

MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT

**ASSESSMENT OF ENVIRONMENTAL EFFECTS
METROPOLITAN AIRPORTS COMMISSION'S
SEVEN-YEAR CAPITAL IMPROVEMENT PLAN
2003-2009**

FOR THE

METROPOLITAN AIRPORTS COMMISSION

BY

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ASSESSMENT OF ENVIRONMENTAL EFFECTS

Minneapolis/St. Paul International Airport Metropolitan Airports Commission Seven-Year Capital Improvement Plan

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ASSESSMENT OF ENVIRONMENTAL EFFECTS

Minneapolis/St. Paul International Airport Metropolitan Airports Commission Seven-Year Capital Improvement Plan

A. INTRODUCTION

This report, prepared in response to the requirements of Minnesota Statutes 1986, Chapter 473, as amended in 1988 and 1998, presents an assessment of the environmental effects (AOEE) of projects in the Metropolitan Airports Commission's (MAC) Seven-Year Capital Improvement Plan (CIP) 2003 - 2009 for the Minneapolis/St. Paul International Airport (MSP). Under Minnesota law, the MAC is required to "examine the cumulative environmental effects at each airport of the projects at that airport (in the seven-year CIP), considered collectively." An assessment of each individual project at MSP with potential environmental effects is included in Appendix A of this document.

This assessment examines the cumulative environmental effects of all proposed capital improvement projects at the Airport from 2003 to 2009. Many of the projects entail repair or rehabilitation of existing facilities. Such work would not affect the before/after usage of the facilities, and as such would not add to or subtract from the cumulative environmental effects. The anticipated measurable effects during construction are discussed in general terms under Paragraph C. The projects included in the cumulative evaluation are those that have the potential of altering, creating, or in some manner affecting the environmental impact categories listed below. The selected impact categories were chosen because they historically contain the more critical impacts.

The amended 1986 law also requires the preparation of an Environmental Assessment Worksheet (EAW) for projects that meet all of the following conditions:

- (1) The project is scheduled in the CIP for the succeeding calendar year (2003);
- (2) The project is scheduled to cost \$5 million or more at MSP or \$2 million or more at any other MAC airport;
- (3) The project involves: the construction of (i) a new or expanded structure for handling passengers, cargo, vehicles or aircraft; or (ii) a new runway or taxiway or the extension of an existing runway or taxiway.

All projects scheduled for 2003 at MSP that meet the above conditions have been assessed for environmental effects as part of the 2010 LTCP in the Final EIS for the Dual Track Airport Planning Process completed in 1998. Therefore, no EAW is required for any project scheduled for 2003 at MSP.

IMPACT CATEGORIES USED TO ASSESS ENVIRONMENTAL EFFECTS

Aircraft Noise

The types of projects which could affect noise on sensitive land uses are those that change the number of operations or the use of runways or the structural effectiveness of the receptor – such as new or lengthened runways, new or lengthened taxiways, new maintenance hangars, additional aircraft gates and residential/school/church noise insulation.

Air Quality

Air quality impacts at the Airport will be primarily caused by changes in vehicular or aircraft activity. Projects that could have an effect will generally be the same projects which affect aircraft noise or vehicular traffic or parking.

Water Quality

Projects which affect water quality are those that create additional runoff (new pavements or buildings), fire suppression systems, new retention basins, or projects that affect the groundwater.

Light Emissions

Projects evaluated under this category are airport beacons, lights associated with new runways or taxiways and lights associated with new roadways, parking lots, or ramps.

Sewage

Those projects which have the potential to increase sewage discharged into the sanitary sewer system are new or expanded buildings or other changes that significantly alter the number of people using a facility.

Wetlands

All projects are evaluated to see if they would entail complete or partial filling of wetlands.

Residential Relocation

Residential relocation effects are associated with land acquisition projects that will displace occupied residential units.

B. PROJECTS WITH POTENTIAL ENVIRONMENTAL EFFECTS

Table 1 lists all projects included in the MAC's Seven-Year Capital Improvement Plan for the years 2003 through 2009. Those projects determined not to contribute to the cumulative environmental effects at the Airport are so noted (e.g., in place pavement and/or terminal building reconstruction/rehabilitation projects and replacement of existing facilities). The notations explain in more detail the type of work the project entails and why this type of project will not contribute to the cumulative environmental effects.

