

LEGISLATIVE REFERENCE LIBRARY
TL726.4.T9 A873 2000
- Minneapolis/St. Paul International
3 0307 00047 8803

MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT

ASSESSMENT OF ENVIRONMENTAL EFFECTS METROPOLITAN AIRPORTS COMMISSION'S SEVEN YEAR CAPITAL IMPROVEMENT PLAN 2001-2007

FOR THE

METROPOLITAN AIRPORTS COMMISSION

BY

HNTB

TL
726.4
.T9
A873
2000

Minn. Stat. 473.614 Subd. 1

OCTOBER 2000

CONSULTANTS' REPORT

**TABLE 1
RELIEVER AIRPORT SYSTEM
METROPOLITAN AIRPORTS COMMISSION**

Notes	Airport & Project Description	Capital	Capital	Capital Improvement Plan				
		Improvement Projects 2001	Improvement Program 2002	2003	2004	2005	2006	2007
Reliever Airport Program								
Airlake								
	4 Crosswind Runway Development						\$5,300,000	\$3,100,000
	1 Pavement Rehabilitation	\$1,230,000						
	3 Property Acquisition -- Crosswind Runway				\$2,600,000			
^**	South Building Area Development	\$2,100,000						
Anoka								
	2 Airfield Signage/ Windcone Replacement	\$1,250,000						
	4 Building Area Development - East	\$500,000					\$3,120,000	
^**	Building Area Development - Northwest		\$5,600,000		\$3,000,000			
	1 Pavement Rehabilitation	\$1,300,000	\$350,000	\$200,000				
	4 Runway 9/27 Extension/Widening		\$6,000,000					
	4 Runway 9/27 MALSR/ILS		\$2,300,000					
	4 Runway 9/27 Parallel Taxiway/Extension		\$1,000,000					
	4 West Building Annex	\$800,000						
Crystal								
	1 Obstruction Removals					\$100,000		
	1 Pavement Rehabilitation	\$500,000		\$375,000				
	1 Runway 6L/24R Reconstruction		\$850,000					
	2 Security Fence Installation	\$50,000						
Flying Cloud								
	2 Airfield Signage and Electrical Upgrades	\$1,000,000						
	2 Hangar/Building Removal			\$300,000				
	1 Pavement Rehabilitation	\$75,000	\$100,000					
	1 Runwa 18/36 Reconstruction		\$750,000					
	5 Runway 9R/27L Reconst./Extension & Rwy 9L/27R Exten.	\$8,500,000						
	5 South Building Area Development	\$4,900,000	\$4,600,000					
Lake Elmo								
	4 East Building Area Development		\$3,500,000		\$1,400,000			
	1 Pavement Rehabilitation	\$1,500,000						
^	Runway 14/32 Construction					\$6,100,000		
^	Runway 4/22 Extension				\$1,900,000			
St Paul								
	1 Bayfield Street Rehabilitation			\$200,000				
	1 Building Area Redevelopment	\$3,000,000						
	2 Flood Protection	\$2,000,000						
	2 MAC Building Modifications	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
	1 Pavement Rehabilitation	\$2,000,000	\$2,150,000					
	Subtotal Reliever Airport Program	\$30,805,000	\$27,300,000	\$1,175,000	\$9,000,000	\$6,300,000	\$8,520,000	\$3,100,000

**TABLE 1
RELIEVER AIRPORT SYSTEM
METROPOLITAN AIRPORTS COMMISSION**

Notes	Airport & Project Description	Capital	Capital	Capital Improvement Plan						
		Improvement Projects	Improvement Program	2001	2002	2003	2004	2005	2006	2007
Reliever Airports Utility Extension Program										
	Airlake									
	Sanitary Sewer/Watermain Install - N. Building Area	\$2,000,000								
	Anoka									
	Sanitary Sewer and Watermain Extensions	\$200,000								
	Crystal									
	Sanitary Sewer and Watermain Extensions	\$200,000								
	Flying Cloud									
	Sanitary Sewer and Watermain Extensions	\$4,500,000								
	Subtotal Reliever Airports Utility Extension Program	\$6,900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	TOTAL RELIEVER AIRPORTS PROGRAM	\$37,705,000	\$27,300,000	\$1,175,000	\$9,000,000	\$6,300,000	\$8,520,000	\$3,100,000		

KEY TO NOTES:

- ^ Item discussed in previous Assessment of Environmental Effects and no change of workscope is expected.
- * Project has also been addressed in other environmental documents (EA/EIS/EAW).
- (1) A rehabilitation, reconstruction or redevelopment project which does not physically alter the original size.
- (2) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity.
- (3) Project does not involve construction; proposed construction projects on acquired land are subject to separate environmental review.
- (4) Additional environmental analysis may be required.

ASSESSMENT OF ENVIRONMENTAL EFFECTS

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

RECEIVED

NOV 13 2000

TABLE OF CONTENTS

LEGISLATIVE REFERENCE LIBRARY
STATE OFFICE BUILDING
ST. PAUL, MN 55155

<u>Section</u>	<u>Page</u>
A. INTRODUCTION.....	1
B. PROJECTS WITH POTENTIAL ENVIRONMENTAL EFFECTS	2
C. IMPACTS DURING CONSTRUCTION	7
D. CUMULATIVE ENVIRONMENTAL EFFECTS	7

APPENDIX A: ASSESSMENT OF INDIVIDUAL PROJECTS' ENVIRONMENTAL EFFECTS

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 Seven Year Capital Improvement Plan (2001-2007) 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 2001 to 2007. 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 1986 law, as amended, governing MAC affairs provides ground rules for determining which project(s) programmed for the succeeding calendar period might require a semi-detailed environmental evaluation. These projects must also involve the construction of either 1) a new or expanded structure to handle passengers, cargo, vehicles or aircraft or 2) a new runway or taxiway or the extension of an existing runway or taxiway. Year 2001 projects at MSP must have a \$5 million or greater price tag while Year 2001 projects at any of the reliever airports must have a \$2 million or greater price tag. Those projects for which an Environmental Assessment Worksheet (EAW) is required look at all impacts in somewhat greater detail. It was determined that one (1) Year 2001 CIP project for MSP requires preparation of an EAW (the EconoLot/Employee Parking Structure). This EAW has been prepared concurrently with this AOEE report.

