laura Neuman</p>	<p>46</p>		<p>Finally, the FEIS is inadequate because the Appendix is missing both material prepared in connection with the EIS and material that substantiates analyses fundamental to the EIS that are required as specified in MN Rule 4410.2300(J).</p>	<p>MN Rule 4410.2400 states that "an RGU shall incorporate material into an EIS by reference when the effect will be to reduce bulk without impeding governmental and public review of the project." The material prepared in connection with the EIS and material that substantiates analyses fundamental to the EIS are referenced either within the document or in the appendices.</p>
<p>Laura Neuman</p>	<p>47</p>	<p>Timeframe</p>	<p>The FEIS Timeframe of 3 Years Post Completion is Too Short. The FEIS does not provide.... [remaining paragraph is a repeat of Comment 41].</p> <p>It is apparent that there has been a significant delay in time from the scoping document to the FEIS. The world is a different place than it was 7 years ago when the scoping process began. This change in time frame is absolutely necessary to get a complete and more accurate picture of the project and impacts. The significant delays from the time of scoping until now have resulted from a combination of several unique circumstances that cannot be faulted to MAC/FAA: the events of September 11, 2001; the ensuing huge decline in aviation; security restructuring, and MAC'S loss of revenue have all taken the focus of MAC away from Flying Cloud. Northwest suing MAC over expansion at Flying Cloud has also caused delay. Use of the correct timeframe of 5 to 10-years post completion in the FEIS would in no way prejudice MAC or FAA or cause undue delay given the delays that have already occurred.</p>	<p>See response to Comment 41 above.</p>
<p>Laura Neuman</p>	<p>48</p>	<p>Alternatives</p>	<p>Minnesota Rules 4410.2300(g) requires MAC to include the following alternatives to the expansion at FCM in its EIS: sites, technologies, modified designs or layouts, modified scale or magnitude, and an alternative incorporating reasonable mitigation measures identified through comments on the scope or draft EIS.</p> <p>After pointing out that the SDEIS failed to comply with this rule by not including a discussion of ANY of these alternatives, the FEIS has not been remedied. It therefore is</p>	<p>The FEIS includes responses to these comments in Volume II (see responses to your SDEIS Comments 332, 333, 334 and 335).</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>inadequate as a matter of law. The FEIS includes only a brief and substandard discussion of each of MAC'S airports. What needs to be accomplished is a detailed look at alternatives and the alternatives' impacts.</p> <p>Again, MAC'S discussion in the FEIS of each of the alternatives should include AT LEAST the following. These are just examples of possible alternatives and are not meant to represent an exhaustive list.</p> <p>A. Sites  MAC must evaluate the use and potential expansion of its other airports as alternative sites to the proposed expansion at FCM. This does not mean MAC simply says a runway length or additional hanger space is not available at its other airports. MAC claims the purpose of the FCM expansion is to reduce or eliminate general aviation ("GA") from the Minneapolis/St. Paul International Airport ("MSP"). However, it fails to address possible use of the other reliever airports or Holman Field (STP) (which has an existing runway length over 5000 feet) as possible sites to accomplish its purpose (reduce congestion at MSP).</p>	<p>See General Response 3. Possible use of other Reliever Airports was also addressed on page III-3 of the FEIS.</p>
Laura Neuman	49	Alternatives	<p>MAC claims over 2300 stopovers a year from FCM to MSP. For example, instead of expanding FCM to relieve any stopovers at MSP, MAC could use financial incentives for stopovers to go to STP to pick up fuel or passengers. Considering that stopovers are only 1.6 of total operations at FCM, it makes sense not to spend 82.9 million dollars for expansion and have the stopovers go to STP instead of MSP through financial incentives. That would serve to accomplish the desired result without significant cost or negative impacts. This alternative needs to be thoroughly investigated and its impacts discussed instead of saying STP's runway would be of no use because it is not in the West Metro area.</p>	<p>See General Responses 1 and 3 and response to NWA Comment 30.</p>
Laura Neuman	50	Alternatives	<p>Northwest Airlines identified another alternative that should have been included in the FEIS. Northwest Airlines hired an economic consultant who showed MAC could use financial incentives to induce aircraft to use FCM instead of MSP. Northwest showed that MAC is unreasonably subsidizing the reliever airports in conflict with MAC'S statutory authority to charge reasonable rents and fees, and is doing so to Northwest's detriment. MAC has not been charging operators at reliever airports as much as those at comparable airports around the country, and that MAC should</p>	<p>The Commission has adopted increased rates and charges for the Reliever Airports as of December 20, 2004. The runways at FCM are too short for the jet operations that are currently using MSP. Providing financial inducements to use FCM will not change that. Inducing aircraft to use FCM instead of MSP requires completion of the proposed improvements. Inducing general aviation to use Flying Cloud instead of MSP is only one of many benefits the proposed expansion will provide. Of the</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>increase its charges to operators at reliever airports. MAC had in its possession Northwest's document entitled "Metropolitan Airports Commission Reliever Seminar April 29, 2004," which laid out this alternative in writing, yet MAC failed to include any analysis of this in the FEIS.</p> <p>Northwest also points out that MAC already has two 5000-foot runways at MSP and Holman Field (STP) and should invest in the construction of a dike to better utilize STP.</p> <p>Northwest also cites a 1994 US General Accounting Office (GAO) Report that said in part</p> <p>"FAA does not consider general aviation to be a significant factor in congestion at commercial airports today."</p> <p>"FAA's analysis showed general aviation was not identified as a major cause of delay."</p> <p>"Although congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now."</p> <p>The numbers MAC itself provides in the environmental review process show that expansion at Flying Cloud will not have an impact at MSP. Therefore other alternatives to FCM expansion should be adequately reviewed in the FEIS. For example, MAC conducted a survey in 1997 of six FBOs, in which they were asked</p> <p>"After taking off from Flying Cloud Airport, have you at any time in the past year had to take on additional fuel or pick up passengers at another metro airport such as St. Paul Downtown or Minneapolis-St. Paul International before continuing on to your final destination? Yes or No. If yes, how many times?"</p> <p>See Appendix D of the Flying Cloud Airport Expansion Technical Report Activity Forecasts November 1999 (emphasis added). Only 2 of the 6 FBOs responded yes to stopovers. MAC'S own survey states: "The two firms combined for a total of 16-29 times." The survey does not specify whether the FBO went to MSP or STP. Even assuming they all went to MSP, obviously, 16-29 operations in a year compared to the 512,588 operations at MSP in a year do not</p>	<p>alternatives mentioned in comments and those considered in the EIS process, the preferred alternative is the only one that meets the full purpose and need for the project.</p> <p>The construction of a dike at STP is in the MAC Capital Improvement Program for 2007.</p> <p>See response to NWA Comment 27.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>justify the expense of 82.9 million dollars. According to MAC'S surveys, stopovers from Flying Cloud to MSP are only 0.006 of operations at MSP!</p> <p>MAC'S 1997 survey is very clear that the question asked was not round trip flights or how many times per week. The question asked was operations per year. Nevertheless from this survey information, MAC claimed in the Draft EIS and Supplement EIS that the stopover operations at MSP were 8,300 a year! In my SDEIS comments I questioned the accuracy of 8,300 stopovers because this number is so high that it equals the total number of ALL business operations at Flying Cloud a year for 1999!!! I am not splitting hairs. Remember, this is the very reason for MAC'S proposed expansion and for its cost-benefit analysis! Again I ask, was MAC recklessly ignorant or deceptive when it came up with 8,300 stopovers after its survey showed 16-29?</p> <p>How did MAC answer my question? MAC contacted the survey respondents again seven years later on January 6, 2004. MAC states in the FEIS that respondents now claim that seven years ago, they actually meant flights per week, not operations per year, and that since that time they have had this same number of stopovers, and they continue to have this number today. So, in the FEIS, MAC has now changed the number of stopovers from 8,300 to 2,340 (a significant decrease!) and claims maybe a few more if Flying Cloud runways are icy requiring landing at MSP.</p>	<p>The 1997 survey was a telephone survey and the recorded response by the surveyor was incorrect. A call was made in January 2004 to the two FBOs that clarified the number was 16 to 29 flights per week.</p> <p>For the FEIS Re-evaluation, three FBOs were surveyed in July and August 2007, which found that there are approximately 29.7 stopovers per week at MSP (unrelated to weather) because of the inadequate length of the runway.</p> <p>Relieving MSP of general aviation traffic is not the only need or benefit of the proposed expansion.</p> <p>See above response.</p>
Laura Neuman	51	Need	<p>Even assuming MAC'S new number of 2,500 stopovers at MSP a year is correct, that is only 0.5% of total operations at MSP! Obviously stopovers from Flying Cloud are NOT causing congestion at MSP. Is it worth 82.9 million dollars to eliminate 0.5% of operations at MSP? Also, remember the two FBOs, Elliot Aviation and Executive Aviation, state that their stopovers have not increased in 7 years. Stopovers at FCM are only 1.6% of total operations. Then why do they need an 82.9 million dollar expansion? MAC has never been able to demonstrate congestion at MSP from general aviation. Even its biggest tenant at MSP, Northwest Airlines, says there is no congestion from general aviation. Northwest Airlines would know! Northwest wants the Flying Cloud expansion stopped.</p>	<p>See General Responses 1 and 2, and responses to NWA Comments 27, 35 and 36.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
Laura Neuman	52	Need	Operations at Flying Cloud have been diminishing since 1994 (232,130 total operations) and were at one of the lowest levels in 2003 (155,837 total operations). In addition, the number of aircraft based at Flying Cloud has decreased since 1987 and is at an all time low of 463 based aircraft in 2003. Why are large amounts of new hanger space needed when the data shows usage of the airport has declined significantly?	Although total operations have decreased substantially There are approximately 477 based aircraft at FCM (in 2007) with a waiting list of 119 for hangar space. Usage of the airport for training and recreational flying is declining, whereas business-related travel is increasing, and additional hangar space for business jets is needed. See also response to NWA Comment 31.
Laura Neuman	53	Need	Without discussion of the use of STP as the stopover location, financial incentives, and improvements at STP to prevent flooding, the FEIS is inadequate as a matter of law. The Aviation Chapter of the Metropolitan Guide Policy 6 urges MAC to use financial considerations for encouraging reliever use.	See General Responses 1 and 3. Of the alternatives mentioned in comments and those considered in the EIS process, the preferred alternative is the only one that meets all elements of the project purpose and need.
Laura Neuman	54		To meet the requirements of Minnesota law, the above-mentioned surveys and their results must be included in the Appendix to the SDEIS because they are fundamental to the proposed expansion. An analysis of alternative sites must include all data and documentation that MAC has that supports its claim that GA will come to FCM over MSP or other airport locations if FCM is expanded. Because such analysis substantiates the whole purpose for the FCM expansion, by law this documentation must be included in the Appendix. MN Rules 4410.2300(J).	Rule 4410.2400 states that "an RGU shall incorporate material into an EIS by reference when the effect will be to reduce bulk without impeding governmental and public review of the project." The referenced material must be readily available for inspection. The surveys are included in the technical reports listed in Appendix A, which were made available to you and other interested parties.
Laura Neuman	55	Alternatives	The importance of evaluating alternative sites is emphasized by the Environmental Quality Board ("EQB") which cautions that public project proposers should not take actions regarding site acquisitions or project commitments prior to completing the EIS process because of the legal requirement to evaluate alternative sites. See the EQB's Guide to Minnesota Environmental Review Rules at page 13. MAC'S acquisition of property near FCM for expansion prior to final EIS approval is unlawfully premature.	Alternative sites were considered. See General Response 3 and response to NWA Comment 37. The acquisition of property near FCM was for safety and noise purposes, as discussed in response to Comment 107.
Laura Neuman	56	Alternatives	B. Technologies. MAC claims that a runway length of 5000 feet will allow specific aircraft to use FCM that cannot now use it. However, MAC has failed to demonstrate by any data or survey information that such specific aircraft operators would use FCM if expanded. MAC can utilize other technologies to determine whether specific operators would utilize an expanded FCM over other locations. A failure to do so makes the FEIS inadequate.	The surveys of jet owners in Appendix D of the FCM Technical Report, Activity Forecasts, show that there are some aircraft owners/operators that would use FCM if the runway were lengthened and/or additional hangar space provided. See Tables D-1 and D-2.
Laura Neuman	57	Alternatives	Another example of using alternative technologies would be an evaluation of a need for expansion at FCM at all if the proper year 2015 is the impact timeframe. Aircraft	See response to Comment 41 on timeframe.  There is no evidence that aircraft will be

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>technology is developing to allow take-offs and landings at shorter distances; therefore an extended runway may not be necessary. MAC claims that newly advanced, quieter jets would utilize an expanded FCM; however, it does not evaluate aircraft advances on take-off and landing distances as alternatives to expansion for the 2015 timeframe. Such an omission makes the FEIS inadequate.</p>	<p>manufactured cost-effectively in the foreseeable future that will allow take-offs and landings at shorter distances and replace the general aviation business jet fleet.</p>
<p>Laura Neuman</p>	<p>58</p>	<p>Alternatives</p>	<p>Finally, other technologies could be used to reduce GA traffic at MSP other than an extended runway, such as lease incentives for moving GA from MSP, an increase in hanger space alone, and/or reducing GA hanger space at MSP. In addition, alternative technologies that could reduce the noise impacts, such as sound barriers for maintenance run-ups. None of these alternatives have been addressed. FEIS is inadequate as a matter of law.</p>	<p>The cited examples are not technologies. GA hangar space at MSP is limited and unlikely to expand because of site constraints and the more pressing need for additional airline gates. GA aircraft will not leave MSP unless the Reliever Airports are expanded to accommodate hangar needs and runway length requirements. Maintenance run-ups are prohibited during nighttime hours when they have the greatest noise impact.</p>
<p>Laura Neuman</p>	<p>59</p>	<p>Alternatives</p>	<p>C. Modified Design or Layouts. MAC has not provided any insight as to modifying the design or layout of FCM that could reduce environmental impacts. For example, this could include the construction of alternative sites for maintenance run-ups or barriers to reduce noise. It also could include the placement of hanger space to reduce noise. In addition, modified designs of or layouts for hanger space may serve as an incentive to move GA traffic to FCM without the need for runway expansion. Alternative modified designs or layouts also could include a study regarding dispersion of aircraft emissions to provide information as to optimum flight paths and runway use to reduce the impact of air emissions. See the following section in this comment on impacts from air emissions. MAC'S failure to look at these alternatives makes the FEIS inadequate as a matter of law.</p>	<p>Distances and maximum allowable grade changes limit the potential sites for hangar construction, as do safety factors and the amount of land acquisition required. Aside from the land currently being used by the City for athletic fields, the proposed south building area is the only space available at the airport for new hangar construction and it is located as close to the runway system as possible.</p>
<p>Laura Neuman</p>	<p>60</p>	<p>Alternatives</p>	<p>D. Modified Scale or Magnitude. MAC has not provided any alternatives for an expansion with a runway less than 5000 feet, or analyzed which aircraft at what capacities could use a runway length between 3900 and 5000 feet. Nor has MAC evaluated a smaller expansion in conjunction with the use of the other reliever airports or Holman Field. MAC should also include an evaluation for limiting nighttime flights to specific runways in addition to preferential flight paths to reduce noise impacts. All such alternatives must be evaluated; otherwise the FEIS is inadequate as a matter of law.</p>	<p>Through the evaluation of the aircraft fleet mix and associated airport use requirements, it was determined that a runway less than 5,000 feet would not meet the purpose and need for the project. As a result, MAC and FAA need not evaluate an alternative that calls for a runway expansion less than 5,000 feet. Development of the airport has been evaluated in consideration of the other system airports and their respective offerings. Due to Federal preemption, and grant assurance provisions, MAC does not have the authority to impose access or use restrictions on FCM, such as limiting</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
				nighttime flights to specific runways. However, as documented in the EIS, MAC has and will continue to enhance and implement a voluntary noise abatement plan for FCM that includes the mitigation of noise impacts through preferential runway use and the consideration of nighttime noise impacts.
Laura Neuman	61	Alternatives	The rule requiring an evaluation of alternatives emphasizes that MAC should not eliminate alternatives based simply on its prior planning process. MAC cannot eliminate any of these alternative analyses based simply on the argument that such alternatives were not in the Metropolitan Council or its planning documents. In addition, MAC'S discussion of these alternatives must include a discussion of the impacts and benefits and any potential mitigation measures for each. Without adequate discussion on alternatives, the FEIS is inadequate as a matter of law.	No alternative was eliminated solely on the prior planning process. In addition, an EIS need not fully evaluate alternatives that do not satisfy the underlying purpose of or need for the project. See FEIS Section III.B.
Laura Neuman	62	Cumulative Impacts	Minnesota rules define cumulative impact as "the impact on the environment that results from the incremental effects of the project in addition to other past, present, and reasonable foreseeable future projects regardless of what person undertakes the other projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." MN Rules 4410.0200, subpart 11.  MAC cannot evaluate the proposed FCM expansion in a vacuum and the sparse discussion of MSP and Pioneer expansion in the FEIS are not even close to adequate.	FEIS Section V.Y considered the effects of the proposed action with past, present and known future actions, including the 2010 expansion of MSP and the expansion of Pioneer Trail, that would be cumulative with the proposed action.
Laura Neuman	63	Cumulative Impacts	The FEIS is inadequate in its discussion of cumulative impacts on air quality. First, there is no discussion of the current state of air quality in Eden Prairie/SW Metro area. MAC has not provided information on the background levels of air toxics in the Eden Prairie area. Current air quality levels of some airport-associated emissions are already in excess of health benchmarks for adults and way in excess for children.	CO and SOx emissions are addressed in FEIS Section V.A. See General Response 7 for discussion of air toxics.
Laura Neuman	64	Cumulative Impacts	There are other known projects that will contribute to impacts on air quality ...[remaining sentence is a repeat of Comment 43]. For the construction and traffic related air quality impacts, MAC need only to consult with DOT and EPA to obtain CAA criteria and HAPS emissions. EPA calculates criteria pollutant and	See response to Comment 43 above.  See General Response 7.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			toxic emissions for mobile sources all of the time. For MSP, FAA and MAC have needed data to compute criteria and HAPS emissions. This is a no-brainer. MAC must evaluate the increase in toxic emissions the proposed expansion will have in addition to the increases from other projects. All of these projects will have an impact on air quality in Eden Prairie.	
Laura Neuman	65	Cumulative Impacts	MAC'S contention that there is no synergistic or cumulative effect from MSP aircraft emissions flies in the face of scientific evidence. FAA is fully aware that aircraft emit toxic emissions and has known it for a long time. Various government agencies and universities have been researching this subject for years. One year ago, FAA printed a document entitled "Select Resource Materials and Annotated Bibliography on the Topic of Hazardous Air Pollutants (HAPS) Associated with Aircraft, Airports, and Aviation" dated July 2003. In this document FAA admits that environmental assessments of toxic emissions have taken place at other airports, including airports in California, Illinois, New Jersey and Massachusetts area. How can MAC and FAA continue to ignore requests for toxic emission information at our airports? Specifically, the concentrations of toxic aircraft emissions for an airport can be calculated by taking the known amounts of hydrocarbon exhaust specific to each type of aircraft, multiplied by the number of operations of that type of aircraft, breaking the hydrocarbon exhaust down into the specific toxic chemicals, and using a sophisticated model to calculate concentrations of those individual toxic chemicals. The calculation of specific toxic chemicals from aircraft emissions is being done at other airports and should be done at Flying Cloud and MSP too.	See General Response 7.
Laura Neuman	66	Air Toxics	In the FEIS, FAA tries to downplay toxic emissions by stating that actual air monitoring placed on the ground at runways at various airports has found toxic chemical levels to be the same as background levels for the urban areas. But FAA omits in its answer the logical and scientific explanation: the high heat of the exhaust coming out of the plane causes the toxic plume to rise above the ground where the monitors aren't located. FAA itself came out with a "Final Report: The use of LIDAR to Characterize Aircraft Initial Plume Characteristics" in February 2004 showing how aircraft exhaust plumes rise. This does not mean that the toxic chemicals disappear, only that they rise away from monitoring devices on the runways and then eventually drift back down.	See General Response 7.



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>FAA should include MSP air quality impacts because of its proximity to Flying Cloud and over-flights.</p>	
<p>Laura Neuman</p>	<p>67</p>	<p>Air Toxics</p>	<p>EPA's National-Scale Air Toxics Assessment uses computer models from emission information in each state and has determined that in Minnesota, 1,3-butadiene, acrolein, benzene, formaldehyde, and POM were at levels in excess of health benchmarks (the levels above which are thought to cause adverse health effects in adults). Recent monitoring measurements taken by MPCA in Minnesota confirm that formaldehyde and benzene in our air are in excess of health benchmarks. MPCA did not monitor POMs and is unable to measure relevant amounts of 1, 3-butadiene and acrolein in the air given limitations on the monitoring equipment. MPCA also has not yet calculated the measurements for airborne lead. See MPCA's "Air Toxics Monitoring in the Twin Cities" dated January 2003.</p> <p>What does this mean? It means that many of the toxic chemicals found in aircraft exhaust are already at high enough levels in our state to cause adverse health effects in adults. For children in our state, it is a much graver picture. Because children breathe more frequently and eat and drink more compared to their sizes than adults, and because a lot of children's systems are still developing, EPA and California agencies are re-evaluating health benchmarks for children. They have identified adverse health effects from toxic chemicals at significantly lower levels than adult levels. These lower, child-health benchmarks include studies on benzene, lead, acrolein, POM, and formaldehyde- the very chemicals that are found in aircraft emissions. See for yourself the alarming health impacts these toxic chemicals have on children at the following website, <a href="http://www.oehha.ca.gov/air/toxic_contaminants/SB25finalreport.htm">http://www.oehha.ca.gov/air/toxic_contaminants/SB25finalreport.htm</a>. It is also a known fact that there is a cumulative effect from air toxics that increases harm to human health. See MPCA 1999 Staff Paper on Air Toxics and Air Quality in Minnesota 2001 Legislative Report. Toxic aircraft emissions do exist and it is clear that NEPA and MEPA require an evaluation of the air quality impact, including cumulative effects from other sources other than just Flying Cloud, especially given that the baseline in Minnesota, before any proposed expansion at Flying Cloud, is already at levels that impact health. The purpose of NEPA and MEPA is to gather information to enable us to make informed</p>	<p>See General Response 7.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>decisions about choices between transportation and air quality. We deserve to know the truth about air quality and the impacts from proposed transportation.</p>	
<p>Laura Neuman</p>	<p>68</p>	<p>Noise</p>	<p>The FEIS is inadequate in its discussion of cumulative impacts on noise. There are other known projects that will contribute to impacts on noise in Eden Prairie/SW Metro: (1) construction of 494 and increased resulting traffic; (2) construction and increased traffic from Highway 312 extension; (3) construction and increased traffic from Pioneer Trail expansion; (4) construction and increased traffic from Highway 212; (5) MSP over-flights. For the construction and traffic related noise impacts, MAC need only to consult with DOT. This is a no-brainer.</p>	<p>See response to Comment 43 above.</p>
<p>Laura Neuman</p>	<p>69</p>	<p>Noise</p>	<p>As to noise from MSP, MAC'S statement in the FEIS that over-flights from MSP have no impact in Eden Prairie flies in the face of logic and reality, no matter what type of math manipulation is done to distort the truth. MAC itself has identified noise from MSP over-flights to be a "major source of noise impact" for every year since 1993 to 2001 in its yearly monitoring reports from Flying Cloud. For example, for the year 2001 monitoring MAC states: "A major source of noise impact during the hours monitored was commercial jet aircraft over-flight from the Minneapolis-Saint Paul International Airport. During the 321 hours monitored, 2190 jet and commuter aircraft over-flight operations from MSP were recorded ranging from 42.3 dBA to 82.0 dBA." Even though MAC describes these noise impacts as "single events" and not "cumulative," they still are a noise impact that need to be identified, quantified and evaluated as part of the NEPA and MEPA process. Single events in the 82.0 dBA are certainly annoying. Neither NEPA nor MEPA state that impacts from noise only matter if they are above a weighted average over the period of a day. Neither NEPA nor MEPA state that noise is evaluated only if it is above DNL 60dBA. Single events of loud noise that happen several times an hour are still considered to be noise pollution. Even MAC considers MSP over-flight noise to be "a major source of noise impact." How can MAC identify a noise impact as "major" and then not include it in its cumulative impact analysis? To include noise from MSP is a no brainer. MAC currently has actual noise monitoring data for Eden Prairie that includes MSP aircraft noise, which has not been included in the FEIS. In addition, MAC continuously monitors noise from MSP and has</p>	<p>MSP overflights of the FCM affected environment are not significant within the context of NEPA and MEPA. Overflight operations from MSP with sound levels ranging from 42.3 dBA to 82.0 dBA would not be perceptible if they occurred simultaneously with FCM overflights with sound levels 10 dBA greater (i.e., ranging from 52.3 dBA to 92.0 dBA, respectively) as discussed in FEIS Section Y, Cumulative Impacts). As shown in FEIS Table Q-4, single events in 2010 are expected to range from 74.5 to 105.7 dBA at the selected receptor sites. Although MSP overflights as a single event can be annoying, they are below the annoyance thresholds of FAA and the Metro Council as cumulative events averaged over the day in the DNL metric. Actual noise monitoring data recorded in 1998 at 20 locations is compared to the 1999 noise contours determined from the INM in Figure Q-1 of the FEIS. Recognizing that the monitored data includes sounds from all sources, including MSP overflights, at each location on a specific day and the INM calculates sound only from aircraft on an average annual day, there is generally good correlation between the two.</p> <p>The operation of MSP and the associated commercial flights that transition over Eden Prairie (EP) are not impacted by the proposed project and typically transition the EP area at altitudes in excess of 3,000 feet above ground. Furthermore, given the variation of MSP</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>access to information enabling MAC to identify, quantify and evaluates noise from MSP aircraft. As to cumulative noise impacts highway expansions, MAC needs only to obtain information from DOT. If this information is not included, the FEIS is inadequate.</p>	<p>overflight locations in EP, the significant distance between the FCM project Area of Potential Effect (APE) and MSP, and the continual transition to quieter aircraft types in the MSP fleet mix, the noise foot print around FCM resulting from the proposed action would not be influenced by MSP overflights to a degree that is significant in the context of MEPA/NEPA. See discussion in FEIS Section V.Y, Cumulative Impacts.</p> <p>Additionally, the ANOMS system used to monitor operations and noise impacts at MSP drop off significantly in data availability and integrity at distances such as that between MSP and FCM. Furthermore, FAA's INM was not developed to conduct an interdependent noise analysis at such extensive distances.</p>
Laura Neuman	70	Water Quality	<p>The FEIS is inadequate in its discussion of cumulative impacts on water quality. There are other known projects that will contribute to impacts on water quality in Eden Prairie/SW Metro: (1) construction of 494 and increased runoff; (2) construction and increased runoff from Highway 312 extension; (3) Construction and increased runoff from Pioneer Trail expansion; (4) construction and increased runoff from Highway 212. For the construction and additional runoff effects on water quality, MAC needs to consult with DOT.</p>	<p>See response to Comment 43 above.</p>
Laura Neuman	71	Noise	<p>The FEIS is inadequate because it has failed to reasonably assess the noise impacts from expansion, which along with air emissions, is the most significant environmental impact. First, as explained above, MAC has not provided enough data on aircraft and other sources of noise, which is readily available and necessary to evaluate the proposed expansion's impact. Second, the noise curves provided in the FEIS are flawed because they are based on faulty and unsubstantiated information. Finally, MAC has not reasonably evaluated noise impact data to determine the effects on homes, school, churches, parks, and wildlife areas. MAC should be required to compare noise generated from the INM with actual noise monitoring data because the INM is consistently under evaluating the amount of noise compared to actual noise monitoring.</p>	<p>FAA and MAC have assessed the effects on homes, schools, churches, parks, and wildlife areas in accordance with the guidelines of the Federal Interagency Commission on Noise (FICON), as discussed in Appendix A.3 at A.3-4 in the FEIS. It is unclear what kind of data on aircraft the commenter says is readily available that is necessary to evaluate the noise impacts. The commenter did not provide this data.</p> <p>Actual noise monitoring data recorded in 1998 at 20 locations is compared to the 1999 noise contours determined from the INM in Figure Q-1 of the FEIS. Recognizing that the monitored data includes sounds from all sources at each location on a specific day and the INM calculates sound only from aircraft on an average annual day, there is generally good correlation between the two.</p>
Laura	72	Noise	<p>As a citizen representative on the former City of</p>	<p>In previous discussions, MAC staff</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
Neuman			Eden Prairie's Airport Advisory Commission, I repeatedly asked MAC representatives in commission meetings for more information as to present and future FCM noise. I asked for noise curves at values outside of the 60 dBA levels and was told that was impossible. I asked for specific monitoring to be conducted in residential areas, and was told that during summer months, there is some actual monitoring conducted. I was provided with some of that actual monitoring data, but no monitoring has taken place since 2001. I also asked for the specific parameters or inputs that were used in the INM for generating the noise curves, and never received an answer.	explained that the accuracy of the INM decreases significantly beyond the 60 DNL contour. The contours throughout this evaluation process have included the contours out to the 60 DNL. Due to budget constraints, the summer noise monitoring was discontinued following 2001. The INM inputs are included in Appendix A.3 of the FEIS – fleet mix, daily operations and runway/flight track use.
Laura Neuman	73	Noise	At the public hearing for the SDEIS in September 2001 I asked Mr. Roy Fuhrmann how it was possible to list in the SDEIS specific DNL values for "noise-sensitive receptors in the year 2010. See e.g., pages VI 8-V19 in the SDEIS. Mr. Fuhrmann informed me that the INM could be used to generate specific noise data points, instead of noise curves, and that the INM with 2010 operations was used to calculate the DNL for those specific sites identified as "receptor sites." I asked Mr. Fuhrmann if it was then possible to use the INM to list specific noise points for all areas in Eden Prairie, not just points listed as "receptor sites," to which he said "yes." I told Mr. Fuhrmann that I had repeatedly asked for this kind of information, and that such information would be extremely useful for residents of Eden Prairie and others to evaluate the noise impacts. I asked Mr. Fuhrmann to provide a map of Eden Prairie with specific noise points around the entire city area, instead of noise curves, to which he responded that such data is "unreliable" given the limitations of the INM. I replied that MAC itself was relying on such "unreliable points in its SDEIS in Tables Q-2 and Q4, and therefore MAC couldn't argue that the use of point-specific noise data was unwarranted. I have never received a map of Eden Prairie with generated noise points from the INM. It appears from Tables Q-2 and Q-4 that the INM can also generate point values for Peak SEL, Lmax, and time above certain noise levels in minutes per day.	As stated above, the accuracy of the INM decreases in determining noise values less than 60 DNL. The further a receptor is from FCM the less accurate would be the INM value. The receptors used for grid point analysis in the FEIS were selected by the EIS Technical Advisory Committee to be representative of locations in residential and Refuge areas most affected by the FCM flight tracks. These points were then monitored to determine the ambient noise levels and to compare existing conditions with future conditions for each alternative. Using the INM to calculate noise values at points throughout the City would not result in potentially significant noise levels based on FAA and Metro Council land use compatibility guidelines. See EQB Rule 4410.2500.
Laura Neuman	74	Noise	In order to reasonably evaluate the noise impact from expansion, MAC must provide a map of Eden Prairie with specific noise points for at least the years 1999 and 2010. I think the more reasonable information is for a time period from years 2004 to 2017 given that 2004 reflects the current all time low number of operations and that 2017 is 10 years post completion. FAA	The information presented in Section V.Q provides sufficient data to assess the noise impacts of the proposed action. See responses to Comment 73 regarding analysis at data points and Comment 41 regarding timeframe. Operations forecast by FAA for 2020 are less than the operations reported in 2004 and