TABLE 1
MINNEAPOLIS / ST. PAUL INTERNATIONAL AIRPORT
METROPOLITAN AIRPORTS COMMISSION

Notes	Projects	Capital Improvement Projects	Capital Improvement Program	Capital Improvement Plan				
		2003	2004	2005	2006	2007	2008	2009
	Runway Deicing/Holding Pad Program							
	(1) Runway 12R Deicing/Holding Pad	\$19,000,000						
	(4) Runway 12R Deicing/Holding Pad-Building Demolition	\$1,230,000						
	(1) Runway 12R Deicing/Holding Pad-Taxiway B Construction		\$2,000,000					
	<i>Subtotal Runway Deicing/Holding Pad Program</i>	<i>\$20,230,000</i>	<i>\$2,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
	Runway 17/35 Program							
	(1) Runway 17/35 Construction	\$126,050,000	\$32,000,000	\$500,000				
	(1) Runway 17/35 Land Acquisition	\$90,000,000						
	<i>Subtotal Runway 17/35 Program</i>	<i>\$216,050,000</i>	<i>\$32,000,000</i>	<i>\$500,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
	Runway 4/22 Development Program							
	(1) North Side Storm Sewer	\$1,000,000	\$3,500,000					
	<i>Subtotal Runway 4/22 Development Program</i>	<i>\$1,000,000</i>	<i>\$3,500,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
	Noise Mitigation Program							
	(1) Residential Sound Insulation (Inside 1996 65 DNL)	\$14,000,000	\$15,000,000					
	(1) Residential Sound Insulation (Inside 2005 65 DNL)		\$300,000	\$8,000,000				
	(1) Miscellaneous Landside Program			\$6,600,000				
	<i>Subtotal Miscellaneous Landside Program</i>	<i>\$14,000,000</i>	<i>\$4,500,000</i>	<i>\$62,600,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
	New Projects Program							
	(4) ALEC North Relocation					\$15,000,000		
	(1) Cargo Projects Development		\$8,700,000					
	(1) CAT II/IIIa System Installations	\$6,000,000		\$2,000,000				
	(1) Concourse F Expansion	\$50,000,000						
	(4) Maintenance Building Addition		\$10,000,000					
	(1) New Air Traffic Control Tower		\$12,000,000	\$38,000,000				
	(1) RAC Service Site Relocation	\$1,000,000	\$4,000,000					
	(3) Runway 30L Fuel Island		\$1,900,000					
	(4) Runway 30R Safety Area Improvements	\$1,500,000	\$3,000,000					
	(3) Runway 30L Snow Storage/Melting Area		\$3,700,000					
	(1) 34th Avenue Reconstruction	\$1,300,000	\$500,000					
	<i>Subtotal New Projects Program</i>	<i>\$59,800,000</i>	<i>\$43,800,000</i>	<i>\$40,000,000</i>	<i>\$0</i>	<i>\$15,000,000</i>	<i>\$0</i>	<i>\$0</i>
	ANNUAL TOTALS -- MSP PROJECTS ONLY	\$355,350,000	\$153,300,000	\$175,950,000	\$42,250,000	\$59,250,000	\$17,250,000	\$14,000,000

NOTES:

- (1) These items have potential effects and are discussed in Appendix A.
- (2) A rehabilitation or reconstruction project which does not physically alter the original size (Project not included in Appendix A).
- (3) An electrical or mechanical device that monitors, indicates or controls existing conditions (Project not included in Appendix A).
- (4) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity (Project not included in Appendix A).

C. EFFECTS DURING CONSTRUCTION

It is expected that typical mitigation measures will be used during construction to minimize potential adverse environmental effects caused by noise, dust, erosion, etc. Since the environmental effects of construction will be temporary, they have not been included in the cumulative, long-term effects of projects in the CIP.

It is recognized that the planned rehabilitation of Runways 12R/30L and 12L/30R and the construction of Runway 17/35 during the Seven-Year CIP will require rerouting of air traffic for temporary periods. The rerouting of aircraft traffic will cause temporary changes in overflight noise levels. The greater noise levels from more flights concentrated on one or two of the Airport's three existing runways will be partially offset by reduced levels under the approaches to the runway(s) that are temporarily out-of-service for repair and/or rehabilitation. In addition, MAC, working with the Metropolitan Aircraft Sound Abatement Council (MASAC), will utilize whatever noise control/reduction measures feasible during the construction of these runways, including:

- 1) Scheduling the work during the closed window season (to the extent feasible).
- 2) Requiring longer work days and weeks by the contractors to expedite the work.
- 3) Balancing the effects of night construction noise with aircraft operating noise.
- 4) Enforcing stringent penalties on contractors for work delays.