IMPACT CATEGORIES USED TO ASSESS ENVIRONMENTAL EFFECTS

Aircraft Noise

The types of projects which might impact noise on the environment are new or lengthened runways, new or lengthened taxiways, new maintenance hangars, additional aircraft gates or facilities that may increase operations, and noise insulation and other noise mitigation measures.

Air Quality

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

Water Quality

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

Wetland Impacts

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

Residential Relocation Impacts

Residential relocation impacts 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 2001 through 2007. Those projects determined not to contribute to the cumulative environmental effects (i.e., pavement and /or terminal building reconstruction/rehabilitation projects, replacement of existing items) at the Airport are so noted. The notations are coded by number in order to 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. It should be noted that the arrangement of the projects in Table 1 has changed significantly from previous years. Projects in this year's CIP have been grouped in a series of "stand-alone" programs to be consistent with the programs of projects included in the lease agreements between MAC and the airlines.

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

Notes	Projects	Capital	Capital	Capital Improvement Plan				
		Improvement Projects 2001	Improvement Program 2002	2003	2004	2005	2006	2007
Runway Deicing/Holding Pad Program								
	(3) Buildings Demolition	\$1,250,000						
^ * *	Runway 12R Deicing/Holding Pad	\$15,000,000						
^ * *	Runway 30R Deicing/Holding Pad	\$19,000,000						
^ * *	Taxiway B Construction	\$1,700,000						
	<i>Subtotal Runway Deicing/ Holding Pad Program</i>	<i>\$36,950,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Runway 17/35 Program								
^ * *	Runway 17/35 Construction	\$108,550,000	\$90,850,000	\$81,250,000				
^ * *	Runway 17/35 Land Acquisition	\$40,000,000						
	<i>Subtotal Runway 17/35 Program</i>	<i>\$148,550,000</i>	<i>\$90,850,000</i>	<i>\$81,250,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Runway 4/22 Development Program								
^ *	North Side Storm Sewer	\$500,000						
^ * *	Runway 4/22 Extension			\$5,000,000				
* *	Runway 4/22 Property Acquisition	\$5,000,000						
(1)	Runway 4/22 Reconstruction - Segment 3	\$9,800,000						
^ * *	Runway 4/22 Road Relocation	\$1,000,000						
	<i>Subtotal Runway 4/22 Development Program</i>	<i>\$16,300,000</i>	<i>\$0</i>	<i>\$5,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Noise Mitigation Program								
(2)	Remote Monitoring Unit Installation	\$500,000						
^ * *	Residential Sound Insulation (Between 60 & 65 DNL)		\$30,500,000	\$36,500,000	\$36,500,000	\$36,500,000	\$36,500,000	
^ * *	Residential Sound Insulation (Inside 65 DNL)	\$36,500,000	\$6,000,000					\$36,500,000
^ * *	School Noise Abatement Projects	\$2,000,000						
^ *	Ventilation Testing/Remediation of Past Homes	\$1,370,000						
	<i>Subtotal Noise Mitigation Program</i>	<i>\$40,370,000</i>	<i>\$36,500,000</i>	<i>\$36,500,000</i>	<i>\$36,500,000</i>	<i>\$36,500,000</i>	<i>\$36,500,000</i>	<i>\$36,500,000</i>
Taxiway C/D Complex Construction								
^ * *	Taxiway C/D Complex				\$19,000,000			
	<i>Subtotal Taxiway C/D Complex Construction</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$19,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>

NOTES:

- ^ Items discussed in previous Assessment of Environmental Effects (using either the exact same project description or a similar one).
- * These items have potential effects that are discussed in the following text.
- * * Projects which are covered in the text and also in other environmental documents (EA/EIS/EAW/AED).
- (1) A rehabilitation or reconstruction project which does not physically alter the original size.
- (2) An electrical or mechanical device that monitors, indicates or controls existing conditions.
- (3) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity.

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

Notes	Projects	Capital	Capital	Capital Improvement Plan				
		Improvement Projects	Improvement Program	2003	2004	2005	2006	2007
Airfield Rehabilitation Program								
^ *	Airside Bituminous Construction	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
(1)	Pavement Rehabilitation -Aprons	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$3,500,000	\$3,500,000	\$3,500,000
(1)	Pavement Rehabilitation - Taxiways A/H			\$4,000,000				
<i>Subtotal Airfield Rehabilitation Program</i>		<i>\$4,500,000</i>	<i>\$4,500,000</i>	<i>\$8,500,000</i>	<i>\$4,500,000</i>	<i>\$4,000,000</i>	<i>\$4,000,000</i>	<i>\$4,000,000</i>
Runway Rehabilitation Program								
(1)	Pavement Rehabilitation - Runway 12L/30R Seg. 2						\$14,000,000	
(1)	Pavement Rehabilitation - Runway 12R/30L Seg. 2				\$10,200,000			
<i>Subtotal Runway Rehabilitation Program</i>		<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$10,200,000</i>	<i>\$0</i>	<i>\$14,000,000</i>	<i>\$0</i>
Environmental Remediation Program								
^ *	Stormwater Collection/Detention Ponds	\$4,000,000						
<i>Subtotal Environmental Remediation Program</i>		<i>\$4,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Concourse C Extension Program								
(3)	Fuel Hydrant Loop Extension	\$4,200,000						
^**	Concourse C Apron Expansion -- Phase 3	\$4,800,000						
<i>Subtotal Concourse C Extension Program</i>		<i>\$9,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Concourse Expansion and Rehabilitation								
^ *	Concourse E Infill		\$2,500,000					
^ *	Concourse F Infill	\$3,000,000			\$11,500,000			
<i>Subtotal Concourse Expansion and Rehabilitation</i>		<i>\$3,000,000</i>	<i>\$2,500,000</i>	<i>\$0</i>	<i>\$11,500,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Lindbergh Terminal Rehabilitation and Development Program								
(3)	Commercial Roadway Bag Belt		\$1,000,000					
^ *	International Arrivals Facility Expansion	\$2,000,000						
(3)	Lindbergh Terminal Bag Make-up Area Addition	\$2,000,000						
^ *	Lindbergh Terminal Loading Dock Relocation		\$1,000,000					