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			itself recommends noise evaluation for 5 to 10 years post-project completion in its environmental policy 1050.1e, Appendix A at pg. 63. These data points should include DNL, Peak SEL, Lmax, and Time above 60 dBA in minutes per day. The current noise curves DO NOT inform residents how noise will change with expansion. The only thing noise curves show is a range of DNL dBA 60 -65, and obviously noise affects the environment at levels below 60 dBA. FAA itself states that supplemental noise metrics can be used to evaluate the noise impact in its environmental policy 1050.1e Appendix A at pg. 64.	1999.
Laura Neuman	75	Noise	In addition, DNL is only part of the noise impact picture. Also extremely important is the weighted maximum noise one will experience in an area, the length of time of extreme noise, and the sound exposure level. These values should be provided in the format of a map of Eden Prairie with specific points, not noise curves. Only by providing all of this data can the impact from noise be properly evaluated.	See response to Comments 73 and 74 above.
Laura Neuman	76	Noise	Aircraft such as the Gulfstream IV cannot be eliminated from the INM because MAC'S use of the weight capacity as a noise restriction is suspect. When the City entered into negotiations with MAC, both MAC and the City required FAA to be involved in the process to avoid any potential problems with their settlement agreement. The City did not want a repeat of what happened with Ordinance 51—after lots of hard work to have the deal unacceptable to FAA. In December 2002, MAC heralded the 60,000 lb weight capacity of the FCM runways as a restriction preventing larger aircraft from using Flying Cloud. In the MAC/City December 2002 Agreement, MAC promises not to increase the weight capacity of the runway. In short, the 60,000 lb restriction was a big part of the deal that FAA participated in. However, one and a half years later, MAC in its FEIS describes this weight restriction in its "noise mitigation" plan, and reduces predicted noise from expansion from the INM given that larger aircraft cannot use the runways. And now, FAA is calling such weight restrictions into question. In a "Proposed Policy" published in the Federal Register in July 2003, FAA says that weight capacity of the runways cannot entirely prohibit aircraft above those weights and cannot be used to mitigate noise, because doing so would be unjustly discriminatory in violation of grant assurances. This policy would affect all runways in the country, not just Flying Cloud. FAA printed this position in July 2003; however, FAA had	See General Response 4.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>already made a decision that the weight bearing capacity of a runway could not be used to prohibit larger aircraft from using an airport in February 2002 (just two months after the MAC/City Agreement). Given it takes FAA months to make a decision, surely FAA knew in December when the MAC/City Agreement was made, that FAA would not allow a restriction of aircraft based on weight capacity of the runway. FAA said nothing in December. Did MAC also know in December that such weight restrictions were suspect? Given FAA's policy printed in July 2003, I have no doubt that because (1) MAC describes the runway weight capacity as "noise mitigation," (2) MAC reduces its over-60,000 lb aircraft in its fleet mix for the INM, and (3) MAC promises not to increase the runway strength, that FAA will determine the weight capacity cannot be used as a restriction prohibiting larger aircraft at Flying Cloud and will find it unjustly discriminatory in violation of grant assurances. There now seems to be no guarantee that larger business jets over 60,000 lbs won't use Flying Cloud. To me, MAC'S actions seem very calculated in order to achieve this result. When the City and MAC entered into the Agreement, the weight bearing capacity of the runway was in no way described as "noise mitigation" nor did MAC state it would reduce the fleet mix in the INM as a result of the weight capacity of the runway. In the MAC/City Agreement it simply states that an engineering study found the capacity to be 60,000 lbs and that MAC wouldn't increase it unless required by State law. Never in the previous Draft EIS or Supplement EIS did MAC discuss weight capacity as noise mitigation until after FAA published its policy that calls it discriminatory. Moreover, it is clear that FAA-will not allow weight capacity to be an all out bar on 60,000 plus aircraft, therefore it is unreasonable to eliminate them in the INM and air quality emission models.</p>	<p>The weight bearing capacity issue arose as a resolution to the outstanding concerns from the City and the FAA.</p>
<p>Laura Neuman</p>	<p>77</p>	<p>Noise</p>	<p>There-are several problems with MAC'S inputs. First, the inputs rely on the fleet mix and flight paths and time of day of the operations. There is NO possible way to obtain any information on these inputs for nighttime flights. The Control tower is closed at night and during one of the busiest hours at FCM 6:00 am to 7:00 am. MAC'S estimates for nighttime flights, and for the busiest hour of 6-7am, are unreliable in the FEIS. According to the FEIS, nighttime noise data comes from the extrapolation of monitoring that took place by MAC consultants for 72 hours total on the days of April 2, 3, and 19, 1997.</p>	<p>In estimating nighttime activity, it is critical that the sampled days be representative of average conditions. The FBOs at FCM were contacted in 1997 to determine if the weekdays proposed to perform the manual counts were representative of normal weekday activity. The FBOs agreed that the proposed counting days in April would be representative of normal weekday activity. It is reasonable to base these nighttime estimates on the most available data — the 1997 traffic counts.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			From 72 hours of monitoring on three days, MAC concludes that nighttime flights are about 3.8 percent of the daytime total. It is incredulous to me how MAC can base its entire evaluation of all environmental impacts on 72 hours worth of data! MAC'S response in the FEIS that the inputs for nighttime flights is correct because of a single survey conducted for three days in one year is ludicrous. How can such an important input be based solely upon such paltry information conducted in 1997!	
Laura Neuman	78	Noise	In my comments, I reported that MAC has actual monitoring data collected for nighttime flights at FCM during the summertime months for the years 1993-2001. There is no doubt that several years of monitoring over entire summertime periods are far more accurate than a 3-day survey by a consulting company that continually screws up survey information (like the number of stopovers being 8300 when total business jet operations are only 5876 in a year!).	See response to Comment 79.
Laura Neuman	79	Noise	Actual monitoring data obtained during MAC'S summer monitoring program covers the years 1993-2001 and contains at least 225 hours of actual monitoring. That summertime data that I have shows a range from 6.5 to 34.6 of nighttime flights. The following table is from actual monitoring data: (See Table in comment letter.) * ( ) indicates the total annual operations according to Tower, which does not count nighttime operations when it is closed. Obviously, actual monitoring data does not come close to capturing the amount of operations at FCM counted by the Tower. The above table and information shows several things. One, if actual monitoring shows total operations consistently lower than total operations from reported tower hours (which doesn't include nighttime operations), then the total number of monitored nighttime operations is way under the actual number of nighttime flights occurring at FCM. Second, actual monitoring data shows that MAC's estimate for nighttime operations is way underestimated. Observe that the longer nighttime monitoring is actually conducted, the larger the percentage nighttime flights are found. The only information to actual nighttime flights is monitoring data. This data shows that nighttime flights are probably close to 15% of total operations.	<p>The comment statement is correct in that the actual monitoring conducted did not occur for all hours that the tower was operational and as such the operations counts obtained from the monitoring are lower than the total tower counts. However, to draw a conclusion that the nighttime assumption is therefore flawed due to the count discrepancy for a 24-hour period is not appropriate. As part of the study process, efforts were taken to monitor all night long in some cases to ensure a good canvassing of the nighttime hours, providing a foundation for determining the nature of nighttime operations through the uninterrupted observation of them during the nights of probable higher operations (i.e., favorable weather conditions).</p> <p>It is important to note that monitoring occurred where and when the operations were most likely to occur. The focus was on maximizing the ability to monitor aircraft over flight, in favorable weather conditions and locations, avoiding inclement times/conditions such as fog, Instrument Meteorological Conditions (IMC), -30°F, etc. Therefore, the 1993 to 2001 monitoring data is skewed to a disproportionate amount of operations for the time monitored.</p>
Laura Neuman	80	Noise	Because nighttime operations are a huge factor in noise output from the INM, this evidence that MAC'S nighttime estimates are severely flawed	Commenter's 15% has no basis; MAC cannot artificially add nighttime operations. See Response to Comment

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			means that the INM output is severely flawed. MAC must provide more accurate information for nighttime operations. A far more accurate way to obtain nighttime flights at FCM would be to use radar data from MSP. All of the INM and emissions information needs to be corrected with increases in the nighttime flights to at least 15% as described above.	79.
Laura Neuman	81	Noise	In response to this comment, MAC states that the flight paths used in the INM are based on the preferred flight paths for noise mitigation. That pilots will actually use the preferred flight paths is debatable; however, even assuming they are, preferred flight paths are relevant only for the noise generated under the mitigation INM. For the proposed expansion Alternate F without mitigation, it cannot be assumed that mitigation flight paths will be used. Different flight paths must be used for the without mitigation alternative. More important, given that MAC admits that only 50% compliance with requests for prohibiting nighttime flights, it is an inaccurate assumption to use the noise mitigation flight paths for all flights. To be consistent, MAC must use mitigation flight paths only 50% compliance and actual flight paths the other 50% of the time for the INM.	This is not correct. Preferential flight track usage for the proposed action was not applied to Alternative F, as shown in Tables A.3-7 and A.3-8 in Appendix A.3. Flight track usage for Alternative F was the same as no action. Also, noise mitigation flight paths were not used for all flights, as shown in the referenced tables. The 50% compliance rate stated in the FEIS applies only to whether or not a flight would be made during nighttime hours -- not to flight track usage.
Laura Neuman	82	Noise	<p>In its FEIS, MAC provides that given the results of a 1999 survey conducted to determine Stage-2 jet aircraft usage of FCM, a substantial change in the fleet mix/operations was made to significantly limit the number of daytime Stage-2 operations and eliminate nighttime Stage-2 operations. A survey was made of Minnesota and it was determined that one Stage-2 operator would use FCM during the daytime. A survey was then conducted of IN, MI, OH, and WI. The FAA registry lists 81 Stage-2 jet aircraft in the Great Lakes Region; however, only 11 owner/operators for 14 Stage-2 aircraft were reached in the survey. Those 11 owner/operators provided that they would account for an estimated 77 operations at FCM per year, with 7 of those operations at night. Sixty-seven Stage-2 jet aircraft in the Great Lakes Region (83) were not evaluated in that survey.</p> <p>Obviously, if 83 of the stage-2jet aircraft did not respond, the data is unreliable. There are other flaws in the survey. The survey should have been conducted for the entire country given that Stage-2 aircraft could come from anywhere in the U.S. In addition, the survey reached such a small number (17) of total Stage-2 aircraft in the Great Lakes Region that 77 daytime/7 nighttime operations is not representative of what happens</p>	<p>The results of those 11 Stage 2 owners that agreed to participate in the survey were assumed to be representative of the total and were extrapolated to the 81 Stage 2 aircraft registered in the 8-state Great Lakes Region that could operate at FCM with a 5,000-ft. runway – which resulted in 567 annual operations, of which 52 would be at night. These are the values used in the FEIS in Appendix A.3, Table A.3-5 for Alternative F. The results of the survey were not used in the noise analysis for the Proposed Action (Alternative F with Noise Mitigation Plan) as stated on page I-3 of the FEIS and revised in Section IV.B.3 of this ROD.</p> <p>Based on Airport Noise and Operations Monitoring System (ANOMS) data for 2001 and 2002 at FCM, the No Action 2010 INM fleet mix was revised to include 8 annual (0.02 daily) operations by Stage 2 jet aircraft (Lear 25). The Stage 2 jet aircraft (Lear 25) in the Proposed Action 2010 INM fleet mix was changed from 1.54, based on the survey, to 0.02 daily operations based on the ANOMS data. The decrease in Proposed Action Stage 2 operations is</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			at FCM. Even the FAA takes issue with the validity of the study with so few respondents. See FAA letter dated October 13, 2000 at page 6 (survey information is "speculative. ") How can MAC claim a significant reduction in daytime use, and the elimination of nighttime use by Stage-2 jets! Especially when these survey results are only a very small portion of the Stage-2 aircraft in the country that could access to FCM. This obviously skews the noise curves to give the appearance of less noise impact.	based on the aggressive voluntary measures presented in the Noise Mitigation Plan that MAC will employ to discourage the use of Stage 2 aircraft at FCM, and the fact that Stage 2 aircraft are no longer manufactured and will therefore ultimately disappear and not be a user of FCM.
Laura Neuman	83	Noise	This survey and its results must be included in the FEIS Appendix as a matter of law. It is material made for the preparation of the EIS documents and is very important information that supports the noise curves. MN Rules 4410.2300(J). Moreover, the results of the Minnesota survey and all information obtained (not just Stage-2 aircraft) as to whether FCM would be used by any operator if the runways were lengthened is pertinent information and should be included in the Appendix. Without such information in the Appendix, the FEIS is inadequate as a matter of law.	The survey is referenced in Appendix A.3, Table A.3-5. See response to Comment 54 above.  Information obtained as to whether FCM would be used by any operator if the runways were lengthened is included in the <i>Flying Cloud Airport Expansion Technical Report - Activity Forecasts, November 1999</i> referenced in Appendix A at A-1.
Laura Neuman	84	Noise	MAC has not reasonably evaluated noise impact data to determine the effects on homes, school, churches, parks, and wildlife areas. Nor has MAC conducted any study or hired appropriate experts to evaluate the impact that noise will have on property values. The only "evaluation" MAC has conducted in the FEIS is to list the number of homes in the DNL range of 60-65 dBA and to state that there are no schools or churches within the DNL dBA 65 curves. This is no "evaluation," and therefore the FEIS is inadequate.	See response to Comment 71 and General Response 5.
Laura Neuman	85	Noise	Contrary to MAC'S response in the FEIS, NEPA and MEPA do not provide that only noise above 60 dBA DNL needs to be evaluated. Just because MAC and FAA limit their determination of "significant noise" to be a day/night average over a 24 hour period of time that is 60 dBA DNL doesn't mean that the noise impact has been reasonably evaluated. In Minnesota, noise pollution is treated like other types of pollution for analysis and cannot be ignored. If noise increases such a single noise events affect the citizens of Minnesota, then the impact must be evaluated.	See responses to Comments 71, 72 and 74.
Laura Neuman	86	Noise	Key information about the whole noise impact from expansion is missing, including the noise changes that will result outside of the noise curves MAC has provided. What will be the noise impact to Cedar Ridge Elementary School from the proposed expansion, which is in a direct flight path of FCM? MAC has not	See response to Comment 71.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			conducted any surveys or interviewed teachers at Cedar Ridge to determine what current effect noise has at the school. What will be the effect at the Senior Center at County Rd. 4 and County Rd.1? What will be the effect on the Presbyterian Church on County Rd. 4 and Prairie Lutheran on Pioneer Trail? What will be the effect at the outdoor center at Staring Lake and the Hennepin County Vocational School? Only by providing more noise data as described in Section IIIA of this commentary can noise impacts be thoroughly evaluated.	
Laura Neuman	87	Noise	MAC has not conducted any significant monitoring that provides insight as to current noise impacts from FCM. Actual monitoring performed during the summer months is sporadic and incomplete. MAC must conduct more monitoring and at more locations in order to determine current noise impacts from FCM and whether the INM model of current conditions is accurate. With this information, INM data for future noise impacts can be better evaluated. MAC should compare noise generated from the INM with actual noise monitoring data.	See response to Comment 71.
Laura Neuman	88	Air Quality	Air emissions data provided in the FEIS are incorrect because of the incorrect fleet mix and number of operations used for 1999 and 2010 years, and because of questionable flight paths/runway use as explained in the section on noise impacts as explained above.	See responses to Comments 41, 81, 82 and 83.
Laura Neuman	89	Air Quality	More important, the FEIS is inadequate because the only information that MAC has provided for the proposed expansion is air emissions information on CO and Sulfur Dioxides ("criteria pollutants"). It is a known fact that aircraft have numerous other hazardous emissions including nitrous oxides that lead to the formation of ozone, and several air toxics that cause adverse health effects to people, animals, and vegetation near airports. See Section IV on cumulative impacts.	See General Response 7.
Laura Neuman	90	Air Quality	In addition, MAC must provide data and evaluate cumulative effects from aircraft emissions from MSP operations. It cannot provide air emission impacts from a proposed FCM expansion in a vacuum. MAC has access to all relevant information on air emissions from MSP aircraft, and can calculate air emissions from proposed expansion at MSP. Without an evaluation of all toxic emissions and without evaluating cumulative effects, the FEIS is inadequate as a matter of law. See Section IV on cumulative impacts.	See response to Comment 43 and General Response 7.
Laura Neuman	91	Air Toxics	Analysis for toxic emissions associated with airports have been conducted for numerous	See General Response 7.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>airports, including the following:</p> <ol style="list-style-type: none"> <li>1. LAX</li> <li>2. O'Hare</li> <li>3. Oakland International Airport</li> <li>4. John Wayne and Orange County International Airports</li> <li>5. Santa Monica Municipal Airport</li> </ol> <p>Technology and information is available to MAC to provide both current and expanded emissions from aircraft, current air toxic levels in Eden Prairie, dispersion models to determine where aircraft emissions will travel, and health risk assessments for residents in Eden Prairie. See, e.g., EPA's "Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft," dated April 1999; Berkeley Keep Jets Over the Bay Committee v. Board of Port Comm'rs, A086708, California Court of Appeals, 1 Dist, Div.2, August 30, 2001; MPCA's data and maps on air toxics in the metro area at its web site. All of this information is needed in order to provide a reasonable assessment of air emissions from an expanded FCM and potential adverse health consequences that could result.</p>	
Laura Neuman	92	Benefit-Cost	<p>The "Flying Cloud Airport Expansion Technical Report: Benefit-Cost Analysis" referenced in the DEIS cannot be the basis for support for the FEIS because of significant changes in forecasts made in the FEIS and because it does not address all of the items listed in Table H-6. For example, the values for benefits to operators; ground travel time savings; reduced costs to Eden Prairie; job, earnings, and output impacts; noise benefits and safety have been changed without support and without explanation as to how numbers were calculated.</p>	<p>The BCA was not used in support of the preferred alternative/Proposed Action (see Response 34). The support for the revised BCA calculations in this ROD is contained in the Flying Cloud Airport Expansion Technical Report, Benefit-Cost Analysis, revised August 2007. As noted earlier, aircraft operations are tracking below forecast levels so the environmental effects based on the forecasts are overstated.</p>
Laura Neuman	93		<p>In response to my comments about MAC'S fictitious numbers for the stopovers from FCM, MAC had to concede in the FEIS that its numbers were ludicrous. MAC changed 8,300 stopovers to 2,340 (which again I prove to be unbelievable in the following paragraphs) and stated that additional benefit resulted from some mystical "forecast of diversion of operations from MSP to FCM." In 4 ½ years, upon repeated requests to produce data or information supporting claims that general aviation will move from MSP to FCM as a result of expansion, MAC has come up with nothing.</p>	<p>See response to Comment 50.</p>
Laura Neuman	94		<p>Now in the FEIS, MAC states for the first time in 4 ½ years that "Some businesses with aircraft operating at MSP have told MAC staff they would relocate to FCM if hanger space and the runway is lengthened to 5,000 feet." FEIS at II-</p>	<p>The initiation and/or success of the project is not solely contingent on the relocation of a few based aircraft currently located at MSP. The project is part of a systems approach to providing</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			4. Obviously, without more detailed information the claim lacks justification. A FEIS should have substance, not unsubstantiated hearsay. What are the names of the businesses? How many aircraft would they move from MSP to FCM as a result of expansion? How many operations would change from MSP to FCM as a result of the move? Was a survey conducted? Was it a telephone call or letter, or just some conversation over coffee? It is incredulous to believe that a business would give up a substantial investment at MSP and incur moving expenses to relocate to FCM. Without real information, not anecdotes, no one can evaluate this claim. This conjecture cannot be the basis for an 82.9 million dollar expansion. Give us real data.	viable alternatives to MSP, thereby preserving capacity. See also General Response 1.
Laura Neuman	95	Forecasts	Interestingly, the number of based aircraft at FCM has declined since 1987 (565) to an all time low in 2003 of 463 based aircraft. With fewer aircraft being based at FCM, why expand?	See response to Comment 31 and 52 and General Response 6.
Laura Neuman	96	Forecasts	The numbers reveal the truth .... (remaining comment a repeat of Comment 50).  Even assuming MAC'S new number ....(remaining comment a repeat of Comment 51).	See responses to Comments 50, 27, 35 and 36, and General Responses 1 and 2.
Laura Neuman	97	Forecasts	Operations at Flying Cloud .... (remaining sentence a repeat of Comment 52). MAC claims of needed expansion need to be verified and documented before they can be mystically quantified as a 67 million dollar benefit.	See response to Comment 52.
Laura Neuman	98	Forecasts	This +82.9 million dollars is going to be spent exclusively to increase the types of business jets at Flying Cloud; however, according to MAC'S data, currently only 3% of flights at Flying Cloud are business jets to begin with! That means that 97% of operations at Flying Cloud are recreational or flight training operations that don't need the expansion.  Even with the proposed expansion, MAC estimates the total business jet operations to increase only to 8% of total operations at Flying Cloud in ten years. According to MAC data in the FEIS, Flying Cloud had the following estimated total operations and estimated business operations. (See Table in comment letter.)	See General Responses 1 and 2.
Laura Neuman	99	Forecasts	MAC has not even claimed that all of this 5% increase in business jets would result because of expansion. Even assuming all increases in business jet operations for 2010 resulted from the expansion, would you spend +82.9 million dollars for a runway that results in a 5% increase of business jet flights in 10 years! Can anyone	See discussion of purpose and need in Section II of the FEIS, and General Responses 1 and 2.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>prove to me that a 5% increase in business jets in ten years at Flying Cloud is worth over 82.9 million dollars? Remember the expansion is not necessary for increasing operations; it's just to increase the types of larger jet business aircraft at the request of two FBOs.</p>	
<p>Laura Neuman</p>	<p>100</p>		<p>Finally, no explanation is given at all as to where the values for benefits to aircraft operators, ground travel savings and reduced costs to Eden Prairie come from. These numbers have the appearance of being pulled out of thin air because they are unsupported and are not explained. MAC'S own surveys show that no current GA at MSP would move to an expanded FCM and there is no evidence in the DEIS or SDEIS that any new operators would come to an expanded FCM over MSP. As such, any savings from fewer delays at MSP is unfounded. Ground travel savings is also unsupported because no operators have been identified who would change from MSP to FCM and who reside closer to FCM than MSP. What are the specific reduced costs to Eden Prairie? The FEIS is inadequate without explanation or support for these cost savings.</p>	<p>The support for the BCA calculations is contained in the Flying Cloud Airport Expansion Technical Report, Benefit-Cost Analysis, revised August 2007. As noted on page 4 of the Technical Report, 20 percent of the respondents to the telephone survey of metro jet aircraft owner/operators that said they would move to FCM were currently based at MSP. The delay savings to MSP would be attributable not only to relocated based aircraft, but also to relocated transient operations, and from the elimination of stopovers at MSP by FCM based aircraft who currently cannot operate out of FCM at full loads because of insufficient runway length. The reduced costs to Eden Prairie are listed in Table 13 of the Technical Report.</p>
<p>Laura Neuman</p>	<p>101</p>	<p>Benefit-Cost</p>	<p>The City of Eden Prairie lists its lost revenue as a total of almost 127 million dollars for the proposed expansion for lost taxes and fees. This is not included in the cost/benefit analysis as it should be.</p>	<p>The costs and benefits to the City are included in the FEIS at V-27. The lost revenue number provided by the City of Eden Prairie was amortized over the life of the project and assumed 280 acres of lost land, which included the land acquired under No Action. The amortized number was converted to an annual number and also adjusted to reflect the revision of lost land to 100 acres, which is the amount of acreage loss attributable to the proposed action. The details are provided in Table 12 of the revised BCA Technical Report.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
Laura Neuman	102	Benefit-Cost	Moreover, the economic benefit that MAC lists as 90 million dollars for FCM is inaccurate because it is based on 1997 data. Both operations and the number of based aircraft have significantly decreased since then. Moreover, the only relevant data is "first round" benefits from the airport at 42 million dollars (Met Council report at 4-41). The revenue from GA visitors cannot be attributable to FCM because there is no way to prove that the only basis for their arrival to the metro area is because of FCM. Without FCM, GA visitors may still have come to the metro, such as through MSP, and therefore would still have the same economic benefit of 9.89 million that cannot be attributable to FCM. In other words, GA visitors come for the Mall of America, the sporting events, etc.; they do not come because of FCM.	This is the most recent study available and was prepared for and distributed by the Metro Council. The results of this study were not used in the benefit-cost analysis, in accordance with FAA guidance for these types of benefits, as stated in the FEIS at V-24. The January 2004 Benefit-Cost Analysis Technical Report, revised August 2007, included the Metro Council study as an economic impact on page 8.
Laura Neuman	103	Benefit-Cost	Also, "secondary benefits" from FCM cannot be included in the economic benefit unless secondary benefit losses from expansion are included. For example, because of expansion, Eden Prairie has lost 500 homes. Those 500 homes would have had the economic benefit from construction costs, furnishing costs, cost of living expenses, and so on, which have not been included in the FEIS. Secondary benefits also would have resulted from the businesses that would have been located on the 80 acres zoned for office and industrial space. None of this was included in the FEIS. Finally, secondary benefits are too speculative, and therefore the economic benefit of FCM should be limited to direct first round benefits for 2004 data, without including GA visitors who may have come to the metro without FCM.	Secondary benefits and costs were not included in the benefit-cost analysis, for the reasons stated in the FEIS at V-24.
Laura Neuman	104	Property Value	As I stated in my comments to the DEIS, MAC cannot use one anecdotal story of a developer to support the claim that Eden Prairie property values will not be diminished by an expansion at FCM. MAC must hire expert appraisers to conduct a study as to how much property values will be affected by noise. These kind of property valuations are done ALL OF THE TIME! Without such an evaluation, the FEIS is inadequate.	See General Response 5.
Laura Neuman	105	Property Value	A comparison to the effect on property values near MSP or any other urban property near an international airport is not applicable to Eden Prairie where most residents do not use FCM - a predominately recreational airport - and property is valued based on environmental amenities because it is suburban property, not urban property. Increases in aircraft noise, air pollution, and traffic will turn valued suburban property into urban-like property, without the	See General Response 5.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>benefit of proximity to an international, commercial airport. MAC must do the applicable study on property devaluation as a result of expansion.</p> <p>MAC cannot simply assert that there is no effect on property values when several studies show that property values are negatively impacted by aircraft to an amount of at least 0.5% for every decibel above average noise. See Bragdon, Clifford R. (1989), "Control of airport- and aircraft-related noise in the United States," Transportation Research Record; Nelson, John P. (1980), "Airports and property values: a survey of recent evidence," Journal of Transport Economics and Policy; Tomkins, J., et al. (1998) "Noise versus access: the impact of an airport in an urban property market," Urban Studies; Knack Ruth Eckdish and Jim Schwab (1996) "Learning to live with airports," Planning; Mieszkowski, Peter and Arthur M. Safer, (1978), "An estimate of the effects on airport noise on property values," Journal of Urban Economics; McDonald, John F. and Clifford I. Osuji (1995), "The effect of anticipated transportation improvement on residential land values," Regional Science and Urban Economics; O'Byrne, Patricia Habuda, et al. (1995), "Housing values. Census estimates, disequilibrium, and the environmental cost of airport noise- a case study of Atlanta," Journal of Environmental Economics and Management; Harvey, Milton E., et al. (1979), "Cognition of a hazardous environment: reactions to Buffalo airport noise," Economic Geography.</p>	See General Response 5.
Laura Neuman	106	Property Value	<p>In 1994 FAA itself commissioned Booz-Allen &amp; Hamilton, Inc. to study property devaluation as a result of aircraft noise. It created a report "The Effect of Airport Noise on Housing Values: A Summary Report. "The study found that the effect of noise on prices was highest in moderately priced and expensive neighborhoods. For two moderately priced neighborhoods north of LAX, the study found "an average 18.6 percent higher property value in the quiet neighborhood, or 1.33 percent per dB of additional quiet." A 1996 study found that the expansion of the Seattle-Tacoma Airport would cost nearby cities \$500 million in property values. The study found that "all other things remaining equal, the value of a house and lot increases by about 3.4 for every quarter of a mile the house is farther away from being directly under a flight track." In 1997, Randall Bell, MAI, Certified General Real Estate Appraiser, Licensed Real Estate Broker and</p>	See General Response 5.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			instructor for the Appraisal Institute examined 190 sales near the LAX, John Wayne, and Ontario airports. He found a diminution in value due to airports averaging 27.4%.	
Laura Neuman	107	Safety	Noncommercial air travel is far more dangerous than commercial air travel. The accident rate for general aviation is ten times higher than for commercial airlines according to the National Transportation Safety Board data. Within the two years, there have been two crashes at FCM, including one fatality. MAC has failed to evaluate this safety risk of increase accidents at FCM as a result of increased traffic, especially considering the unknown operations that occur when the control tower is closed. Without such an evaluation, the FEIS is inadequate.	Safety was addressed in General Response 7 in Volume II of the FEIS. The predominate location of GA accidents reported to the NTSB occurred either on the airport or in the runway protection zone (RPZ). The MAC has acquired all of the land in the RPZ of the proposed action. In addition, as a result of the proposed action, the MAC has acquired most of the land in the expanded Mn/DOT safety zones in order to prevent development in the path of aircraft landing and departing FCM. As a result of these acquisitions, the risk of crashes that could affect people on the ground is greatly diminished.
Laura Neuman	108	Safety	In addition, since September 11, 2001, security issues at airports are extremely important. Significant security changes have occurred at commercial airports, but little to none have taken place at general aviation airports. Given this and the proposed expansion's ability to allow larger jets at FCM, MAC needs to address security issues at FCM for the proposed expansion, including but not limited to nighttime security, record-keeping of operations in to and out of FCM, and security at hangars and fueling stations.	In May 2004 the Transportation Security Administration (TSA) released "Security Guidelines for General Aviation Airports". The Flying Cloud Airport was one of the first airports in the country to adopt a security plan consistent with these guidelines. The plan has been coordinated with the Eden Prairie Police Department, the Eden Prairie Fire Department, the Federal Aviation Administration, and tenants on the airport. Each commercial tenant on the airport is also required to have a security plan tailored for their site and operations conducted thereon. Additional security measures for the operators of large aircraft have already been imposed by the TSA. In 2004 new fencing and new gates were installed to further enhance the security of the airport.
Vicki Pellar Price	109	Alternatives	Less costly alternative 5000' runways exist at St. Paul and MSP and could be utilized without an \$82.9 million cost; another 5000' runway is planned at Anoka.	See General Response 1 and 2.
Vicki Pellar Price	110	Benefit-Cost	MAC continues to propose a fiscally reckless expansion despite downtrend in annual operations, national downtrend in recreation flyers, security issues, the high cost of oil and rate increases that are unpalatable to users and other available alternatives.	These trends do not change the purpose and need for the project.
Vicki Pellar Price	111	Air Toxics	The air-quality impact of the proposed expansion is up and now exceeds 100tons/yr of CO emissions based on the Proposed Action, requiring a general conformity determination. "The general public may not know it. but it is an undisputed fact known by EPA, MPCA, FAA,	See General Response 7.



