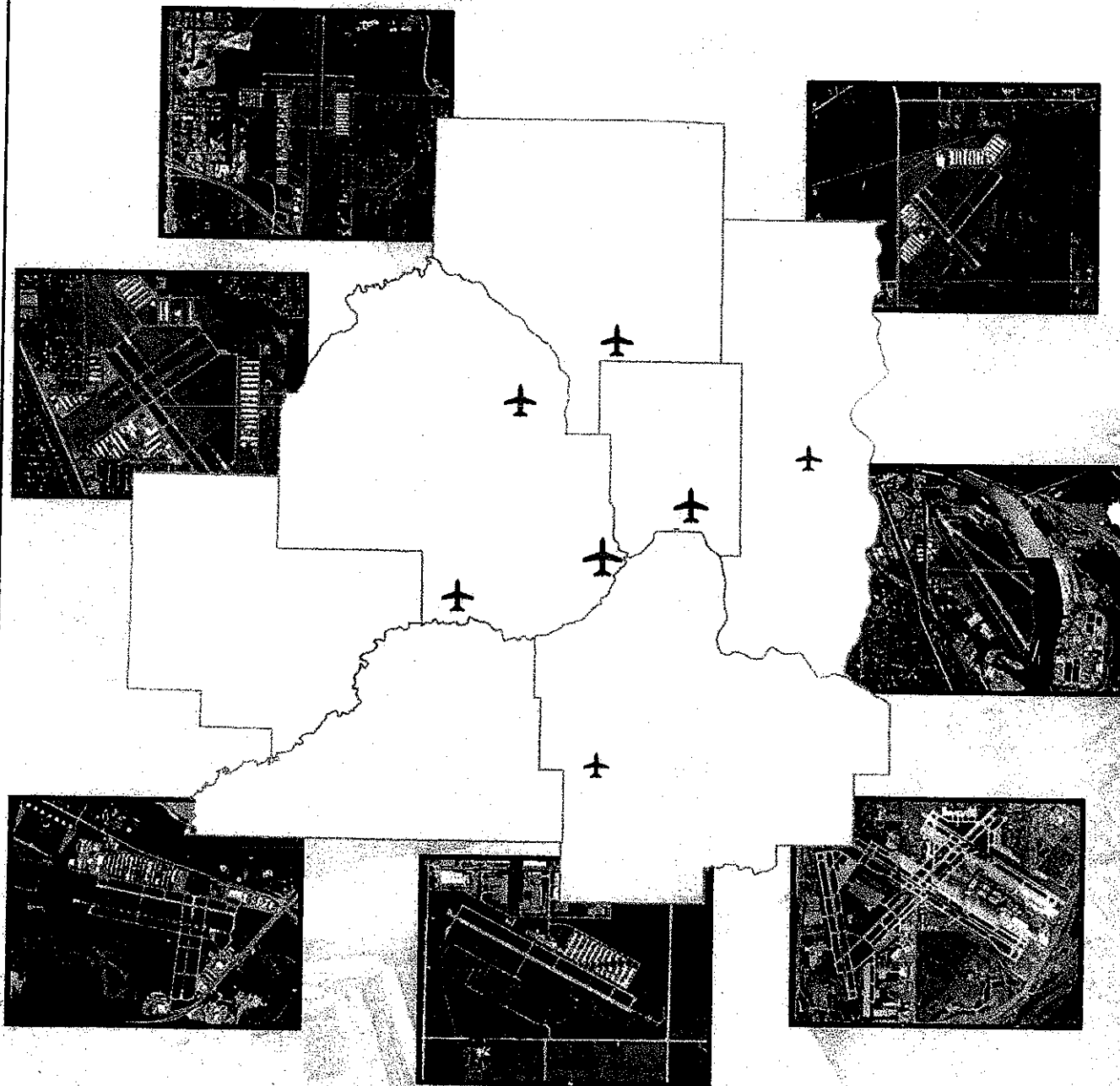




Assessment of Environmental Effects

Seven-Year Capital Improvement Program 2010 - 2016



**Prepared by the
Metropolitan Airports Commission
Environment Department
October 2009**

Table of Contents

<u>Sections</u>	<u>Page</u>
1. Introduction.....	1
2. Projects with Potential Environmental Effects and Effects During Construction.....	10
3. Cumulative Environmental Effects	11

Appendices

A. Description of Projects in the 2010 – 2016 Capital Improvement Program.....	A-1
--	-----

Tables

Table 1-1: 2010 – 2016 Capital Improvement Program	2
Table 1-2: Summary Environmental Assessment of 2010 Projects in the MAC 2010 – 2016 Capital Improvement Program that Require an EAW or EIS.....	9

Figures

Figure A-1: MSP Projects with Potential Environmental Effects	A-1
Figure A-2: Taxiway C-D Complex Project.....	A-3

This report is prepared in response to the requirements of Minnesota Statutes 1986, Chapter 473, as amended in 1988 and 1998. It presents an assessment of the environmental effects (AOEE) of projects in the Metropolitan Airports Commission's (MAC) Seven-Year Capital Improvement Program (CIP) from 2010 to 2016 for each MAC airport. 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." Many of the projects in the CIP entail repair or rehabilitation of existing facilities. Such work will not affect use of the facilities and as such will not add to, or subtract from, cumulative environmental effects. The anticipated measurable effects during construction are discussed under Section 2.

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

1. The project is scheduled in the CIP for the succeeding calendar year (2010 in this CIP);
2. The project is scheduled to cost \$5 million or more at Minneapolis-St. Paul International Airport (MSP) or \$2 million or more at any other MAC airport; and
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.

Table 1-1 lists all projects included in the Seven-Year Capital Improvement Program for the years 2010 through 2016. An Environmental Assessment Worksheet (EAW), Environmental Assessment (EA) or Environmental Impact Statement (EIS) has been prepared for all projects scheduled to be implemented in 2010 that meet the above three conditions in Minnesota Statutes 1986, Chapter 473 for a mandatory EAW. One project in the 2010 CIP meets the criteria and is presented in Table 1-2.

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
2010 Program								
Noise Mitigation Program								
(1)	Noise Mitigation Settlement	\$43,300,000	\$1,000,000	\$16,000,000	\$1,400,000	\$4,000,000		
	Subtotal Noise Mitigation Program	\$43,300,000	\$1,000,000	\$16,000,000	\$1,400,000	\$4,000,000		
Taxiway C/D Complex Construction								
(1)	Taxiway C/D Complex	\$6,000,000						
	Subtotal Taxiway C/D Complex Construction	\$6,000,000						
Airfield Rehabilitation Program								
(2)	Airside Bituminous Rehabilitation	\$500,000						
(2)	Pavement Joint Sealing/Repair	\$500,000						
	Subtotal Airfield Rehabilitation Program	\$1,000,000						
Landside Rehabilitation & Repair Program								
(2)	Landside Pavement Rehabilitation	\$400,000						
(2)	Parking Structure Rehabilitation	\$3,000,000						
(4)	Terminal Modifications	\$2,000,000						
(4)	Building Exterior Rehabilitation	*						
(4)	Terminal Electrical Modifications	*						
(4)	Terminal Mechanical Modifications	*						
(4)	Terminal Miscellaneous Modifications	*						
(2)	Humphrey Terminal & MSP Campus Mods	*						
	Subtotal Landside Rehabilitation & Repair Program	\$5,400,000						
			* \$2,000,000 to be used to fund highest priority projects in these categories.					
Reliever Airport Program								
Airlake								
(1)	South Building Area Alleyway Development **	\$1,000,000						
	Subtotal	\$1,000,000						
			**Partial funding for this project to be provided by others.					
Anoka County - Blaine								
(2)	Pavement Rehabilitation	\$600,000						
	Subtotal	\$600,000						
Flying Cloud								
(1)	South Building Area Development **	\$1,500,000						
	Subtotal	\$1,500,000						
			**Funding for this project to be provided by others.					
St. Paul								
(2)	Joint and Crack Repairs	\$100,000						

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
(4)	MAC Building Maintenance	\$200,000						
	Subtotal	\$300,000						
	Subtotal Reliever Airport Program	\$3,400,000						
Miscellaneous Field & Runway Program								
(2) (3) (4)	Miscellaneous Airfield Construction	\$400,000						
	Subtotal Miscellaneous Field & Runway Program	\$400,000						
	Subtotal 2010 Program	\$59,500,000	\$1,000,000	\$16,000,000	\$1,400,000	\$4,000,000		
Post 2010 Program								
10 - Lindbergh Terminal								
Safety/Security Projects								
(4)	LT Sprinkler System - Concourses C & D	\$8,600,000						
(5)	Lindbergh Terminal In-line Baggage Screening **	\$33,500,000	\$28,000,000					
	Subtotal Safety/Security Projects	\$42,100,000	\$28,000,000					
		**TSA to fund 90% of the eligible costs.						
Facility Rehabilitation								
(2)	Upgrade Mezzanine Restrooms to meet ADA Code			\$600,000				
(2)	Skyway HVAC		\$1,200,000					
(2)	Skyway Flooring Replacement		\$150,000					
(2)	Tug Drive Floor Repair	\$1,050,000			\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
(2)	Electrical Infrastructure Rehab. Program	\$1,000,000	\$1,000,000	\$1,000,000	\$500,000			
(3)	Terminal Miscellaneous Modifications		\$2,500,000	\$2,500,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
(4)	Emergency Power Upgrades	\$1,000,000	\$1,000,000	\$1,000,000	\$800,000			
(5)	Lower Level Roadway/GTC Water Infiltration Mitigation		\$2,500,000					
(2)	Restroom Upgrade Program		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
(4)	Air Handling Unit Replacement		\$1,150,000	\$1,050,000	\$900,000			
(4)	Conveyance System Upgrades	\$1,500,000	\$1,950,000	\$2,500,000	\$2,000,000			
	Subtotal Facility Rehabilitation	\$4,550,000	\$13,450,000	\$10,650,000	\$10,200,000	\$6,000,000	\$6,000,000	\$6,000,000
Passenger Amenities								
(4)	Art in the Terminal		\$250,000	\$250,000				
(5)	Checkpoints 2 & 5 Expansion		\$2,000,000					
(2)	Meeter/Greeter/Freedom of Speech Booth Upgrades		\$225,000					
(2)	Concessions Revenue Development/Upgrades	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
(4)	Public Access Videophones (PAVs)		\$300,000					
(5)	Terminal Seating Improvements		\$1,000,000					