D. CUMULATIVE ENVIRONMENTAL EFFECTS

Following is a summary of the cumulative environmental effects of the projects in the MSP 2003-2009 CIP. Appendix A contains an assessment of environmental effects on a project-by-project basis.

A number of projects included in the Seven-Year CIP for 2003-2009 are ongoing projects from previous years or have been analyzed previously for their environmental effects. The effects of these projects are discussed in their individual project descriptions in this document, as well as in other environmental documents (Environmental Assessments, Environmental Assessment Worksheets, or Environmental Impact Statements).

The remaining projects listed in the CIP that could potentially affect the environment are included in the MSP 2010 Long Term Comprehensive Plan (LTCP). The 1989 Metropolitan Airports Planning Act required the MAC and the Metropolitan Council to complete a comprehensive and coordinated study of the region's long term aviation needs. The seven-year study, known as the Dual Track Airport Planning Process, came to an end in 1996 when the legislature stopped further study of a new airport and directed the MAC to implement the MSP 2010 LTCP.

The LTCP study included a number of alternatives for development and expansion of MSP. The study was conducted in accordance with the Alternative Environmental Review Process approved by the Minnesota Environmental Quality Board (EQB) in March 1992. This process included the preparation of Alternative Environmental Documents (AEDs) for evaluating the alternatives under consideration. A draft AED was prepared and distributed for comment as part of the MSP LTCP study. This document addressed the cumulative environmental effects that would result from the proposed improvements. Upon receipt of

comments, a final AED was prepared and again distributed for comment. The MAC, being the Responsible Governmental Unit (RGU), determined the adequacy of the Final AED in early 1995.

Several project descriptions in Appendix A refer to the Dual Track Airport Planning Process Final EIS. This document assessed the environmental effects of the MSP 2010 LTCP and 2020 Concept Plan. The 2010 LTCP is the first-phase implementation of the 2020 Concept Plan; it includes the new north-south runway and related projects, and interim improvements to the Lindbergh and HHH terminals and parking. The Final EIS was distributed and made available to affected agencies and the public for review and comment on its adequacy on May 7, 1998. The FAA determined in its September 23, 1998 Record of Decision that the Final EIS, together with supporting documents and responses to comments on its adequacy, meets the environmental review reporting requirements of the National Environmental Policy Act (NEPA) for projects in the MSP 2010 LTCP. The Minnesota Environmental Quality Board (EQB) found the Final EIS to be adequate in terms of compliance with the environmental review requirements of the state of Minnesota on October 26, 1998.

Summary Of Cumulative Environmental Effects

As disclosed in the May 1998 Dual Track Airport Planning Process Final EIS, the MSP 2010 LTCP would have significant adverse effects on noise, historic properties/districts, surface water quality, wetlands and the Minnesota Valley National Wildlife Refuge. Through consultation with affected agencies, the MAC committed to implement measures that will appropriately mitigate these adverse effects. The potential effect of low frequency noise is still an unresolved issue. MAC and affected municipalities prepared a report with recommendations and MAC has submitted the report with its recommendations to the FAA for its review. The FAA responded that the study failed to demonstrate that there would be increased annoyance to the residents of Richfield due to low-frequency noise. The FAA further stated that they have an interest in pursuing additional study in this area

The Seven-Year CIP for 2003-2009 includes some of the projects identified in the MSP 2010 LTCP. Therefore, the cumulative environmental effects of these projects in the CIP are included in the assessment of environmental effects presented in the Final EIS, and no further assessment is needed.

APPENDIX A

ASSESSMENT OF INDIVIDUAL PROJECTS' ENVIRONMENTAL EFFECTS

III-A. INTRODUCTION

The following pages describe the anticipated environmental effects of the MAC's overall Seven-Year CIP for MSP. **Figure A-1** depicts the location of each MSP project in the CIP with potential environmental effects.