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>and MAC that aircraft burning fossil fuels emit toxic chemicals that cause cancerous and non-cancerous health problems. MAC has failed to identify, quantify and address toxic emissions in its environmental review. MAC has repeatedly ignored our requests. In the June 2004 FEIS, FAA very carefully and deceptively in one paragraph answers the issue on toxic emissions on page 42-43 of Volume II. If you are not familiar with chemistry and environmental laws, FAA's answer seems to state that it has no obligation to report toxic emissions from aircraft under NEPA and MEPA and that the emissions do not exist.</p> <p>Let me make it clear, the emissions do exist and FAA is obligated under NEPA and MEPA to disclose them. FAA is fully aware that aircraft emit toxic emissions and has known it for a long time. Various government agencies and universities have been researching this subject for years. Nowhere in NEPA or MEPA does it restrict FAA's evaluation of air quality to those items identified in the Clean Air Act (CAA), as FAA implies in its answer. One year ago, FAA printed a document entitled "Select Resource Materials and Annotated Bibliography on the Topic of Hazardous Air Pollutants (HAPS) Associated with Aircraft, Airports, and Aviation" dated July 2003. In this document FAA admits that environmental assessments of toxic emissions have taken place at other airports. How can MAC and FAA continue to ignore requests for toxic emission information at our airports?</p>	
Vicki Pellar Price	112	Air Toxics	Specifically, the concentrations of toxic aircraft emissions for an airport can be calculated by taking the known amounts of hydrocarbon exhaust specific to each type of aircraft, multiplied by the number of operations of that type of aircraft, breaking the hydrocarbon exhaust down into the specific toxic chemicals, and using a sophisticated model to calculate concentrations of those individual toxic chemicals. The calculation of specific toxic chemicals from aircraft emissions is being done at other airports and should be done at Flying Cloud and MSP too.	See General Response 7.
Vicki Pellar Price	113	Air Toxics	In the FEIS, FAA tries to downplay toxic emissions by stating that actual air monitoring placed on the ground at runways at various airports has found toxic chemical levels to be the same as background levels for the urban areas. But FAA omits in its answer the logical and scientific explanation: the high heat of the exhaust coming out of the lane causes the toxic	See General Response 7.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>plume to rise above the ground where the monitors aren't located. FAA itself came out with a "Final Report: The Use of LIDAR to Characterize Aircraft Initial Plume Characteristics" in February 2004 showing how aircraft exhaust plumes rise. This does not mean that the toxic chemicals disappear, only that they rise away from monitoring devices on the runways and then eventually drift back down.</p>	
Vicki Pellar Price	114	Air Toxics	<p>Toxic emissions from aircraft are not some theory that only environmentalists and tree huggers have invented and are concerned about. In my research on the subject of toxic aircraft emissions I have spoken to various experts at EPA, MPCA, and California agencies. Believe me, it is a real issue that doesn't go away just because MAC and FAA choose to ignore it in Minnesota. Air quality affects us all, especially children. The following-information should scare you into wanting to stop this unnecessary airport expansion.</p> <p>These are the toxic chemicals that come out of aircraft exhaust according to EPA:  1,3-Butadiene, Acetaldehyde, Acrolein, Benzene, Ethylbenzene, Formaldehyde, nHexane, Xylene, Propionaldehyde, Styrene, Toulene, Lead, Polycyclic Organic Matter (POM). EPA's National-Scale Air Toxics Assessment used computer models from emission information in each state and determined that in Minnesota, 1,3-butadiene, acrolein, benzene, formaldehyde, and POM were at levels in excess of health benchmarks (the levels above which are thought to cause adverse health effects in adults). Recent monitoring measurements taken by MPCA in Minnesota confirm that formaldehyde and benzene in our air are in excess of health benchmarks. MPCA did not monitor POMs and is unable to measure relevant amounts of 1,3-butadiene and acrolein in the air given limitations on the monitoring equipment. MPCA also has not yet calculated the measurements for airborne lead. See MPCA's "Air Toxics Monitoring in the Twin Cities" dated January 2003."</p>	See General Response 7.
Vicki Pellar Price	115	Air Toxics	<p>What does this mean? it means that many of the toxic chemicals found in aircraft exhaust are already at high enough levels in our state to cause adverse health effects in adults. For children in our state, it is a much graver picture. Because children breathe more frequently and eat and drink more compared to their sizes than adults, and because a lot of children's systems are still developing, EPA and California agencies are re-evaluating health benchmarks</p>	See General Response 7.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>for children. They have identified adverse health effects from toxic chemicals at significantly lower levels than adult levels. These lower, child-health benchmarks include studies on benzene, lead, acrolein, POM, and formaldehyde- the very chemicals that are found in aircraft emissions. See for yourself the alarming health impacts these toxic chemicals have on children at the following website, <a href="http://www.oehha.ca.gov/air/toxic_contaminants/SB25finalreport.htm">http://www.oehha.ca.gov/air/toxic_contaminants/SB25finalreport.htm</a>. Toxic aircraft emissions do exist and it is clear that NEPA and MEPA require an evaluation of the air quality impact, especially given that the baseline in Minnesota, before any proposed expansion at Flying Cloud, is already at levels that impact health. Yes, it's true that other combustion engines like motor vehicles emit toxic chemicals too, but that doesn't mean you ignore the aviation source. The purpose of NEPA and MEPA is to gather information to enable us to make informed decisions about choices between transportation and air quality. We deserve to know the truth about air quality and the impacts from proposed transportation. Why hasn't FAA and MAC given us information on aircraft toxic emissions for the expansion at Flying Cloud and MSP? (MSP emissions should be included because of cumulative impacts.) This time I can't justify the evasion of the answer with a claim that MAC and FAA are recklessly ignorant. Given FAA's own documents and the fact that toxic emissions are evaluated at other airports, MAC and FAA are being deceptive."</p>	
Vicki Pellar Price	116	Forecasts	<p>According to the FAA, MAC'S projections for use at an expanded FCM are overestimated by 49%. FAA forecasts for 2010 indicate 203,486 operations, while MAC'S forecasts indicate 302,982, 49% higher than the FAA. MAC continues to justify what the FAA and GAO have already negated, that in order to divert traffic away from MSP they need longer runways to accommodate those types of planes (heavier). MAC appears to be making a whole new case to support the new FAA rulemaking which doesn't allow pavement weight based restrictions, which were part of the agreement between the city and MAC, before this new rulemaking.</p>	<p>See General Response 6 and response to Laura Neuman Comment 41.</p> <p>See General Response 4.</p>
Vicki Pellar Price	117	Need	<p>MAC continues to misrepresent need as exemplified on their web site by stating that relievers relieve congestion and delays at MSP, by diverting traffic away from MSP.</p>	<p>That is their role — to relieve congestion and delays at MSP by diverting traffic away from MSP. Stating this does not misrepresent need. See also General Response 1.</p>
Vicki Pellar Price	118	Need	<p>Both the GAO and FAA have stated that congestion and delays at major hubs are not</p>	<p>See response to NWA Comment 27.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			attributable to General Aviation. Instead delays and congestion are caused by: predatory business practices, overbooking, weather, airport mismanagement, and hub system insufficiencies. Most analysts agree that the relevance and importance of relievers has changed, so its current use in the overall system is generally overstated.	
Vicki Pellar Price	119	Need	NWA's Reliever Seminar report from April 29th, 2004 states that "the decision to expand FCM was made in 1992 based upon forecasts completed in 1987. However, FCM operations peaked in 1976 and have trended downward since. More recently FCM operations have declined an average of 4.4% each year since 1998.	See General Response 6.
Vicki Pellar Price	120	Need	Northwest cites a 1994 US General Accounting Office (GAO) Report that said in part:  "FAA does not consider general aviation to be a significant factor in congestion at commercial airports today."  "FAA's analysis showed...general aviation was not identified as a major cause of delay."  "Although congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now."  Northwest continued by demonstrating how MAC could use financial incentives, not expansion, to induce greater use of the reliever airports, even if MAC increased rates to make the relievers more economically self sufficient.	See response to NWA Comment 27.
Vicki Pellar Price	121	Need	By MAC'S own omission the relievers need a new business model because they are not self sufficient, and some may even need to be closed, and most are still dependant on subsidies, unlike other relievers nationally. Reliever Seminar meetings have shown that organizations like the AOPA and individual users are unwilling to accept rate hikes in order to make the airports more self sustaining.	Comments noted.
Vicki Pellar Price	122	Need	Even assuming MAC'S new number of 2,500 stopovers at MSP a year is correct, that is only 0.5% of total operations at MSP! Obviously stopovers from Flying Cloud are NOT causing congestion at MSP. Is it worth millions of dollars to eliminate 0.5% of operations at MSP? Also, remember the two FBOs, Elliot Aviation and Executive Aviation, state that their stopovers have not increased in 7 years. Then why do they need an expansion in the first	See General Response 1.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>place? MAC has never been able to demonstrate congestion at MSP from general aviation. Even its biggest tenant at MSP, Northwest Airlines, says there is no congestion from general aviation. Northwest Airlines would know! Northwest wants the Flying Cloud expansion stopped.</p>	
Vicki Pellar Price	123	Need	<p>MAC has failed utterly to present a true picture of need to the public. They have distorted every relevant piece of information in order to make their case for an expansion. Their over inflated projections regarding need and their under exaggerated assessment of costs are irresponsible and fiscally reckless.</p>	See General Response 1 and 6.
Vicki Pellar Price	124		<p>"When the City entered into negotiations with MAC, both MAC and the City required FAA to be involved in the process to avoid any potential problems with their settlement agreement. The City did not want a repeat of what happened with Ordinance 51—after lots of hard work to have the deal unacceptable to FAA.</p> <p>Given the best MAC could do was a "voluntary" restriction on nighttime operations, it presented the 60,000 lbs weight-bearing capacity of the runway at Flying Cloud as a restriction on use. MAC heralded the 60,000 lb as a restriction preventing larger aircraft from using Flying Cloud. In the MAC/City December 2002 Agreement, MAC promises not to increase the weight capacity of the runway. In short, the 60,000 lb restriction was a big part of the deal that FAA participated in.</p> <p>One and a half years later, MAC in its FEIS describes this weight restriction in its "noise mitigation" plan, and reduces predicted noise from expansion from the INM given that larger aircraft cannot use the runways. And now, FAA is calling such weight restrictions into question. In a "Proposed Policy" published in the Federal Register in July 2003, FAA says that weight capacity of the runways cannot entirely prohibit aircraft above those weights and cannot be used to mitigate noise, because doing so would be unjustly discriminatory in violation of grant assurances. This policy would affect all runways in the country, not just Flying Cloud.</p> <p>FAA printed this position in July 2003; however, FAA had already made a decision that the weight bearing capacity of a runway could not be used to prohibit larger aircraft from using an airport in February 2002 (just two months after the MAC/City Agreement). Given it takes FAA months to make a decision, surely FAA</p>	See General Response 4.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>knew in December when the MAC/City Agreement was made, that FAA would not allow a restriction of aircraft based on weight capacity of the runway. FAA said nothing in December. Did MAC also know in December that such weight restrictions were suspect?</p> <p>Given FAA's policy printed in July 2003, I have no doubt that because (1) MAC describes the runway-weight capacity as "noise mitigation," (2) MAC reduces its Over-60,000 lb aircraft in its fleet mix for the INM, and (3) MAC promises not to increase the runway strength, that FAA will determine the weight capacity cannot be used as a restriction prohibiting larger aircraft at Flying Cloud and will find it unjustly discriminatory in violation of grant assurances.</p> <p>There now seems to be no guarantee that larger business jets over 60,000 lbs won't use Flying Cloud. To me, MAC'S actions seem very calculated in order to achieve this result. When the City and MAC entered into the Agreement, the weight bearing capacity of the runway was in no way described as "noise mitigation" nor did MAC state it would reduce the fleet mix in the INM as a result of the weight capacity of the runway. In the MAC/City Agreement it simply states that an engineering study found the capacity top be 60,000 lbs and that MAC wouldn't increase it unless required by State law. Never in the previous Draft EIS or Supplement EIS did MAC discuss weight capacity as a restriction on use or noise mitigation until after FAA published its policy that calls it discriminatory.</p> <p>Why in June 2004, after a printed FAA policy to the contrary, is MAC using the 60,000 lb weight restriction as "noise reduction? Is MAC just recklessly ignorant or deceptive?</p> <p>If FAA does find the weight capacity restriction at Flying Cloud discriminatory, the City is no longer bound to the Agreement pursuant to Section 7.2.2 because MAC breached its commitments and representations, and has breached its duty to defend the Agreement by setting up the weight capacity of the runways as an illegal restriction."</p>	
Vicki Pellar Price	125	Safety	This warning (below [see comment 126]) was posted on the NBAA's web site on August 6, 2004. At no time during the public notification from the government, which was just recently, did they ever include a GA security advisory, nor was the local public who live in	See response to Comment 108.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>communities with GA airports ever given any kind of notice of this warning. So policy regarding informing the public seems to be inconsistent.</p> <p>As far as we know, a security program to be used as a model for the relievers was initiated by Eden Prairie and Minnesota's US Attorney, Tom Hefilfinger, and not MAC. Where does MAC's responsibility enter into the picture? What we know is there wasn't enough money for the new fencing, but coming up with \$82.9M for an expansion at FCM takes priority. That's absolutely preposterous.</p>	
Vicki Pellar Price	126	Safety	<p>On August 6, 2004 the Department of Homeland Security (DHS) issued a general aviation security advisory following recent interagency review of "new and unusually specific information about where Al-Qaeda would like to attack." On August 1, the U.S. Government raised the threat level to Code Orange for the New York City, Newark, NJ, and Washington, DC, areas. The August 6 advisory urged the general aviation community to be alert, citing "Al-Qaeda's continued efforts to plan multiple attacks against the United States possibly employing commercial or general aviation aircraft, including helicopters." NBAA Members should review the TSA's Security Guidelines for General Aviation Airports and NBAA's Best Practices for Business Aviation Security. Any suspicious activity should be reported immediately to the Airport Watch Hotline at (866) GA SECURE.</p>	Comments noted.
Vicki Pellar Price	127	Noise	<p>There are three significant changes to the noise mitigation plan: Bird Strike and US Fish and Wildlife concerns have changed the impact of noise on the community. The Bird Strike potential was revised so that MAC will not designate 9R-27L as the preferred runway which will shift more training operations over populated areas. The US Fish and Wildlife has revised over flight regarding the refuge which shifts 97% of arrivals over populated areas. MAC says the current plan will eliminate a 20-ft screening berm along the south hangar due to site limitations. This was planned on by the city and neighboring community.</p>	<p>The reference to shifting 97% of flights is incorrect. Approximately 96% of arrivals currently are over populated areas (see FEIS Table X-6) because they mostly occur on the parallel east-west runways.</p> <p>See response to Eden Prairie Comment 19.</p>
Vicki Pellar Price	128	Comments	<p>Because the majority of respondents are residents and not paid professionals, it's impossible to include the detail necessary to form a complete response to the intended expansion. But, despite this, many have been able to research and identify some crucial and disturbing evidence which demonstrates the utter industry bravado that can push through a</p>	

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>project whether it meets the criteria necessary to establish worthiness, credibility, compatibility or fiscal acceptability.</p> <p>Disturbing responses from critical agencies like the Metropolitan Council include some of the impacts that MAC does not address in their EIS. No reference to alternative locations, no analysis of impacts from heavier planes, the use of glycol-based deicers, the use of urea, the issues of compatible land use, increasing solid and hazardous wastes into local water, surface water quality and runoff in relationship to accidental fuel spills.</p> <p>The EPA response indicates an "EC-2" rating to the SDEIS which means there are environmental concerns for the project.</p> <p>The Lower Minnesota River Watershed District also identifies concern due to a lack of information MAC failed to provide regarding deicing activities, sanitary water, and storm water runoff.</p> <p>Not surprisingly, most of the support for the project comes from the aviation and business community itself, who tout business success and so-called open spaces, over any consideration, what-so-ever, related to real impacts. They demonstrate an utter lack of community consideration, and overwhelming ignorance regarding need, and the real impacts aviation transportation has on important quality-of-life issues.</p>	<p>See Metro Council Comment 8, which states that the FEIS adequately addresses the Council's concerns and potential for significant environmental impact.</p> <p>See EPA Comment 4, which states that EPA has no further concerns as long as all FEIS mitigation measures and an appropriate modification of the FAA Response 267 in the FEIS regarding air toxics are included in the Record of Decision.</p> <p>See LMRWD Comments 8-15 and responses.</p>
Mark Michelson	129	Property Values	<p>MAC's FEIS, Final Environmental Impact Statement, fails to adequately answer the questions in regard to loss of property values. As far as I can read in the Summary of Comments on Draft EIS and Supplemental Draft EIS and Responses, the only answer given to any question about property values is General Response number 8 on page 3 of the Summary of Comments. General Response number 8 is an answer to one question from a property owner who thought they would have to sell their home for below the purchase value. General Response 8 asserts (one) that homes will not lose so much value that valuations will fall below purchase prices, and (two) figuring out loss in value is too complex for the FAA and MAC. That neatly sidesteps the issue, but it doesn't answer the questions raised over the past 20 years in regard</p>	<p>See General Response 5.</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>to loss of property value.</p> <p>Flying Cloud Airport is surrounded by homes valued at from \$250,000 to the multi-millions. Eden Prairie is a community of homes where values increase on a daily basis. People who purchased homes in Eden Prairie 5 years ago have seen their values double. A home purchase in Eden Prairie is an investment where people expect a payback. Answering the "Loss in Property Value" question by saying "In Minnesota it has been shown that MSP aircraft noise has not reduced property values below the purchase price" simply begs the question. In a time of rapidly increasing values, the fact that a home near an airport doesn't increase in value as quickly as a similar home situated far enough away from an airport to not experience the noise and pollution associated with aircraft, means that home has lost value.</p> <p>The issue is not if loss of value in the vicinity of an airport happens. Anecdotal evidence and several studies (the studies have all been brought to the attention of MAC in the last 20 years), prove that without a doubt it happens. The issue is: what is MAC going to do about it? MAC's stated intent is to waken Flying Cloud from its General Aviation slumber by injecting it with a new 5,000-foot runway. MAC wants jets that are 2 to 3 times the size of the current jets to make Flying Cloud their home. Aviation loves longer runways. It means more aircraft, more business and best of all; the people who don't pay enough rent to keep Flying Cloud solvent will get a reduction in their aircraft insurance rates because the runways are 5,000 feet long.</p> <p>What does it mean to homeowners? If MAC's plan is successful, homeowners within three miles of the airport will experience a radical increase in aircraft noise, air pollution and light pollution (the expanded airport will have a terrific lighting system). These are not items that tend to increase the value of a home.</p> <p>MAC is forging ahead with their plan as if it makes no difference whatsoever that if their plan works there will be a direct, cause and effect loss in property value in Eden Prairie. That doesn't mean that people won't be able to sell their homes or that they'll have to sell them for less than they purchased them. It means they'll lose value. A home near a busy, noisy, polluting airport will be valued less than a home outside of the airport's influence. What is MAC going to</p>	