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
(2)	Terminal Directories		\$450,000					
	Subtotal Passenger Amenities	\$200,000	\$4,425,000	\$450,000	\$200,000	\$200,000	\$200,000	\$200,000
	Operational Improvements							
(4)	Concourse C Elevator to D Street		\$400,000					
(4)	Open Architecture Building Automation (OABA)	\$1,650,000						
(6)	IS Data Center Facilities		\$3,000,000	\$13,000,000	\$13,000,000			
	Subtotal Operational Improvements	\$1,650,000	\$3,400,000	\$13,000,000	\$13,000,000			
	Post Airline Relocation Renovations							
(2)	Terminal Bag Claim/Make-up Area/Rehab.			\$8,800,000		\$8,800,000	\$8,200,000	
(6)	Concourse E Remodeling/Expansion						\$76,000,000	
(2)	Ticket Lobby Modifications						\$8,900,000	\$9,100,000
(3)	Concourse G Tram - Equipment Procurement						\$50,000,000	
	Subtotal Post Airline Relocation Renovations			\$8,800,000		\$8,800,000	\$144,100,000	\$9,100,000
	Subtotal Lindbergh Terminal	\$48,500,000	\$49,275,000	\$32,900,000	\$23,400,000	\$15,000,000	\$150,300,000	\$15,300,000
	13 - Energy Management Center							
(4)	Energy Savings Projects	\$2,000,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
(4)	Alternative Energy Projects			\$1,000,000				
	Subtotal Energy Management Center	\$2,000,000	\$2,500,000	\$3,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000
	21 - Field and Runway							
(2)	Airside Bituminous Rehabilitation		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
(2)	Pavement Joint Sealing/Repair		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
(2)	Pavement Rehabilitation - Aprons		\$2,000,000	\$1,700,000	\$1,600,000			
(4)	Runway 30R MALSf		\$1,800,000					
(2)	Miscellaneous Field and Runway		\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
(5)	Perimeter Fence/Gate Barrier System		\$3,000,000					
(5)	Baggage Quarantine Building			\$1,260,000				
(5)	SIDA Incursion Upgrades	\$700,000						
(6)	Taxiway C Extension to Humphrey Remote		\$5,500,000					
(4)	ASR Shadow Mitigation				\$5,000,000			
(4)	South Field Maintenance Building Wash Bay			\$1,300,000				
(3)	Runway 12R/30L Tunnel Fans and Dampers		\$1,400,000					
(1)	North Side Storm Sewer		\$5,000,000					
(3)	MAC/Xcel Settlement Agreement **	\$900,000						
	Subtotal Field and Runway	\$1,500,000	\$20,100,000	\$5,660,000	\$8,000,000	\$1,400,000	\$1,400,000	\$1,400,000

** Xcel to fund 100% of the project costs.

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
26 - Terminal Roads/Landside								
(2)	Tunnel/Bridge Rehabilitation	\$100,000	\$100,000	\$500,000	\$100,000	\$100,000	\$100,000	\$100,000
(2)	LT Upper Level Roadway Guardrail Support Replacement	\$1,100,000						
	Subtotal Terminal Roads/Landside	\$1,200,000	\$100,000	\$500,000	\$100,000	\$100,000	\$100,000	\$100,000
31 - Parking								
(2)	Parking Structure Rehabilitation		\$3,000,000	\$3,500,000	\$3,500,000	\$4,000,000	\$4,000,000	\$4,000,000
(4)	Humphrey Ramp VMS/Revenue Control System Upgrade		\$1,500,000					
(2)	Humphrey GTC Core Building Modifications		\$850,000					
(1)	Humphrey Orange Ramp Outrigger Addition/Levels 9&10					\$58,700,000		
(1)	Humphrey Purple Ramp Outrigger Addition				\$32,100,000			
(4)	Lindbergh/Humphrey Vehicle Detection/Counting		\$400,000					
(2)	Valet Parking Waiting Area Improvements	\$400,000						
(5)	Valet Garage Flammable Waste Traps/Floor Drains	\$500,000	\$1,000,000					
(2)	Short Term Parking Redesignation				\$350,000			
(3)	Short Term Parking Guidance Light System				\$750,000			
(4)	Valet/Commercial Entrance Lanes Modifications		\$1,000,000					
	Subtotal Parking	\$900,000	\$7,750,000	\$3,500,000	\$36,700,000	\$62,700,000	\$4,000,000	\$4,000,000
36 - Humphrey Terminal								
<u>Safety/Security Projects</u>								
(3)	Emergency Voice Evacuation System		\$4,000,000					
(5)	Explosive Detection System/Baggage Sortation System **			\$55,000,000				
	Subtotal Safety/Security Projects		\$4,000,000	\$55,000,000				
<u>Facility Rehabilitation</u>								
(2)	Humphrey Jet bridge Replacement - 6&7	\$1,600,000						
(2)	Ticket Counter/Backwall Signage Replacement	\$800,000						
	Subtotal Facility Rehabilitation	\$2,400,000						
<u>Humphrey Terminal Expansion</u>								
(4)	GSE Building Relocation			\$5,500,000				
(5)	Fuel Farm Lease Extinguishment			\$3,500,000				
(1)	Humphrey Fuel Farm Relocation			\$5,900,000				
(1)	Apron			\$4,000,000	\$21,000,000	\$21,000,000		
(1)	Gates 1 - 6				\$104,000,000			
(1)	Gates 18 -27				\$136,000,000			
(1)	Auto Rental Facilities/QTA					\$50,000,000		
	Subtotal Humphrey Terminal Expansion			\$18,900,000	\$261,000,000	\$71,000,000		
	Subtotal Humphrey Terminal	\$2,400,000	\$4,000,000	\$73,900,000	\$261,000,000	\$71,000,000		

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
**Project grant application has been forwarded to the TSA to fund 90% of the eligible project costs.								
39 - Public Areas/Roads								
(2)	Landside Pavement Rehabilitation		\$1,900,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
(2)	Taxi Cab Break Room Expansion		\$800,000					
	Subtotal Public Areas/Roads		\$2,700,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
46 - Hangars and other Buildings								
(8)	Zantop Hangar - Meet Fire Code/Demo				\$1,000,000			
(3)	Navy Building/Old Motor Pool Buildings/Fire Code				\$1,000,000			
(2)	Roof Replacements							
(2)	Navy Building		\$300,000					
(2)	Impark		\$260,000					
(2)	Building H and I		\$1,220,000					
(2)	FAA Building Upgrades	\$3,000,000						
	Subtotal Hangars and other Buildings	\$3,000,000	\$1,780,000		\$2,000,000			
56 - Trades/Maintenance Buildings								
(2)	Maintenance Building Roof Replacement		\$550,000					
	Subtotal Trades/Maintenance Buildings		\$550,000					
63 - Police								
(5)	Security Guard Building/Utilities			\$1,100,000				
(6)	Midfield Administration Building			\$17,800,000				
(5)	Perimeter Fence Intrusion Detection System		\$3,000,000					
(4)	MSP Card Access/CCTV Improvements	\$2,850,000	\$2,750,000	\$2,650,000	\$1,400,000			
	Subtotal Police	\$2,850,000	\$5,750,000	\$21,550,000	\$1,400,000			
66 - Fire								
(5)	Post Road Fuel Farm Fire Protection Improvements		\$3,000,000					
(3)	MSP Campus Fire Alarm System Upgrade				\$850,000	\$850,000		
	Subtotal Fire		\$3,000,000		\$850,000	\$850,000		
76 - Environment								
(2)	Storm water Pond Dredging		\$3,000,000					
(5)	North Fuel Island Oil/Water Separator		\$700,000					
	Subtotal Environment		\$3,700,000					
Reliever Airports								
81 - St. Paul								
(6)	Holman Terminal Sub drain				\$600,000			

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
(2)	Joint and Crack Repairs			\$100,000		\$100,000		\$100,000
(5)	MAC Building Maintenance			\$200,000		\$200,000		\$200,000
(2)	Pavement Rehabilitation		\$1,400,000	\$1,000,000	\$1,500,000		\$500,000	
(4)	Electrical Vault Improvements				\$700,000			
(4)	Compex Mitigation				\$1,000,000			
	Subtotal St. Paul		\$1,400,000	\$1,300,000	\$3,800,000	\$300,000	\$500,000	\$300,000
	82- Lake Elmo							
(2)	Pavement Rehabilitation			\$300,000			\$300,000	
(1)	East Building Area Development **							\$2,800,000
(2)	Runway 14/32 Reconstruction		\$1,600,000					
(1)	Runway 4/22 Extension						\$1,500,000	
(1)	East Side Parallel Taxiway							\$1,200,000
	Subtotal		\$1,600,000	\$300,000			\$1,800,000	\$4,000,000
								**Funding for this project to be provided by others.
	83 - Airlake							
(2)	Pavement Rehabilitation			\$200,000			\$400,000	
(1)	South Building Area Development **					\$2,700,000		
(1)	Runway 12/30 Extension	\$200,000						\$8,000,000
	Subtotal Airlake	\$200,000		\$200,000		\$2,700,000	\$400,000	\$8,000,000
								**Funding for this project to be provided by others.
	84 - Flying Cloud							
(2)	Alleyway Rehabilitation			\$300,000				
(2)	Pavement Rehabilitation				\$800,000	\$900,000		
(2)	Runway 18/36 Reconstruction S. End/Perimeter Road		\$1,500,000					
(1)	South Building Area Development **				\$600,000			
	Subtotal Flying Cloud		\$1,500,000	\$300,000	\$1,400,000	\$900,000		
								**Funding for this project to be funded by others.
	85 - Crystal							
(2)	Alleyway Rehabilitation		\$550,000					
(4)	Obstruction Removals					\$300,000		
(2)	Pavement Rehabilitation		\$200,000	\$500,000				
(1)	Runway 14R/32L Modifications		\$1,000,000					
	Subtotal Crystal		\$1,750,000	\$500,000		\$300,000		
	86 - Anoka County - Blaine							
(3)	Security Gate Replacement *	\$500,000						
(2)	Pavement Rehabilitation		\$300,000	\$400,000				