Projects with Potential Environmental Effects 2003-2009



I. 2003 Capital Improvement Projects

- I.A Runway 12R Deicing/Holding Pad
- I.B Runway 17/35 Construction
- I.C Runway 17/35 Land Acquisition
- I.D North Side Storm Sewer
- I.E Residential Sound Insulation (Inside 1996 65 DNL)
- I.F Residential Sound Insulation - Multi-family (Inside 1996 65 DNL)
- I.G School Noise Abatement Projects
- I.H Airside Pavement Rehabilitation Program
- I.I Commercial Roadway Bag Belt
- I.J MAC Cargo Buildings - Air Freight Facility
- I.K CAT II/IIIa System Installations
- I.L Concourse F Expansion
- I.M RAC Service Site Relocation
- I.N 34th Avenue Reconstruction

II. 2004 Capital Improvement Program

- II.A Runway 12R Deicing/Holding Pad - Taxiway B Construction
- II.B Runway 17/35 Construction
- II.C Residential Sound Insulation (Inside 2005 65 DNL)
- II.D Lindbergh Terminal North Addition
- II.E Cargo Projects Development
- II.F New Air Traffic Control Tower
- II.G RAC Service Site Relocation

III. 2005 Capital Improvement Plan

- III.A Runway 17/35 Construction
- III.B Residential Sound Insulation (63-64 2005 DNL)
- III.C Taxiway C/D Complex
- III.D MAC Cargo Buildings - Airline Belly Cargo Facility

IV. 2006 Capital Improvement Plan

(No projects having potential environmental effects begin this year)

V. 2007 Capital Improvement Plan

V-A. Residential Sound Insulation (60-62 2005 DNL)

VI. 2008 Capital Improvement Plan

(No projects having potential environmental effects begin this year)

VII. 2009 Capital Improvement Plan

(No projects having potential environmental effects begin this year)

Note: Projects in *Italics* are not shown on map



Photo: December 1999



Figure A-1

I. 2003 PROJECTS

The following projects are included in the MAC's CIP for MSP in 2003 that have the potential to affect the environment:

- I.A. Runway 12R Deicing/Holding Pad
- I.B. Runway 17/35 Construction
- I.C. Runway 17/35 Land Acquisition
- I.D. North Side Storm Sewer
- I.E. Residential Sound Insulation (Inside 1996 DNL 65 Noise Contour)
- I.F. Residential Sound Insulation Multi-family (Inside 1996 DNL 65 Noise Contour)
- I.G. School Noise Abatement Projects
- I.H. Airside Pavement Rehabilitation Program
- I.I. Commercial Roadway Bag Belt
- I.J. MAC Cargo Buildings – Air Freight Facility
- I.K. Category (CAT) II/IIIa Landing System Installations
- I.L. Concourse F Expansion
- I.M. Rent-A-Car (RAC) Service Site Relocation
- I.N. 34th Avenue Reconstruction

I-A. RUNWAY 12R DEICING/HOLDING PAD

The need exists for a large apron area near the end of each runway to provide space for aircraft waiting for departure and to also function as a deicing pad with a glycol recovery and containment system. Airlines experience delays at departure for a number of reasons with the result that previously deiced aircraft requiring additional deicing must return to the terminal for the deicing, and other aircraft in the queue cleared for departure may be delayed for other reasons (e.g., mechanical malfunctions). The deicing pad would provide the needed deicing prior to departure and the holding apron would provide storage for delayed aircraft while allowing other aircraft to taxi by and depart without delay. This project will construct the airport's deicing/holding pad on Runway 12R to allow for the efficient deicing of aircraft and collection of glycol as well as for the holding of aircraft for operational reasons. This project will also include the construction of Taxiway B between the deicing pad and Exit Taxiway B10.

Deicing aircraft is an environmental issue since the glycol that runs off can reduce oxygen levels in bodies of water with which it comes in contact. These aprons would allow for efficient aircraft deicing and glycol collection as well as for aircraft holding for operational reasons. This project will also include the construction of Taxiway B between the deicing pad and Exit Taxiway B10. Water quality is the major category to be impacted by this project. There will be a positive effect in that the Airport's overall collection and containment system will decrease the amount of contaminated runoff entering the Minnesota River. Air emissions and energy consumption will also decrease as a result of this project since idling time for 12R departures will be reduced and taxi time to and from the terminal for aircraft requiring additional deicing will be eliminated.