(continued next page)

NOTES:

- ^ Items discussed in previous Assessment of Environmental Effects (using either the exact same project description or a similar one).
- * These items have potential effects that are discussed in the following text.
- ** Projects which are covered in the text and also in other environmental documents (EA/EIS/EAW/AED).
- (1) A rehabilitation or reconstruction project which does not physically alter the original size.
- (2) An electrical or mechanical device that monitors, indicates or controls existing conditions.
- (3) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity.

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

Notes	Projects	Capital	Capital	Capital Improvement Plan				
		Improvement Projects	Improvement Program	2003	2004	2005	2006	2007
		2001	2002					
Lindbergh Terminal Expansion and Rehabilitation Program (cont.)								
^ *	Lindbergh Terminal North Addition	\$36,000,000						
(3)	Lindbergh Terminal Toilet Additions	\$1,500,000						
(2)	Security Camera Installation	\$500,000						
<i>Subtotal Lindbergh Terminal Expansion and Rehabilitation Program</i>		<i>\$42,000,000</i>	<i>\$2,000,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Landside Rehabilitation and Repair Program								
(1)	Landside Bituminous Construction	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
(1)	Lindbergh Terminal Interior Rehabilitation	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
(1)	Parking Structure Rehabilitation	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
(3)	Terminal Air Handling Units Replacement	\$1,700,000	\$1,800,000	\$500,000	\$500,000			
(3)	Terminal Complex Sprinkler System Modifications	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
(3)	Terminal Electrical Modifications	\$600,000	\$700,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
(1)	Terminal Exterior Rehabilitation	\$3,500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
(3)	Terminal Mechanical Modifications	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
(3)	Terminal Miscellaneous Modifications	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
(1)	West Terminal Area Rehabilitation	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
<i>Subtotal Landside Rehabilitation and Repair Program</i>		<i>\$8,800,000</i>	<i>\$6,500,000</i>	<i>\$4,600,000</i>	<i>\$4,600,000</i>	<i>\$4,100,000</i>	<i>\$4,100,000</i>	<i>\$4,100,000</i>
Miscellaneous Field and Runway								
(3)	Apron/GSE Lighting Upgrade	\$2,000,000						
(1) (2) (3)	Miscellaneous Construction	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
(2)	Secured Area Access Control System Field Gate Installation	\$400,000						
(1)	Runway 12R/30L Tunnel Structure Rehabilitation	\$2,250,000						
(3)	Utility Modifications	\$1,100,000						
<i>Subtotal Miscellaneous Field and Runway</i>		<i>\$6,150,000</i>	<i>\$400,000</i>	<i>\$400,000</i>	<i>\$400,000</i>	<i>\$400,000</i>	<i>\$400,000</i>	<i>\$400,000</i>
Miscellaneous Landside Program								
(2)	Central Alarm Monitoring/Fiber Optic Cable Installation	\$8,250,000						
(3)	East Airport Water Main Loop	\$150,000						
^ *	Econolot/Employee Parking Structure	\$195,000,000						

(continued next page)

NOTES:

- ^ Items discussed in previous Assessment of Environmental Effects (using either the exact same project description or a similar one).
- * These items have potential effects that are discussed in the following text.
- ** Projects which are covered in the text and also in other environmental documents (EA/EIS/EAW/AED).
- (1) A rehabilitation or reconstruction project which does not physically alter the original size.
- (2) An electrical or mechanical device that monitors, indicates or controls existing conditions.
- (3) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity.

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

Notes	Projects	Capital	Capital	Capital Improvement Plan				
		Improvement Projects	Improvement Program	2003	2004	2005	2006	2007
		2001	2002					
Miscellaneous Landside Program (cont.)								
	(3) Fire /Rescue Station Replacement Facilities		\$20,000,000			\$8,000,000		
	^ * MAC Cargo Buildings - Air Freight Facility		\$4,000,000					
	^ * MAC Cargo Buildings - Airline Belly Cargo Facility		\$4,700,800					
	<i>Subtotal Miscellaneous Landside Program</i>	\$203,400,000	\$28,700,800	\$0	\$0	\$8,000,000	\$0	\$0
New Projects Program								
	(3) Buildings Demolition -- Bureau of Mines	\$10						
	** Cargo Projects Development Program	\$32,500,000						
	* CAT II/IIIa Systems Installations	\$8,000,000	\$9,000,000					
	(3) CCTV Digital Storage System	\$10						
	(3) Common Curbside Check-in Stations	\$150,000						
	(3) Concourse D Pod Modifications	\$4,000,000						
	(3) Fiber Optic Connection	\$225,000						
	^ * Ground Run-up Enclosure	\$10						
	(3) Humphrey Fuel System Upgrade	\$10						
	^** Humphrey Terminal Gates Addition	\$10						
	(3) Lindbergh Terminal Security Modifications	\$850,000						
	(3) MAC Communications Terminal Hub Room	\$120,000						
	(3) Maintenance Building Addition		\$10,000,000					
	* New Air Traffic Control Tower	\$2,000,000			\$23,000,000			
	(3) Parking Ramp Escalator	\$10						
	(3) Police Department Facilities Modifications	\$200,000						
	(1) Public Parking -- Roadway Landscaping Phase 3		\$700,000					
	^ * RAC Service Site Relocation	\$5,000,000						
	(2) Security Breach Notification System	\$300,000						
	(3) Special Needs Passenger Assistance Area	\$150,000						
	<i>Subtotal New Projects Program</i>	\$33,495,060	\$19,700,000	\$0	\$23,000,000	\$0	\$0	\$0
ANNUAL TOTALS -- MSP PROJECTS ONLY		\$576,715,060	\$191,650,800	\$136,250,000	\$109,700,000	\$53,000,000	\$59,000,000	\$45,000,000