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>do about that? How is MAC going to address that question?</p> <p>MAC is intentionally and knowingly creating a situation where, if MAC is right, thousands of homeowners will lose value in their homes – and we are not talking about tarpaper shacks – we’re talking about expensive homes, very expensive homes.</p> <p>To say that the problem is too complex for them to evaluate is ridiculous. These are the same people who brought us the DNL 65 and other sound measurements. They can project sound measurements using a computer simulation but they can’t evaluate the loss of property value in the vicinity of an airport? The truth is they don’t want to acknowledge the problem. Once they accept that there is a casual relationship between airport proximity and loss in residential value, a new precedent will be established and they will be responsible for that loss in value. In Minnesota, even a partial loss in value due to another parties actions can be claimed.</p> <p>The FEIS has failed to adequately address the issue of “loss of residential property values”. This issue has been brought to MAC’s attention in a large variety of questions over the past 20 years and General Response 8 does not answer the question adequately.</p>	
Vicki Pellar Price	130	Star Tribune Article	<p>The Star Tribune Editorial from 2001, Flying Cloud must take more of the load, was rife with inaccuracies.</p> <p>Yet, MAC included it as evidence in the FEIS in support of the expansion at (FCM) Flying Cloud Airport.</p> <p>Zero Expansion submitted a counterpoint, Flying Cloud Already Carrying Huge Load, to the Star Tribune’s editorial, Sept 27, 2001, disputing their assertions, which was published in the paper; the published rebuke was not included in the Final EIS Statement.</p> <p>The Zero Expansion counterpoint accused the Star Tribune of not checking their facts and reminded them that their own aviation beat reporter recently published numbers of operations which showed that Flying Cloud was in fact carrying the largest load of all the relievers, even without a 5,000 ft runway.</p> <p>That MAC included the Strib editorial in the FEIS and not the counterpoint shows how</p>	<p>MAC did not include the September 18, 2001 article in the FEIS as evidence to support the expansion. The article was submitted by Mitchell Anderson of Eden Prairie as a comment on the DEIS, which MAC and FAA are obligated to include. The article was included as requested by Mr. Anderson without a response. Similarly, your attached counterpoint article is included herein without a response.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>industries and governments paint the picture they want you to see, which often is not the truth. The Strib editorial is an opinion piece and is lack of factual data and supporting evidence does not provide substantive, factual corroboration for the project, which is what an FEIS should produce.</p> <p>But more than just conjecture, there are numerous inaccuracies, which are misleading and deceptive. An unknowing public would swallow these inaccuracies as truths, but they hardly represent a meaningful and factual justification for an expansion:</p>	
Vicki Pellar Price	131	Safety	<p>In the article, Security Is Looser on Corporate Aircraft, New York Times, Print Media Edition: Late Edition (East Coast), New York, N.Y., Oct 28, 2003, the author, Joe Sharkey tells us that though 429 airports that handle commercial flights are set up for all the security drills, this is certainly not the case for over 5,000 General Aviation airports nationally. These GA airports handle over 10,000 companies that run 15, 500 fixed wing aircraft, two seat turbo-prop and humongous heavy iron jet operations that carry 50 passengers in what are termed 'soft target' situations because "few if any of the passengers on those planes receive the preboarding security checks by federal screeners that are standard practice at commercial airports. Also because there are thousands of fractional owners today, there is little ability to oversee or check the ever-changing ownerships of thousands of planes and their ever-changing users. Very few of these users, in fact, ever pass through a metal detector. And officials in the industry are increasingly worried that lax or haphazard security procedures have created and opportunity for terrorists."</p> <p>Read the article which will be posted at <a href="http://www.zeroexpansion.com">www.zeroexpansion.com</a>; click on the security link (which is a chain link fence. As far as residents know, that's the only barrier between terrorists and the community. The chain link gates are open all day long.)</p>	Comments noted.
Vicki Pellar Price	132		<p>Both the GAO and FAA have stated that General Aviation is not the cause for delays at major airports.</p> <p>See NWA report, Metropolitan Airports Commission, Reliever Airport Seminar, April 29, 2004:</p> <p>Northwest cites a 1994 US General Accounting Office (GAO) Report that said in part:</p>	See response to NWA Comment 27, response to Laura Neuman Comment 50, and General Response 1.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>“FAA does not consider general aviation to be a significant factor in congestion at commercial airports today.”</p> <p>“FAA’s analysis showed...general aviation was not identified as a major cause of delay.”</p> <p>“Although congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now.”</p> <p>For many years, the AIP program included a set-aside for reliever airports. These were small airports that the FAA determined would help relieve congestion at nearby larger airports. However, GAO issued a study that found these airports were not effective in relieving congestion. As a result, the Federal Aviation Reauthorization Act of 1996 (P.L. 104-264) eliminated this set-aside.</p> <p>NWA stated in their Reliever Seminar report that it’s economically unattractive for small operators to use MSP now. That may not have been the case back when the Met Council mandated that the relievers relieve MSP. NWA reported that MAC has the ability to further ‘incentivize’ the use of the relievers through minimum landing increases at MSP. So the rationale to relieve MSP is about as old as the Met Council’s reliever mandate, which needs to be overhauled.</p>	
Vicki Pellar Price	133		<p>MAC’s projections for use (at an expanded FCM) submitted to the FAA were 49% more than what the FAA projected - FOIA city of Eden Prairie.</p> <p>Flying Cloud Airport operations have decreased annually by 4.4% - NWA report Metropolitan Airports Commission Reliever Seminar Meeting, April 29th, 2004.</p> <p>Even the AOPA’s Phil Boyer, President of the Aircraft Owners and Pilots Association, stated that MAC should not expand the runways at FCM at the Reliever Airport Seminar in April of 2004 because rates will go up even more. Though you’ll never find this on the AOPA web site, or in the minutes of that Reliever Airport Seminar meeting, he said it. MAC denies he said it. I was there and heard it. Boyer also said their surveys indicated what operators want the most and it’s not an extended runway.</p> <p>There are already two 5,000-ft runways, at St</p>	<p>See General Response 6 and response to Laura Neuman Comment 47.</p> <p>Mr. Boyer’s comments were an apparent reaction to a proposed rate increase, not the Flying Cloud projects. Mr. Boyer was apparently trying to make the point that his constituents should not see a unilateral rate hike if the increases were predicated on airport improvements which most would not use. The AOPA has not recommended that the projects be delayed or terminated.</p> <p>See General Response 3.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>Paul Holman Field and at MSP.</p> <p>Survey of members of the AOPA-</p> <p>Extend Runways- 30%</p> <p>Upgrade facilities- 39%</p> <p>More Hangars- 64%</p> <p>More Maintenance- 82%</p> <p>Keep rates same- 83%</p>	
Vicki Pellar Price	134		<p>The AOPA also suggests that MAC change the weight based pavement restriction for runways, which would allow larger, heavier planes to use the existing runways at FCM, without lengthening them. The problem with changing the weight based pavement restriction, which is supported by both the NBAA, National Business Aviation Association and the AOPA is that the city and MAC agreed to a 60,000-lb limit on pavement strength.</p> <p>There is new FAA rulemaking for no weight-based pavement airport access restrictions, which was proposed by the FAA after the city and MAC signed the Final Agreement. The legally binding agreement contains a MAC commitment to Eden Prairie to support a 60,000 lb pavement based restriction.</p> <p>Everything is a moot point now because the MAC must uphold that restriction or risk a possible law suit with the city, or the FAA could allow it, and then the AOPA would end up paying for it? Anyway you look at it; it doesn't bode well for MAC. If in fact the airport did not expand, and the runways, as is, serviced the larger planes, there could be two lawsuits, one by the city and a class-action lawsuit by Eden Prairie residents. Any way you look at it, MAC is up against it, even without NWA on their case.</p>	See General Response 4.
Vicki Pellar Price	135		<p>The Met Council whose responsibility to oversee and protect land use compatibility and assurances that water quality and environmental consequences are minimized, needs to reassess reliever mandates from 50 years ago, which were based on non-jet use and no dense population centers adjacent airports; this mandate is out-of-date, and out-of-touch. The Met Council is remiss in its duties to protect the public in terms of land use compatibility which impacts security and environmental consequences.</p> <p>The FAA's charter from Congress mandates that it serve two distinct functions: to oversee safety and to promote air travel. And, in fact, the vast majority of criticism leveled at the FAA in</p>	Comments noted.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>recent years is that it promotes air travel at the expense of safety.</p> <p>In the case at Santa Monica Airport, in California, one of the busiest General Aviation Airports in the nation, airport officials last year, at significant cost to themselves, implemented a ban on larger private jets because the airport had inadequate safety margins – per the FAA’s own standards – and no room to increase them. The FAA responded by serving the City of Santa Monica (which operates the airport) with a Notice of Investigation, claiming that it would be unlawful to prohibit the jets from landing – even as it acknowledged the inadequate safety margins. Could this happen in Eden Prairie at Flying Cloud Airport? This does not bode well for residents in Eden Prairie.</p> <p>We’ve come to expect that the FAA and MAC do not act in a community’s best interests, but we do expect that the Met Council, whose mission is to oversee regional planning, transportation, housing, water quality and management and open spaces, would not become a bureaucratic arm of support, a rubber stamp, for a project that has so little justification and would do so much harm to the quality-of-life in Eden Prairie.</p>	
Eden Prairie Chamber of Commerce	136	Supports project	<p>At the August 12 [2004] meeting of the Eden Prairie Chamber of Commerce’s Board of Directors, the Board voted unanimously in favor of the attached resolution supporting the expansion of the runways and building area at the Flying Cloud Airport. We would like to encourage the Metropolitan Airports Commission to complete the expansion in a timely manner.</p> <p>As you know, the Metropolitan Airports Commission purchased Flying Cloud back in 1947. Since that time, it has serviced the needs of a growing community, a community that serves as part of an economic engine for our business climate. In fact, a recent study by the Metropolitan Airports Commission indicates that the Flying Cloud Airport is responsible for 310 on site jobs, 1,220 related jobs and contributes \$90 million to the southwest metro’s economy. Furthermore, of all the reliever airports, Flying Cloud contributes the largest economic impact to our region.</p> <p>Competing the expansion at Flying Cloud Airport will continue to support the southwest metro’s growing economy.</p> <p>EDEN PRAIRIE CHAMBER OF COMMERCE FLYING CLOUD EXPANSION POSITION</p>	The study referred to was completed by the Metropolitan Council.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>STATEMENT:  WHEREAS, businesses are the source of jobs and economic vitality for the City of Eden Prairie, the surrounding communities and their residents, and;  WHEREAS, a recent Metropolitan Council study demonstrates that the Flying Cloud Airport provides 310 on site jobs, 1,220 related jobs and contributes \$90 million to the southwest metro economy, and;  WHEREAS, expansion of runways and business aviation building area will promote continued investment, enhance economic vitality and ensure modern facilities, in keeping with Eden Prairie's image as a prosperous as well as environmentally responsible community, and;  WHEREAS, a Final Environmental Impact Statement (FEIS) has been prepared by the Federal Aviation Administration (FAA) and the Metropolitan Airports Commission and submitted to the Minnesota Environmental Quality Board (EQB) which addresses all material environmental concerns, and:  WHEREAS, expansion of the runways will improve operational safety at the airport, and;  WHEREAS, expansion of the airport will promote improvements in security at the airport.  NOW THEREFORE BE IT RESOLVED, that the Eden Prairie Chamber of Commerce supports the expansion of runway and building area at Flying Cloud Airport and strongly encourages the Metropolitan Airports Commission to complete the expansion in a timely manner.</p>	<p>At the time this resolution was adopted, the document had not yet been submitted to the EQB for their review and determination.</p>
Steve Case	137		<p>I am a pilot, frequent traveler on NWA, and a consumer of aviation services and have a strong interest in aviation (paraphrased). That said, I strongly encourage the further development of regional airports. They enable an increased use of small aircraft which will help the local economy. The business leaders who may be interested in expansion into the metropolitan area may well arrive by private plane and we want them to have a good first impression as well as the ability to operate from a safe, less busy airport. Increased regional airport capacity, of course, also is highly desirable for any company using small aircraft for operations out of Minneapolis. Air travel is essential to all sorts of American business and we have to continue to make it desirable and available to more and more traffic. If Flying Cloud is to be further developed, however, money also has to be spent on improved automobile access as well as runways or else the convenience of air service has not been increased. It is extremely difficult</p>	<p>Comments noted.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>to get to Flying Cloud at hours other than mid-day.</p> <p>I would prefer the further development of Crystal Airport rather than Flying Cloud because of the significantly reduced road traffic. The recent completion of Highway 100 makes access to Crystal from the East much easier. Additionally, Crystal is further from MSP so that it better serves areas that are further from the south east portion of Minneapolis (while Flying Cloud is closer). I suspect that it is also less expensive to acquire land near Crystal compared to Eden Prairie and that this portion of the Twin Cities could more use the economic boost from services that will surround the airport.</p> <p>Regarding NWA objections to any expansion of regional airports, their bias is understandable as a for-profit company. They have a near monopoly on the local air service market after their allowed merger with Republic and they want to keep it this way. They want all money for aviation to be beneficial only to their direct interests. I understand their view but do not agree with it, even though I use their services and have a vested interest in their continued success.</p>	<p>Development of the Crystal Airport will not meet the full purpose and need for the project. It is expected that purchasing the fully developed residential and commercial areas around the Crystal Airport to provide sufficient space for the needed runway length and approach protection, not to mention the relocation costs for all of those residents and businesses, would far exceed the cost of undeveloped land in Eden Prairie.</p>
Kimberley Kaufman	138	Air Toxics	<p>I am very concerned about the toxic ingredients in jet fuel contaminating our air, soil and water. Expanding the runways so that corporate jets may use the airport will definitely increase the environmental pollution in our area. Your average business jet will be less than 1000 feet over people's homes that are within a three mile radius of Flying Cloud.</p> <p>There are no studies to date proving there are no toxic side effects of jet pollution on children. These kids breathe the air, play outside, roll around on the grass and drink the water, which over time becomes contaminated from whatever substances fall from the air down on to the surface of the earth. It is only a matter of time before it percolates down through the soil to reach the aquifers that we all draw our water from. If you have not consulted with Dr. Todd Anderson of The Institute of Environmental and Human Health about the toxic effects of jet fuel on the environment and humans, you haven't done your homework. The institute's phone number is 806-885-4567.</p> <p>There is an article in the Los Angeles Business Journal, dated May 12, 2003, by Laurence</p>	See General Response 7.



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>Darmiento detailing the environmental havoc that has been caused by perchlorate, a toxic product in military jet fuel. Many wells in Los Angeles have been closed due to contamination, and the Colorado river is also contaminated with this substance. Another issue I wanted to discuss was the problem with noise. I grew up in Richfield on 11th Ave. Noise pollution is not limited to a three mile radius of the airport. I know what has happened to East Richfield as a result of MSP, and I don't want the quality of life, real estate value, and environmental quality to go downhill. Granted, Flying Cloud is never going to have even a small fraction of the number of planes as MSP. It won't take that much of an increase in traffic at Flying Cloud airport to degrade the quality of life. The World Health Organization blames excess noise for an increased risk of hypertension and heart disease. A Dutch study linked hypertension with living near an airport. Several studies have found that workers exposed to noise are at higher risk for high blood pressure. One recent survey found that noise was the main reason people wanted to move out of their neighborhoods. At persistent and/or very high levels, it permanently damages hearing. Aside from its adverse effects on hearing, the uncontrollability of noise, rather than its intensity, seems to be the greatest irritant. Noise you can't shut off is likely to have more severe effects on your emotional well-being. People may adjust to noise and learn not to hear it, but that's not necessarily better for their health. Noise impairs performance of school children and others subjected to it while working,</p> <p>Persistent exposure to noise can cause sleep disturbances, discomfort, anxiety, depression, and headaches. It can make psychiatric disorders worse. As noise levels rise, so has the number of organizations, laws, and ordinances trying to cope with the problem. In Congress, there are at least ten bills aimed at regulating noise, mostly from airplanes. Phil Boyer, President of the Aircraft Owners and Pilot's Association (AOPA), states that his members supported "preserving and maintaining the current infrastructure rather than looking for expansion projects." Jerry Bryndal, a pilot who has used Flying Cloud airport for twenty years, says, "I do not know of a valid financial return for the city to justify subjecting our community to the many negatives that would come from the expansion." The FAA has studies showing that General Aviation does not cause congestion at major airports like MSP. The FAA participated</p>	

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>in the deal between MAC and the City of Eden Prairie, which promised not to increase the 60,000 pound weight capacity of runways. Now the FAA is rejecting weight restrictions for runways. This means there is no safeguards in place for protecting the City of Eden Prairie and its residents from the negative impact of the expansion. If you expand the airport at Flying Cloud, you will degrade a large portion of the City of Eden Prairie, our city that we chose to live in, raise our children, and develop community with our neighbors.</p>	
<p>Nina and Dick Cottrell</p>	<p>139</p>	<p>Property Value</p>	<p>I am writing to register my wife &amp; my opposition to the proposed expansion. The increased traffic will have a potential negative impact on residential property value in the area affected by approaching and departing traffic. We see evidence of this at the MSP terminal – increased noise insulation of homes to protect residents but of course no way to make their back yards and parks similar to other areas outside the approach areas.</p> <p>If there is a documented decline in residential value following an expansion, could this result in a class action law suit over loss of property value? Have you included this potential expense in your estimates? What plans and assumptions for cost have been made to provide noise insulation services for residences adversely affected in order to provide equity of treatment similar to the main airport? In case you have not noticed, jet powered planes are much louder than prop driven ones. This expansion will increase jet traffic.</p> <p>This impact is not only a noise issue but also a potential for property damage. While we may receive free tree-top trimming by errant pilots approaching or leaving the airport, we don't feel this reward offsets the potential for property damage and reduction in residential property value.</p>	<p>See General Response 5.</p>
<p>Janice Obrecht</p>	<p>140</p>	<p>Air Toxics          Noise</p>	<p>My concerns are twofold. First. I understand that air emissions from airplanes hang in the trees near airports. We have a small forest behind our home that many neighbors also enjoy. I would like the air quality behind our home tested for emissions to see the environmental impact this airport is currently having on our neighborhood. Of the people that live by our ravine (which is connected to Purgatory Creek) seven of the twelve homes have experienced cancer in the last three years. The air quality needs investigation.</p> <p>Second, the noise from airplanes early in the morning wakes us up most Saturdays before 6:00am. How would you like to be woken up</p>	<p>See General Response 7.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			that early on Saturday? I have called the city officials who simply claim not to have any ability to help. What is the answer? Definitely not expansion! Please consider this heart felt plea before moving forward.	Noise mitigation measures are defined in the FEIS, V-48.
Cathy Lamovec	141	Property Values  Cost	<p>I am a citizen of Eden Prairie. My life savings are invested in my home, which is not far from the airport. I know that the expansion will negatively affect property values, but my reasons for being against the expansion go beyond that.</p> <p>It has been documented that most of the traffic at Flying Cloud is recreational or training - some estimates are as high as 97. The expansion would not offload MSP to any significant degree. The expansion costs have been estimated at around \$89 million dollars. For what?</p> <p>With the downturn in the aviation industry in general since 9/11, several major carriers are in danger of going out of business as it is. I can't imagine anyone in a position of making this decision who would look at all of the facts and then decide to spend the taxpayer's money. Please use your heads wisely. The money that you are deciding to spend does not belong to you. Please remember that.</p>	<p>See General Response 5.</p> <p>See General Response 2.</p>
Kurt Egertson	142	Noise	<p>My concern regarding the environmental impact study is that I believe the study to be flawed, particularly regarding noise impact.</p> <p>I believe that the study makes assumptions that airplanes take off and land along the line of the runways. In reality, when planes are taking off to the "west", the airport employs a protocol (for lack of a better term) that directs planes to turn to the southwest as soon as possible - voluntarily. MANY planes do this. I think the noise impact is magnified because the planes have to keep their engines at higher throttle levels to maintain altitude or climb while banking to the southwest.</p> <p>I live southwest of the end of the runways and notice many planes flying directly over my house and neighborhood—due to this protocol. It once made sense because housing development was more sparse around here. Now, the protocol no longer makes sense.</p> <p>I also believe that the protocol to turn southwest is not contemplated in any of the studies. I would ask that either you rework the studies or end the protocol to turn southwest.</p>	<p>This 'protocol' is a part of the noise mitigation plan in the FEIS that was developed by the EIS Noise Mitigation Committee that included the mayor of Eden Prairie.</p>
Robert Lawrenz	143		<p>I believe the following are good reasons not to expand: 1) Airplanes are dirty and add to air pollution in our area; 2) Airplanes are noisy and are a degradation of our right to the quiet enjoyment of our property; and 3) the airport</p>	<p>See General Responses 2 and 7.</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
Cynthia Workman	145	Land Use and Noise	<p>I am reading this mornings Star Tribune and I am very unhappy. I recently purchased a new single family home at the Hennepin Village association on highway 1. I was told that the land adjoining the airport was purchased to keep residential building at bay - not for the expansion of the airport.</p> <p>We have lived here since May 2004. I love the area and our home. I do not like the airport noise. It is very obtrusive in our day. I cannot be on the telephone anywhere in my house if the windows are open and a plane takes off or lands. We are up by 5:45 am during the week days so with our hustle and bustle we don't notice the morning airplane takeoffs or the planes coming home after 5:00 pm. But, on the week-ends, now that's a different story. We look forward to sleeping in - with kids that's hard to do. But, with the airplanes taking off - it's impossible. I had no idea the noise would be this constricting. No one does until they live by it. And, I think it has gotten worse. It seems the planes are much louder or there are more of a certain kind of plane that doesn't get as high or something but it is different now.</p> <p>In the article, Joe Smith, General Manager of Elliott said that this expansion would allow for more planes and more variety. I'm afraid of that - more planes - non stop noise and variety - louder planes!</p> <p>Our housing area has 3 groups of Hennepin Village my group is in the middle of the sub-division we have 150 homes. The group being built up now is 300 and it is right next to the airport land and next year they will be starting 600 homes West of us. This is a lot of homes just sitting West of the runway. I hate to see their faces when they hear what I hear now.</p> <p>Please do something to stop this expansion. I know that the runway expansion is going East and West. Why not send the expansion North and South over the river instead of over our housing sub-division. The article also had concern about the Wild Life Refuge being damaged by the additional traffic. Gosh - no mention about the damage to our lives financially, physically, and emotionally. What on earth are we thinking these days.</p> <p>I look forward to hearing a NO on this proposal.</p>	<p>The air traffic patterns around the airport have been in place for more than 30 years, and the proposed expansion will not change them significantly. Neither the MAC nor FAA control land use zoning decisions in Eden Prairie or any other city. The proposed expansion of the Airport has been available for public review and comment since 1998. There has been considerable attention devoted to the expansion by the City Council and many residents and with coverage by the local newspaper.</p>
Mark Diede	146		<p>I thought I read somewhere that flights are currently diverted from or will eventually be diverted from the river bluffs due to pollution. Sorry folks a goose does not equal a kid.</p> <p>If we are to expand an airport in the city then the environment must suffer, not the children playing on the grass. Build a new airport in a</p>	<p>This is incorrect. The preferred path after takeoff to the east is over the bluffs.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>cornfield and do not let any development within 20 miles of it.</p> <p>Whenever I drive past that bluff area, I imagine what a developer could do. Ballpark anyone? At any rate, I oppose any expansion of the airport.</p>	
Bob Breckner	147	Supports project	<p>We definitely need to expand the FCM airport! It is the jewel of the southwest metro area and is ripe for expansion to serve the growing business/residential communities!</p> <p>Adding another 1000 feet of runway will not change the overall character of the airport but will provide for several aircraft to utilize the airport versus going to MSP. The additional traffic would be generally light jets that have single takeoff and landing operations. These aircraft are quieter and have higher performance and can obtain altitude very quickly.</p> <p>It will also provide an additional safety factor for the current users! The current 3950 ft already severely limits operations when wet or contaminated runway conditions exists. I know of aircraft that take off to MSP to load up on passengers and fuel! What a waste of time, fuel and a takeoff/arrival slot.</p> <p>FCM has not changed in over 25 years! It has been a vacuum for improvements!</p> <p>Why do we continue to provide Northwest with all of the funds when no capital improvement money is sent to FCM? It is interesting that the most subsidized company in Minnesota (Northwest) claims that they are the ones subsidizing the general aviation community (that according to one of our own State Legislators). When the decision was made to keep MSP at the current location, one of the objectives was to improve the reliever airport system. This has not happened!</p> <p>I hope we can reverse a 25 year trend of no improvements and make the most of a very important asset!</p>	Comments noted.
Paul Breckner	148	Supports project	<p>I understand that you are both involved in collecting letters regarding the expansion of Flying Cloud airport. I am hopeful that you will agree and understand the importance of General Aviation.</p> <p>If one were to carefully look at the corporate expansion in the Twin Cities, many companies have located in the southwest corridor. Many of these companies utilize FCM and either operate or charter aircraft. The airport has become a larger asset to the community in the post 9-11 turmoil that has increase at all major airports.</p> <p>The airport has been ignored too long and if we are to forecast future growth, I do not think MSP can handle the traffic. I support the expansion!</p>	Comments noted.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
John Lindstrom	149	Supports project	<p>As a pilot and an instructor currently working at the Flying Cloud Airport, I would like to voice my support for the planned expansion of the Flying Cloud Airport. I have been a pilot since 1991, and began flying as a student at the Crystal Airport. When I was hired by Hummingbird Helicopters and began working at Flying Cloud, I could not believe the difference between these two airports. The clear space provided around the Flying Cloud Airport shows that the safety of the public has been a high priority of the MAC and the FAA. Unlike the Crystal Airport, where the communities of Crystal, Brooklyn Park and Brooklyn Center have allowed developments to encroach right to the fence line, Eden Prairie has maintained a safe and community friendly buffer zone around Flying Cloud. This space must be maintained for the safety of both the aviators and the citizens. The planned runway expansion takes that into account.</p> <p>The additional hanger space planned for the south side of the airport is crucial for the growth of general aviation at Flying Cloud. Many of the businesses currently housed at Flying Cloud have been limited in their growth due to the physical dimensions of the existing airport. By allowing the new construction on the south side many businesses, including Hummingbird Helicopter, will have an opportunity for new growth and revenue.</p> <p>I would also like to go on record as one who resents the continued interference by Northwest Airlines in the plans for any investments in the reliever airport system. In their own publication the president of Northwest has publicly stated his resentment towards general aviation. His comments about airlines 'subsidizing' private aviation ignore the truth of the issue. If it were not for the success of the reliever airports, airlines such as Northwest would be staggered by the cost of sharing the Minneapolis / St. Paul International Airport with student, private and corporate aviation. Ground and flight operation delays would cost them millions of dollars. Northwest cannot be allowed to rule the decision making process simply because they are the biggest bully on the block.</p> <p>Thank you for your time, your consideration, and your concerns for the health and safety of general aviation.</p>	Comments noted.
John Rice	150	Supports project	The extension of the runways is a safety issue for general aviation pilots, who are overburdened as a rule with costs and fees that they do not realize any benefit from. Hundreds of millions of dollars have been paid by GA	Comments noted.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>pilots into the Trust Fund which is being used for general budget purposes, and almost a billion dollars sits while we continue to pay huge taxes on fuel and other airport related fees. The money which is being presented for the FCM improvements has already been paid by GA pilots, why shouldn't it be used for the safety and enhancement of those that paid it in?</p> <p>Northwest Airlines is a bully who threatens anyone or any company who does act strictly in Northwest s interests. They mercilessly play fare games with other low costs airlines interested in making MSP a destination (Southwest for example); yet hold the public hostage with an incredibly decadent rate system. Rather than figure out costs, add a fair margin and charge by the mile, they alienate passengers with poor service and indecent fares for those having to fly last minute (business OR pleasure), and then beg for assistance when their system doesn't show them profitability yet they refuse to make changes. They institute self service capabilities to have their customers I do more work in the reservations process, but give nothing back to those passengers for the extra work involved. If Northwest does everything possible to drive GA pilots out of larger airports, then fight tooth and nail to keep dollars GA pilots have already paid for improvements from going to those improvements.</p> <p>They want it both ways. It is prohibitively expensive for GA pilots not being subsidized on a corporate expense account to pay ramp fees and fuel costs at larger airports, yet they also do not want any of our paid in tax dollars going for improvements at airports we can afford.</p> <p>Please consider using GA Trust fund money to pay for the improvements needed at GA airports. If you can not allow for the improvements at GA airports, then please at least reduce the incredible fees and taxes imposed on GA pilots to utilize publicly owned facilities at all airports.</p>	
Stephen and Mary Chicoine	151		<p>We are writing to you to express our deep concern as to the proposed development of the Flying Cloud Airport in Eden Prairie, MN. We cannot imagine how anyone can (properly) assess the environmental impact and approve the expansion with the resulting increased air traffic at low altitude over the residential areas, as well as the adjacent wildlife refuge. The issues across a broad spectrum of air and noise pollution are only too obvious. Does it help for me to add that I have a graduate degree in engineering?</p> <p>There is no doubt in our minds that this is yet one more case of business taking top priority and shoving its agenda through, regardless of the</p>	<p>See General Response 7.</p> <p>See General Response 1.</p>



Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>common good. As citizens and taxpayers, we expect you to recognize the obvious and block this unnecessary expansion. It will benefit but a few who fly private jets. Seriously now, is that for the overall common good? We sincerely would appreciate some dedicated civil servants standing up for the common good. We deserve more of that in this nation of ours.</p> <p>The Eden Prairie Chamber of Commerce does not represent the people of Eden Prairie. I trust that is apparent to all concerned.</p>	
Mike and Eileen Benz	152		<p>The first letter we ever wrote to the MAC regarding the proposed expansion of Flying Cloud Airport was when our youngest son was just barely two years old. This year he started his senior year at Eden Prairie High School. My how sixteen years have flown – and here we are – still writing letters voicing our concerns against the expansion!</p> <p>Up until two years ago we lived in a house on Spring Road that would have been positioned just a stone's throw away from the end of an extended 9R/27L. We'd seen over a half dozen different scoping documents. Initially our house was an acquisition property. Then it wasn't. DNL contour lines changed like the seasons. We always got the feeling from the MAC that because we weren't in a defined neighborhood - we didn't matter. With an extended runway, noise mitigation would have many of these planes turn south and head out over the Minnesota River valley. That turn south technique would put those planes right over the top of our house. But, because there were only a few houses in the area, MAC didn't seem to care. How ironic that our property (and that of our two neighbors) was purchased by a developer who fashioned high density housing (Hennepin Village) out of the old "neighborhood". I wonder if MAC is ignoring this neighborhood now.</p> <p>As I shuffled through our box of expansion documents, I came across some preliminary cost estimates for the expansion project in the July 1991 EAW/DSDD. Seems the project was pegged in the \$11.5 million dollar range (\$2.6 for land, \$8.9 for construction and improvements). In the final EIS, the costs are listed in the \$41 million dollar range (\$18.5 for land, \$22.5 for construction and improvements). What ever was MAC thinking? I think it shows MAC'S complete lack of fiscal responsibility toward the whole project and the taxpayers that foot the bill. Of course we know that \$41 million is probably a very conservative figure. In this day and age (actually any day or age) I find it</p>	<p>See response to Comment 145.</p> <p>See General Response 1 and 2.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>hard to justify spending this amount of money to benefit such a small number of people. Especially since the people that will benefit most from this project are already operating at significantly subsidized rates.</p> <p>The MAC has not been forthcoming with the City of Eden Prairie and its citizens. Reneging on Ordinance 51 was quite the tactic. Cost/benefit analysis just doesn't add up. Here's a novel idea - perhaps the MAC should utilize its existing facilities. We know that Flying Cloud Airport will always be part of our backyard, we can't argue that. We can argue against further expansion. It's not wanted. It's not needed.</p>	<p>As discussed in the FEIS, V-46, discussions between MAC, the FAA and the City of Eden Prairie resulted in the amendment to Ordinance No. 51.</p>
John and Patricia Duffy	153	Property Values and Safety	<p>We live several blocks from the Flying Cloud Airport. The airport traffic is noticeable at the present time but seldom overly intrusive. However the areas surrounding the airport are all being developed mostly with multiple family dwellings resulting in reduced open areas. We believe that the proposed expansion will significantly increase the noise pollution and increase, the probability of airplane accidents in and around the airport. In addition both of these elements will in the future reduce the value of all of the homes and housing in the area. The published information that we have seen strongly indicates that the other existing regional airports in our area will support all future small aircraft needs without the proposed expansion of the Flying Cloud Airport.</p>	<p>See General Responses 3 and 5, and response to Comment 145. MAC's No-Action and Proposed-Action land acquisition of runway approach areas and proposed runway extensions will enhance the safety for all airport operations.</p>
Guilherme Schmidt	154	Supports project	<p>I wanted to express my opinion of support for the Flying Cloud Airport expansion. I am a firm believer that air transportation is part of our progress and evolution. Airports are like roads, they come with progress, and nobody likes more and wider roads, but they are necessary to accommodate traffic and make car traveling safer. Same goes with airports. With the incoming advent of the very light jets. There will be increasing burden on airports, and safety must come first. Also a solid and exemplary relief airport system is crucial for the state of Minnesota. Delays at MSP makes flying into MN undesirable. A strong relief system. alleviates traffic at MSP and give more options for charter flights and attract more business at MSP. Undoubtedly the economic impact of the expansion of Flying Cloud would be positive for the city of Eden Prairie and for the state of MN. Let alone the number of jobs that would be created by airport business expansion, we would host more business conferences in town, as access to charter flights would be easier, more people would consider corporate aircraft</p>	<p>Comments noted.</p>

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			<p>ownership, since getting in and out of Flying Cloud is a lot easier than MSP, and airlines passengers would be happier with fewer delays due to general aviation traffic moving away from MSP. Money spent in progress is money well spent. The environment issues can be addressed with proper traffic procedures and voluntary night restrictions. But above all things safety is a must. The runway system at Flying Cloud is old and with the increase in traffic and demands of private air travel. I would hate to see our air transportation infrastructure see the same destiny that our road system is now seeing. Suffering from bottle neck capacity due to lack of visionary planning and investments.</p>	
John Hamel	155	Visual Impacts	<p>Thank you for responding to my phone call today, it is nice to know we have local representation on issues as the neighbors closest to the airport. I am not opposed to the expansion, primarily because of the buffer zone land that has been purchased and thus will not be developed. I am concerned about the impact on the neighbors to the west, when the strobe lights are extended to the west 1200 feet and the excessive for these lights. Scott Kipp senior planner of Eden Prairie indicated there would be a bowl effect of where the lights are located and this would keep the light pollution to a minimum. I have not been able to verify that these issues have been considered, addressed and assured by an approved grading plan.</p>	See response to Comment 19.
Joe Dahmer	156	Purpose and Need	<p>I am President of Betaseed, Inc, a medium sized agricultural seed company located in Shakopee, MN. Betaseed does business throughout the western two-thirds of the US and internationally. As such, many of my fellow employees and I travel extensively and frequently, both domestically and internationally. A viable and stable commercial airline industry is vital to our business. I am writing to ask you to oppose the expansion of Flying Cloud in Eden Prairie, MN. My company and the entire region as a whole will benefit much more from investing available funds in MSP rather than in the expansion of Flying Cloud. Betaseed and most other commercial businesses in this region depend heavily upon commercial air carriers, and any action that would weaken their competitive position would be detrimental to the region. As you know the airline industry is in terrible financial condition, and it is doubtful this will improve significantly in the next 5-10 years. We are fortunate that our primary MSP carrier, Northwest Airlines, is stronger than most others. I am glad my company does not face the prospect of having its principal airline facing</p>	

Commenter	No.	Subject	Summary of Comment on FEIS	Response
			liquidation. Available funds should be directed to MSP as a means of supporting commercial airlines serving MSP to assure that MSP does not become a "spoke" instead of a "hub". Granted, expansion of Flying Cloud would likely benefit the companies that supply services at this airport and some companies and individuals that rely on larger aircraft that are not able to use the current Flying Cloud runways. However, the damage that will be caused by expansion far outweighs the benefits, and I urge you to oppose the expansion of Flying Cloud Airport.	Improvements at MSP do nothing to provide safe, efficient and convenient facilities at FCM, and do not meet the Purpose and Need for the project.  See General Response 1.
Nancy Kimball	157	Alternatives	(transcript of telephone message) I am a resident of Eden Prairie and I just wanted to call and tell you that I am against the expansion of the Flying Cloud Airport, and I think it is wasting money and I think there are other alternatives that can exist. I know that there are quite a few citizens out here that don't want the expansion and I think that you could have some other alternatives.	See General Response 3.
Pat McCarthy	158		(transcript of telephone message) I am a resident of Eden Prairie and I am calling to let you know that I am against the expansion as a resident of Eden Prairie of the Flying Cloud Airport. I don't think it is needed, I don't think it is necessary and I'd like anybody in the airport commission to do whatever they can to stop it.	Comment noted.
Mrs. John Davis	159	Alternatives	(transcript of telephone message) I would like to call and express that I do not think that there should be any expansion of Eden Prairie because there are other alternatives and I am against any expansion and wasting of government money. I am tired of the government wasting our money. So it is unwarranted and other alternatives exist.	See General Response 3.
Nancy Aerieta	160	Alternatives	(transcript of telephone message) I want to let you folks know that I don't want an expansion and I don't want all the government money wasted. I don't want the Flying Cloud expansion done. There is a cheaper way to go and it is unwarranted to expand. No expansion at Flying Cloud please.	It is not clear what is meant by "a cheaper way to go" or to what alternatives this refers. See General Response 1 and 3.
Grace Wilber	161	Alternatives	(transcript of telephone message) I am thoroughly opposed and against Flying Cloud Airport expansion. It will be wasting government money when the data shows Flying Cloud expansion is unwarranted and cheaper alternatives exist. The noise is a huge factor and also depreciation of my property which I have worked hard for and don't want to have to get rid of at a low price because of your expansion.	See General Response 3 and 5.

Commenter	No.	Subject	Summary of Comment on FEIS	Response
<b>Comments received after the end of the comment period:</b>				
Mark Smith, National Waterworks	162	Supports project	<p>National Waterworks (NWW) is a resident business of Eden Prairie, MN and we have many opportunities to use Flying Cloud Airport. NWW is a distributor of products for the underground construction market. Whether we are flying out for a plant tour or a vendor is flying in to see us, we use the Flying Cloud facility multiple times a year.</p> <p>I understand that the expansion of Flying Cloud is under consideration. I strongly recommend the further development of the airport to stay in tune with the times. I would like to share the following real life example with you. We were picked up at Flying Cloud for a plant tour in Texas. The plane was a Citation jet owned by one of four of our vendors. The pilot was an air force reserve pilot and very familiar with the plane. I was able to sit in the front seat with the pilot.</p> <p>Both on takeoff and landing the pilot had to perform extraordinary maneuvers because of the short runways. While both takeoff and landing we safe and within parameters, he still had to perform these functions under less than desirable conditions. The increased angle on takeoff was quite the ride. I do believe that a longer runway would make these maneuvers unnecessary.</p> <p>I would appreciate it if you would consider this information during your decision making process.</p>	Comments noted.
Lynne Etling	163		<p>Our whole neighborhood is strongly against the recent news concerning expansion of the airport. I think Jerry Bell sums it up "The question begs to be answered – if the pilots using the airport are against it and the community does not want it, who is behind the push for this expansion? We like our airport as it is – a friendly neighborhood spot to enjoy some aviation. The usage numbers do not support expansion, the cost does not support expansion, the noise does not support expansion, the pollution does not support the expansion."</p> <p>My husband and I love the animal life that our neighborhood brings. Expanding the airport will not only harm the human residents but it will also harm the wildlife in the area. Staring Lake will not exist as it is today. I urge you to stop any push to expand the airport.</p>	<p>See General Response 1 and 6.</p> <p>The proposed runway extensions are on the east-west runways, not the north-south runway that routes traffic over Staring Lake.</p>



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

RECEIVED  
AUG 18 2004  
REPLY TO THE ATTENTION OF:  
Airport Development

AUG 13 2004

B-19J

Mr. Glen Orcutt  
Federal Aviation Administration  
6020 - 28<sup>th</sup> Avenue, Suite 102  
Minneapolis, Minnesota 55450

✓ Ms. Bridget Rief  
Metropolitan Airports Commission  
6040 - 28<sup>th</sup> Avenue South  
Minneapolis, Minnesota 55450

**Re: EPA Review and Comments on the Final Environmental Impact Statement for the Expansion of Flying Cloud Airport, Eden Prairie, MN (FAA) (CEQ No. 040276).**

Dear Mr. Orcutt and Ms. Rief:

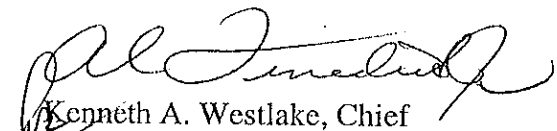
Thank you for submitting the above referenced Final Environmental Impact Statement (FEIS) dated June 2004. We appreciate your coordination with us, and the steps taken to address the U.S. Environmental Protection Agency Region 5 (EPA) comments regarding the December 1999 Draft EIS (DEIS) and August 2001 Supplemental Draft EIS (SDEIS) for the proposed expansion of Flying Cloud Airport (FCM). We have reviewed the information presented in the FEIS in light of the concerns presented in our September 24, 2001, letter regarding the SDEIS and offer the following comments.

**General Conformity Determination** - EPA concurs with the Final General Conformity Determination presented in the FEIS. | /

**Air Toxics** - Regarding FAA's response to comment #267 (FEIS, Volume II, p. 42) concerning air toxics, EPA has NOT conducted "preliminary research [indicating] that concentrations of air toxics are not significantly influenced by aircraft activity." In addition, the statement that "most air toxic emissions are generated by ground transportation and by manufacturing and chemical plants" is a little too broad and there is no reference given to support the statement. EPA requests that these statements be appropriately modified in the Record of Decision (ROD). For further information concerning EPA research and air toxics please contact Suzanne King, Air and Radiation Division at (312) 886-6054. | 2

- 3 | **Noise Mitigation** - Appendix A (FEIS, Volume I) includes a signed *Final Agreement Concerning Flying Cloud Airport and Metropolitan Airports Commission Ordinance No. 51 - December 2002* (Final Agreement) between the City of Eden Prairie and the Metropolitan Airports Commission (MAC). We note that the MAC will continue its summer monitoring program of aircraft noise at FCM (FEIS, Volume II, p. 39), and will mitigate impacts in accordance with the mitigation measures found in Section V.Q.3 - Mitigation Measures (FEIS, Volume I) and the Final Agreement. We are pleased to see that the FEIS mitigation measures and Final Agreement prohibit nighttime run-ups between the hours of 10:00 p.m. and 7:00 a.m. The FEIS and Final Agreement mitigation measures should become part of the ROD for this proposal.
- 4 | As long as all FEIS mitigation measures and appropriate modifications to response #267 are included in the Record of Decision, we have no further concerns with the National Environmental Policy Act (NEPA) documentation for this proposal.
- 5 | Please provide us with a copy of the Record of Decision for this project when it becomes available. If you have any questions, please contact Virginia Laszewski of my staff at (312) 886-7501 or e-mail her at: laszewski.virginia@epa.gov.

Sincerely,

  
Kenneth A. Westlake, Chief  
Environmental Planning and Evaluation Branch



Minnesota Department of Transportation

Metropolitan Division

Waters Edge  
1500 West County Road B2  
Roseville, MN 55113

RECEIVED  
JUL 21 2004  
Airport Development

July 20, 2004

Ms. Bridget Rief  
Metropolitan Airports Commission  
6040 - 28<sup>th</sup> Ave. South  
Minneapolis, MN 55450

SUBJECT: FEIS Expansion of Flying Cloud Airport, Mn/DOT Review #FEIS04-001  
NE Quad of TH 212 and CSAH 4  
Eden Prairie, Hennepin County  
Control Section 2744

Dear Ms. Rief:

Thank you for the opportunity to review the above referenced Final Environmental Impact Statement (FEIS). Mn/DOT's concerns from our October 3, 2001 letter regarding the Draft EIS have been addressed. If you have any questions regarding this review please feel free to contact me at (651) 582-1378. | 6

Sincerely,

A handwritten signature in cursive script that reads 'Brigid Gombold'.

Brigid Gombold  
Senior Transportation Planner

Copy: Glen Orcutt / Federal Aviation Administration  
Bob Byers / Hennepin County Planning



August 6, 2004

RECEIVED  
AUG 09 2004  
Airport Development

Bridget Rief  
Metropolitan Airports Commission  
6040 - 28th Avenue South  
Minneapolis, MN 55450

RE: Metropolitan Airports Commission - Expansion of Flying Cloud Airport - Federal Environmental Impact Statement (FEIS) -- City of Eden Prairie  
Metropolitan Council District 3 (Mary Hill Smith, 952-475-1388)  
Metropolitan Council Review No. 18168-3


Dear Ms. Rief:

7 Metropolitan Council staff has conducted a review of the FEIS for Flying Cloud Airport in Eden Prairie. The FEIS is for the proposed extension of the primary runway from 3,900 to 5,000 feet, extension of the parallel runway from 3,600 to 3,900 feet, development of a new south building area, acquisition of land and the implementation of other related improvements at Flying Cloud Airport. The Council's staff reviewed and commented on the draft EIS (Review File No. 18168-1) for this proposed project in February 2000 and on the Supplemental DEIS (Review File No. 18168-2) for this proposed project in October 2001.

Staff review finds the FEIS adequately addresses regional concerns and its potential for significant environmental impact.

If you have any questions or need further information with respect to these matters, please contact either Jim Uttley, AICP, Planning Analyst and Principal Reviewer, at 651-602-1361 or Robin Cauffman, AICP, Sector Representative, at 651-602-1457.

Sincerely,

  
Phyllis Hanson, Manager  
Planning Technical Assistance

cc: Mary Hill Smith, Metropolitan Council District 3  
Mark Vander Schaaf, Director, Planning and Growth Management Department  
Cheryl Olsen, Reviews Coordinator  
Robin Cauffman, AICP, Sector Representative, Office of Planning & Technical Assistance  
Jim Uttley, AICP, Principal Reviewer, Office of Planning & Technical Assistance

\\Reviews\Other Agencies\MAC\Letters\MAC 2004\FEIS Expansion of Flying Cloud Airport 18168-3

## Lower Minnesota River Watershed District



RECEIVED  
SEP 01 2004  
Airport Development

Edward A. Schlamp, President  
Hennepin County  
Ron Kraemer, Vice President  
Dakota County  
Lawrence Samstad, Treasurer  
Scott County

Leo Forner, Secretary  
Carver County  
Len Kremer, Assistant Treasurer  
Hennepin County  
Terry L. Schwalbe, Administrator  
Cell (952) 221-1089

August 31, 2004

Ms. Bridget Rief  
Metropolitan Airports Commission  
6040 - 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450

### RE: Flying Cloud Airport Expansion/FEIS

Dear Bridgett:

I am re-sending the written comments previously submitted dated August 14, 2004 with a new date of August 31, 2004 that now include a further motion of comments found on pages two and three herein made by the LMRWD's Board of Managers at their August 18, 2004 board meeting.

#### Remarks:

The Lower Minnesota River Watershed District (LMRWD) has reviewed the Flying Cloud Airport Expansion Final Environmental Impact Statement (FEIS), including responses to comments, prepared for the Flying Cloud Airport Expansion project. We offer the following comments for your consideration in your response to the Metropolitan Airports Commission (MAC) and the Federal Aviation Administration (FAA).

#### Water and Sanitary Sewer Issues Related to Water Quality

It appears that the water supply and sanitary waste issues previously raised will be resolved with hookup to City of Eden Prairie services. The FEIS indicates that as of June 2003, MAC has connected to the Eden Prairie municipal water and sewer system and that airport properties along TH 212 have hooked up to the connection. Properties along Pioneer Trail are scheduled for hookup in 2005. The LMRWD supports the continued hookup of airport properties to the municipal facilities and encourages proper abandonment of the old facilities prior to the start of airport expansion activities.

8

#### Glycol and Deicing Issues

The LMRWD acknowledges that the use of deicing chemicals at the Flying Cloud Airport is less than that at the MSP International Airport, and that the method in which those chemicals are applied is somewhat different. In particular, we note that the use of deicing chemicals is minimized with the use

9

- 1 -

Scott County Government Center  
200 4<sup>th</sup> Avenue West  
Shakopee, MN 55379  
Phone: (952) 496-8842, Fax: (952) 496-8844  
E-mail [terrys@lowermn.com](mailto:terrys@lowermn.com)

## *Lower Minnesota River Watershed District*

9 | of heated hangars and indoor storage of planes. We also note that when needed, deicing is conducted in isolated apron areas. However, we reiterate that the use of these chemicals in any amount for deicing planes and runways poses a potential contamination issue and that a glycol/deicing management plan should be prepared for the airport. Specific information related to the capture and disposal of these chemicals was not provided in the environmental documents nor was specific information provided in the responses to our previous comments.

### **Surface Water Runoff**

10 | The LMRWD is pleased to see that storm water management at the airport will comply with the LMRWD Water Management Plan in that it will limit runoff rates from the site to the pre-development rate. We also note the inclusion in the FEIS of existing and proposed drainage scenarios for the airport and are looking forward to the formal submittal of the project's storm water drainage design for review and permit. We would like to see more specific information as to the Best Management Practices that will be implemented and the temporary and permanent erosion and sediment control measures that will be utilized. We would appreciate the opportunity to work with MAC on the design of appropriate storm water management and erosion and sediment control plans that will ensure the protection of the Minnesota River and other surface waters in the area.

### **Potential Spills and Other Pollutants**

11 | The environmental documents and responses to comments did not provide specific information as to methods that are being used and/or will be used to prevent and contain potential spills, and manage other pollutants routinely generated during operation of the airport. The LMRWD acknowledges that the airport and some of its tenants are required to prepare SPCC and SWPP plans for MPCA approval, and that several tenants are registered hazardous waste generators. Given this, it seems possible that more detailed information could be provided as to how spills will be prevented, how they will be contained if they occur, and how other pollutants generated at the airport (deicing chemicals for planes and runways, chemicals used in routine maintenance and repair activities, wash water from plane washing, fuel, etc.) will be handled, stored and/or disposed of.

### **Further Board Comments**

In addition, the board made the following motion of comments at their August 18, 2004 board meeting:

12 | **It was moved and seconded to approve the memorandum with the additional two comments/questions:**

1. Has MAC had any previous discharge violations, historically, with glycol into the Minnesota River.

13 | 2. Do the measures you are proposing to take eliminate future discharges?

14 | 3. The LMRWD requests that in addition to questions shown above that that MAC respond to each of the issues/comments specifically stated in this comment letter of August 31, 2004.

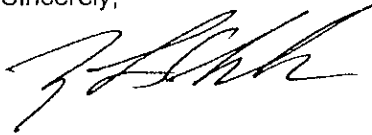
*Lower Minnesota River Watershed District*

4. We want to hear back from you that you have implemented these standards and if not, why not, and have them send us a copy of the final plan or conditions adopted.

15

We hope you find our comments useful. If you have any questions, please call Terry Schwalbe (LMRWD) at 952-496-8842, Lisa Fay (Bonestroo) at 651-604-4866 or Dan Edgerton (Bonestroo) at 651-604-4820.

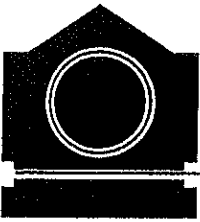
Sincerely,



Terry L. Schwalbe  
District Administrator

- 3 -

*Scott County Government Center  
200 4<sup>th</sup> Avenue West  
Shakopee, MN 55379  
Phone: (952) 496-8842, Fax: (952) 496-8844  
E-mail terrys@lowermn.com*



The City of

# Eden Prairie

8080 Mitchell Road • Eden Prairie, MN 55344-4485 • edenprairie.org • 952-949-8300 • TDD 952-949-8399

August 16, 2004

**RECEIVED**  
**AUG 17 2004**  
**Airport Development**

Ms. Bridget Rief  
Metropolitan Airports Commission  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450

SUBJECT: Comments on the Final Environmental Impact Statement for the Expansion of Flying Cloud Airport

Dear Ms. Rief:

The City of Eden Prairie has reviewed the Final Environmental Impact Statement for the Expansion of Flying Cloud Airport (FEIS). Consistent with the commitments contain in the Final Agreement between the City of Eden Prairie (City) and the Metropolitan Airports Commission (MAC) (December 2002) our comments are based on the need for additional environmental disclosure.

16

1. Air Quality. MAC's response in the FEIS on our request to have an air quality receptor located at the approach end of runway 9R is not adequate. The air quality receptor is necessary to evaluate emissions and its effect on the environment regardless of the area being within a runway clear zone. According to the FEIS this runway will experience the greatest number of takeoffs and landings. Further analysis is essential to fully evaluate the potential environmental impact of the proposed expansion, and that the general conformity determination has been satisfied.

17

2. Operations Forecast and Runway Use. The FEIS fails to provide the factual documentation necessary to support the changes made in the operational forecasts and runway use patterns. These two critical assumptions determine the basis for evaluating potential environmental impacts, especially aircraft operations over populated areas, overflights of bird concentrations, and noise.

18

3. Noise. The Integrated Noise Model (INM) version used for the Draft EIS is not stated. The INM used for the Supplement Draft EIS is version 6.0, while the INM used for the FEIS is version 5.2. The FEIS needs to explain the differences between the versions and why different versions were used for each document.

19

4. Light Emissions and Visual Impacts. The use of a 20-foot berm to screen the proposed new hangar area has been eliminated from the FEIS. This is not acceptable. MAC's response in the FEIS states that "current plans do not include the construction of the berm...". The 20-foot berm identified in the Draft EIS as mitigation for the new hangar area is critical in providing the necessary screening as well as noise mitigation for taxiing



Ms. Bridget Rief

Comments on the Final Environmental Impact Statement for Expansion of Flying Cloud Airport

August 16, 2004

Page 2

aircraft within this hangar area. Preliminary plans for the berm have been review by MAC and the City, and must remain as part of the mitigation for the new hangar area.