This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of this project.

I-B. RUNWAY 17/35 CONSTRUCTION

One of the key facility requirements of the MSP 2010 LTCP is a new 8,000-foot runway on the west side of the Airport. The construction of Runway 17/35 is being phased over several years. This year's projects associated with the Runway include the following:

1. 77th Street/24th Avenue Interchange/I-494 Frontage Road
2. Buildings Demolition
3. Ground Handler Fuel Facility
4. Infield Fueling Facilities
5. Lease Extinguishment
6. MAC Equipment and Materials Storage Building
7. MAC Glycol Facilities Demolition and Construction
8. MAC South Fueling Facility
9. RPZ Obstructions Removal
10. Runway 17/35 Construction – South End
11. Runway 17/35 North End Paving
12. Runway 4/22 Tunnel
13. Snowmelters

The Final EIS for the MSP 2010 LTCP addressed the cumulative and construction effects of Runway 17/35. Mitigation plans for identified significant adverse environmental effects have been prepared. Runway 17/35 will not become operational until the committed mitigation has been accomplished.

I-C. RUNWAY 17/35 LAND ACQUISITION

This project is a continuation of efforts begun by the Metropolitan Airports Commission in 1998 to acquire off-airport land for the Runway 17/35 project. Land will be acquired and leases will be extinguished to provide for the FAA-defined Runway Protection Zone (RPZ) for the Runway 35 end. Several businesses, offices and a VFW Post will be relocated as a result of this project. No residences are within the RPZ, so there is no impact in terms of residential relocations. However, the businesses and their employees will be affected by these acquisitions. The acquisition and relocation proceedings will be done in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. During 2003, there will be a continuation of the acquisition of off-airport land as well as lease extinguishment required to provide for the Runway 17/35 Protection Zone (RPZ). Costs for these items will be determined based on negotiations with the impacted property owners.

This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of this project.

I-D. NORTH SIDE STORM SEWER

The extension of Runway 4/22 by 1,000 feet to the northeast (for which a separate EA was prepared and a FONSI was issued by the FAA) requires the construction of a new storm water drainage system. The new storm sewer was constructed in 2001 and runs from the intersection of Runway 12L/30R and Runway 4/22 to Snelling Lake. The North Side Storm Sewer project will provide for the construction of the new discharge pipe from Highway 5 to Snelling Lake. There will also be improvements made to the Snelling Lake pond system. Water quality is the only environmental impact category affected by this project. A positive impact will be created as a result of implementing this project since the amount of potentially harmful effluent reaching the region's waterways will be reduced.

I-E. RESIDENTIAL SOUND INSULATION (INSIDE 1996 DNL 65 Noise Contour)

This item is intended to cover projects identified as part of the Federal Aviation Regulation (FAR) Part 150 program (noise control and compatibility planning for airports) which has been approved, in part, by the FAA. The extent of the work will depend on the amount of federal aid available for each type of project. Land acquisition would include selected residences around the Airport. Only those homes within the certified 1996 DNL 65 noise contour will be sound insulated as part of this continuing project initiated in 1992. This project will also include the removal of materials containing asbestos. This project also includes needed mechanical modifications to homes completed under the program.

This project will result in a positive impact concerning airport high frequency noise due to the significantly lower sound levels which will be achieved within the homes receiving sound insulation.

Low frequency noise and its effects on nearby residences are unresolved issues. In early 2000 MAC initiated a study to determine the effects of low frequency noise and vibration from aircraft operations at MSP. This study, entitled "Minneapolis-St. Paul International Airport Low Frequency Noise Policy Committee Report" and dated August 10, 2000, was submitted to the FAA's Minneapolis Airports District Office. The FAA responded that the study failed to demonstrate that there would be increased annoyance to the residents of Richfield due to low-frequency noise. The FAA further stated that they have an interest in pursuing additional study in this area

I-F. RESIDENTIAL SOUND INSULATION-MULTI-FAMILY (INSIDE 1996 DNL 65 NOISE CONTOUR)

This item is intended to cover projects identified as part of the Federal Aviation Regulation (FAR) Part 150 program (noise control and compatibility planning for airports) which has been approved, in part, by the FAA. The extent of the work will depend on the amount of federal aid available for each type of project. Land acquisition would include selected residences around the

Airport. Only those multi-family units within the certified 1996 DNL 65 noise contour will be sound-insulated as part of this project.