NOTES:

- ^ Items discussed in previous Assessment of Environmental Effects (using either the exact same project description or a similar one).
- * These items have potential effects that are discussed in the following text.
- ** Projects which are covered in the text and also in other environmental documents (EA/EIS/EAW/AED).
- (1) A rehabilitation or reconstruction project which does not physically alter the original size.
- (2) An electrical or mechanical device that monitors, indicates or controls existing conditions.
- (3) A structural, mechanical or electrical device and/or modification of an existing system or structure that does not significantly increase size or passenger capacity.

C. IMPACTS 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 impacts 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 extension and reconstruction of Runway 4/22 and the planned rehabilitation of Runways 12R/30L and 12L/30R during the seven year program 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 three runways will be partially offset by reduced levels under the approaches of the runway(s) temporarily out-of-service for repair/rehabilitation. In addition, MAC, working with the Metropolitan Aircraft Sound Abatement Council (MASAC), will utilize whatever noise control/reduction measures are 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 delays in work.

D. CUMULATIVE ENVIRONMENTAL EFFECTS

Following is a summary of the cumulative environmental effects of the projects in the MSP 2001-2007 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 2001-2007 are ongoing projects from previous years or they have been analyzed previously for their environmental impacts. These projects are identified in Table 1 with two stars (**). The impacts of these projects are discussed in their individual project description, as well as in other environmental documents (Environmental Assessments, Environmental Assessment Worksheets, or Environmental Impact Statements).

The remaining projects listed in the CIP 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 impacts 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 has committed to implement measures that will appropriately mitigate these adverse effects. The potential effect of low frequency noise is an unresolved issue that MAC and affected municipalities and agencies are currently studying.

The seven year CIP for 2001-2007 includes a portion of the projects identified in the MSP 2010 LTCP. Therefore, the cumulative environmental effects of the projects in the CIP are included in the assessment of environmental effects presented in the Final EIS.

APPENDIX A

**ASSESSMENT OF INDIVIDUAL PROJECTS'
ENVIRONMENTAL EFFECTS**

INTRODUCTION

The following pages describe the anticipated environmental effects of each item in the MAC's overall seven year Capital Improvement Plan (CIP) for the Minneapolis/St. Paul International Airport (MSP), if implemented. **Table A.1** summarizes these items by year and by element of the MSP CIP (projects, program, plan) while **Figure A-1** depicts the location of each major project in the CIP.

TABLE A.1
MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT
ENVIRONMENTAL IMPACT SUMMARY

I. 2001 CAPITAL IMPROVEMENT PROJECTS

I.A	Runway 12R Deicing/Holding Pad
I.B	Runway 30R Deicing/Holding Pad
I.C	Taxiway B Construction
I.D	Runway 17/35 Construction
I.E	Runway 17/35 Land Acquisition
I.F	North Side Storm Sewer
I.G	Runway 4/22 Property Acquisition
I.H	Runway 4/22 Road Relocation
I.I	Residential Sound Insulation (Inside DNL 65)
I.J	School Noise Abatement Projects
I.K	Ventilation Testing/Remediation of Past Homes
I.L	Airside Bituminous Construction
I.M	Stormwater Collection/Detention Ponds
I.N	Concourse C Apron Expansion-Phase 3
I.O	Concourse F Infill
I.P	International Arrivals Facility Expansion
I.Q	Lindbergh Terminal North Addition
I.R	EconoLot/Employee Parking Structure
I.S	Cargo Projects Development Program
I.T	CAT II/IIIa System Installations
I.U	Ground Run-Up Enclosure
I.V	Humphrey Terminal Gates Addition
I.W	New Air Traffic Control Tower
I.X	RAC Service Site Relocation

TABLE A.1
MINNEAPOLIS/ST. PAUL INTERNATIONAL AIRPORT
ENVIRONMENTAL IMPACT SUMMARY
(Continued)

II. 2002 CAPITAL IMPROVEMENT PROGRAM

- II.A Residential Sound Insulation (Between 60 and 65 DNL)
- II.B Concourse E Infill
- II.C Lindbergh Terminal Loading Dock Relocation
- II.D MAC Cargo Buildings – Air Freight Facility
- II.E MAC Cargo Buildings – Airline Belly Cargo Facility