The proposed alteration of the existing wooded knoll west of the airport for the relocation of the MALSR lighting system as depicted in Figure P-1 will cause significant impact for existing residential properties to the west. The westerly shift of the lighting system results in the excavation of the top 20 feet of the knoll. The existing knoll provides a natural buffer from the approach lighting system currently located over 2,000 feet to the east.

19

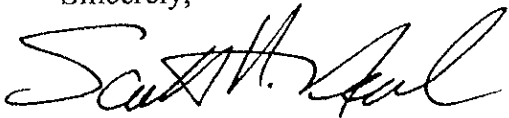
5. Solid and Hazardous Waste; Wastewater. Evaluation of existing wastewater systems is not adequate. While MAC has identified 38 septic systems on the field, they fail to indicate their location, determine proper functioning, and compliance with MPCA 7080 rules, or for possible ground water contamination.

20

6. Water Quality. According to the FEIS, MPCA records indicate 31 underground storage tanks being removed, 3 as abandoned/filled in, and 2 as inactive. However, Table U-8 lists all 36 underground storage tanks as being removed. MAC needs to evaluate the accuracy of this information and whether additional investigation on the location and condition of these 5 storage tanks is warranted to determine the potential for groundwater impacts.

21

Sincerely,



Scott H. Neal  
City Manager

cc: Mayor and Councilmembers  
Scott Kipp, Senior Planner  
Ric Rosow, City Attorney

RECEIVED  
SEP 17 2004  
Airport Development

B. ANDREW BROWN  
(612) 340-5612  
FAX (612) 340-8800  
brown.andrew@dorsey.com

September 16, 2004

VIA FACSIMILE & U.S. MAIL

Mr. Glen Orcutt  
Federal Aviation Administration  
6020 28th Avenue, Suite 102  
Minneapolis, MN 55450

Ms. Bridget Rief  
Metropolitan Airport Commission  
6040 28th Avenue South  
Minneapolis, MN 55450

Re: Comments on Final Environmental Impact Statement for the Expansion of Flying Cloud Airport, Eden Prairie, MN (FAA) (CEQ No. 040276)

Dear Mr. Orcutt and Ms. Rief:

Northwest Airlines appreciates the opportunity to submit comments on the Final Environmental Impact Statement ("FEIS") for the proposed expansion of Flying Cloud Airport ("FCM") in Eden Prairie, pursuant to the National Environmental Protection Act, 42 U.S.C. §§ 4321 et seq. ("NEPA").

22 NEPA "was intended to ensure that decisions about federal actions would be made only after responsible decisionmakers had fully adverted to the environmental consequences of the actions, and had decided that the public benefits flowing from the actions outweighed their environmental costs." Jones v. District of Columbia Redev. Land Agency, 499 F.2d 502, 512 (D.C. Cir. 1974) (emphasis added). See also 42 U.S.C. § 4332. In this case, the mandates of NEPA have not been met because the purported benefits of the proposed expansion are hugely overstated in the FEIS. Without a fair and sensible assessment of the benefits, the proper comparison of those benefits to the environmental costs is not possible. Additionally, MAC has not adequately considered feasible alternatives to the proposal that may fulfill the same objectives with far less adverse environmental impacts and at much lower economic costs.

23 As you know, Northwest has serious reservations about the need for the proposed expansion, the accuracy of data and forecasts relied upon to demonstrate that need, the analysis of alternatives in the FEIS, and the benefit-cost analysis for the project. See Northwest Airlines January 22, 2003 Comments on Flying Cloud Airport Expansion SDEIS; April 9, 2004 Reliever Airports Seminar Report. Additionally, Northwest does not believe that the noise analysis and mitigation plan presented in the FEIS is consistent with Federal Aviation Administration ("FAA") requirements.

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 2

These concerns, as discussed further below, lead to a conclusion that the FEIS is inadequate, and that moving forward with the expansion is not warranted. At a minimum, more accurate analysis of the need for the proposed expansion and alternatives to the expansion, as well as a noise analysis and mitigation plan that comply with FAA policy, should be conducted through supplementation of the environmental review.

24

Ultimately, Northwest believes that an up-to-date, even-handed and complete analysis will only confirm what is already plainly evident based on current data – that the potential benefits of the proposed expansion do not justify its environmental or financial impacts. Northwest therefore urges MAC to terminate this project, divest itself of its \$34 million of land acquisitions associated with the project, and return all proceeds to the MSP construction fund.

#### I. PURPOSE OF AND NEED FOR THE EXPANSION

The description of a proposed project's purpose and need in an FEIS is crucial because it forms the basis for consideration of alternatives and evaluation of the project under NEPA. If an agency does not "make a reasonably adequate compilation of relevant information" or "the EIS sets forth statements that are materially false or inaccurate," then "the EIS does not satisfy the requirements of NEPA, in that it cannot provide the basis for an informed evaluation or a reasoned decision." North Carolina Alliance for Transp. Reform, Inc. v. Dep't of Transp., 151 F. Supp.2d 661, 688 (holding EIS inadequate because traffic projections used in the FEIS were overstated and considerably higher than updated estimates).

25

Northwest was one of several parties that questioned MAC's analysis of the need for the proposed expansion and the benefit-cost ratio of the project in comments on the Supplemental Draft Environmental Impact Statement. MAC responded in the FEIS that:

The reason for the proposed expansion is not based on economic need or on a positive benefit-cost ratio. It is based on minimizing the use of MSP by [general aviation] traffic and providing hangars to meet the existing and future demand.

FEIS Vol. II at 1. This justification is inadequate for the following reasons.

**A. The FEIS grossly overstates the need for and likely benefits of the proposed expansion, because it relies on outdated and inaccurate forecasts of General Aviation operations at FCM.**

As MAC notes in the FEIS, "[i]t is the FAA's policy that forecasts used to make decisions about the timing and scale of major investments must be accurate." FEIS at II-4. Yet the forecasts that MAC uses in the FEIS to demonstrate the need for expansion of FCM, last updated in 1997, are woefully inaccurate. FAA's most recent Total Activity Forecast (TAF) for FCM, issued in 2003, estimates total FCM operations in 2010 at 168,999, compared to MAC's

26



Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 3

estimates in the FEIS of 302,982 operations in 2010 with the expansion or 241,353 operations in 2010 without expansion.

26 While acknowledging that its forecasts fail to take into account the significant decline in GA that has occurred in the past decade, MAC attempts to explain away the discrepancies between its out-dated forecasts and the up-to-date FAA forecasts by claiming that the TAF forecasts do not include nighttime FCM operations and that they underestimate the diversion of aircraft from MSP after the expansion. See FEIS at II-5. Neither of these factors can explain away the inaccuracy of MAC's forecasts. MAC itself estimates 2010 nighttime FCM operations at less than 13,000 and operations diverted from MSP at less than 7,000 – clearly not enough to account for a difference in forecast operations of 134,000.

Northwest's previous comments on the draft EIS also questioned the accuracy of MAC's forecasts and their failure to take recent declines in GA into account. MAC's response – that the purpose of the proposed expansion "is to accommodate GA activity in the year 2010 and beyond" – is inadequate. See FEIS Vol. II at 46. Even out to 2020, FAA is forecasting total operations at FCM that are well below what the airport had in 1976.

**B. Expanding FCM to accommodate additional GA traffic will not relieve congestion at MSP.**

27 MAC claims that expansion of FCM to accommodate additional GA traffic is necessary to relieve congestion at MSP. See FEIS at II-1. Yet as far back as 1994, the General Accounting Office issued a report analyzing the impact of General Aviation on air traffic congestion at hub airports in the United States concluding that general aviation "is not a major cause of delay." FAA analysis showed that the dominant cause for delays was weather conditions, followed by terminal volume, closed runways and taxiways, and equipment problems. The report concluded that, "[a]lthough congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now." See GAO Report to the Chairman, Subcommittee on Transportation and Related Agencies, Committee in Appropriations, U.S. Senate (June 1994).

Given the significant decline in general aviation operations that has occurred over the past ten years, these statements are even more true today. In its Benefit-Cost Analysis on the FCM expansion, MAC estimated 2002 GA operations at MSP at 51,560. The actual number of GA operations at MSP in 2002 was 25,075 – less than half of the estimate MAC relies on to demonstrate a need for the FCM expansion. MAC's own consultant, HTNB, estimated in October 2003 that GA operations at MSP in 2007 would total 28,846, compared to the 49,800 estimate of total operations cited in the Benefit-Cost Analysis. The number of GA flights that could potentially be diverted from MSP is therefore significantly lower than MAC claims in the FEIS and the Benefit-Cost Analysis for the FCM expansion. Further, as MAC admits, the GA operators themselves have the ultimate choice as to whether to use MSP or FCM, and many

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 4

GA operations at MSP connect passengers to commercial flights or have passengers using the Signature Service at MSP, which is not available at FCM.

The other key data cited by MAC in the FEIS to demonstrate that expansion of FCM would relieve congestion at MSP is a 1997 survey of six FCM-based aircraft operators regarding stopovers they made at MSP. FEIS at 11-2. MAC claims, based on this survey, that FCM based aircraft frequently stopover at MSP to pick up passengers or fuel that could not be loaded at FCM because the inadequate runway length at FCM cannot accommodate the additional weight. *Id.* In the Draft EIS, MAC claimed that this survey indicated 8300 stopovers at MSP per year, or approximately 23 per day. In response to comments questioning the accuracy of this information, MAC acknowledged "confusion" about these survey results and significantly reduced the estimated number of stopovers to 2340 per year, or just over six per day. *See* FEIS Vol. II at 70-71. Even those six stopovers per day may have resulted more from the 20,000 pound weight restriction imposed for noise control purposes rather than from inadequate runway length. MAC's reliance on this anecdotal evidence of a small number of stopovers at MSP to demonstrate the need for an \$82.9 million expansion at FCM is unjustified.

28

## II. ALTERNATIVES

Under NEPA, the consideration of alternatives to a proposed project is "the heart of the environmental impact statement." 40 CFR § 1502.14. It is "absolutely essential to the NEPA process that the decisionmaker be provided with a detailed and careful analysis of the relative environmental merits and demerits of the proposed action and possible alternatives, a requirement . . . characterized as 'the linchpin of the entire impact statement.'" *DuBois v. Dep't of Agriculture*, 102 F.3d 1273, 1287 (1st Cir. 1996) (quoting *NRDC v. Callaway*, 524 F.2d 79, 92 (2d Cir. 1975)). Further, "[t]he existence of a viable but unexamined alternative renders an environmental impact statement inadequate." *Id.* *See also Simmons v. Army Corps of Engineers*, 120 F.3d 664, 666 (Under NEPA, "no decision is more important than delimiting what these 'reasonable alternatives' are").

29

Here, MAC evaluates only two alternatives in the FEIS: (1) the proposed expansion, which includes acquisition of land, construction of new hangars, and extension of the runways; and (2) a "No Action" alternative that includes acquisition of the land and construction of new hangars but not extension of the runways. In response to Northwest's prior comments, the FEIS quickly dismisses "off-site" alternatives to address the congestion issues at MSP that MAC claims are the primary basis for the proposed expansion.<sup>1</sup> FEIS at III-3. This unduly limited

<sup>1</sup> To the extent that MAC attempts to define the purpose of the project more narrowly as the expansion of FCM, *see* FEIS at I-1, it impermissibly limits consideration of alternatives in the FEIS. *See Simmons*, 120 F.3d at 670 (such narrowing of purpose is an impermissible "end-run around NEPA's core requirement").

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 5

29

consideration of alternatives violates the requirements of NEPA. See DuBois, 102 F.3d at 1287. There are feasible alternatives that MAC failed to consider in the FEIS, which would have far less environmental impact and be more cost-effective than the proposed expansion.

**A. GA traffic could be diverted from MSP to the reliever airports more successfully using far more cost-effective options.**

A 2004 report studying the cost of operating GA traffic at the reliever airports versus MSP concluded that MSP is already an economically unattractive alternative for GA operators because of the landing fees, higher fuel costs, greater taxi delays and higher storage costs. GCW Consulting Report (Mar. 2004). These higher costs are a natural deterrent to increased GA traffic at MSP.

30

Additional financial incentives, such as a minimum landing fee at MSP, could be used to further motivate corporate traffic to use the reliever airports and better reflect the relative cost of using the MSP airfield as opposed to the relievers. See FEIS at v (citing Metropolitan Council 1996 Aviation Policy Plan) ("If experience indicates that further inducements are necessary to encourage greater use of reliever airports, the MAC should use financial inducements that would make it more economical to use the reliever airports than the major airport").

This alternative is particularly attractive because it would not require the \$82.9 million capital investment that the FCM expansion will require. Applying this capital toward deferred capital improvements at MSP would do far more to alleviate congestion at MSP than its proposed use to expand FCM.

**B. The demand for hangar space at FCM could be resolved by more efficient leasing of current hangar space rather than construction of additional space.**

One of the primary factors cited by MAC to justify the need for the proposed FCM expansion is the waitlist for hangar space at FCM. FEIS at II-4. MAC claims that the existence of the waitlist is evidence of pent-up demand for additional hangar space. MAC fails to acknowledge in the FEIS that the FCM waitlist is also a result of inefficient pricing and leasing practices, including:

31

- under-pricing of leases, such that demand exceeds supply;
- granting of 30-year leases, with rights to one to two additional lease terms of varying length, which prevents turnover and precludes optimal utilization of hangar space; and
- failure to manage the property with reversionary leases, as is the norm in the industry, such that tenants retain ownership of all improvements at lease termination.

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 6

As a result, hangars at FCM are in some cases being used for storage of boats and recreational vehicles rather than aircraft. MAC's own consultants, Airport Business Solutions, concluded that changes in the leasing practices would result in more efficient use of the hangar space. See Nov. 12, 2003 ABS Memorandum. Given that the current number of based aircraft at FCM is approximately 490 – 116 less than FCM current aircraft capacity of 606 – changing these inefficient leasing practices could potentially eliminate the waitlist of 50 to 100 aircraft desiring hangar space at FCM. 31

**C. MAC fails to adequately consider alternatives for accommodating business jets within the Metropolitan Airport System.**

MAC also concludes that expansion of FCM is necessary in order to accommodate larger business jets and divert those aircraft from MSP. See FEIS at II-2. However, business jets already have the option of the St. Paul Downtown Airport, which is located in close proximity to MSP and has a runway of 6,700 feet with a precision approach. 32

Moreover, only 20 of the 122 additional aircraft that MAC estimates would base at FCM by 2010 if the expansion occurs are business jets. See Benefit Cost Analysis Table 5. In essence, based on MAC's own numbers, the purpose of expanding the FCM runway is to provide an opportunity for the owners of 20 business jets to base at FCM instead of MSP, STP, or other feasible airports in the reliever system like the Anoka County-Blaine Airport. This benefit to 20 business jet owners simply does not outweigh the costs of the numerous adverse environmental and cultural impacts identified in the FEIS, not to mention the \$82.9 million to be spent on the project.

**III. BENEFIT-COST ANALYSIS**

In response to Northwest's comment that MAC was required to include its Benefit-Cost Analysis of the project in the EIS, MAC asserts that 40 CFR 1502.23 does not require the analysis of costs and benefits and claims that such an analysis "was not relevant to a choice among alternatives that satisfy the purpose and need for the proposed expansion project." See FEIS Vol. II at 44. MAC's dismissal of this comment is inadequate and contrary to the mandates of NEPA. 33

**A. The Benefit-Cost Analysis for the expansion conducted by MAC and FAA must be included in the FEIS.**

As explained by the United States Court of Appeals for the Fourth Circuit:

Misleading economic assumptions can defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of a proposed project. NEPA requires agencies to balance a project's economic benefits against its adverse environmental effects. The use of inflated economic 34

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 7

benefits in this balancing process may result in approval of a project that otherwise would not have been approved because of its adverse environmental effects.

Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996) (citations omitted).

34 For this reason, "[i]f a cost-benefit analysis relevant to the choice of alternatives is conducted, *the analysis must be incorporated* by reference or appended to the statement as an aid in evaluating environmental consequences." City of Sausalito v. O'Neill, 211 F. Supp. 2d 1175, 1195 (N.D. Cal. 2002) (emphasis added). Here, MAC and FAA prepared a cost-benefit analysis that specifically analyzes alternatives contemplated in the environmental review process. See Flying Cloud Airport Expansion Benefit-Cost Analysis (Revised, Jan. 2004). Under NEPA, MAC is required to incorporate that analysis into the FEIS, and the accuracy of the cost-benefit analysis must be considered in evaluating the adequacy of the FEIS.

**B. The Benefit-Cost Analysis improperly inflates the economic benefits of the project by relying on outdated and inaccurate information.**

35 Although the Benefit-Cost Analysis for the FCM Expansion was "revised" in January 2004, it continues to calculate costs and benefits in terms of 1998 dollars and to calculate the benefits of the expansion as if the project was completed prior to 2004. It also relies on exceedingly outdated forecasts proven inaccurate by actual data. For example, as discussed above, the Benefit-Cost Analysis for the FCM Expansion relies on grossly overstated forecasts of GA operations at FCM and at MSP. The Analysis relies on an estimate of 51,560 total 2002 GA operations at MSP, when the actual number in 2002 was less than half that, at 25,075. See Benefit-Cost Analysis Table 6; HTNB Oct. 14, 2003 Memorandum. The Analysis relies on a forecast of 49,800 total GA operations at MSP in 2007, whereas MAC's consultant, HNTB, now forecasts 28,846 total GA operations at MSP in 2007. See id.

As a result, the Benefit-Cost Analysis dramatically overestimates the likely number of diversions of GA aircraft from MSP to FCM and the possible savings in aircraft and passenger delay at MSP. In 2007, MAC claims that 6,700 of 49,800 GA operations would be diverted to FCM. See Benefit-Cost Analysis Table 7. Even assuming that MAC's claimed number of diversions is proportionally correct, only 3,880 operations would be diverted in 2007 based on the current forecast of GA operations at MSP. Moreover, MAC's claimed number of diversions from MSP and increase in operations at FCM are overstated. Although not mentioned in the Benefit-Cost Analysis, MAC's own study of similar expansions at seven reliever airports comparable to FCM, such as Chicago DuPage and Atlanta Peachtree Airport, MAC found that "there were no major changes in total operations attributable to the runway extension." FCM Expansion Activity Forecasts Report at 13.

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 8

The next step in the Benefit-Cost Analysis causes even greater inflation in the benefits of the project. MAC takes the already inflated number of diversions from MSP and calculates the amount of delay at MSP that those diversions would relieve. FAA guidance states that, for projects which would cost \$50 million or more, sophisticated simulation modeling should be used to accurately calculate the impact of the project on airfield delay. See FAA Airport Benefit-Cost Analysis Guidance § 10.4.1 (1999). In this case, however, MAC conducted no simulation modeling to calculate impacts on delay, instead relying on a convoluted interpretation of a single chart in the 1993 MSP Capacity Enhancement Plan to estimate that delay would be reduced by twelve seconds per passenger at MSP, which MAC claims would amount to a benefit of nine cents per passenger. See Benefit-Cost Analysis at 5; 1993 MSP Capacity Enhancement Plan, Figure 17. MAC then claims that this nine cents per passenger delay savings at MSP, over a period of twenty years, represents a *\$67.8 million benefit* – over two-thirds of the total benefit that MAC claims would result from the FCM expansion. See Benefit-Cost Analysis, Table 21.

Not only is this flawed analysis contrary to FAA guidance, but it is precisely the kind of "misleading economic assumption" that can "defeat the first function of an EIS by impairing the agency's consideration of the adverse environmental effects of a proposed project." Hughes, 81 F.3d at 446. MAC's reliance on this analysis to support the FCM expansion is not reasonable.

**C. The Benefit-Cost Analysis improperly excludes the cost of MAC's land acquisitions from the costs of the expansion.**

MAC's failure to include the cost of acquiring the land necessary for the proposed expansion as a cost of the expansion is also improper, resulting in further inflation of the economic benefit of the project. MAC attempts to justify exclusion of that cost by claiming that "MAC plans to acquire that land whether or not the hangar expansion and runway extension plans are implemented." Benefit-Cost Analysis at 10. At the same time, however, MAC includes the *benefits* of the land acquisition, such as the ability to build the new hangars, in the benefit-cost ratio.

In the FEIS, MAC acknowledges that the cost of the land acquisition was considered part of the proposed expansion (and not the No Action alternative) during the scoping portion of the environmental review process. FEIS at viii. After MAC decided to proceed with the acquisition before completing the environmental review process, MAC decided to include the acquisition as part of the "No Action" alternative in the FEIS and exclude it as a cost of the proposed expansion in the benefit-cost analysis. MAC's reliance on the fact that it completed the acquisition before obtaining final approval for the project as a reason to exclude the acquisition as a cost of the expansion is misleading and inappropriate. See Benefit-Cost Analysis at 10.

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 9

#### IV. NOISE ANALYSIS AND MITIGATION PLAN

**A. MAC states that it will "preclude" all Stage 2 aircraft operations at FCM and improperly uses this preclusion of Stage 2 aircraft as a noise mitigation measure.**

Northwest commented previously that, through the environmental review process, MAC was improperly restricting Stage 2 aircraft operations at FCM without first meeting the notice and analysis requirements of the 1990 Airport Noise and Capacity Act, 49 U.S.C. §§ 47521-47533 ("ANCA") and 14 CFR Part 161. In the FEIS, MAC responds that the FAA review requirements do not apply because no restrictions are being imposed at FCM on Stage 2 aircraft:

38 the final Agreement [between the City of Eden Prairie and MAC] and amendment to Ordinance 51 do not contain restrictions on Stage 2 or other aircraft operations, except the gross weight cannot exceed the runway bearing capacity. . . . The FAA has determined that the proposed amendment does not require a Part 161 review.

FEIS Vol. II at 46.

In the FEIS, however, MAC significantly decreases the estimated noise impacts of the proposed expansion by reducing the estimate of the 2010 fleet mix from 1.54 to 0.02 daily operations by Stage 2 jet aircraft. MAC explains that "[t]he decrease in Proposed Action Stage 2 operations is based on the aggressive measures in the Final Agreement that MAC will employ to discourage the use of Stage 2 aircraft at FCM." FEIS at ii. The "aggressive measures" to discourage Stage 2 aircraft are not discussed in any detail in the FEIS. The noise mitigation measures simply include a statement that "MAC will implement a voluntary program to preclude all operations at the Airport by Stage 2 Aircraft." FEIS at V-47.

The Final Agreement between the City of Eden Prairie and MAC includes a similar statement that MAC "shall implement a voluntary program to preclude all operations at the Airport by Stage 2 Aircraft," but also requires that MAC "complete any necessary procedural steps as required under federal law, including a study required by 14 CFR Part 161." FEIS Vol. I, App. A, Final Agreement § 3.6. MAC's failure to explain the "voluntary" program that will "preclude" Stage 2 aircraft from using FCM, and its determination that a Part 161 study is not necessary to institute these "aggressive measures," are glaring omissions from the FEIS noise analysis and violate the requirements of ANCA and 14 CFR Part 161.

Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 10

**B. MAC's agreement to ban all aircraft above 60,000 pounds and its use of the 60,000 pound limit as a noise mitigation measure violate FAA policy.**

MAC also notes that "operations by aircraft with certified maximum gross takeoff weights of 60,000 pounds or greater . . . were eliminated" from the noise analysis, and cites to the 60,000 pound weight restriction as a noise mitigation measure. FEIS at V-47. This absolute restriction of aircraft above the 60,000 pound weight-bearing capacity of the runway – and reliance on that restriction as a noise mitigation measure – is contrary to current FAA policy.

Under a July 2003 Proposed Policy, which FAA has deemed in effect until the Final Policy is issued, airports receiving federal funding cannot merely establish the designated weight-bearing capacity of a runway as a weight restriction, but must demonstrate that this weight restriction is truly necessary to protect pavement life. See 68 Fed. Reg. 39176. Even further, the airport authority must consider alternative ways to protect the pavement while allowing some aircraft over the official weight-bearing, such as the Gulfstream IV in this case, to operate at the airport. See id.

MAC relies on this prohibition of aircraft above 60,000 pounds in its noise analysis and as one of ten noise mitigation measures. FEIS at V-47. FAA states in the July 2003 Proposed Policy that "[i]f there is no showing of need to protect pavement life, or the limit on airport use appears motivated by interest in mitigating noise without going through processes that exist for such restrictions, an attempt to limit aircraft by weight will be considered unreasonable." 68 Fed. Reg. 39176. In order to accurately analyze the noise impacts of the proposed expansion, assuming the expansion will be carried out in compliance with FAA policy, the noise analysis and mitigation plan in the FEIS must be conducted without reliance on the 60,000 pound weight restriction.

**V. CONCLUSION**

The Final Environmental Impact Statement for the proposed expansion of Flying Cloud Airport does not meet the requirements of NEPA, because the analysis of purpose and need for the project relies on outdated and inaccurate data, reasonable alternatives are not adequately considered, the benefits of the project are dramatically overstated in the benefit-cost analysis, and the noise analysis and mitigation plan violate FAA policy and regulations.

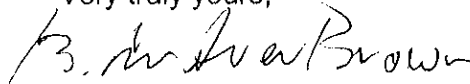
MAC claims that the FCM expansion is necessary because of 1996 legislation mandating that MAC "divert the maximum feasible number of general aviation operations" from MSP to the reliever airports. However, spending \$82.9 million to divert such a small number of operations from MSP is *not* a feasible alternative. An honest evaluation of the public benefit of this project and a weighing of that benefit against its adverse environmental, cultural and financial impacts demonstrates that the project should be terminated. At the very least, a supplemental EIS should be conducted to take into consideration significant new information



Mr. Glen Orcutt  
Ms. Bridget Rief  
September 16, 2004  
Page 11

regarding GA activity forecasts in the Metropolitan Airport System and to rectify the failure to consider alternatives, the overstatement of benefits versus costs of the project, and the improper noise analysis and mitigation in the FEIS.

Very truly yours,



B. Andrew Brown

cc: Kathleen Nelson

September 15, 2004

VIA Hand Delivery

RECEIVED  
SEP 15 2004  
Airport Development

To: Ms. Bridget Reif  
MAC  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450

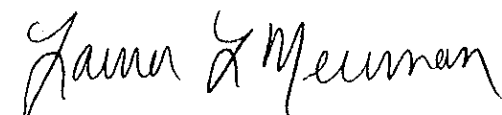
RE: Comment to the Final Environmental Impact Statement Section 4(f) Evaluation,  
dated June 2004.

Dear Ms. Reif:

Enclosed are my comments to the above-named FEIS.

Please inform me when MAC submits the FEIS to the Environmental Quality Board.

Thank you.