**Table 1-1
2010 - 2016 CAPITAL IMPROVEMENT PROGRAM**

Note	Projects	2010	2011	2012	2013	2014	2015	2016
(1)	Building Area Development - East Annex **						\$2,400,000	
(1)	Building Area Development - Xylite St. Relocation			\$1,000,000				
(1)	Building Area Development - West Annex **					\$850,000		
(6)	Taxiway Charlie - A2/C2 Extension			\$900,000				
	Subtotal Anoka County - Blaine	\$500,000	\$300,000	\$2,300,000		\$850,000	\$2,400,000	
	Subtotal Reliever Airports	\$700,000	\$6,550,000	\$4,900,000	\$5,200,000	\$5,050,000	\$5,100,000	\$12,300,000
		*\$300,000 MAC cost and \$200,000 tenant cost.						
		**Funding for this project to be provided by others.						
	Subtotal Post 2010 Program	\$63,050,000	\$107,755,000	\$146,810,000	\$341,550,000	\$159,000,000	\$163,800,000	\$36,000,000
	Total CIP	\$122,550,000	\$108,755,000	\$162,810,000	\$342,950,000	\$163,000,000	\$163,800,000	\$36,000,000

NOTES:

- (1) A project that has potential substantive environmental effects.
- (2) A repair, rehabilitation or reconstruction project that does not physically alter the original size (the project does not have substantive environmental effects; an EAW or EIS is not required).
- (3) An electrical or mechanical device that monitors, indicates or controls existing conditions (the project does not have substantive environmental effects; an EAW or EIS is not required).
- (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 (the project does not have substantive environmental effects; an EAW or EIS is not required).
- (5) A project that consists of security enhancements, facility maintenance or upgrades (the project will not have substantive environmental effects; an EAW or EIS is not required).
- (6) A new, replacement or expansion project that does not have substantive environmental effects; an EAW or EIS is not required.

**Table 1-2
Summary Environmental Assessment of 2010 Projects in the MAC 2010-2016 Capital Improvement Program that require an EAW or EIS**

Project Description	Are the Effects of the Project Addressed in an Approved EAW, EA or EIS?	Environmental Categories Affected by the Project														
		Air Quality	Compatible Land Use	Fish, Wildlife and Plants	Floodplains and Floodways	Hazardous Materials, Pollution Prevention and Solid Waste	Historical, Architectural, Archaeological and Cultural Resources	Light Emissions and Visual Effects	Parks, Recreation Areas and Trails	Noise	Water Quality (Storm, Waste and Ground Water)	Wetlands	Infrastructure and Public Services	Farmland	Erosion and Sedimentation	
MSP PROJECTS																
Taxiway C/D Complex	Yes 2010 LTCP FEIS, May 1995	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	No effect	Effect*	No effect	No effect	No effect	No effect

* All required mitigation is being completed as part of the project.

Projects with Potential Environmental Effects and Effects During Construction

Projects with Potential Environmental Effects

Table 1-2 identifies the environmental effects categories evaluated by the EAWs prepared for the CIP projects scheduled to be implemented in 2010. Table 1-1 identifies those projects in the CIP that do not have a potential substantive effect on the environment (such as the repair, reconstruction or rehabilitation of pavement and buildings, and replacement of existing facilities). The notes in Table 1-1 offer further explanation of the type of work that each project entails and why this work will not affect the environment. Appendix A provides a description of each project in the CIP to be implemented in the years 2010 and 2011 and for only those projects that have potential substantive environmental effects to be implemented in 2012 through 2016. The descriptions of those projects scheduled to be implemented in 2012 through 2016 are preliminary and subject to change.

Effects During Construction

Typical mitigation measures will be used during construction to minimize potential adverse environmental effects caused by the construction process, including noise, dust, and erosion. The environmental effects of construction are temporary and do not constitute cumulative, long-term effects. As a result, the environmental effects from construction of projects in the CIP are not discussed in Section 3 of this document, which describes cumulative environmental effects.

Cumulative Environmental Effects

An EAW, EA or EIS requires an assessment of cumulative effects. A cumulative effect is the effect on the environment that results from the incremental effect of a project in addition to other past, present, and reasonably foreseeable future projects regardless of what entity or person undertakes the other projects. Cumulative effects may result from individually minor but collectively significant projects taking place over a period of time.

2010 MSP Projects

The effects of CIP projects in the MSP 2010 Program, such as the Taxiway C/D Complex project, were addressed in the Dual Track Airport Planning Process Final EIS (Dual Track FEIS). FAA and MAC circulated the Dual Track FEIS for public comment on May 7, 1998. FAA determined in its September 23, 1998 Record of Decision that the Dual Track FEIS, together with supporting documents and responses to comments on its adequacy, met the requirements of NEPA for projects in the MSP 2010 LTCP. On October 26, 1998, the Minnesota Environmental Quality Board (EQB) determined that the Dual Track FEIS met the requirements of MEPA. The Taxiway C/D Complex project will result in additional impervious surface and therefore additional storm water runoff, which will be accommodated by existing storm water detention facilities. The work planned in 2010 represents the sixth and final phase of the Taxiway C/D Complex work.

Post 2010 MSP Projects

The CIP also includes projects for MSP that were not included in the Dual Track FEIS but that have the potential for substantive environmental effects. MAC is presently in the process of updating the MSP 2020 Vision Plan. Initial indications are that the development options being evaluated as part of the present MSP LTCP update are similar to the development proposals contained in the 2015 Terminal Expansion Project Draft EA that was completed pursuant to the MSP 2020 Visions Plan provisions. The Post 2010 Program projects in the CIP that have the potential for substantive environmental effects are included in the CIP based on the planning progress made to-date as part of the MSP LTCP update. Upon finalization of the MSP LTCP, the associated environmental documentation will be completed as part of the planning and related CIP processes in advance of project construction.

For purposes of this document, given the similarities between the MSP LTCP update development options and the projects evaluated as part of the 2015 Terminal Expansion Project Draft Environmental Assessment (EA), the 2015 Terminal Expansion Project Draft EA provides a reasonable assessment of the cumulative environmental effects of the preliminary Post-2010 Program MSP projects in the CIP.

The 2015 Terminal Expansion Project Draft EA evaluates Phases 1 and 2 of the MSP 2020 Vision Plan. MAC and FAA prepared the EA. Minnesota Rule 4410.1300, which implements MEPA, allows an EA to be circulated in place of a MEPA EAW so long as the EA addresses each of the

environmental effects identified in the EAW form. The MAC is the responsible government unit under MEPA for the 2015 Terminal Expansion Project.

The 2015 Terminal Expansion Project EA addresses each of the environmental effects identified in the EAW form and therefore is the equivalent of an EAW under MEPA. In July 2005, MAC circulated the 2015 Terminal Expansion Project EA for public comment. In December 2005, the MAC determined that the 2015 Terminal Expansion Project EA met the requirements of a MEPA EAW. In addition, MAC determined that the 2015 Terminal Expansion Project did not have the potential for significant environmental effects, and that MAC need not prepare an EIS for the project under MEPA. The 2015 Terminal Expansion Project EA assessed the cumulative environmental effects for past, present and reasonably foreseeable future projects at MSP, very similar to the MSP projects in the 2010 - 2016 CIP.

The major environmental impact of projects planned for implementation in the CIP at MSP is water quality. Projects that create additional impervious surface (runoff) or increase the generation of sewage/wastewater or the use of glycol in deicing aircraft may affect water quality, including groundwater and discharge to receiving waters.

The Humphrey Parking Expansion project will result in an estimated additional emission of 60 tons (which is less than the de minimus level of 100 tons per year) of carbon monoxide (CO) annually, which is minimal since it is less than one-half of one percent of the existing annual CO emissions (approximately 20,670 tons). The project, in conjunction with the proposed expansion of the Humphrey Terminal, will also result in additional traffic on 34th Avenue South and congestion at the intersection with Airport Lane. The MSP LTCP update process will address traffic on Airport Lane and 34th Avenue in a manner which will mitigate this impact. The parking expansion will not have a significant effect on surface water runoff because these projects are being constructed on existing impervious surfaces.

The cumulative effects of the MSP projects in the CIP, as detailed in the 2015 Terminal Expansion Project EA, are as follows: The forecast of aircraft operations for the year 2015 was the basis for determining the cumulative air emissions and noise values contained in the Draft EA for all past, present, and reasonably foreseeable future projects at MSP. The primary pollutant emission of concern from vehicular air and ground traffic is CO, because the Twin Cities Metropolitan Region is a designated maintenance area for CO under the Clean Air Act. CO emissions forecast in the 2015 Terminal Expansion Project EA would increase as compared with CO emissions in 2004. However, the 2015 forecast of aircraft operations is the same with the proposed projects evaluated in the 2015 Terminal Expansion Project EA as without the proposed projects (no action). Given the identical 2015 forecast aircraft operations, and because the MSP projects in the CIP and evaluated in the Terminal Expansion Project EA will reduce delays at terminal gates, the proposed projects will actually result in lower CO emissions in 2015 than under the no action alternative. Also, there would be slightly fewer persons adversely affected by aircraft noise in 2015 under the proposed projects as compared to no action (primarily as a result of changes in runway use).