III. 2003 CAPITAL IMPROVEMENT PLAN

- III.A Runway 4/22 Extension

IV. 2004 CAPITAL IMPROVEMENT PLAN

- IV.A Taxiway C/D Complex

V. 2005 CAPITAL IMPROVEMENT PLAN

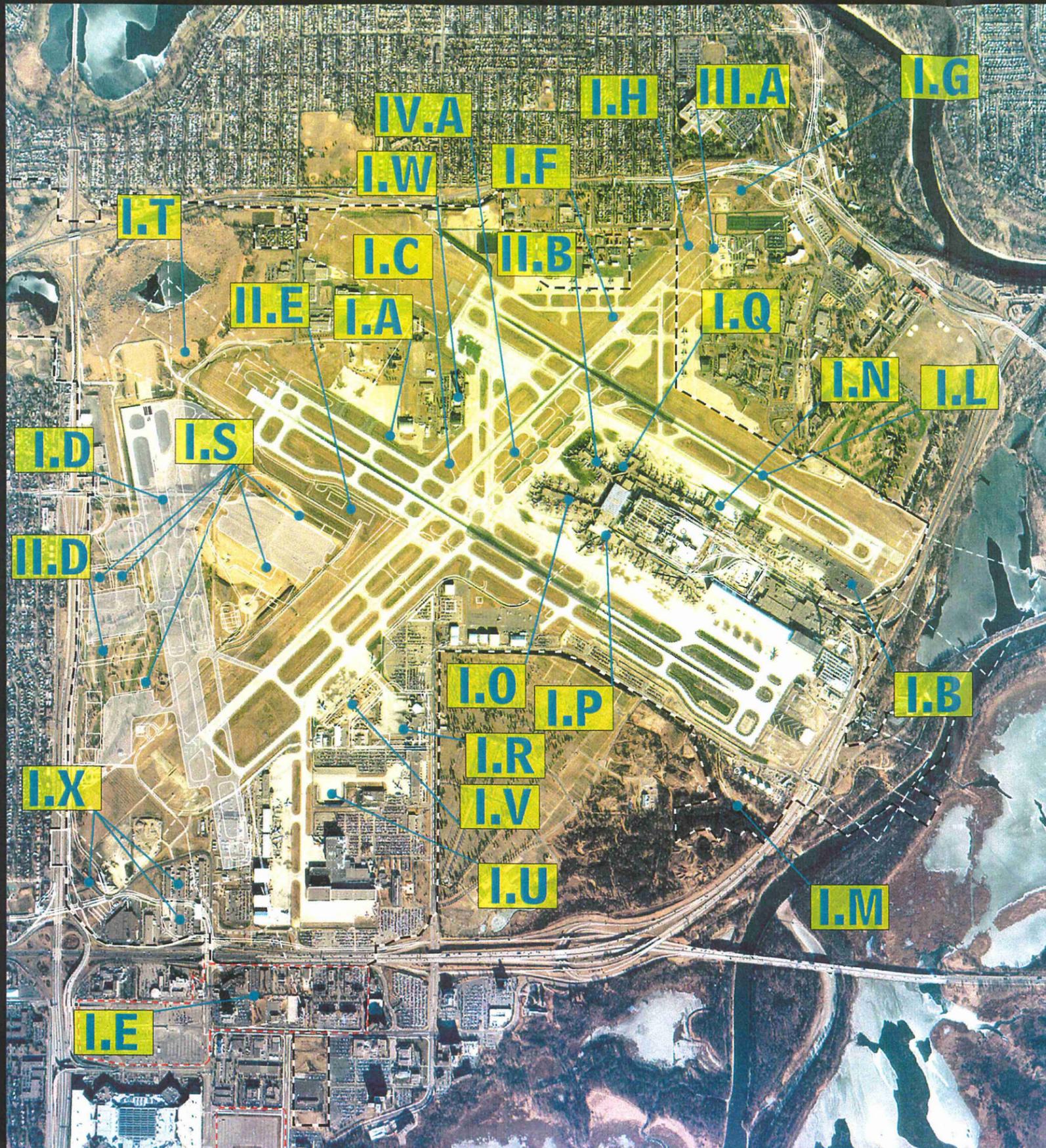
(No projects with impacts begin this year)

VI. 2006 CAPITAL IMPROVEMENT PLAN

(No projects with impacts begin this year)

VII. 2007 CAPITAL IMPROVEMENT PLAN

(No projects with impacts begin this year)



Projects with Potential Environmental Effects 2001-2007

I. 2001 Capital Improvement Projects

- I.A Runway 12R Deicing/Holding Pad
- I.B Runway 30R Deicing/Holding Pad
- I.C Taxiway B Construction
- I.D Runway 17/35 Construction
- I.E Runway 17/35 Land Acquisition
- I.F North Side Storm Sewer
- I.G Runway 4-22 Property Acquisition
- I.H Runway 4-22 Road Relocation
- I.I *Residential Sound Insulation (Inside 65 DNL)*
- I.J *School Noise Abatement Projects*
- I.K *Ventilation Testing/Remediation of Past Homes*
- I.L Airside Bituminous Construction
- I.M Stormwater Collection/Detention Ponds
- I.N Concourse C Apron Expansion -- Phase 3
- I.O Concourse F Infill
- I.P International Arrivals Facility Expansion
- I.Q Lindbergh Terminal North Addition
- I.R EconoLot/Employee Parking Structure
- I.S Cargo Projects Development Program
- I.T Cat II/IIIa System Installations
- I.U Ground Run-Up Enclosure
- I.V Humphrey Terminal Gates Addition
- I.W New Air Traffic Control Tower
- I.X RAC Service Site Relocation

II. 2002 Capital Improvement Program

- II.A *Residential Sound Insulation (Between 60 & 65 DNL)*
- II.B Concourse E Infill
- II.C *Lindbergh Terminal Loading Dock Relocation*
- II.D MAC Cargo Buildings - Air Freight Facility
- II.E MAC Cargo Buildings - Airline Belly Cargo Facility

III. 2003 Capital Improvement Plan

- III.A Runway 4-22 Extension

IV. 2004 Capital Improvement Plan

- IV.A Taxiway C/D Complex

V. 2005 Capital Improvement Plan

(No projects with impacts begin this year)

VI. 2006 Capital Improvement Plan

(No projects with impacts begin this year)

VII. 2007 Capital Improvement Plan

(No projects with impacts begin this year)

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



Photo: December 1999



N.T.S.

Figure A-1

I. PROJECTS BEGINNING IN 2001

The following projects are included in the MAC's Capital Improvement Plan (CIP) for the Minneapolis-St. Paul International Airport (MSP) in calendar year 2001 which have the potential to affect the environment:

- I.A Runway 12R Deicing/Holding Pad
- I.B Runway 30R Deicing/Holding Pad
- I.C Taxiway B Construction
- I.D Runway 17/35 Construction
- I.E Runway 17/35 Land Acquisition
- I.F North Side Storm Sewer
- I.G Runway 4/22 Property Acquisition
- I.H Runway 4/22 Road Relocation
- I.I Residential Sound Insulation (Inside DNL 65)
- I.J School Noise Abatement Projects
- I.K Ventilation Testing/Remediation of Past Homes
- I.L Airside Bituminous Construction
- I.M Stormwater Collection/Detention Ponds
- I.N Concourse C Apron Expansion—Phase 3
- I.O Concourse F Infill
- I.P International Arrivals Facility Expansion
- I.Q Lindbergh Terminal North Addition
- I.R EconoLot/Employee Parking Structure
- I.S Cargo Projects Development Program
- I.T CAT II/IIIa System Installations
- I.U Ground Run-Up Enclosure
- I.V Humphrey Terminal Gates Addition
- I.W New Air Traffic Control Tower
- I.X RAC Service Site Relocation

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 other aircraft cleared for departure may be delayed. 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.