This project will result in a positive impact concerning airport high frequency noise due to the significantly lower sound levels which will be achieved within the multi-family units receiving sound insulation.

I-G. SCHOOL NOISE ABATEMENT PROJECTS

MAC has included noise abatement projects within the CIP with the goal of achieving an aggregate interior noise reduction of 15-20 decibels (dBA) in the instruction areas of schools, compared to noise levels prior to the project improvements. Since program inception, a total of 16 schools have been soundproofed by the MAC with financial assistance from the FAA and Mn/DOT - Office of Aeronautics. The MAC is proposing to continue this program in 2003.

The legislation which ended the Dual Track Airport Planning Process contained requirements that the MAC insulate an additional six schools between the officially delineated 1996 FAR Part 150 DNL 60 and 65 noise contours. Visitation School in Minneapolis will be soundproofed as part of this project in 2003, this school being the last of six (6) schools to be soundproofed as a requirement of the Dual Track planning process.

This project will provide positive effects concerning airport noise. Achieving an aggregate interior noise reduction of 15-20 decibels (dBA) in the instruction areas of schools compared to noise levels prior to improvements is possible and has been shown to be an effective abatement strategy.

I-H. AIRFIELD PAVEMENT REHABILITATION PROGRAM

This is an ongoing program to replace sections of concrete pavement in the aircraft operational areas that have deteriorated to a point where maintenance is no longer a viable option. This year's project will replace the apron pavement adjacent to gates E2 through E6, D1 through D6 and C1.

This project should not result in any increase to stormwater runoff volumes, sediments, nutrients or organics.

I-I. COMMERCIAL ROADWAY BAG BELT

There are currently discussions taking place on how to better utilize the east upper level roadway to alleviate traffic congestion on the upper level roadway adjacent to the terminal. One issue that must be resolved is the movement of baggage from the east roadway to the terminal bag make-up area. A project to provide the required bag belt and sorting facility is being considered.

Air quality is the only environmental impact category affected by this project. A positive impact will be created as a result of implementing this project since traffic congestion on the upper level roadway will be reduced.

I-J. MAC CARGO BUILDINGS – AIR FREIGHT FACILITY

In conjunction with the construction of Runway 17/35, new building areas will be developed. The MAC will construct two cargo buildings that will be leased to airport tenants. This project will provide for the construction of an air freight facility including all required aircraft apron and auto/truck parking areas to accommodate non-anchor carrier cargo activity as well as for cargo operators who operate to and from MSP on an infrequent basis. This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of projects included in the 2010 LTCP.

I-K. CAT II/IIIa SYSTEM INSTALLATIONS

This multi-phase project will upgrade existing instrument landing systems (ILS) to Runways 12L, 12R and 35 including navigational aids and in-pavement lights. Currently 12L and 12R can accommodate Category I (CAT I) operations during inclement weather. Upgrading these, as well as the Future Runway 35, to CAT II/IIIa involves adding additional lights in between existing approach lights and adding some specialty in-pavement lights to improve the safe operation of aircraft during poor visibility conditions. The 12R system was completed in 2002. The 2003 project will provide the CAT II/IIIa system for Runway 12L.

There are additional lights in this upgraded landing system. However, the cumulative effects are not anticipated to be significant due to the time periods during which the system operates (i.e., only during very poor weather/visibility conditions) and the fact that the strobing sequenced lights are aimed such that any nearby homes would remain unaffected by direct light intrusion.

I-L. CONCOURSE F EXPANSION

This project will provide for the expansion of Concourse F to include additional gates, additional gate hold areas and jet bridges. Modifications to the apron and fuel hydrant system will also be included with this project.

This project will increase passenger capacity by increasing the number of aircraft gates. This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of this project.

I-M. RAC SERVICE SITE RELOCATION

The MAC has over the past few years relocated all of the Rent-A-Car (RAC) companies to temporary locations to make room for expansion of the Green Concourse (now Concourse C). The ultimate plan for the Airport's RAC companies to collocate them to an on-airport site near the intersection of I-494 and Cedar Avenue (MN Highway 77). This total project may include rental counters, administrative areas, ready car lots, return car lots, employee parking, quick turnaround areas (QTA), service/maintenance areas, and vehicle storage. The overall project is being proposed to begin after 2010.