By way of background, the four major watersheds on MSP property include approximately 2,700 acres, of which approximately 1,400 acres are covered with impervious surfaces. Stormwater runoff from almost all of MSP is then directed to one of three stormwater detention pond systems. These ponds provide protection for the Minnesota River against fuel spills and as designed, remove Total Suspended Solids (TSS), phosphorus, and other pollutants from the stormwater. The two primary storm water ponds, MSP Pond 1 and MSP Pond 2, are designed to remove approximately 80% of TSS and associated pollutants from all runoff on an annual average basis while the MSP Pond 3 & 4 system is estimated to remove more than 90% of TSS. Storm water may also come into contact with aircraft deicing fluids (ADF), pavement deicing chemicals, sand, and the residual effects of unwanted releases (petroleum or otherwise) that have the potential to impact the storm water. The primary pollutant of concern is the carbonaceous biochemical oxygen demand (CBOD₅) that is exerted on the receiving

waters by the glycol component found in ADFs. The airport has a National Pollutant Discharge Elimination System (NPDES) Permit that regulates the discharge of CBOD₅ to the receiving waters.

Over the last 16 years the airport has invested well in excess of \$150 million dollars in capital improvements and best management practices to help minimize the impact of airport operations on the quality of storm water discharge. The improvements include plug and pump contained deicing locations, dedicated deicing pads, contained snow melters, glycol recovery vehicles, state-of-the-art deicing equipment, pavement brooming equipment, storm water retention ponds, a new glycol management facility, elimination of urea usage, and other measures to reduce the impacts of airport operations on the receiving waters. These efforts have helped to achieve an over 80 percent reduction in CBOD₅ discharge to the receiving waters.

The proposed CIP projects will have limited impact on surface water discharges from MSP. The various project sites are located primarily on previously developed, impervious areas. The CIP projects will add fewer than five acres of impervious surfaces to MSP. This added impervious area is negligible compared to the 1,400 acres of existing impervious area at MSP. As previously noted, existing detention ponds will accommodate any additional storm water runoff that the proposed CIP projects generate.

The proposed projects will have no impact on the groundwater or the hydro-geologic conditions at MSP. Construction activity related to the projects is not anticipated to occur at depths that would penetrate the Glenwood Shale confining layer. If construction penetrates the confining layer, engineered controls will be used to re-establish existing confining conditions (thus preventing vertical migration of groundwater) and to either contain or divert groundwater flow in the immediate area. These construction practices have been employed successfully during past construction projects at MSP. There are no known groundwater impacts in the area of the CIP projects for MSP. The CIP projects may have minor hydro-geologic effects on the local groundwater, but they are not expected to have a significant effect on hydro-geologic conditions at MSP.

Expansion of the MSP terminals would require an expansion of the existing fuel hydrant system. Although this would not affect the groundwater, it does create a potential source of groundwater impacts should the hydrant system have an unwanted release. Leak detection equipment, system maintenance procedures, and best management practices currently employed with the MSP hydrant system would be applied to the new system to ensure that the potential for undesired releases is minimized.

Wastewater discharges from MSP are conveyed to the MCES Metro Plant on Childs Road. This plant has a design capacity of 250 million gallons per day (MGD). The proposed projects are expected to increase passenger loads by approximately 50 percent between 2004 and 2015. This passenger growth will be accompanied by an approximately equivalent increase in wastewater discharges.

Wastewater is discharged to the Metro Plant through the MCES sewer interceptor system. Discharges from MSP are conveyed to the interceptor system through three different sewer systems. The majority is discharged from the airport to a tunnel near the Mississippi River that discharges into the interceptor system. A small volume of wastewater is discharged into the City of Minneapolis sewer system prior to reaching the MCES interceptors. Wastewater from the south west portion of MSP is discharged through the City of Richfield sewer system prior to reaching the MCES interceptors.

The estimated 50 percent increase in passenger loads is predicted to increase the daily sanitary discharge volume by approximately 0.35 MGD. This increase would be conveyed through the "tunnel" and Richfield systems. Assuming a 2.5 peak loading factor, this would amount to a peak addition of approximately 37,000 gallons per hour. This increase in loading is not expected to be an issue with the Metro Plant's total capacity, because the increase amounts to less than 0.2 percent of the plant's daily treatment capacity. However, there could be potential issues with the wet-weather conveyance

capacity of the interceptor system from other municipal sources. The MCES has informed MAC staff and consultants that there is sufficient dry-weather capacity in the MCES interceptor system to handle the proposed increase in flow (see discussion below regarding wet-weather capacity). In addition, the Richfield system is oversized to provide options for the City of Bloomington to divert their discharges through the Richfield system to the Metro Plant if Bloomington's conveyance to the Seneca Treatment Facility is obstructed. Recent upgrades to the Bloomington conveyance system make Bloomington's use of the Richfield system unlikely. Therefore, the Richfield system should have adequate capacity.

Additionally, the City of Minneapolis and the MCES have been working diligently on a CSO separation project that will return sewer capacity and reduce the combined sewer overflow (CSO) problems that exist within the sanitary sewer network. Although the issue is not unique to airport growth, MAC is considering the timing and impact of these projects in future planning for MSP.

Whether or not the proposed CIP projects for MSP are implemented, the MAC-owned sanitary sewer infrastructure may require upgrades to convey the higher volume of wastewater from the Lindbergh and/or Humphrey Terminals (upstream of the "tunnel" and Richfield systems). As it makes development decisions, MAC will evaluate the existing capacity of the MAC-owned sanitary sewer system to determine where and when capacity limitations may be encountered.

Anoka County – Blaine Reliever Airport Projects

MAC and FAA prepared and approved a Final EIS for the Anoka County-Blaine reliever airport in January 2003. The Final EIS included the East and West Annex Building Area projects that are a part of the CIP. These projects may affect water quality and wetlands by increasing impervious surface area, which will result in increased storm water runoff. To protect wetland areas, storm water detention ponds or ditches will accommodate the increased runoff. Wetlands impacted by construction will be mitigated according to watershed district and/or Minnesota DNR requirements. These projects will proceed only if funding from sources other than MAC can be found.

The East Building Area Annex project is planned for 2015. MAC will complete the necessary environmental studies prior to implementation of the project.

MAC is presently in the process of updating the ANE LTCP. Initial indications are that the plan will not propose any substantive expansion or enhancement of the facilities at ANE. Upon finalization of the ANE LTCP, if needed, environmental documentation will be completed as part of the planning and related CIP processes.

Airlake Reliever Airport Projects

MAC recently completed an update to the Long-Term Comprehensive Plan for the Airlake Airport. The recommendation in the plan includes a south building area development and the extension of Runway 12/30 from 4,098-feet to 5,000-feet. MAC prepared an EAW for the Airlake Airport South Building Area Development project in January 1999. The EAW addressed the storm water runoff and designated trout stream impacts. In 2001, the initial grading for the building area was completed with the construction of a storm water detention pond to capture runoff before it enters the designated trout stream. The trout stream was also relocated under a permit by the Minnesota DNR as part of the project. The second phase of construction is scheduled for completion in 2014. It will involve the placement of aggregate base and asphalt material for the hangar area taxilanes, along with the installation of sanitary sewer and water services. This work was also evaluated in the 1999 EAW.

The Long-Term Comprehensive Plan for the airport details the extension of Runway 12/30 to 5,000 feet and the realignment of Cedar Avenue. This project is currently planned for 2016. MAC is currently in the process of developing an EAW to evaluate the Cedar Avenue roadway alignment. MAC will have to identify funding sources for implementation of the proposed runway extension and will not proceed with the runway extension project until the necessary environmental review is completed.

Lake Elmo Reliever Airport Projects

MAC recently completed an update to the Long-Term Comprehensive Plan for the Lake Elmo Airport. The recommendation in the plan includes the construction of the East Building Area and extension of Runway 4/22 from 2,499-feet to 3,200-feet. MAC prepared an EAW for the East Building Area development in October 2001. The document identified increased storm water runoff, the removal of approximately thirty-two acres of farmland on MAC property, and an impact of 0.016-acres to a 3.30-acre Type 3 (small, shallow) wetland. As with past airport projects, MAC will design the project to accommodate the storm water runoff onsite and will obtain all environmental permits necessary to implement the project.

The Runway 4/22 extension detailed in the Long-Term Comprehensive Plan for the airport is planned for 2015. MAC will have to identify funding sources for implementation of the proposed runway extension and will not proceed with the runway extension project until the necessary environmental review is completed.

The CIP for the airport also includes a project, scheduled for 2011, to reconstruct Runway 14-32. The reconstruction project will not physically alter the original size of the runway and no additional environmental review is required for the reconstruction.

Crystal Reliever Airport Projects

MAC recently completed an update to the Long-Term Comprehensive Plan for the Crystal Airport. The recommendation in that plan is to close two of the airport's four runways. At this time, the document is under review by the Metropolitan Council. Should the document be accepted by the Metropolitan Council, MAC will determine the best course of action for implementing the long-term plan. The FAA must also approve the proposed runway closures.

The CIP includes the Runway 14R-32L Modifications project, scheduled for 2011. This project involves the reconstruction and conversion of the existing runway pavement into a taxiway. This project will not be implemented until the necessary approvals and environmental study associated with the runway closure are completed.

Flying Cloud Reliever Airport Projects

In June 2004, MAC and FAA prepared and approved a Final EIS that included the Runway 10R/28L Widening/Extension and South Building Area Development projects. In 2009 the runway extension will be completed.

In 2011 the southern portion of Runway 18-36 will be reconstructed and shortened by 58 feet to address the runway safety area deficiency at that end of the Runway. In addition, the east-west perimeter road will be constructed through the Runway 18 approach along Pioneer Trail.