  
Laura L. Neuman

# Laura Neuman's Comments to the FEIS dated June 2004 for the Expansion of Flying Cloud Airport.

## Table of Contents

I.	Summary.....	2
II.	The FEIS Timeframe of 3 Years Post Completion is Too Short.....	3
III.	No "Alternatives" Are Provided as Required by Minnesota and Federal law.....	4
	A. Sites.....	4
	B. Technologies.....	7
	C. Modified Designs or Layouts.....	7
	D. Modified Scale or Magnitude.....	8
IV.	There Is No Evaluation of Cumulative Impacts as Required by Minnesota and Federal Law.....	8
	A. Air Quality.....	9
	B. Noise.....	11
	C. Water Quality.....	12
V.	Noise Has Not Been Reasonably Evaluated.....	12
	A. MAC Has Not Provided Reasonable Noise Data.....	12
	B. The FEIS's INM Output Is Flawed Because Inputs Are Incorrect and Unsubstantiated.....	14
	1. Aircraft Such as the Gulfstream IV Cannot Be Eliminated from the INM Because MAC's Use of the Weight Capacity as a Noise Restriction is Suspect.....	14
	2. Nighttime Operations Input Are Incorrect and Unsubstantiated.....	15
	3. Flight Paths/runway use Input Is Incorrect and Unsubstantiated.....	17
	4. Fleet Mix Inputs for Stage-2 Jets Are Unsubstantiated.....	17
	C. MAC Has Not Evaluated Noise Impact Data.....	18
VI.	Impacts from Air Emissions Have Not Been Reasonably Evaluated.....	19
VII.	MAC's Cost/Benefit Analysis Is Inadequate and Unreasonable.....	20
	A. Cost of "MSP Delay Benefits" is Unfounded and Exaggerated.....	20
	B. MAC Has Not Reasonably Evaluated Losses from Decreased Property Values..	23
VIII.	MAC Has Failed to Evaluate the Issues of Safety and Security.....	25

## I. Summary

The Final Environmental Impact Statement dated June 2004 ("FEIS") for the proposed expansion at Flying Cloud Airport ("FCM") is inadequate as a matter of law for the following reasons.

First, the FEIS does not provide an adequate time frame for evaluation of the proposed expansion. The expansion is supposed to be completed in 2007, and in the FEIS, impacts are evaluated only for the 2010 timeframe. FAA itself recommends noise evaluation for 5 to 10 years post-project completion in its environmental policy 1050.1e, Appendix A at pg. 63. The FEIS should evaluate impacts for the year 2017 instead of the year 2010. This FEIS provides only a 3-year post completion evaluation. The impacts from the proposed expansion cannot be reasonably evaluated with such a short timeframe after completion, and therefore the FEIS is inadequate. 41

Second, the FEIS fails to evaluate alternatives as required in Minnesota Rules Chapter 4410 and Federal law. Several alternatives were identified to MAC before the completion of the FEIS, which were not included in the FEIS. These alternatives include, but are not limited to, financial incentives to encourage the use of FCM over MSP, financial incentives for stopovers from FCM to use St. Paul Holman field where an adequate runway exists instead of MSP, and eliminating subsidies at the reliever airports so that demand reflects true market demand at FCM. 42

Third, the FEIS fails to evaluate cumulative impacts as required in Minnesota Rules Chapter 4410 and Federal law. There are several construction projects in the Eden Prairie area that will contribute to noise, air quality, and water run-off that have not even been identified by MAC in the FEIS, such as (1) construction of 494 and increased resulting traffic; (2) construction and increased traffic from Highway 312 extension; (3) construction and increased traffic from Pioneer Trail expansion; (4) construction and increased traffic from Highway 212; (5) MSP expansion and over-flights (including both criteria pollutants and toxic (HAPS) emissions). Most importantly on the issue of air quality, MAC has not provided information on the background levels of air toxics in the Eden Prairie area. Current air quality levels of some airport-associated emissions are already in excess of health benchmarks for adults and way in excess for children. MAC must evaluate the increase in toxic emissions the proposed expansion will have in addition to the increases from other projects, such as MSP and 494 expansions. 43

MAC's cursory dismissal of the cumulative impact of noise from MSP in the FEIS for Eden Prairie flies in the face of reality. MAC admits 9 times in its own documents that in Eden Prairie, "A major source of noise impact during the hours monitored was 44

44 commercial jet aircraft overflight from the Minneapolis-Saint Paul International Airport.” This statement is made in every noise monitoring summary for noise monitoring conducted in Eden Prairie from 1993 to 2001 (after 2001 actual monitoring ceased). MAC must evaluate the impact its proposed expansion will have given the current state of the environment and other projects in the area, including noise from MSP.

45 Fourth, the FEIS fails to reasonably evaluate several impacts, specifically (1) noise impacts (2) air emissions impacts, (3) a cost/benefit analysis, and (4) security and safety. Information on noise impacts in the FEIS DO NOT inform residents how noise will change with expansion. The only thing noise curves show is a range of DNL dBA 60 – 65, and obviously noise affects the environment at levels below 60 dBA. FAA itself states that supplemental noise metrics can be used to evaluate the noise impact in its environmental policy 1050.1e Appendix A at pg. 64.

46 Finally, the FEIS is inadequate because the Appendix is missing both material prepared in connection with the EIS and material that substantiates analyses fundamental to the EIS that are required as specified in MN Rule 4410.2300(J).

**II. The FEIS Timeframe of 3 Years Post Completion is Too Short**

47 The FEIS does not provide an adequate time frame for evaluation of the proposed expansion. The expansion is supposed to be completed in 2007, and in the FEIS, impacts are evaluated only for the 2010 timeframe. FAA itself recommends noise evaluation for 5 to 10 years post-project completion in its environmental policy 1050.1e, Appendix A at pg. 63. The FEIS should evaluate impacts for the year 2017 instead of the year 2010. This FEIS provides only a 3-year post completion evaluation. The impacts from the proposed expansion cannot be reasonably evaluated with such a short timeframe after completion, and therefore the FEIS is inadequate.

It is apparent that there has been a **significant delay** in time from the scoping document to the FEIS. The world is a different place than it was 7 years ago when the scoping process began. This change in time frame is absolutely necessary to get a complete and more accurate picture of the project and impacts. The significant delays from the time of scoping until now have resulted from a combination of several unique circumstances that cannot be faulted to MAC/FAA: the events of September 11, 2001; the ensuing huge decline in aviation; security restructuring, and MAC’s loss of revenue have all taken the focus of MAC away from Flying Cloud. Northwest suing MAC over expansion at Flying Cloud has also caused delay. Use of the correct timeframe of 5 to 10-years post completion in the FEIS would in no way prejudice MAC or FAA or cause unduly delay given the delays that have already occurred.

### III. No "Alternatives" Are Provided as Required by Minnesota and Federal law

Minnesota Rules 4410.2300(g) requires MAC to include the following alternatives to the expansion at FCM in its EIS:

Sites

Technologies

Modified designs or layouts

Modified scale or magnitude and

An alternative incorporating reasonable mitigation measures identified through comments on the scope or draft EIS.

After pointing out that the SDEIS failed to comply with this rule by not including a discussion of ANY of these alternatives, the FEIS has not been remedied. It therefore is inadequate as a matter of law. The FEIS includes only a brief and substandard discussion of each of MAC's airports. What needs to be accomplished is a detailed look at alternatives and the alternatives' impacts.

Again, MAC's discussion in the FEIS of each of the alternatives should include AT LEAST the following. These are just examples of possible alternatives and are not meant to represent an exhaustive list.

#### A. Sites

MAC must evaluate the use and potential expansion of its other airports as alternative sites to the proposed expansion at FCM. This does not mean MAC simply says a runway length or additional hanger space is not available at its other airports. MAC claims the purpose of the FCM expansion is to reduce or eliminate general aviation ("GA") from the Minneapolis/St. Paul International Airport ("MSP"). However, it fails to address possible use of the other reliever airports or Holman Field (STP) (which has an existing runway length over 5000 feet) as possible sites to accomplish its purpose (reduce congestion at MSP). 48

MAC claims over 2300 stopovers a year from FCM to MSP. For example, instead of expanding FCM to relieve any stopovers at MSP, MAC could use financial incentives for stopovers to go to STP to pick up fuel or passengers. Considering that stopovers are only 1.6% of total operations at FCM, it make sense not to spend 82.9 million dollars for expansion and have the stopovers go to STP instead of MSP through financial incentives. That would serve to accomplish the desired result without significant cost or negative 49

impacts. This alternative needs to be thoroughly investigated and its impacts discussed instead of saying STP's runway would be of no use because it is not in the West Metro area.

49 Northwest Airlines identified another alternative that should have been included in the FEIS. Northwest Airlines hired an economic consultant who showed MAC could use financial incentives to induce aircraft to use FCM instead of MSP. Northwest showed that MAC is unreasonably subsidizing the reliever airports in conflict with MAC's statutory authority to charge reasonable rents and fees, and is doing so to Northwest's detriment. MAC has *not* been charging operators at reliever airports as much as those at comparable airports around the country, and that MAC should increase its charges to operators at reliever airports. MAC had in its possession Northwest's document entitled "*Metropolitan Airports Commission Reliever Seminar April 29, 2004*," **which laid out this alternative** in writing, yet MAC failed to include any analysis of this in the FEIS.

Northwest also points out that MAC already has two 5000-foot runways at MSP and Holman Field (STP) and should invest in the construction of a dike to better utilize STP.

Northwest also cites a 1994 US General Accounting Office (GAO) Report that said in part

**"FAA does not consider general aviation to be a significant factor in congestion at commercial airports today."**

**"FAA's analysis showed . . . [g]eneral aviation was not identified as a major cause of delay."**

**"Although congestion caused by general aviation at commercial airports was a consideration when the reliever program was established, it has largely ceased to be one now."**

The numbers MAC itself provides in the environmental review process show that expansion at Flying Cloud will *not* have an impact at MSP. Therefore other alternatives to FCM expansion should be adequately reviewed in the FEIS. For example, MAC conducted a survey in 1997 of six FBOs, in which they were asked

50 **"After taking off from Flying Cloud Airport, have you at any time in the past year had to take on additional fuel or pick up passengers at another metro airport such as St. Paul Downtown or Minneapolis-St. Paul International before continuing on to your final destination? Yes or No. If yes, how many times?"**

See Appendix D of the Flying Cloud Airport Expansion Technical Report Activity Forecasts November 1999 (emphasis added). Only 2 of the 6 FBOs responded yes to stopovers. MAC's own survey states: "The two firms combined for a total of 16-29 times." The survey does not specify whether the FBO went to MSP or STP. Even assuming they all went to MSP, obviously, 16-29 operations in a year compared to the

512,588 operations at MSP in a year in a year do not justify the expense of 82.9 million dollars. According to MAC's surveys, stopovers from Flying Cloud to MSP are only 0.006% of operations at MSP!

MAC's 1997 survey is very clear that the question asked was not round trip flights or how many times per week. The question asked was operations per year. Nevertheless from this survey information, MAC claimed in the Draft EIS and Supplement EIS that the stopover operations at MSP were 8,300 a year! In my SDEIS comments I questioned the accuracy of 8,300 stopovers because this number is so high that it equals the total number of ALL business operations at Flying Cloud a year for 1999!!! I am not splitting hairs. Remember, this is the very reason for MAC's proposed expansion and for its cost/benefit analysis! Again I ask, was MAC recklessly ignorant or deceptive when it came up with 8,300 stopovers after its survey showed 16-29?

50

How did MAC answer my question? MAC contacted the survey respondents again seven years later on January 6, 2004. MAC states in the FEIS that respondents now claim that seven years ago, they actually meant flights per week, not operations per year, and that since that time they have had this same number of stopovers, and they continue to have this number today. So, in the FEIS, MAC has now changed the number of stopovers from 8,300 to 2,340 (a significant decrease!) and claims maybe a few more if Flying Cloud runways are icy requiring landing at MSP.

Even assuming MAC's new number of 2,500 stopovers at MSP a year is correct, that is only 0.5% of total operations at MSP! Obviously stopovers from Flying Cloud are NOT causing congestion at MSP. Is it worth 82.9 million dollars to eliminate 0.5% of operations at MSP? Also, remember the two FBOs, Elliot Aviation and Executive Aviation, state that their stopovers have *not* increased in 7 years. Stopovers at FCM are only 1.6% of total operations. Then why do they need an 82.9 million dollar expansion? MAC has *never* been able to demonstrate congestion at MSP from general aviation. Even its biggest tenant at MSP, Northwest Airlines, says there is no congestion from general aviation. Northwest Airlines would know! Northwest wants the Flying Cloud expansion stopped.

51

Operations at Flying Cloud have been diminishing since 1994 (232,130 total operations) and were at one of the lowest levels in 2003 (155,837 total operations). In addition, the number of aircraft based at Flying Cloud has decreased since 1987 and is at an all time low of 463 based aircraft in 2003. Why are large amounts of new hanger space needed when the data shows usage of the airport has declined significantly?

52

Without discussion of the use of STP as the stopover location, financial incentives, and improvements at STP to prevent flooding, the FEI is inadequate as a matter of law. The Aviation Chapter of the Metropolitan Guide Policy 6 urges MAC to use *financial* considerations for encouraging reliever use.

53

To meet the requirements of Minnesota law, the above-mentioned surveys and their results must be included in the Appendix to the SDEIS because they are fundamental to

54



54 | the proposed expansion. An analysis of alternative sites must include all data and documentation that MAC has that supports its claim that GA will come to FCM over MSP or other airport locations if FCM is expanded. Because such analysis substantiates the whole purpose for the FCM expansion, by law this documentation must be included in the Appendix. MN Rules 4410.2300(J).

55 | The importance of evaluating alternative sites is emphasized by the Environmental Quality Board ("EQB") which cautions that public project proposers should not take actions regarding site acquisitions or project commitments prior to completing the EIS process because of the legal requirement to evaluate alternative sites. See the EQB's Guide to Minnesota Environmental Review Rules at page 13. MAC's acquisition of property near FCM for expansion prior to final EIS approval is unlawfully premature.

#### B. Technologies

56 | MAC claims that a runway length of 5000 feet will allow specific aircraft to use FCM that cannot now use it. However, MAC has failed to demonstrate by any data or survey information that such specific aircraft operators would use FCM if expanded. MAC can utilize other technologies to determine whether specific operators would utilize an expanded FCM over other locations. A failure to do so makes the FEIS inadequate.

57 | Another example of using alternative technologies would be an evaluation of a need for expansion at FCM at all if the proper year 2015 is the impact timeframe. Aircraft technology is developing to allow take-offs and landings at shorter distances, therefore an extended runway may not be necessary. MAC claims that newly advanced, quieter jets would utilize an expanded FCM, however, it does not evaluate aircraft advances in take-off and landing distances as alternatives to expansion for the 2015 timeframe. Such an omission makes the FEIS inadequate.

58 | Finally, other technologies could be used to reduce GA traffic at MSP other than an extended runway, such as lease incentives for moving GA from MSP, an increase in hanger space alone, and/or reducing GA hanger space at MSP. In addition, alternative technologies that could reduce the noise impacts, such as sound barriers for maintenance run-ups. None of these alternatives have been addressed. FEIS is inadequate as a matter of law.

#### C. Modified Designs or Layouts

59 | MAC has not provided any insight as to modifying the design or layout of FCM that could reduce environmental impacts. For example, this could include the construction of alternative sites for maintenance run-ups or barriers to reduce noise. It also could

include the placement of hanger space to reduce noise. In addition, modified designs of or layouts for hanger space may serve as an incentive to move GA traffic to FCM without the need for runway expansion. Alternative modified designs or layouts also could include a study regarding dispersion of aircraft emissions to provide information as to optimum flight paths and runway use to reduce the impact of air emissions. See the following section in this comment on impacts from air emissions. MAC's failure to look at these alternatives makes the FEIS inadequate as a matter of law.

59

#### D. Modified Scale or Magnitude

MAC has not provided any alternatives for an expansion with a runway less than 5000 feet, or analyzed which aircraft at what capacities could use a runway length between 3900 and 5000 feet. Nor has MAC evaluated a smaller expansion in conjunction with the use of the other reliever airports or Holman Field. MAC should also include an evaluation for limiting nighttime flights to specific runways in addition to preferential flight paths to reduce noise impacts. All such alternatives must be evaluated; otherwise the FEIS is inadequate as a matter of law.

60

The rule requiring an evaluation of alternatives emphasizes that MAC should not eliminate alternatives based simply on its prior planning process. MAC cannot eliminate any of these alternative analyses based simply on the argument that such alternatives were not in the Metropolitan Council or its planning documents. In addition, MAC's discussion of these alternatives must include a discussion of the impacts and benefits and any potential mitigation measures for each. Without adequate discussion on alternatives, the FEIS is inadequate as a matter of law.

61

#### IV. There Is No Evaluation of Cumulative Impacts as Required by Minnesota and Federal Law

Minnesota rules define cumulative impact as "the impact on the environment that results from the incremental effects of the project in addition to other past, present, and reasonable foreseeable future projects regardless of what person undertakes the other projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." MN Rules 4410.0200, subpart 11.

62

MAC cannot evaluate the proposed FCM expansion in a vacuum and the sparse discussion of MSP and Pioneer expansion in the FEIS are not even close to adequate.

## A. Air Quality

63 The FEIS is inadequate in its discussion of cumulative impacts on air quality. First, there is no discussion of the current state of air quality in Eden Prairie/SW Metro area. MAC has not provided information on the background levels of air toxics in the Eden Prairie area. Current air quality levels of some airport-associated emissions are already in excess of health benchmarks for adults and way in excess for children.

64 There are other known projects that will contribute to impacts on air quality in Eden Prairie/SW Metro: (1) construction of 494 and increased resulting traffic; (2) construction and increased traffic from Highway 312 extension; (3) construction and increased traffic from Pioneer Trail expansion; (4) construction and increased traffic from Highway 212; (5) MSP over-flights (including both criteria and toxic (HAPS) emissions). For the construction and traffic related air quality impacts, MAC need only to consult with DOT and EPA to obtain CAA criteria and HAPS emissions. EPA calculates criteria pollutant and toxic emissions for mobile sources all of the time. For MSP, FAA and MAC have needed data to compute criteria and HAPS emissions. This is a no-brainer. MAC must evaluate the increase in toxic emissions the proposed expansion will have in addition to the increases from other projects. All of these projects will have an impact on air quality in Eden Prairie.

65 MAC's contention that there is no synergistic or cumulative effect from MSP aircraft emissions flies in the face of scientific evidence. FAA is fully aware that aircraft emit toxic emissions and has known it for a long time. Various government agencies and universities have been researching this subject for years. One year ago, FAA printed a document entitled "Select Resource Materials and Annotated Bibliography on the Topic of Hazardous Air Pollutants (HAPS) Associated with Aircraft, Airports, and Aviation" dated July 2003. **In this document FAA admits that environmental assessments of toxic emissions have taken place at other airports, including airports in California, Illinois, New Jersey and Massachusetts area.** How can MAC and FAA continue to ignore requests for toxic emission information at our airports?

Specifically, the concentrations of toxic aircraft emissions for an airport can be calculated by taking the known amounts of hydrocarbon exhaust specific to each type of aircraft, multiplied by the number of operations of that type of aircraft, breaking the hydrocarbon exhaust down into the specific toxic chemicals, and using a sophisticated model to calculate concentrations of those individual toxic chemicals. **The calculation of specific toxic chemicals from aircraft emissions is being done at other airports and should be done at Flying Cloud and MSP too.**

66 In the FEIS, FAA tries to downplay toxic emissions by stating that actual air monitoring placed on the ground at runways at various airport has found toxic chemical levels to be the same as background levels for the urban areas. But FAA omits in its answer the logical and scientific explanation: the high heat of the exhaust coming out of the plane

causes the toxic plume to rise above the ground where the monitors aren't located. FAA itself came out with a "Final Report: The Use of LIDAR to Characterize Aircraft Initial Plume Characteristics" in February 2004 showing how aircraft exhaust plumes rise. This does not mean that the toxic chemicals disappear, only that they rise away from monitoring devices on the runways and then eventually drift back down. FAA should include MSP air quality impacts because of its proximity to Flying Cloud and over-flights.

66

EPA's National-Scale Air Toxics Assessment uses computer models from emission information in each state and has determined that in Minnesota, 1,3-butadiene, acrolein, benzene, formaldehyde, and POM were at levels in *excess* of health benchmarks (the levels above which are thought to cause adverse health effects in *adults*). Recent monitoring measurements taken by MPCA in Minnesota confirm that formaldehyde and benzene in our air are in excess of health benchmarks. MPCA did not monitor POMs and is unable to measure relevant amounts of 1,3-butadiene and acrolein in the air given limitations on the monitoring equipment. MPCA also has not yet calculated the measurements for airborne lead. See MPCA's "Air Toxics Monitoring in the Twin Cities" dated January 2003.

What does this mean? It means that many of the toxic chemicals found in aircraft exhaust are *already* at high enough levels in our state to cause adverse health effects in adults. For children in our state, it is a much graver picture. Because children breathe more frequently and eat and drink more compared to their sizes than adults, and because a lot of children's systems are still developing, EPA and California agencies are re-evaluating health benchmarks for children. They have identified adverse health effects from toxic chemicals at significantly lower levels than adult levels. These lower, child-health benchmarks include studies on benzene, lead, acrolein, POM, and formaldehyde--the very chemicals that are found in aircraft emissions. See for yourself the alarming health impacts these toxic chemicals have on children at the following website, [http://www.oehha.ca.gov/air/toxic\\_contaminants/SB25finalreport.htm](http://www.oehha.ca.gov/air/toxic_contaminants/SB25finalreport.htm).

67

It is also a known fact that there is a cumulative effect from air toxics that increases harm to human health. See MPCA 1999 Staff Paper on Air Toxics and Air Quality in Minnesota 2001 Legislative Report.

Toxic aircraft emissions *do* exist and it is clear that NEPA and MEPA require an evaluation of the air quality impact, including cumulative effects from other sources other than just Flying Cloud, especially given that the baseline in Minnesota, before any proposed expansion at Flying Cloud, is already at levels that impact health. The purpose of NEPA and MEPA is to gather information to enable us to make informed decisions about choices between transportation and air quality. We deserve to know the truth about air quality and the impacts from proposed transportation.

## B. Noise

68 The FEIS is inadequate in its discussion of cumulative impacts on noise. There are other known projects that will contribute to impacts on noise in Eden Prairie/SW Metro: (1) construction of 494 and increased resulting traffic; (2) construction and increased traffic from Highway 312 extension; (3) construction and increased traffic from Pioneer Trail expansion; (4) construction and increased traffic from Highway 212; (5) MSP over-flights. For the construction and traffic related noise impacts, MAC need only to consult with DOT. This is a no-brainer.

As to noise from MSP, MAC's statement in the FEIS that over-flights from MSP have no impact in Eden Prairie flies in the face of logic and reality, no matter what type of math manipulation is done to distort the truth.

**MAC itself has identified noise from MSP over-flights to be a "major source of noise impact" for every year since 1993 to 2001 in its yearly monitoring reports from Flying Cloud .** For example, for the year 2001 monitoring MAC states:

69 **"A major source of noise impact during the hours monitored was commercial jet aircraft overflight from the Minneapolis-Saint Paul International Airport.** During the 321 hours monitored, 2190 jet and commuter aircraft overflight operations from MSP were recorded ranging from 42.3 dBA to 82.0 dBA."

Even though MAC describes these noise impacts as "single events" and not "cumulative," they still are a *noise impact* that need to be identified, quantified and evaluated as part of the NEPA and MEPA process. Single events in the 82.0 dBA are certainly annoying. Neither NEPA nor MEPA state that impacts from noise only matter if they are above a weighted average over the period of a day. Neither NEPA nor MEPA state that noise is evaluated only if it is above DNL 60dBA. Single events of loud noise that happen several times an hour are still considered to be noise pollution. Even MAC considers MSP overflight noise to be **"a major source of noise impact."** How can MAC identify a noise impact as "major" and then not include it in its cumulative impact analysis?

To include noise from MSP is a no brainer. MAC currently has actual noise monitoring data for Eden Prairie that includes MSP aircraft noise, which has not been included in the FEIS. In addition, MAC continuously monitors noise from MSP and has access to information enabling MAC to identify, quantify and evaluates noise from MSP aircraft. As to cumulative noise impacts highway expansions, MAC needs only to obtain information from DOT. If this information is not included, the FEIS is inadequate.

### C. Water Quality

The FEIS is inadequate in its discussion of cumulative impacts on water quality. There are other known projects that will contribute to impacts on water quality in Eden Prairie/SW Metro: (1) construction of 494 and increased runoff; (2) construction and increased runoff from Highway 312 extension; (3) Construction and increased runoff from Pioneer Trail expansion; (4) construction and increased runoff from Highway 212. For the construction and additional runoff effects on water quality, MAC needs to consult with DOT.

70

Environmental impacts cannot possibly be evaluated without adequate information as to the current status of noise and air pollution, and the future effects of other projects. Without information on the cumulative effects from proposed expansion at FCM, the FEIS is inadequate as a matter of law.

### V. Noise Has Not Been Reasonably Evaluated

The FEIS is inadequate because it has failed to reasonably assess the noise impacts from expansion, which along with air emissions, is the most significant environmental impact.

First, as explained above, MAC has not provided enough data on aircraft and other sources of noise, which is readily available and necessary to evaluate the proposed expansion's impact. Second, the noise curves provided in the FEIS are flawed because they are based on faulty and unsubstantiated information. Finally, MAC has not reasonably evaluated noise impact data to determine the effects on homes, school, churches, parks, and wildlife areas. MAC should be required to compare noise generated from the INM with actual noise monitoring data because the INM is consistently under evaluating the amount of noise compared to actual noise monitoring.

71

#### A. MAC Has Not Provided Reasonable Noise Data

As a citizen representative on the former City of Eden Prairie's Airport Advisory Commission, I repeatedly asked MAC representatives in commission meetings for more information as to present and future FCM noise. I asked for noise curves at values outside of the 60 dBA levels and was told that was impossible. I asked for specific monitoring to be conducted in residential areas, and was told that during summer months, there is some actual monitoring conducted. I was provided with some of that actual monitoring data, but no monitoring has taken place since 2001. I also asked for the specific parameters or inputs that were used in the INM for generating the noise curves, and never received an answer.

72

73

At the public hearing for the SDEIS in September 2001, I asked Mr. Roy Fuhrmann how it was possible to list in the SDEIS specific DNL values for "noise-sensitive receptors" in the year 2010. See e.g., pages V18-V19 in the SDEIS. Mr. Fuhrmann informed me that the INM could be used to generate specific noise data points, instead of noise curves, and that the INM with 2010 operations was used to calculate the DNL for those specific sites identified as "receptor sites." I asked Mr. Fuhrmann if it was then possible to use the INM to list specific noise points for all areas in Eden Prairie, not just points listed as "receptor sites," to which he said "yes." I told Mr. Fuhrmann that I had *repeatedly* asked for this kind of information, and that such information would be extremely useful for residents of Eden Prairie and others to evaluate the noise impacts. I asked Mr. Fuhrmann to provide a map of Eden Prairie with specific noise points around the entire city area, instead of noise curves, to which he responded that such data is "unreliable" given the limitations of the INM. I replied that MAC *itself* was relying on such "unreliable points" in its SDEIS in Tables Q-2 and Q4, and therefore MAC couldn't argue that the use of point-specific noise data was unwarranted. I have never received a map of Eden Prairie with generated noise points from the INM. It appears from Tables Q-2 and Q-4 that the INM can also generate point values for Peak SEL, Lmax, and time above certain noise levels in minutes per day.