Although aircraft idling at this deicing/holding pad will emit noise and air emissions during delay periods, delays at the airport are anticipated to be negligible with construction of Runway 17/35. Delay savings are anticipated to be approximately 21,000 hours per year by the Year 2010 (based upon the current ratio of growth in operations).

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 incorporate a collection system to collect the glycol runoff. Water quality is the only category to be impacted by this project. There will be a positive effect in that the Airport's overall collection system will decrease the amount of contaminated runoff entering the Minnesota River.

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 30R 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 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 other aircraft cleared for departure may be delayed. The holding apron would provide storage for delayed aircraft while allowing other aircraft to taxi by and depart without delay.

This project provides for the construction of the airport's deicing/holding pad on Runway 30R 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 an adjacent snow storage/melting area, blast fences, screen walls adjacent to Highway 5 and the Inbound Roadway and a Ground Service Equipment (GSE) facility.

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 incorporate a collection system to capture the glycol runoff. Water quality is the only category to be impacted by this project. There will be a positive effect in that the Airports' overall collection system will reduce the amount of contaminated runoff entering the Minnesota River.

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

I.C TAXIWAY B CONSTRUCTION

This project will provide for the construction of Taxiway B from 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. Although the increase in runoff from this project will not be significant, it is included in the Final EIS for the MSP 2010 LTCP.

I.D 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 a 5-year period. Work began in 1999 which included grading and utility construction in the New Ford Town area, site preparation and utility installation in the infield area.

This project is a continuation of the overall 5-year program to develop Runway 17/35 at MSP. Projects proposed for 2001 include the following:

1. 66th Street Interchange – Phase 2
2. Airfield Lighting Control Center
3. Buildings Demolition
4. Infield Fueling Facilities
5. Infield Service Road
6. Infield Site Preparation
7. Longfellow Avenue Landscaping
8. MAC Glycol Facilities
9. Other General Construction
10. Runway 17/35 Intersection Site Preparation/Paving
11. Runway 17/35 Site Preparation
12. Taxiway M
13. Taxiway W-Y Tunnel
14. Trunk Storm Sewer – Phase 2
15. Trunk Storm Sewer – Phase 3
16. Trunk Storm Sewer – Phase 4
17. Y-3 Connector Tunnel

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

I.E 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 2001, 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.F 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) will require the construction of a new storm water drainage system. The new storm sewer will be constructed from the intersection of Runway 12L/30R and Runway 4/22 to Snelling Lake. This project will provide for the construction of the segment from Highway 5 to Snelling Lake. 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.G RUNWAY 4/22 PROPERTY ACQUISITION

This project is part of the overall proposed project to extend Runway 4/22 1,000 feet to the northeast to a total length of 12,000 feet. The purpose of the extension is to allow non-stop service to Pacific Rim countries with full payloads requiring a runway length of approximately 12,000 feet. A Draft EA was prepared and distributed in November 1997 and the Final EA was distributed in September 1999. A FONSI was issued by the FAA shortly afterwards. Findings of this document indicate that the cumulative impacts of implementing the overall project (including this land acquisition project which is required prior to proceeding with the extension) are not significant. The cumulative impacts of this project were also included in the final EIS for the MSP 2010 LTCP.

I.H RUNWAY 4/22 ROAD RELOCATION

A service road currently crosses through the Runway Safety Area (RSA), the Object Free Area (OFA), and the Localizer critical area for Runway 22. This project provides for the relocation of the Interbase (US Airforce – MANG) roadway to maximize the expansion of the Runway Safety Area (RSA) and Object free area (OFA) associated with Runway 4-22.

❖ Water Quality

Water Quality is the only impact category affected by this project because it will result in a slight increase in runoff to the Minnesota River North Drainage Area. Although the increase in runoff from this project will not be significant, it is included in the Final EIS for the MSP 2010 LTCP.

I.I RESIDENTIAL SOUND INSULATION (INSIDE 65 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) which has been approved, in part, by the FAA. This project this year concludes this multi-year program to soundproof homes only. 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 65 DNL noise contour will be sound-insulated as part of this continuing project initiated in 1992 in the cities of Minneapolis and Richfield. This project will also include the removal of asbestos containing materials. There is also a need to go back and make mechanical modifications to homes previously completed under the program. The modifications would be included with this project.

❖ **Aircraft Noise**

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. Last year MAC initiated a study to determine the effects of low frequency noise and vibration from aircraft operations at MSP. This study was recently completed and has been formally submitted to the FAA's Minneapolis Airports District Office. The document is titled "Minneapolis-St. Paul International Airport Low Frequency Noise Policy Committee Report" and is dated August 10, 2000. No response has been received from the FAA as of the date of this writing. If supported by the study and approved by all parties involved, MAC will prepare and implement a low frequency noise mitigation program for the affected communities.

I.J 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. Over the past several years, thirteen (13) 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 2001.

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 will be soundproofed as part of this project in 2001. Schools on the fringe or just outside the DNL 60 contour are currently ineligible for abatement initiatives.

❖ **Aircraft Noise**

This project will provide positive impacts 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. Reductions of this magnitude will provide higher quality learning environments in which to teach children.

I.K VENTILATION TESTING/REMEDICATION OF PAST HOMES

There is a need to make mechanical modifications to homes soundproofed previously under the residential sound proofing program (see **Paragraph I.I**). These modifications are a continued effort on the part of the MAC to improve the quality of the indoor air of those homes that were insulated or soundproofed between June 1992 and April 1997. Air quality is the only environmental category that would be affected by this project (indoor air quality in particular). There will be a marked improvement in the quality of the air residents breathe after the required modifications are made.