More specifically, the overall RAC site will be situated near the MTC bus garage on the Airport's south side on three individual parcels of land subdivided by 77th Street, Longfellow Road, and the relocated Frontage Road. This project represents the initial preparation phase of the overall project and provides for the construction of on-grade parking areas.

The RAC service site relocation shifts existing RAC activities to a new location. Therefore, this project is included in the no action alternative and the MSP 2010 LTCP alternative in the Final EIS. The Final EIS addressed the cumulative effects of this project.

I-N. 34TH AVENUE RECONSTRUCTION

This project provides for the installation of the final lift of bituminous pavement on 34th Avenue and the completion of all site clean up. This project is part of the overall EconoLot / Employee Parking Structure project. Its effects were considered as part of the Environmental Assessment Worksheet (EAW) for the EconoLot / Employee Parking Structure, submitted to the Minnesota Environmental Quality Board in October of 2000.

II. PROJECTS BEGINNING IN 2004

The following projects are proposed to start in the Year 2004 that have the potential to affect the environment.

- II-A. Runway 12R Deicing/Holding Pad – Taxiway B Construction
- II-B. Runway 17-35 Construction
- II-C. Residential Sound Insulation (Inside 2005 65 DNL)
- II-D. Lindbergh Terminal North Terminal Addition
- II-E. Cargo Projects Development
- II-F. New Air Traffic Control Tower

II-A. RUNWAY 12R DEICING/HOLDING PAD - TAXIWAY B CONSTRUCTION

This project will provide for the construction of Taxiway B between Runway 4/22 to Taxiway M. It also includes the removal of Taxiway T between Runway 4/22 and Taxiway M and the construction of taxiway fillets east of Runway 4/22.

Water quality is the only impact category affected by this project because the new impervious surfaces will result in a slight increase in runoff to the Mother Lake wetlands area. The increase in runoff from this project will not be significant, and its cumulative effect is included in the Final EIS for the MSP 2010 LTCP.

II-B. RUNWAY 17/35 CONSTRUCTION

One of the key facility requirements of the MSP 2010 LTCP is a new 8,000-foot runway on the west side of the Airport. The construction of Runway 17/35 is being phased over several years. This year's projects include the following:

1. 66th Street Interchange – Phase 2
2. Campus Monumentation
3. Other General Construction
4. Runway 17 Deicing Pad Construction
5. Runway 17/35 Communications
6. Runway 17/35 NAVAIDS
7. Runway 17/35 RPZ Restoration
8. Snowmelters
9. Taxiway Q Construction

The Final EIS for the MSP 2010 LTCP addressed the cumulative and construction effects of Runway 17/35. Mitigation plans for identified significant adverse environmental effects have been prepared. Runway 17/35 will not become operational until the committed mitigation has been accomplished.

II-C. RESIDENTIAL SOUND INSULATION (INSIDE 2005 DNL 65 Noise Contour)

This project is part of the MSP Noise Mitigation Plan for the 2010 LTCP. It is an expansion of the current Sound Insulation Program (SIP) for homes inside the DNL 65 noise contour. The intent of this project is to include sound insulation of residences within the certified 2005 DNL 60 - 65 noise contour. The 2005 DNL contour has been prepared as part of the update of the FAR Part 150 program. The impact of this project is a reduction of interior sound levels due to aircraft overflights.

II-D. LINDERGH TERMINAL NORTH TERMINAL ADDITION

This project provides for the construction of a two-story expansion to the north end of the Lindbergh Terminal. The first level (ticketing level) will include an extension of the Northstar Crossing retail mall as well as adding new public rest rooms and a public elevator and stair to the mezzanine level. The mezzanine level will provide for expanded MAC and airline tenant office space. This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of this project.

II-E. CARGO PROJECT DEVELOPMENT

This project will provide for the construction of a new cargo facility as part of the Runway 17/35 development. This project is included in the Final EIS for the MSP 2010 LTCP. The Final EIS addressed the cumulative effects of this project.