74

In order to reasonably evaluate the noise impact from expansion, MAC must provide a map of Eden Prairie with specific noise points for at least the years 1999 and 2010. I think the more reasonable information is for a time period from years 2004 to 2017 given that 2004 reflects the current all time low number of operations and that 2017 is 10 years post completion. FAA itself recommends noise evaluation for 5 to 10 years post-project completion in its environmental policy 1050.1e, Appendix A at pg. 63. These data points should include DNL, Peak SEL, Lmax, and Time above 60 dBA in minutes per day. The current noise curves DO NOT inform residents how noise will change with expansion. The only thing noise curves show is a range of DNL dBA 60 -65, and obviously noise affects the environment at levels below 60 dBA. FAA itself states that supplemental noise metrics can be used to evaluate the noise impact in its environmental policy 1050.1e Appendix A at pg. 64.

75

In addition, DNL is only part of the noise impact picture. Also extremely important is the weighted maximum noise one will experience in an area, the length of time of extreme noise, and the sound exposure level. These values should be provided in the format of a map of Eden Prairie with specific points, not noise curves. Only by providing all of this data can the impact from noise be properly evaluated.

B. The FEIS's INM Output Is Flawed Because Inputs Are Incorrect and Unsubstantiated

MAC has failed to address this discrepancy in the FEIS. The INM is the key tool used in evaluating several environmental impacts. It is used to generate noise data, including noise curves for the 1999 and 2010 no-action and proposed expansion comparison. The fleet mix and number of operations used in the INM are the basis for the Emissions and Dispersion Modeling System (EDMS) to calculate CO and Sulfur dioxide emissions. MAC's inputs for the INM include types of aircraft, number of operations, and runway use/flight tracks for departures and closed traffic or touch-and-gos, and the time of day of operations. Nighttime operations are given a heavier weight than daytime operations.

1. Aircraft Such as the Gulfstream IV Cannot Be Eliminated from the INM Because MAC's Use of the Weight Capacity as a Noise Restriction is Suspect

When the City entered into negotiations with MAC, both MAC and the City *required* FAA to be involved in the process to avoid any potential problems with their settlement agreement. The City did not want a repeat of what happened with Ordinance 51—after lots of hard work to have the deal unacceptable to FAA.

In December 2002, MAC heralded the 60,000 lb weight capacity of the FCM runways as a restriction preventing larger aircraft from using Flying Cloud. In the MAC/City December 2002 Agreement, MAC promises not to increase the weight capacity of the runway. In short, the 60,000 lb restriction was a big part of the deal that FAA participated in

However, one and a half years later, MAC in its FEIS describes this weight restriction in its "noise mitigation" plan, and reduces predicted noise from expansion from the INM given that larger aircraft cannot use the runways. And now, FAA is calling such weight restrictions into question. In a "Proposed Policy" published in the Federal Register in July 2003, FAA says that weight capacity of the runways **cannot** entirely prohibit aircraft above those weights and **cannot** be used to mitigate noise, because doing so would be unjustly discriminatory in violation of grant assurances. This policy would affect all runways in the country, not just Flying Cloud.

FAA printed this position in July 2003; however, FAA had already made a decision that the weight bearing capacity of a runway could *not* be used to prohibit larger aircraft from using an airport in February 2002 (just two months after the MAC/City Agreement). Given it takes FAA months to make a decision, surely FAA knew in December when the MAC/City Agreement was made, that FAA would *not* allow a restriction of aircraft based on weight capacity of the runway. FAA said nothing in December. Did MAC also know in December that such weight restrictions were suspect?

76



Given FAA's policy printed in July 2003, I have no doubt that because (1) MAC describes the runway weight capacity as "noise mitigation," (2) MAC reduces its over-60,000 lb aircraft in its fleet mix for the INM, and (3) MAC promises not to increase the runway strength, that FAA will determine the weight capacity cannot be used as a restriction prohibiting larger aircraft at Flying Cloud and will find it unjustly discriminatory in violation of grant assurances.

76 There now seems to be no guarantee that larger business jets over 60,000 lbs won't use Flying Cloud. To me, MAC's actions seem very calculated in order to achieve this result. When the City and MAC entered into the Agreement, the weight bearing capacity of the runway was in *no* way described as "noise mitigation" nor did MAC state it would reduce the fleet mix in the INM as a result of the weight capacity of the runway. In the MAC/City Agreement it simply states that an engineering study found the capacity top be 60,000 lbs and that MAC wouldn't increase it unless required by State law. Never in the previous Draft EIS or Supplement EIS did MAC discuss weight capacity as noise mitigation until *after* FAA published its policy that calls it discriminatory.

Moreover, it is clear that FAA will not allow weight capacity to be an all out bar on 60,000 plus aircraft, therefore it is unreasonable to eliminate them in the INM and air quality emission models.

## 2. Nighttime Operations Input Are Incorrect and Unsubstantiated

There are several problems with MAC's inputs. First, the inputs rely on the fleet mix and flight paths and time of day of the operations. There is NO possible way to obtain any information on these inputs for nighttime flights. The Control tower is closed at night and during one of the busiest hours at FCM 6:00 am to 7:00 am. MAC's estimates for nighttime flights, and for the busiest hour of 6-7am, are unreliable in the FEIS.

77 According to the FEIS, nighttime noise data comes from the extrapolation of monitoring that took place by MAC consultants for **72 hours total** on the days of April 2, 3, and 19, 1997. From 72 hours of monitoring on three days, MAC concludes that nighttime flights are about 3.8 percent of the daytime total. It is incredulous to me how MAC can base its entire evaluation of **all environmental impacts** on 72 hours worth of data! MAC's response in the FEIS that the inputs for nighttime flights is correct because of a *single survey conducted for three days in one year is ludicrous*. How can such an **important** input be based solely upon such paltry information conducted in 1997!

78 In my comments, I reported that MAC has actual monitoring data collected for nighttime flights at FCM during the summertime months for the years 1993-2001. There is no doubt that several years of monitoring over entire summertime periods are far more accurate than a 3-day survey by a consulting company that continually screws up survey

information (like the number of stopovers being 8300 when total business jet operations are only 5876 in a year!).

Actual monitoring data obtained during MAC's summer monitoring program covers the years 1993-2001 and contains at least 225 hours of actual monitoring. That summertime data that I have shows a range from 6.5% to 34.6% of nighttime flights. The following table is from actual monitoring data:

Year	Hours Monitored During Nighttime Hours of 10 pm to 7 am (percent of time monitored, percent of total nighttime hours)	Annual Nighttime Operations According to Monitoring Data	Total Annual Operations According to Monitoring Data*	Percent of Nighttime Flights According to Monitoring Data
1996	25 (18 %, 0.8%)	35,609	103,002 (217,703)	34.6 %
1997	20 (14%, 0.6%)	6,570	100,812 (198,199)	6.5%
1998	48 (12%, 1.5%)	9,308	90,249 (210,907)	10.3%
1999	18 (6%, 0.5%)	7,848	106,960 (192,737)	7.3%

\* ( ) indicates the total annual operations according to Tower, which does not count nighttime operations when it is closed. Obviously, actual monitoring data does not come close to capturing the amount of operations at FCM counted by the Tower.

The above table and information shows several things. One, if actual monitoring shows total operations consistently lower than total operations from reported tower hours (which doesn't include nighttime operations), then the total number of monitored nighttime operations is way under the actual number of nighttime flights occurring at FCM. Second, actual monitoring data shows that MAC's estimates for nighttime operations is way underestimated. Observe that the longer nighttime monitoring is actually conducted, the larger the percentage nighttime flights are found. The only information to actual nighttime flights is monitoring data. This data shows that nighttime flights are probably close to 15% of total operations.

Because nighttime operations are a huge factor in noise output from the INM, this evidence that MAC's nighttime estimates are severely flawed means that the INM output is severely flawed. MAC must provide more accurate information for nighttime operations.

79

80

80

A far more accurate way to obtain nighttime flights at FCM would be to use radar data from MSP. All of the INM and emissions information needs to be corrected with increases in the nighttime flights to at least 15% as described above.

3. Flight Paths/runway use Input Is Incorrect and Unsubstantiated

81

In response to this comment, MAC states that the flight paths used in the INM are based on the preferred flight paths for noise mitigation. That pilots will actually use the preferred flight paths is debatable, however, even assuming they are, preferred flight paths are relevant only for the noise generated under the mitigation INM. For the proposed expansion Alternate F without mitigation, it cannot be assumed that mitigation flight paths will be used. Different flight paths must be used for the without mitigation alternative. More important, given that MAC admits that only 50% compliance with requests for prohibiting nighttime flights, it is an *inaccurate assumption* to use the noise mitigation flight paths for *all* flights. To be consistent, MAC must use mitigation flight paths only 50% compliance and actual flight paths the other 50% of the time for the INM.

4. Fleet Mix Inputs for Stage-2 Jets Are Unsubstantiated

82

In its FEIS, MAC provides that given the results of a 1999 survey conducted to determine Stage-2 jet aircraft usage of FCM, a substantial change in the fleet mix/operations was made to significantly limit the number of daytime Stage-2 operations and eliminate nighttime Stage-2 operations. A survey was made of Minnesota and it was determined that one Stage-2 operator would use FCM during the daytime. A survey was then conducted of IN, MI, OH, and WI. The FAA registry lists 81 Stage-2 jet aircraft in the Great Lakes Region, however, only 11 owner/operators for 14 Stage-2 aircraft were reached in the survey. Those 11 owner/operators provided that they would account for an estimated 77 operations at FCM per year, with 7 of those operations at night. *Sixty-seven Stage-2 jet aircraft in the Great Lakes Region (83%) were not evaluated in that survey.*

Obviously, if 83% of the stage-2 jet aircraft did not respond, the data is unreliable. There are other flaws in the survey. The survey should have been conducted for the *entire* country given that Stage-2 aircraft could come from anywhere in the U.S. In addition, the survey reached such a small number (17%) of total Stage-2 aircraft in the Great Lakes Region that 77 daytime/7 nighttime operations is not representative of what happens at FCM. *Even the FAA takes issue with the validity of the study with so few respondents. See FAA letter dated October 13, 2000 at page 6 (survey information is "speculative.")* How can MAC claim a significant reduction in daytime use, and the elimination of nighttime use by Stage-2 jets! Especially when these survey results are only a very small portion of the Stage-2 aircraft in the country that could access to FCM. This obviously skews the noise curves to give the appearance of less noise impact.

This survey and its results must be included in the FEIS Appendix as a matter of law. It is material made for the preparation of the EIS documents and is very important information that supports the noise curves. MN Rules 4410.2300(J). Moreover, the results of the Minnesota survey and all information obtained (not just Stage-2 aircraft) as to whether FCM would be used by any operator if the runways were lengthened is pertinent information and should be included in the Appendix. Without such information in the Appendix, the FEIS is inadequate as a matter of law.

83

### C. MAC Has Not Evaluated Noise Impact Data

MAC has not reasonably evaluated noise impact data to determine the effects on homes, school, churches, parks, and wildlife areas. Nor has MAC conducted any study or hired appropriate experts to evaluate the impact that noise will have on property values. The only "evaluation" MAC has conducted in the FEIS is to list the number of homes in the DNL range of 60-65dBA and to state that there are no schools or churches within the DNL dBA 65 curves. This is no "evaluation," and therefore the FEIS is inadequate.

84

Contrary to MAC's response in the FEIS, NEPA and MEPA *do not provide* that only noise above 60 dBA DNL needs to be evaluated. Just because MAC and FAA limit their determination of "significant noise" to be a day/night average over a 24 hour period of time that is 60 dBA DNL doesn't mean that the noise impact has been reasonably evaluated. In Minnesota, noise pollution is treated like other types of pollution for analysis and cannot be ignored. If noise increases such a single noise events affect the citizens of Minnesota, then the impact must be evaluated.

85

Key information about the whole noise impact from expansion is missing, including the noise changes that will result outside of the noise curves MAC has provided. What will be the noise impact to Cedar Ridge Elementary School from the proposed expansion, which is in a direct flight path of FCM? MAC has not conducted any surveys or interviewed teachers at Cedar Ridge to determine what current effect noise has at the school. What will be the effect at the Senior Center at Cty. Rd. 4 and Cty. Rd. 1? What will be the effect on the Presbyterian Church on Cty Rd. 4 and Prairie Lutheran on Pioneer Trail? What will be the effect at the outdoor center at Staring Lake and the Hennepin County Vocational School? Only by providing more noise data as described in Section IIIA of this commentary can noise impacts be thoroughly evaluated.

86

MAC has not conducted any significant monitoring that provides insight as to current noise impacts from FCM. Actual monitoring performed during the summer months is sporadic and incomplete. MAC must conduct more monitoring and at more locations in order to determine current noise impacts from FCM and whether the INM model of current conditions is accurate. With this information, INM data for future noise impacts can be better evaluated. MAC should compare noise generated from the INM with actual

87

noise monitoring data.

## VI. Impacts from Air Emissions Have Not Been Reasonably Evaluated

88

Air emissions data provided in the FEIS are incorrect because of the incorrect fleet mix and number of operations used for 1999 and 2010 years, and because of questionable flight paths/runway use as explained in the section on noise impacts as explained above.

89

More important, the FEIS is inadequate because the only information that MAC has provided for the proposed expansion is air emissions information on CO and Sulfur Dioxides ("criteria pollutants"). It is a known fact that aircraft have numerous other hazardous emissions including nitrous oxides that lead to the formation of ozone, and several air toxics that cause adverse health effects to people, animals, and vegetation near airports. See Section IV on cumulative impacts.

90

In addition, MAC must provide data and evaluate cumulative effects from aircraft emissions from MSP operations. It cannot provide air emission impacts from a proposed FCM expansion in a vacuum. MAC has access to all relevant information on air emissions from MSP aircraft, and can calculate air emissions from proposed expansion at MSP. Without an evaluation of all toxic emissions and without evaluating cumulative effects, the FEIS is inadequate as a matter of law. See Section IV on cumulative impacts.

Analysis for toxic emissions associated with airports have been conducted for numerous airports, including the following:

1. LAX
2. O'Hare
3. Oakland International Airport
4. John Wayne and Orange County International Airports
5. Santa Monica Municipal Airport.

91

Technology and information is available to MAC to provide both current and expanded emissions from aircraft, current air toxic levels in Eden Prairie, dispersion models to determine where aircraft emissions will travel, and health risk assessments for residents in Eden Prairie. See, e.g., EPA's "Evaluation of Air Pollutant Emissions from Subsonic Commercial Jet Aircraft," dated April 1999; Berkeley Keep Jets Over the Bay Committee v. Board of Port Comm'rs, A086708, California Court of Appeals, 1<sup>st</sup> Dist., Div.2, August 30, 2001; MPCA's data and maps on air toxics in the metro area at its web site. All of this information is needed in order to provide a reasonable assessment of air emissions from an expanded FCM and potential adverse health consequences that could result.

VII. MAC's Cost/Benefit Analysis Is Inadequate and Unreasonable

The "Flying Cloud Airport Expansion Technical Report: Benefit-Cost Analysis" referenced in the DEIS<sup>1</sup> cannot be the basis for support for the FEIS because of significant changes in forecasts made in the FEIS and because it does not address all of the items listed in Table H-6. For example, the values for benefits to operators; ground travel time savings; reduced costs to Eden Prairie; job, earnings, and output impacts; noise benefits and safety have been changed without support and without explanation as to how numbers were calculated.

92

A. Cost of "MSP Delay Benefits" is Unfounded and Exaggerated

In response to my comments about MAC's fictitious numbers for the stopovers at MSP from FCM, MAC had to concede in the FEIS that its numbers were ludicrous. MAC changed 8,300 stopovers to 2,340 (which again I prove to be unbelievable in the following paragraphs) and stated that additional benefit resulted from some mystical "forecast of diversion of operations from MSP to FCM." In 4 ½ years, upon repeated requests to produce data or information supporting claims that general aviation will move from MSP to FCM as a result of expansion, MAC has come up with nothing.

93

Now in the FEIS, MAC states for the first time in 4 ½ years that "Some businesses with aircraft operating at MSP have told MAC staff they would relocate to FCM if hanger space is available and the runway is lengthened to 5,000 feet." FEIS at II-4. Obviously, without more detailed information the claim lacks justification. A FEIS should have substance, not unsubstantiated hearsay. What are the names of the business? How many aircraft would they move from MSP to FCM as a result of expansion? How many operations would change from MSP to FCM as a result of the move? Was a survey conducted? Was it a telephone call or letter, or just some conversation over coffee? It is incredulous to believe that a business would give up a substantial investment at MSP and incur moving expenses to relocate to FCM. Without real information, not anecdotes, no one can evaluate this claim. This conjecture cannot be the basis for an 82.9 million dollar expansion. Give us real data.

94

Interestingly, the number of based aircraft at FCM has declined since 1987 (565) to an all time low in 2003 of 463 based aircraft. With fewer aircraft being based at FCM, why expand?

95

<sup>1</sup> The "Flying Cloud Airport Expansion Technical Report: Benefit-Cost Analysis" referenced in the DEIS should have been included in the Appendix as a matter of law because it substantiates analyses fundamental to the EIS as specified in MN Rule 4410.2300(J).

The numbers reveal the truth about MAC's proposed expansion. The numbers MAC itself provides in the environmental review process show that expansion at Flying Cloud will *not* have an impact at MSP. First, MAC conducted a survey in 1997 of six FBOs, in which they were asked

**“After taking off from Flying Cloud Airport, have you at any time in the past year had to take on additional fuel or pick up passengers at another metro airport such as St. Paul Downtown or Minneapolis-St. Paul International before continuing on to your final destination? Yes or No. If yes, how many times?”**

See Appendix D of the Flying Cloud Airport Expansion Technical Report Activity Forecasts November 1999 (emphasis added). Only 2 of the 6 FBOs responded yes to stopovers. MAC's own survey states: “The two firms combined for a total of 16-29 times.” The survey does not specify whether the FBO went to MSP or STP. Even assuming they all went to MSP, obviously, 16-29 operations in a year compared to the 512,588 operations at MSP in a year do not justify the expense of 82.9 million dollars. According to MAC's surveys, stopovers from Flying Cloud to MSP are only 0.006% of operations at MSP!

96

MAC's 1997 survey is very clear that the question asked was not round trip flights or how many times per week. The question asked was operations per year. Nevertheless from this survey information, MAC claimed in the Draft EIS and Supplement EIS that the stopover operations at MSP were 8,300 a year! In my SDEIS comments I questioned the accuracy of 8,300 stopovers because this number is so high that it equals the total number of ALL business operations at Flying Cloud a year for 1999!!! I am not splitting hairs. Remember, this is the very reason for MAC's proposed expansion and for its cost/benefit analysis! Again I ask, was MAC recklessly ignorant or deceptive when it came up with 8,300 stopovers after its survey showed 16-29?

How did MAC answer my question? MAC contacted the survey respondents again seven years later on January 6, 2004. MAC states in the FEIS that respondents now claim that seven years ago, they actually meant flights per week, not operations per year, and that since that time they have had this same number of stopovers, and they continue to have this number today. So, in the FEIS, MAC has now changed the number of stopovers from 8,300 to 2,340 (a significant decrease!) and claims maybe a few more if Flying Cloud runways are icy requiring landing at MSP.

Even assuming MAC's new number of 2,500 stopovers at MSP a year is correct, that is only 0.5% of total operations at MSP! Obviously stopovers from Flying Cloud are NOT causing congestion at MSP. Is it worth 82.9 million dollars to eliminate 0.5% of operations at MSP? Also, remember the two FBOs, Elliot Aviation and Executive Aviation, state that their stopovers have *not* increased in 7 years. Then why do they need an 82.9 million dollar expansion? Total stopovers of 2500 a year is only 1.6% of total operations at FCM. MAC has *never* been able to demonstrate congestion at MSP from general aviation. Even its biggest tenant at MSP, Northwest Airlines, says there is no

congestion from general aviation. Northwest Airlines would know! Northwest wants the Flying Cloud expansion stopped.

Operations at Flying Cloud have been diminishing since 1994 (232,130 total operations) and were at one of the lowest levels in 2003 (155,837 total operations). Why are large amounts of new hanger space needed when the data shows usage of the airport has declined significantly? MAC claims of needed expansion need to be verified and documented before they can mystically quantified as a 67 million dollar benefit.

97

This +82.9-million dollars is going to be spent exclusively to increase the types of business jets at Flying Cloud, however, according to MAC's data, currently **only 3% of flights at Flying Cloud are business jets** to begin with! That means that 97% of operations at Flying Cloud are recreational or flight training operations that don't need the expansion.

Even with the proposed expansion, MAC estimates the total business jet operations to increase only to 8% of total operations at Flying Cloud in ten years. According to MAC data in the FEIS, Flying Cloud had the following estimated total operations and estimated business operations.

98

	1999	2010 (with expansion)
<b>Total Operations</b>	234,475	302,982
<b>Business Jet Operations</b>	5,876 (3% of all operations)	24,440 (8% of all operations)

MAC has not even claimed that all of this 5% increase in business jets would result *because* of expansion. Even assuming all increases in business jet operations for 2010 resulted from the expansion, would you spend +82.9 million dollars for a runway that results in a 5% increase of business jet flights in 10 years! Can anyone prove to me that a 5% increase in business jets in ten years at Flying Cloud is worth over 82.9 million dollars? Remember the expansion is not necessary for increasing operations, it's just to increase the types of larger jet business aircraft at the request of two FBOs.

99

Finally, no explanation is given at all as to where the values for benefits to aircraft operators, ground travel savings and reduced costs to Eden Prairie come from. These numbers have the appearance of being pulled out of thin air because they are unsupported and are not explained. MAC's own surveys show that no current GA at MSP would move to an expanded FCM and there is no evidence in the DEIS or SDEIS that any new operators would come to an expanded FCM over MSP. As such, any savings from fewer delays at MSP is unfounded. Ground travel savings is also unsupportable because no operators have been identified who would change from MSP to FCM and who reside closer to FCM than MSP. What are the specific reduced costs to Eden Prairie? The FEIS is inadequate without explanation or support for these cost savings.

100



101

The City of Eden Prairie lists its lost revenue as a total of almost 127 million dollars for the proposed expansion for lost taxes and fees. This is not included in the cost/benefit analysis as it should be.

102

Moreover, the economic benefit that MAC lists as 90 million dollars for FCM is inaccurate because it is based on 1997 data. Both operations and the number of based aircraft have significantly decreased since then. Moreover, the only relevant data is "first round" benefits from the airport at 42 million dollars (Met Council report at 4-41). The revenue from GA visitors cannot be attributable to FCM because there is no way to prove that the only basis for their arrival to the metro area is because of FCM. Without FCM, GA visitors may still have come to the metro, such as through MSP, and therefore would still have the same economic benefit of 9.89 million that cannot be attributable to FCM. In other words, GA visitors come for the Mall of America, the sporting events, etc., they do not come because of FCM.

103

Also, "secondary benefits" from FCM cannot be included in the economic benefit unless secondary benefit losses from expansion are included. For example, because of expansion, Eden Prairie has lost 500 homes. Those 500 homes would have had the economic benefit from construction costs, furnishing costs, cost of living expenses, and so on, which have not been included in the FEIS. Secondary benefits also would have resulted from the businesses that would have been located on the 80 acres zoned for office and industrial space. None of this was included in the FEIS. Finally, secondary benefits are too speculative, and therefore the economic benefit of FCM should be limited to direct first round benefits for 2004 data, without including GA visitors who may have come to the metro without FCM.

#### B. MAC Has Not Reasonably Evaluated Losses from Decreased Property Values

104

As I stated in my comments to the DEIS, MAC cannot use one anecdotal story of a developer to support the claim that Eden Prairie property values will not be diminished by an expansion at FCM. MAC must hire expert appraisers to conduct a study as to how much property values will be affected by noise. These kind of property valuations are done ALL OF THE TIME! Without such an evaluation, the FEIS is inadequate.

105

A comparison to the effect on property values near MSP or any other urban property near an international airport is not applicable to Eden Prairie where most residents do not use FCM--a predominately recreational airport--and property is valued based on environmental amenities because it is *suburban* property, not urban property. Increases in aircraft noise, air pollution, and traffic will turn valued suburban property into urban-like property, without the benefit of proximity to an international, commercial airport. MAC must do the applicable study on property devaluation as a result of expansion.

MAC cannot simply assert that there is no effect on property values when several studies show that property values are negatively impacted by aircraft to an amount of at least 0.5% for every decibel above average noise. See Bragdon, Clifford R. (1989), "Control of airport- and aircraft-related noise in the United States," *Transportation Research Record*; Nelson, John P. (1980), "Airports and property values: a survey of recent evidence," *Journal of Transport Economics and Policy*; Tomkins, J., et al. (1998) "Noise versus access: the impact of an airport in an urban property market," *Urban Studies*; Knack, Ruth Eckdish and Jim Schwab (1996) "Learning to live with airports," *Planning*; Mieszkowski, Peter and Arthur M. Safer, (1978), "An estimate of the effects on airport noise on property values," *Journal of Urban Economics*; McDonald, John F. and Clifford I. Osuji (1995), "The effect of anticipated transportation improvement on residential land values," *Regional Science and Urban Economics*; O'Byrne, Patricia Habuda, et al. (1995), "Housing values, Census estimates, disequilibrium, and the environmental cost of airport noise: a case study of Atlanta," *Journal of Environmental Economics and Management*; Harvey, Milton E., et al. (1979), "Cognition of a hazardous environment: reactions to Buffalo airport noise," *Economic Geography*.

105

In 1994, FAA itself commissioned Booz-Allen & Hamilton, Inc. to study property devaluation as a result of aircraft noise. It created a report "*The Effect of Airport Noise on Housing Values: A Summary Report*." The study found that the effect of noise on prices was highest in moderately priced and expensive neighborhoods. For two moderately priced neighborhoods north of LAX, the study found "an average 18.6 percent higher property value in the quiet neighborhood, or 1.33 percent per dB of additional quiet."

106

A 1996 study found that the expansion of the Seattle-Tacoma Airport would cost nearby cities \$500 million in property values. The study found that "all other things remaining equal, the value of a house and lot increases by about 3.4% for every quarter of a mile the house is farther away from being directly under a flight track."

In 1997, Randall Bell, MAI, Certified General Real Estate Appraiser, Licensed Real Estate Broker and instructor for the Appraisal Institute examined 190 sales near the LAX, John Wayne, and Ontario airports. He found a diminution in value due to airports averaging 27.4%.

VIII. MAC Has Failed to Evaluate the Issues of Safety and Security

107

Noncommercial air travel is far more dangerous than commercial air travel. The accident rate for general aviation is ten times higher than for commercial airlines according to the National Transportation Safety Board data. Within the two years, there have been two crashes at FCM, including one fatality. MAC has failed to evaluate this safety risk of increase accidents at FCM as a result of increased traffic, especially considering the unknown operations that occur when the control tower is closed. Without such an evaluation, the FEIS is inadequate.

108

In addition, since September 11, 2001, security issues at airports are extremely important. Significant security changes have occurred at commercial airports, but little to none have taken place at general aviation airports. Given this and the proposed expansion's ability to allow larger jets at FCM, MAC needs to address security issues at FCM for the proposed expansion, including but not limited to nighttime security, record-keeping of operations in to and out of FCM, and security at hangers and fueling stations.