Appendix A

Description of Projects in the 2010 – 2016 Capital Improvement Program



Figure A-1
Capital Improvement Projects with Potential Environmental Effects

Minneapolis - St. Paul International Airport
2010-2016

Project Schedule	
2010	Taxiway C/D Complex <i>Noise Mitigation Settlement</i>
2011	North Side Storm Sewer <i>Noise Mitigation Settlement</i>
2012	Humphrey Purple Ramp Outrigger Addition Humphrey Terminal North Expansion: Apron Humphrey Fuel Facility Relocation Auto Rental Facilities <i>Noise Mitigation Settlement</i>
2013	Humphrey Terminal North Expansion: Gates 1 - 6 and Gates 18 - 27 <i>Noise Mitigation Settlement</i>
2014	Humphrey Orange Ramp Outrigger Addition <i>Noise Mitigation Settlement</i>
2015	None for MSP
2016	None for MSP

Projects in Italics are not shown on map

2010 Capital Improvement Program

2010 Development Program

Noise Mitigation Program

Noise Mitigation Settlement \$43,300,000

This project is a continuation of the implementation of the sound insulation program based on the 2007 Noise Exposure Map contained in the Part 150 Update consistent with the terms and conditions of the court ordered Consent Decree.

Taxiway C/D Complex Construction

Taxiway C/D Complex (see Figure A-2) \$6,000,000

This project will be the last phase in a multi-phase program to reconstruct and reconfigure Taxiways C and D between Taxiway A and Taxiway P. The ultimate location for Taxiways C and D will provide for Group V aircraft on both taxiways which is a significant improvement over the existing geometrics that limit the aircraft wingspan allowed. This project includes reconstruction and relocation of a segment of Taxiway D from Taxiway C5 to Taxiway Q and associated crossover taxiways. In addition, the existing Taxiway D pavement has reached the end of its useful life, presents a Foreign Object Damage (FOD) potential, and needs reconstruction.

Airfield Rehabilitation Program

Airside Bituminous Rehabilitation \$500,000

This is an ongoing program to construct or reconstruct bituminous pavements within the Air Operations Area. Inspection of taxiway pavements and other airfield areas will be made to determine whether or not a bituminous repair project is required.

Pavement Joint Sealing \$500,000

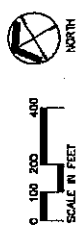
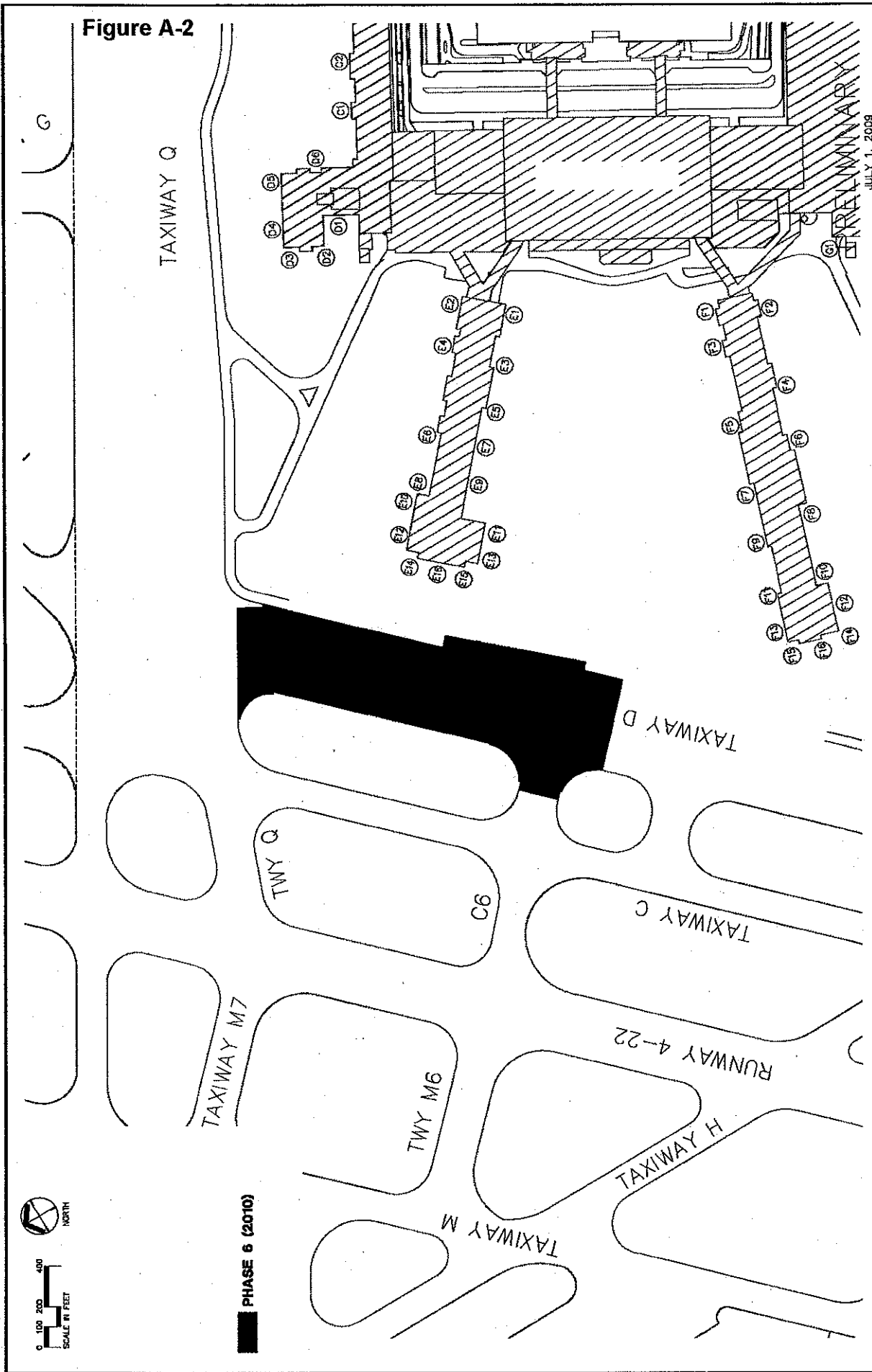
This is an ongoing program to provide for the resealing of joints in existing concrete pavements. The areas scheduled for sealing in 2010 include the southwest apron areas and along the F Concourse. This project also provides for limited crack and surface repairs.

Landside Rehabilitation & Repair Program

Landside Pavement Rehabilitation \$400,000

This is an ongoing program to reconstruct the airport's roadways and parking lots. A specific project has not been identified at this time. Pavements will be evaluated in the spring of 2010 to determine whether a pavement repair project is needed.

Figure A-2



PHASE 6 (2010)

		Metropolitan Airports Commission	PROJECT NO. 124357 DRAWING NO. 2010
LICENSE NO. 000 000 0000 LICENSE NO. 000 000 0000 LICENSE NO. 000 000 0000		JULY 1, 2009	CONSTRUCTION STAGING PLAN TAXIWAY C-D COMPLEX
DESIGNED DRAWN CHECKED	DATE BY DATE BY DATE BY	SUPERVISOR OF RECORDS	HSP

Parking Structure Rehabilitation

\$3,000,000

This is an ongoing program to maintain the integrity of the airport's multi-level parking structures. Projects typically include concrete repair, joint sealant replacement, expansion joint repairs, concrete sealing and lighting improvements. This project will implement recommendations made in the "Condition Assessment and Management Program Report" completed in 2007 and updated in 2009.

Terminal Modifications

\$2,000,000

Each year, MAC staff compiles a list of "maintenance" projects that are beyond the capability of the MAC's maintenance staff. These projects are then prioritized and completed either as a series of contracts or as purchase orders. A list was compiled for 2009 and any projects that do not fit within the budget will be carried over into 2010. New projects will be discussed in early 2010.

Summarized below are the categories of the projects which are included in the Terminal Modifications program:

Building Exterior Rehabilitation

*

This is a continuation of the program to rehabilitate the exterior of the Lindbergh Terminal and other MAC buildings including roof and curtain wall rehabilitation.

Terminal Electrical Modifications

*

This is an ongoing program to address electrical issues in the terminals due to age and deterioration of the existing systems or modifications necessary for improved reliability.

Terminal Mechanical Modifications

*

This is an ongoing program to address mechanical issues in the terminals due to age and deterioration of the existing systems or modifications necessary for improved reliability.

Terminal Miscellaneous Modifications

*

This is an ongoing program to update and remodel areas within the terminals to keep abreast with changing requirements. This may be accomplished through a series of small individual projects to meet the requirements of the various tenants or may be consolidated into a single project.

Humphrey Terminal & MSP Campus Modifications

*

This is an ongoing program to modify or remodel areas within the West Terminal Complex, the Humphrey Terminal and other facilities around the MSP Campus to meet the needs of the various tenants/general public/MAC departments utilizing the facilities

* Historically, projects have been defined for each of these five categories. With reduced dollars available to fund non-revenue generating projects, a total dollar allocation of \$2,000,000 has been allocated to fund the highest priority projects within any of these project categories.

Reliever Airport Program

AIRLAKE

South Building Area Alleyway Development \$1,000,000 **

This project will provide for the construction of three-four alleyways, including aggregate base and bituminous pavements, to allow for the construction of storage hangars. These alleyways would be considered a non-service area and would not have sanitary sewer or water utilities installed. It is anticipated that all costs would be assessed to new tenants, and that the majority of costs would be collected up front prior to MAC construction expenditures. The project also includes paving of a section of the building area access road. The remainder of alleyway build out would occur in future years.

** Partial funding for this project to be provided by others.

ANOKA COUNTY – BLAINE

Pavement Rehabilitation \$600,000

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project includes the reconstruction of Taxiway Alpha south of Runway 36 with sub grade rehabilitation. The pavement is reaching the end of its useful life and needs reconstruction.

FLYING CLOUD

South Building Area Development \$1,500,000 **

This project includes the complete installation of the sanitary sewer and water system as well as other utilities necessary for hangar construction.

** Funding for this project to be provided by others.

ST. PAUL

Joint and Crack Repairs \$100,000

Given the extremely poor sub grade materials at this airport, the need for crack repair and joint sealing is critical to maintain pavement strength and pavement life. An inspection of the pavement will be completed to determine the areas most in need of repair.

MAC Building Maintenance \$200,000

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of buildings or modifications necessary to meet the requirements of the tenants.