II-F. NEW AIR TRAFFIC CONTROL TOWER

With the construction of Runway 17/35 and the development of the adjacent building areas, there will be a need to construct a new Air Traffic Control Tower in order to see all parts of the runway and taxiway surfaces. This project will commence with a conceptual study in 2003. The Final EIS included an analysis of this project's effects.

III. PROJECTS BEGINNING IN 2005

The following projects are proposed to start in 2005 and have the potential to affect the environment.

- III.A Runway 17/35 Construction
- III.B Residential Sound Insulation (63-64 2005 DNL)
- III.C Taxiway C/D Complex
- III.D MAC Cargo Buildings - Airline Belly Cargo Facility

III-A. RUNWAY 17/35 CONSTRUCTION

One of the key facility requirements of the MSP 2010 LTCP is a new 8,000-foot runway on the west side of the Airport. The construction of Runway 17/35 is being phased over several years. The only 2005 project is building demolition.

The Final EIS for the MSP 2010 LTCP addressed the cumulative and construction effects of Runway 17/35. Mitigation plans for identified significant adverse environmental effects have been prepared. Runway 17/35 will not become operational until the committed mitigation has been accomplished.

III-B. RESIDENTIAL SOUND INSULATION (63-64 dBA 2007 DNL)

This item is intended to cover projects identified as part of the Federal Aviation Regulation (FAR) Part 150 program (noise control and compatibility planning for airports) Noise Exposure Map which will be submitted to the FAA in the future in the form of a FAR Part 150 update process.

This project will result in a positive impact concerning airport high frequency noise due to the lower sound levels which will be achieved within units receiving sound insulation.

III-C. TAXIWAY C/D COMPLEX

The Taxiway C/D Complex (adjacent to Concourses E and F and parallel to Runway 4/22) will be reconstructed. Taxiway D (adjacent to Concourses E and F) is currently restricted to Boeing 727-type aircraft or smaller aircraft and the pavement on both taxiways is in need of replacement. Reconstruction of Taxiways C and D will allow unrestricted two-way taxiing of aircraft on both taxiways.

This project will not increase the overall capacity of the Airport. It will involve the construction of additional taxiway maneuvering areas adjacent to Concourses E and F. The project will add approximately 336,750 square feet of impervious pavement surface. Runoff from this surface will be added to the Minnesota River North Drainage Area. The environmental effects of this the year 2010 are included in the Final EIS for the MSP 2010 LTCP

III-D. MAC CARGO BUILDINGS - AIRLINE BELLY CARGO FACILITY

In conjunction with the construction of Runway 17/35, new building areas will be developed. The MAC will construct two cargo buildings that will be leased to airport tenants. This project will provide for construction of a "belly" cargo building to include all required aircraft apron and auto/truck parking areas.

Presently a majority of MSP's airline belly cargo is accommodated within a 36,000 SF multi-tenant cargo facility owned by Standard Air Cargo (Standard Cargo Facility). This facility is scheduled for removal in order to accommodate construction of the Humphrey Terminal and its associated infrastructure. Additionally, Delta Airlines has indicated a desire to move into the proposed MAC-owned belly cargo facility. Currently there are no other existing facilities at MSP that can accommodate the required airline belly cargo operations. Therefore, a new facility must be constructed to replace the Standard Cargo Facility and house airline belly cargo operations. The potential aircraft noise and water quality cumulative effects associated with this project have been addressed in the Final EIS for the MSP 2010 LTCP.

IV. PROJECTS BEGINNING IN 2006

There are no projects included in the MAC's CIP for MSP beginning this year that may potentially affect the environment.

V. PROJECTS BEGINNING IN 2007

The following projects are proposed to start in 2005 and have the potential to affect the environment.

V-A. RESIDENTIAL SOUND INSULATION (60-62dBA 2007 DNL)

This item is intended to cover projects identified as part of the Federal Aviation Regulation (FAR) Part 150 program (noise control and compatibility planning for airports) Noise Exposure Map which will be submitted to the FAA in the future in the form of a FAR Part 150 update process.

This project will result in a positive impact concerning airport high frequency noise due to the lower sound levels which will be achieved within units receiving sound insulation.

VI. PROJECTS BEGINNING IN 2008

There are no projects included in the MAC's CIP for MSP beginning this year that may potentially affect the environment.

VII. PROJECTS BEGINNING IN 2009

There are no projects included in the MAC's CIP for MSP beginning this year that may potentially affect the environment.