I.L AIRSIDE BITUMINOUS CONSTRUCTION

This is an ongoing project to construct or reconstruct bituminous pavements within the Air Operations Area. This year's work will include the inspection of existing bituminous overlays on Runway 12L/30R. This inspection project will result in a determination of whether or not this runway will require a major repair project in the near future. This project should not result in any increase to stormwater runoff volumes, sediments, nutrients and organics.

I.M STORM WATER COLLECTION/DETENTION PONDS

The Commission's National Pollutant Discharge Elimination System (NPDES) permit contains restrictions on the contaminants allowed to enter the Minnesota River in storm water runoff from the Airport. The Airport's system of stormwater detention ponds aids in containing and removing such contaminants as solids, grease, and oil. Modifications, additions, and refinements to these systems are periodically required to produce continued improvement in water quality discharge. A new National Pollutant Discharge Elimination System (NPDES) permit is expected to require additional storm water storage in order to control discharge of settleable solids to the Minnesota River. This project will provide for the construction of a new larger earthen dam and concrete spillway in the ravine near the Highway 5 embankment to provide required storm water storage area for the Minnesota River South drainage basin. Surface water discharge off of the airport is regulated by the MPCA through NPDES permitting authority and procedures. Storm water control measures will be developed or enhanced consistent with NPDES permit requirements. The proposed collection/detention pond locations are not anticipated to have adverse impacts on Fort Snelling State Park downstream.

❖ Water Quality

This project will create a positive impact on the water quality of the Minnesota River by reducing the amount of harmful effluent discharged into the Minnesota River.

I.N CONCOURSE C APRON EXPANSION – PHASE 3

In order to meet the anticipated future needs of the airlines, a phased easterly expansion of the Green Concourse was initiated in 1999. The first phase of this project added gates to the Green Concourse and extended the existing fueling hydrant system. The second phase of this project provided for an eastward

expansion consisting of eight (8) new gates and a new Regional Terminal Facility with 29 aircraft parking positions. This year's project comprises the third and final phase of the apron construction associated with the expansion of the Green Concourse (now Concourse C). This project will include the construction of the pavement in the area of the existing Post Office once the new Airport Mail Center is in operation. The project also includes installation of an underground fuel hydrant system. The only impact category affected by this project is water quality. This project is included in the Final EIS for the MSP 2010 LTCP. The cumulative effect on water quality was addressed by the Final EIS for all projects included in the 2010 LTCP.

I.O CONOURSE F INFILL

In order to maximize the capacity of the existing terminal complex, it will be necessary to expand Concourses E, F and G. This project will add additional space by filling in the "notch" between Gates 6 and 8 on Concourse F to provide for additional concession space, toilet facilities and phones and will provide storage space for the MAC and the airlines.

I.P INTERNATIONAL ARRIVALS FACILITY EXPANSION

The success of the International Arrivals Facility (IAF) has prompted the Federal Government to add additional staff to the IAF facility on the Gold Concourse. There is, therefore, a need for additional office space and facility expansion to house the staff. In addition, it is proposed to modify the secondary inspections area by installing new Agriculture and Customs inspection counters and modifying the passenger pick up area located on the baggage claim level by adding additional seating and signage. The success of the IAF facility has also prompted a request for a study of how to expand the capacity of the entire facility to handle additional 747 aircraft simultaneously.

This project is included in the no action alternative and the MSP 2010 LTCP alternative in the Final EIS. The Final EIS addressed the year 2010 cumulative effects of this project.

I.Q LINDBERGH TERMINAL NORTH ADDITION

This project will provide for a two-story expansion of the north end of the Lindbergh Terminal. The first story of the addition shall extend the existing retail mall space to the north while including new public restrooms, a public elevator and stairwell to the mezzanine level, and an entry lobby to two (2) second-story airline preferred customers lounges, and MAC office space. This additional space is intended to accommodate the 2010 LTCP.

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.R ECONOLOT/EMPLOYEE PARKING STRUCTURE

The construction of the southeast segment of Taxiway W will impact approximately 300 parking spaces in the employee parking lot on Post Road. There is also a need to expand the EconoLot parking lot to serve the new Humphrey Terminal as well as provide additional employee/public parking for the Lindbergh Terminal. A new parking structure to serve both needs located at the south end of the EconoLot site has been identified as the location for this proposed structure. The facility will be sized to accommodate approximately 1,800 employee spaces and approximately 8,200 public/employee spaces. This project will also provide for the demolition of the existing Hubert H. Humphrey Terminal and for the upgrading/construction of an improved road system providing access to the new Humphrey Terminal.

In conjunction with this AOEE, the environmental impacts of this project are included in a separate Environmental Assessment Worksheet (EAW). Below is a summary of the anticipated environmental impacts of this project:

- Air Quality – Application to MPCA for an Indirect Source Permit (ISP) for the Airport.
- Water Quality – While increases in run-off water will be minimal with the construction and implementation of this facility, all run-off events will be handled by MSP's existing collection system.
- Noise Pollution – Construction noise will be typical for this type of project. Only approved equipment will be used such that excessive noises are not generated. There are no nearby residential areas that will be affected by the construction of this parking structure or vehicular noises.

I.S CARGO PROJECTS DEVELOPMENT PROGRAM

This program provides for the development of the building site and construction of the cargo buildings within the Runway 17/35 development area. These buildings include facilities for Federal Express, UPS, BAX Global, Emery Worldwide and DHL Worldwide Express. This project is included in the Final EIS for the MSP 2010 LTCP. The final EIS addressed the cumulative effects of this project.