Miscellaneous Field and Runway Program

Miscellaneous Construction \$400,000

This is an ongoing program to consolidate various incidental items beyond the capabilities of the maintenance personnel, projects too small to be accomplished independently or to handle airside problems requiring repair which come up unexpectedly.

Post 2010 Program Projects

10 – Lindbergh Terminal

SAFETY/SECURITY PROJECTS

Lindbergh Terminal Sprinkler System – Concourses C&D \$8,600,000

Changes in the State Building Code require that the terminal and concourse be fully sprinkled. This project will be the fourth phase in a multi-phase program to provide the required fire sprinkler and alarm system. This year's project will be located primarily on Concourses C and D.

Lindbergh Terminal In-line Baggage Screening \$33,500,000 **

This project is the second phase of a three phase program to provide the Lindbergh Terminal with an automated, in-line Explosives Detection System (EDS). Phase 2 provides a replacement building and in-line, automated EDS system for the Lindbergh Terminal's existing "bus-stop" semi-automated system. This upgrade will improve baggage screening, overall system reliability, and reduce labor costs.

** Project grant application has been forwarded to TSA to fund 90% of the eligible project costs.

FACILITIES REHABILITATION

Tug Drive Floor Repair \$1,050,000

The membrane waterproofing system on the tug drive floor is deteriorating and coming apart in various areas or has been damaged allowing water to leak into work areas, electrical vault rooms, the valet garage and other operational areas below. The membrane system is nearing the end of its designated life of 5 years and will be replaced in a phased program.

Electrical Infrastructure Rehab Program \$1,000,000

There are fifty-three electrical substations that serve the Lindbergh Terminal complex. It is imperative that these substations be inspected, cleaned and upgraded in order to ensure their continued performance. This is the second phase in a multi-phase program that began in 2009.

Emergency Power Upgrades \$1,000,000

Studies and surveys of the Lindbergh Terminal's transfer switches and emergency lighting were completed and priority projects implemented in 2009. This year's project will continue the design and implementation of emergency power and lighting corrective work.

Conveyance System Upgrade \$1,500,000

A study of the MSP campus conveyance systems including elevators, escalators, moving walks, dumbwaiters, and material lifts was completed by the Facilities Department's conveyance consultant. The study evaluated the design useful life of each system including the availability of replacement parts and technical support of the equipment going forward. Many of the systems are being operated by outdated technology that is generally less efficient than modern control equipment. Some of the systems do not include some of the safety devices or features that are commonly installed on modern equipment. A multi year program will therefore be implemented to "modernize" and replace elements of the conveyance systems.

PASSENGER AMENITIES

Concessions Revenue Development/Upgrades \$200,000

This project will fund miscellaneous upgrades (finishes, furniture, condiment stations, etc.), signage and/or modified connections to utilities for the concession programs at the Lindbergh and Humphrey Terminals.

OPERATIONAL IMPROVEMENTS

Open Architecture Building Automation (OABA) \$1,650,000

This program will upgrade all MAC building automation systems to the LonMark open protocol so that the airport can bid maintenance and construction contracts more competitively. This project will replace Siemens controllers and legacy Honeywell controllers with LonMark controllers from Honeywell, Circon, Distech, or TAC systems that are all LonMark certified product lines. This project is the last project in a three year phased program.

13 - Energy Management Center

Energy Savings Projects \$2,000,000

A program was initiated in 2002 to provide for the implementation of projects that would save the Commission energy costs in its operating budget. Discussions with both Xcel and Centerpoint have identified additional projects that are eligible for energy saving rebates and that will save the Commission additional energy costs.

21 - Field and Runway

SIDA Incursion Upgrades \$700,000

Airfield security continues to be a primary focus at MSP. In order to enhance airfield security, this project will construct three security checkpoints on the airfield service roads complete with card readers to verify access to the airfield.

MAC/Xcel Settlement Agreement \$800,000 **

This project provides for the installation of Xcel facility improvements located within the MSP campus property. MAC and Xcel staff have identified several potential areas for improvements to the electrical facilities subject to a final review and project scope determination. These projects would be funded by Xcel as part of the MAC/Xcel settlement agreement.

** Xcel to fund 100% of the project costs.

26 - Terminal Roads/Landside

Tunnel/Bridge Rehabilitation \$100,000

A Bridge and Tunnel Safety Inspections Report was prepared in 2007. The report outlines structural maintenance recommendations to be implemented. While there were no immediate structural repairs required, an annual project for bridge and tunnel maintenance will continue in 2010.

LT Upper Level Roadway Guardrail Support Replacement \$1,100,000

The concrete on the existing supports for the guardrail on the Lindbergh Terminal upper level roadway has been cracking and spalling due to water infiltration and freeze/thaw cycles. Concrete that has been dislodged due to spalling has the ability to fall on people standing on the lower level roadway sidewalk or on vehicles entering or exiting Valet parking. Patching of potential concrete spalls has not held sufficiently over time. This project provides for cutting off the existing posts and installing a new mounting bracket for the supports.

31 - Parking

Valet Parking Waiting Area Improvements \$400,000

To improve customer service to users of the Valet parking at the Lindbergh Terminal, the Valet waiting area will be improved with additional elevator access to this level that would open to the Valet side, the addition of new signage at other levels to access Valet parking, and segregation of MAC Trades vehicles and ABM from the passenger waiting area. The Valet waiting area will be improved with the addition of a weather monitor, new seating, finish upgrades, improved lighting, and other amenities.

Valet Garage Flammable Waste Traps/Floor Drains \$500,000

The Valet garage utilizes a series of floor drains to collect water from melting snow and other sources of drainage. Currently, there is only one floor drain that drains into a flammable trap, a device that collects sand, oil, grease or flammable liquids. These materials either float or settle, thus trapping it, and draining only the water layer to the sanitary sewer. This project is the second phase in a program that will rebuild the existing floor drains and connect them to new flammable waste traps.

36 - Humphrey Terminal

FACILITIES REHABILITATION

Humphrey Jet Bridge Replacement - Gates 6 & 7 \$1,600,000

At the time the new Humphrey Terminal was constructed, MAC relocated two existing MAC-owned jet bridges from the old Humphrey facility to Gates 6 and 7. These bridges are 30 years old and have deteriorated to the point that maintenance is no longer a viable option and the bridges need to be replaced.

Ticket Counter/Backwall Signage Replacement \$800,000

This project will replace static signs at the backwall and LED signs above the ticket counters with dynamic LCD monitors. This system will allow for flexibility in managing the ticketing lobby as a common-use facility. The MAC will also be able to provide additional information with the new system including visual paging, emergency notices, and other messages that are currently being taped to the ticket counters.

46 – Hangars and other Buildings

FAA Building Rehabilitation \$3,000,000

The lease on the FAA building located to the north of the MAC General Office is at the end of its 20 year term. The building was constructed and maintained by a development company retained by the FAA. MAC is currently negotiating with FAA on a new lease that would include land rent, maintenance costs, and tenant improvements. The existing building is 20 years old and needs improvements including a new roof and major mechanical and electrical upgrades in order to meet current MAC standards. The cost of these improvements would be recovered in the new lease.

63 – Police

MSP Card Access/CCTV Improvements \$2,850,000

This is an ongoing program to add new and upgrade existing CCTV systems to ensure the safety and security of MSP. The majority of the areas within the terminals, concourses, and parking areas have adequate coverage. There are, however, areas that need upgraded coverage such as terminal entry and exits, passenger gathering points, queuing areas, and inside passenger tram cars. The expanded coverage will provide for valuable real-time viewing for proper response as well as recorded video for investigation and evidentiary purposes.

83 – Airlake

Runway 12/30 Extension \$200,000

This project includes costs for the initial planning, justification and environmental scoping required for both the proposed runway extension and the corresponding realignment of Cedar Avenue east of the airport.

86 – Anoka

Security Gate Replacement \$500,000 *

The existing entrance gates at Anoka have exhibited numerous maintenance problems over the past few years. The gates are very large and heavy, especially for the single operator systems. This project includes upgrades to the three existing entrance gates with new dual-operators. In addition, a fourth gate and fence line modifications are proposed as part of a potential non-aeronautical development within the south hangar area. Additional security will be necessary should this development move forward utilizing the existing airport service roads for access. Of the total cost, approximately \$200,000 should be paid by the developer as a cost necessary for their project, and as requested by the FAA, in order to approve the development. If the developer pursues other options, or decides not to proceed, the project will include only the three existing MAC gates at a cost of \$300,000.

* \$200,000 to be funded by developer.

2011 Capital Improvement Program

2010 Development Program

Noise Mitigation Program

Noise Mitigation Settlement \$1,000,000

This project is a continuation of the implementation of the sound insulation program based on the 2007 Noise Exposure Map contained in the Part 150 Update consistent with the terms and conditions of the court ordered Consent Decree.

Post 2010 Program Projects

10 - Lindbergh Terminal

SAFETY/SECURITY PROJECTS

Lindbergh Terminal In-line Baggage Screening \$28,000,000 **

The Lindbergh Terminal Explosives Detection System (EDS) Phase 3 is currently part of the TSA FY09 Other Transaction Agreement (OTA), and includes the scope of work that will tie all north lobby ticket counters, initially the Other Airlines (OAL), into both the LT south and west EDS systems. This tie-in will remove EDS machines and TSA baggage screening from the LT lobby, move the ticket counters back into their original positions (close to the ticket counter belts), modify the clear lines out of the west EDS system to accommodate additional screening capacity, and sort OAL baggage to outbound devices prior to entering the DL/NWA sortation matrix. The project will also modify the Early Bag Storage System (EBSS) route and programming to accommodate the additional baggage from the west EDS system, and will create an oversize (OS) screening room in existing ATO space, with feeds for OS Canadian transfer baggage to be input in the baggage room, and screened with originating OS baggage.

The project will have the majority of the system designed for reuse if the OALs are moved to an expanded Humphrey Terminal. The design also reserves right-of-way clearances for future baggage check-in and transport conveyors for integration into the west and south EDS systems.

The system provides some redundancy for TSA EDS systems, improves working conditions for TSA employees, improves passenger space issues in the ticket lobby (by removing devices and moving the ticket counters back), but, increases the amount of conveyor system and complexity to be maintained over time.

** Project grant application has been forwarded to TSA to fund 90% of the eligible project costs.

FACILITIES REHABILITATION

Skyway HVAC \$1,200,000

The skyways from the Lindbergh Terminal to the parking structures utilize unit heaters for heating and cooling the skyways. These HVAC units have been failing over the years and repair parts have been increasingly difficult to find. This project would replace the units with a new HVAC system.

Skyway Flooring Replacement

\$150,000

The existing floor covering on the skyways has faded and deteriorated over the years due to exposure to the sun and from fluid leaks from failing HVAC units. Once the HVAC units have been replaced, this project would provide for the installation of new floor covering materials.

Electrical Infrastructure Rehab Program

\$1,000,000

There are fifty-three electrical substations that serve the Lindbergh Terminal complex. It is imperative that these substations be inspected, cleaned and upgraded in order to ensure their continued performance. This is the third phase in a multi-phase program that began in 2009.

Terminal Modifications

\$2,500,000

Each year, MAC staff compiles a list of "maintenance" projects that are beyond the capability of the MAC's maintenance staff. These projects are then prioritized and completed either as a series of contracts or as purchase orders. A list will be compiled for 2010 and any projects that do not fit within the budget will be carried over into 2011. New projects will be discussed in early 2011.

Summarized below are the categories of the projects which are included in the Terminal Modifications program:

Building Exterior Rehabilitation

*

This is a continuation of the program to rehabilitate the exterior of the Lindbergh Terminal and other MAC buildings including roof and curtain wall rehabilitation.

Terminal Electrical Modifications

*

This is an ongoing program to address electrical issues in the terminals due to age and deterioration of the existing systems or modifications necessary for improved reliability.

Terminal Mechanical Modifications

*

This is an ongoing program to address mechanical issues in the terminals due to age and deterioration of the existing systems or modifications necessary for improved reliability.

Terminal Miscellaneous Modifications

*

This is an ongoing program to update and remodel areas within the terminals to keep abreast with changing requirements. This may be accomplished through a series of small individual projects to meet the requirements of the various tenants or may be consolidated into a single project.

Humphrey Terminal & MSP Campus Modifications

*

This is an ongoing program to modify or remodel areas within the West Terminal Complex, the Humphrey Terminal and other facilities around the MSP Campus to meet the needs of the various tenants/general public/MAC departments utilizing the facilities

*Historically, projects have been defined for each of these five categories. With reduced dollars available to fund non-revenue generating projects, a total dollar allocation of \$2,500,000 has been allocated to fund the highest priority projects within any of these project categories.

Emergency Power Upgrades

\$1,000,000

Studies and surveys of the Lindbergh Terminal's transfer switches and emergency lighting were completed and priority projects implemented in 2008. This year's project will continue the design and implementation of emergency power and lighting corrective work.

Lower Level Roadway/GTC Water Infiltration Mitigation

\$2,500,000

Water infiltration through the structural concrete slab above the Ground Transportation Center and lower level of the Lindbergh Terminal has required the use of buckets and other containers to collect the water. Long-term water infiltration of structural members will result in deterioration of the structural concrete and will shorten the life of the structure. This project will determine the causes of the infiltration and develop a construction solution.

Restroom Upgrade Program

\$2,000,000

A study of all restrooms in the Lindbergh Terminal was completed in 2009 to develop a program to upgrade/modernize the restrooms at the Lindbergh Terminal. From this study, each restroom was prioritized as to its condition. This program would provide for the phased modernization of the restrooms to include upgraded finishes, lighting, resource and energy saving upgrades, and ADA compliance.

Air Handling Unit Replacement

\$1,150,000

There are existing air handling units serving the Lindbergh Terminal that were installed with the original terminal construction and are over 40 years old. A study of these units has been completed that evaluated each unit based on its age, condition, and its ability to adequately heat or cool the spaces it serves. This program will replace ten units that have been identified as needing replacement phased over a three year period. The estimated project costs include modifications to building walls to facilitate the removal of existing equipment and installation of the new units, upgraded electrical and temperature controls and required asbestos abatement.

Conveyance System Upgrades

\$1,950,000

A study of the MSP campus conveyance systems including elevators, escalators, moving walks, dumbwaiters, and material lifts was completed by the Facilities Department's conveyance consultant. The study evaluated the design useful life of each system including the availability of replacement parts and technical support of the equipment going forward. Many of the systems are being operated by outdated technology that is generally less efficient than modern control equipment. Some of the systems do not include some of the safety devices or features that are commonly installed on modern equipment. A multi year program will therefore be implemented to "modernize" and replace elements of the conveyance systems.

PASSENGER AMENITIES

Art in the Terminal

\$250,000

This project presents an opportunity to partner with the Airport Foundation to provide a gallery-type space on Concourse C for the display of permanent and temporary/rotating art exhibits. This project also includes lighting and finish upgrades in the baggage claim area to support art installations. The Concourse C location has been identified as an art installation location since the adoption of the Public Art standards in 1999. This project will be phased over two years.

Checkpoints 2 & 5 Expansion \$2,000,000

The TSA will be installing new Advanced Technology screening devices at the checkpoints. These units will be larger than those currently in use and will result in the loss of 4 screening lanes. This project would provide for the expansion of Checkpoints 2 and 5 by infilling the floors to accommodate the new TSA technology without loss of screening capability.

Meeter/Greeter/Freedom of Speech Booth Upgrades \$225,000

This project will replace the existing meeter/greeter booths and freedom of speech booth at the Lindbergh Terminal with updated furniture and a new information display system. The existing booths are over 10 years old and are showing signs of wear. The meeter/greeter booths are the welcome location for major corporations and regional events and provide a "first impression" for many passengers arriving at the terminal.

Concessions Revenue Development/Upgrades \$200,000

This project will fund miscellaneous upgrades (finishes, furniture, condiment stations, etc.), signage and/or modified connections to utilities for the concession programs at the Lindbergh and Humphrey Terminals.

Public Access Videophones (PAVs) \$300,000

This project would procure, install, and modify all existing TDD/TTY locations within the terminals to accept new technology, internet-based Public Access Videophones (PAVs). Twelve devices would replace existing TDD/TYYs plus four additional PAVs would be installed at locations currently underserved such as in the rental car and transit areas.

Terminal Seating Improvements \$1,000,000

This project will replace public beam-seating at the Lindbergh Terminal with the Eames Tandem Sling-seating that has been in place in the Humphrey Terminal since its opening. This seating has been durable, timeless, and affordable to repair. This project would also provide for additional conversational style seating in the North Star Crossing area of the Lindbergh Terminal.

Terminal Directories Replacement \$450,000

This project will replace static terminal directories in the North Star Crossing of the Lindbergh Terminal with dynamic directories that would provide a customized response for specific way finding and concession queries through touch-screen technology. Change out of information would occur in more real-time than current directory change outs, would be consistent MAC's other digital information available to the public, and would represent lower costs long-term. These large display monitors would also have the ability to display other MAC specific Public Information, Visual Paging, and Emergency information when not being used by customers for way finding purposes.

OPERATIONAL IMPROVEMENTS

Concourse C Elevator to D Street \$400,000

Currently, the Concourse C elevator stops at the concourse level. MAC staff has requested that this elevator be modified to allow for access to D Street. This would allow the MAC trades to get lift equipment used to change lights and clean high areas to the east end of the Concourse C.

IS Data Center Facilities

\$3,000,000

There are currently twenty (20) data center spaces located throughout the MAC campus. Each of these rooms contain rack mounted IT equipment that serves various functions. Several of these rooms are running out of available power and cooling capacity. Several existing rooms do not have emergency power, redundant cooling, security cameras, or temperature monitoring. Many electrical components must also be shut down to perform maintenance which leaves the IT equipment without power. In addition, the "hub and spoke" configuration of data room connections is susceptible to operational disruptions. A study has been completed that proposes to consolidate the 20 data centers into two (2) new data centers connected on a new fiber ring for reliability and the replacement of existing servers. This program would be phased over several years.

13 - Energy Management Center

Energy Savings Projects

\$2,500,000

A program was initiated in 2002 to provide for the implementation of projects that would save the Commission energy costs in its operating budget. Discussions with both Xcel and Reliant have identified additional projects that are eligible for energy saving rebates and will save the Commission additional energy costs.

21 - Field and Runway

Airside Bituminous Rehabilitation

\$500,000

This is an ongoing program to construct or reconstruct bituminous pavements within the Air Operations Area. Inspection of taxiway pavements and other airfield areas will be made to determine whether or not a bituminous repair project is required.

Pavement Joint Sealing

\$500,000

This is an ongoing program to provide for the resealing of joints in existing concrete pavements. The areas scheduled for sealing will be determined in the spring of 2011. This project would also provide for limited crack and surface repairs.

Pavement Rehabilitation - Aprons

\$2,000,000

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 approximately 7,000 square yards of concrete apron located adjacent to Concourse C between Gates D6 and C3.

Runway 30R MALSF

\$1,800,000

This project will provide for significant safety enhancements for approaching aircraft to Runway 30R by the installation of a medium intensity approach lighting system with flashers (MALSF). This lighting system consists of 45 steady burning lights and 3 flashing lights spaced along the extended runway centerline from the threshold to a distance of 1,400 feet beyond the threshold.

Miscellaneous Construction

\$400,000

This is an ongoing program to consolidate various incidental items beyond the capabilities of the maintenance personnel, projects too small to be accomplished independently or to handle airside problems requiring repair which come up unexpectedly.

Perimeter Fence/Gate Barrier System \$3,300,000

This project is part of a phased program to strengthen the perimeter security fence and airfield access gates. The final project in the perimeter fence program was approved in 2008. This project will provide for the hardening of the perimeter security gates.