I.T CAT II/IIIa SYSTEM INSTALLATIONS

This project will upgrade existing instrument landing systems (ILS) to Runways 12L, 12R and 35 including navigational aids and in-pavement lights. Currently each of these three (3) runway ends accommodate Category I (CAT I) operations during inclement weather. Upgrading these 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 while taxiing on the ground during poor visibility conditions. This particular project will provide an upgrade of the current CAT I ILS system on Runway 12R to meet CAT IIIa requirements.

❖ **Light Emissions**

This impact category is mentioned because of the additional lights in this upgraded landing system. However, the cumulative impacts 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.

❖ **Wetlands Impacts**

It is currently unknown whether or not this particular project (upgrade the CAT I system for Runway 12R to meet CAT IIIa requirements) will require the sinking of concrete footings for light standards into small portions of the wetland areas skirting Mother Lake. An option being considered is structural connections between existing ILS light standards to accommodate the additional required light units. An EAW may be necessary at a later date as the details of this project become definitive.

I.U GROUND RUN-UP ENCLOSURE

This project will provide for the installation of a ground run-up enclosure on the existing MSP run-up pad to reduce the noise impact of engine run-ups on communities adjacent to the Airport. Aircraft noise is the only impact category affected by this project.

❖ **Aircraft Noise**

This project will result in a positive impact concerning airport noise due to the significantly lower sound levels which will be achieved when aircraft/aircraft engines are operated for maintenance purposes inside this enclosure.

I.V HUMPHREY TERMINAL GATES ADDITION

The MAC is currently constructing a replacement facility for the existing Hubert H. Humphrey (HHH) International Terminal. This replacement terminal will be located approximately 1,000 feet west of the existing terminal building. This project will provide for building modifications and jetbridge installation to add two gates (gates 1 and 10) to the new Humphrey Terminal. An EAW was prepared for the initial phase of development in 1997. The conclusions at that time were that the project, if properly mitigated in several categories of concern, could be implemented.

I.W 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 tall 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 2001. The FEIS included an analysis of this project's impacts.

I.X RAC SERVICE SITE RELOCATION

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

More specifically, the overall RAC site will be situated on three (3) individual parcels of land subdivided by 77th Street, Longfellow Road, and the relocated Frontage Road. The facility's completion date is anticipated to be the year 2004 and it is expected to cost approximately \$200M. MAC is discussing with several rental car companies the possibility of completing a small portion of the planned complex prior to 2004. This project represents the initial preparation phase of the overall \$200M project to provide for the relocation of the RAC service sites to a common location near the MTC bus garage on the south side of the Airport.

This overall RAC site essentially is a shifting of current/existing rental auto company activities at MSP. 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.

II. PROJECTS BEGINNING IN 2002

The following projects are proposed to start in the Year 2002 that have the potential to affect the environment. Several projects continue for many years and are discussed in the year that they are scheduled to begin.

- II.A Residential Sound Insulation (Between 60 and 65 DNL)
- II.B Concourse E Infill
- II.C Lindbergh Terminal Loading Dock Relocation
- II.D MAC Cargo Buildings – Air Freight Facility
- II.E MAC Cargo Buildings – Airline Belly Cargo Facility

II.A RESIDENTIAL SOUND INSULATION (BETWEEN 60 & 65 DNL)

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 65 DNL noise contour (see **Paragraph I.I**). The intent of this project is to include sound insulation of residences within the 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 (the first year of an overall multi-year project) is a reduction of interior sound levels due to aircraft overflights.

II.B CONCOURSE E INFILL

In order to maximize the capacity of the existing terminal complex, areas on all airport concourses will be infilled. This project will provide for the infill of Concourse E to provide additional space for concessions, toilet facilities, phones and storage space. This project does not include additional gates. Since these infill efforts are only expected to be minor additions, no impact categories are affected.

II.C LINDBERGH TERMINAL LOADING DOCK RELOCATION

The MAC proposes to relocate the existing Lindbergh Terminal loading dock because of increasing congestion in that area of the Airport. It is proposed to move the loading dock (where supplies, food, etc. are delivered) to a landside location on airport. MAC is currently studying possible locations. The project should not adversely affect the environment.

II.D 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 out 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.

II.E 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 impacts associated with this project have been addressed in the Final EIS for the MSP 2010 LTCP.

III. PROJECTS BEGINNING IN 2003

The following projects are proposed to start in the Year 2003 that have the potential to affect the environment. Several projects continue for many years and are discussed in the year that they are scheduled to begin.

III.A Runway 4/22 Extension

III.A RUNWAY 4/22 EXTENSION

The proposed project is to extend Runway 4/22 1,000 feet to the northeast to a total length of 12,000 feet. The purpose of the extension is to allow non-stop service to Pacific Rim countries with full payloads requiring a runway length of approximately 12,000 feet. A Draft EA was prepared and distributed in November 1997 and the Final EA was distributed in September 1999. A FONSI was issued by the FAA shortly afterwards. Findings of these documents indicated that the cumulative impacts of implementing the project were not significant. The cumulative impacts of the project were also included in the Final EIS for the MSP 2010 LTCP.

IV. PROJECTS BEGINNING IN 2004

The following project is proposed to start in the Year 2004 that has the potential to affect the environment. Several projects continue for many years and are discussed in the year that they are scheduled to begin.

IV.A Taxiway C/D Complex

IV.A TAXIWAY C/D COMPLEX

The Taxiway C/D Complex, located 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 project in the year 2010 are included in the Final EIS for the MSP 2010 LTCP

V. PROJECTS BEGINNING IN 2005

There are no new projects included in the MAC's Capital Improvement Plan for the Minneapolis/St. Paul International Airport beginning in the Year 2005 that may potentially affect the environment.

VI. PROJECTS BEGINNING IN 2006

There are no new projects included in the MAC's Capital Improvement Plan for the Minneapolis/St. Paul International Airport beginning in the Year 2006 that may potentially affect the environment.

VII. PROJECTS BEGINNING IN 2007

There are no new projects included in the MAC's Capital Improvement Plan for the Minneapolis/St. Paul International Airport beginning in the Year 2007 that may potentially affect the environment.