Taxiway C Extension to Humphrey Remote \$5,500,000

This project provides for the extension of Taxiway C between Taxiway S and the Humphrey Remote Apron to improve access to and from the Humphrey Remote Apron.

Runway 12R/30L Tunnel Fans and Dampers \$1,400,000

There are a series of rooms adjacent to the tunnel under Runway 12R/30L that house mechanical ventilation equipment for the tunnel. The mechanical equipment consists of very large fans and dampers. The harsh environment in these subsurface rooms has resulted in deterioration of the mechanical equipment and replacement of the fans and dampers is required.

North Side Storm Sewer \$5,000,000

This project provides for the modifications to storm water detention ponds 3 and 4. The pond 4 outlet control structure will be replaced and a 60-inch storm sewer pipe installed to increase the outflow capacity of the pond. The pond 3 berm will be raised and the spillway reconstructed to reduce pond overtopping and spillway washout. The outlet control structure will also be replaced and a parallel 60-inch storm sewer installed to increase the outflow capacity.

26 - Terminal Roads/Landside

Tunnel/Bridge Rehabilitation \$100,000

A Bridge and Tunnel Safety Inspections Report was prepared in 2007. The report outlines structural maintenance recommendations to be implemented. While there were no immediate structural repairs required, an annual project for bridge and tunnel maintenance will continue in 2011.

31 - Parking

Parking Structure Rehabilitation \$3,000,000

This is an ongoing program to maintain the integrity of the airport's multi-level parking structures. Projects typically include concrete repair, joint sealant replacement, expansion joint repairs, concrete sealing and lighting improvements. This project will implement recommendations made in the "Condition Assessment and Management Program Report" completed in 2007 and updated in 2009.

Humphrey Ramp VMS/Revenue Control System Upgrade \$1,500,000

This project provides for the installation of a number of Variable Message Signs (VMS) at the Humphrey Parking Ramp and on airport roadways between the Humphrey and Lindbergh Terminals that will aid in directing the public to the appropriate parking facility. It is also proposed to install additional revenue control equipment and signage to allow for more flexibility in the use of the Humphrey parking ramps

Humphrey GTC Core Building Modifications \$850,000

This project will provide for the renovation of the Humphrey ground transportation core (GTC) building by installing a passenger information booth, a meeter/greeter booth and Freedom of Information booth, and commercial vehicle counter spaces equipped with variable message signage.

Lindbergh/Humphrey Vehicle Detection/Counting \$400,000

This project will provide for the installation of a vehicle detection system to generate data showing the number and location of vehicles at each terminal. This data will be used to analyze vehicle movements on the roadway system, roadway wear, determine where signage improvements are required, and to generate improved public/commercial vehicle use fleet percentages and forecasts.

Valet Garage Flammable Waste Traps/Floor Drains \$1,000,000

The Valet garage utilizes a series of floor drains to collect water from melting snow and other sources of drainage. Currently, there is only one floor drain that drains into a flammable trap, a device that collects sand, oil, grease or flammable liquids. These materials either float or settle, thus trapping it, and draining only the water layer to the sanitary sewer. This project will rebuild several of the existing floor drains and connect all floor drains to new flammable waste traps.

Valet/Commercial Entrance Lanes Modification \$1,000,000

The entrance to the Valet garage and Commercial lanes can back up during peak times and can impede customers attempting to enter the baggage claim roadway. This project would provide a switchable lane that can accommodate increased Valet traffic during heavier flow times and then be returned to use by commercial vehicles at other times. This additional lane would also increase the queuing area for commercial vehicles, taxis, and Valet customers.

36 – Humphrey Terminal

SAFETY/SECURITY PROJECTS

Emergency Voice Evacuation System \$4,000,000

This project will upgrade the existing paging system at the Humphrey Terminal to comply with current codes for emergency evacuation. A similar upgrade was recently completed on Concourse A and B.

39 – Public Areas/Roads

Reconstruction of 28th Ave. \$1,900,000

This project provides for the reconstruction of 28th Avenue from approximately Highway 62 (Crosstown) to E. 62nd Street. This roadway has been used as a haul route for many airside projects over the years and the constant pounding by heavily loaded trucks has caused the roadway to deteriorate to the point where major reconstruction is required.

Taxi Cab Break Room Expansion \$800,000

The taxi cab break room is attached to the Super America service station located on Post Road. The current facility was constructed to hold 70 operators. Modifications to the break room reduced its capacity to 45 operators. Based on the number of taxi cabs in the holding lot, the room needs to be

able to hold 150 operators. In addition, the rest room facilities need to be expanded to accommodate the additional operators.

46 – Hangars and other Buildings

Roof Replacements

The MAC's roofing consultant has completed a study that assessed the condition of the roof systems of the buildings on the MAC campus and developed a roof management program. Several buildings require either repairs or replacements in 2010 and are listed below.

Navy Building	\$300,000
Impark Building	\$260,000
Buildings H and I	\$1,220,000

56 – Trades/Maintenance Buildings

<u>Maintenance Building Roof Replacement</u>	\$550,000
--	-----------

The roof management program described above also indicated that a section of the roof on the Maintenance Building requires replacement in 2010.

63 – Police

<u>Perimeter Fence Intrusion Detection System</u>	\$3,000,000
---	-------------

The Airport Police Department has requested that a perimeter intrusion detection system be installed on the existing airport security fence. This system would enhance security of the perimeter fence by remotely monitoring approximately 5 miles of perimeter fence. The system would install directly on the existing fence.

<u>MSP Card Access/CCTV Improvements</u>	\$2,750,000
--	-------------

This is an ongoing program to add new and upgrade existing CCTV systems to ensure the safety and security of MSP. The majority of the areas within the terminals, concourses, and parking areas have adequate coverage. There are, however, areas that need upgraded coverage such as terminal entry and exits, passenger gathering points, queuing areas, and inside passenger tram cars. The expanded coverage will provide for valuable real-time viewing for proper response as well as recorded video for investigation and evidentiary purposes.

66 – Fire

<u>Post Road Fuel Farm Fire Protection Improvements</u>	\$3,000,000
---	-------------

In order to enhance fire protection at the Post Road fuel storage facility, a series of projects will be evaluated. These include the following:

1. On site pump house with foam supply
2. Pre-piped monitor nozzles for exposure protection

3. Improvements to the water supply to the storage facility
4. Fire protection for the filter storage area
5. Access improvements to the site for fire fighting purposes

76 – Environment

Storm Water Pond Dredging \$3,000,000

This project provides for the removal and proper disposal of accumulated sediments in storm water detention pond 4 to increase the storm water runoff storage volume.

North Fuel Island Oil/Water Separator \$700,000

This project provides for the installation of an oil water separator (OWS) and modification of pavements at the MAC North Fueling Facility. The OWS provides storm water protection from spills and releases during vehicle fueling and fuel transfer activities. The current fuel island directs storm water flows to a grass retention basin where, in the event of a release, impacted soils are removed and disposed of at an approved facility. This project will bring MAC controlled facilities up to MSP recommended water quality best management practices.

81 - St. Paul

Pavement Rehabilitation \$1,400,000

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project will include the reconstruction of portions of Taxiway Alpha south of Runway 9/27, along with necessary sub grade rehabilitation. This pavement is exhibiting deterioration and major transverse cracks have developed.

82 – Lake Elmo

Runway 14/32 Reconstruction \$1,600,000

This project includes the full reconstruction of Runway 14/32. The pavement has reached the end of its useful life and must be replaced.

84 - Flying Cloud

Runway 18/36 Reconstruction S. End/Perimeter Road \$1,500,000

This project provides for the reconstruction of Segment 3 of Runway 18/36 that includes the segment from the Runway 36 end to the Runway 10R/28L safety area boundary and the replacement of lighting cable for the Runway 18/36 parallel taxiway. In addition, the runway safety area deficiency will be corrected and enhanced and east-west perimeter road constructed.

85 – Crystal

Alleyway Reconstruction

\$550,000

This project includes rehabilitation of a portion the alleyways in the east and north building areas.

Pavement Rehabilitation

\$200,000

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions.

Runway 14R/32L Modifications

\$1,000,000

As defined in the Long Term Comprehensive Plan update, this project will include closure of Runway 14R/32L and reconstruction of the pavement into a parallel taxiway. Portions of the Taxiway Echo connectors will also be reconstructed. The pavement is only 2-inches thick, is fully cracked and crumbling, and presents a FOD hazard. An environmental study for the runway closure will be completed prior to commencement of the project.

86 – Anoka County – Blaine

Pavement Rehabilitation

\$300,000

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons) through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. This project will include rehabilitation of taxilanes in the south hangar area that were not previously reconstructed as part of the sanitary sewer and water main installation.

2012 – 2016 Capital Improvement Program

(Description of projects expected to be implemented in 2012 through 2016 are preliminary, and only those that have potential substantive environmental effects are included in this section.)

2010 Program Projects

MSP Noise Mitigation Program

Noise Mitigation Settlement \$22,400,000

The project implements the noise mitigation program based on the 2007 Noise Exposure Map contained in the Part 150 Update, consistent with the terms and conditions of the court-ordered Consent Decree.

Post 2010 Program

31 – Parking

Humphrey Orange Ramp Outrigger Addition /Levels 9&10 \$58,700,000

This project provides for the construction of seven additional levels (levels 4 - 10) of parking on the east side of the Orange Ramp, two additional levels (levels 9 and 10) on the Orange Ramp, and seven additional levels (levels 4 – 10) of parking over the LRT station.

Humphrey Purple Ramp Outrigger Addition \$32,100,000

This project will add seven additional levels (levels 2 – 8) of parking on the east side of the Purple Ramp which would add approximately 1,288 parking spaces.

36 – Humphrey Terminal

Humphrey Fuel Facility Relocation \$5,900,000

Prior to any expansion of the Humphrey Terminal to the south, the existing fuel farm will be relocated.

Humphrey Terminal Expansion – Apron \$46,000,000

This project will provide for the expansion of the concrete apron to accommodate the expansion of the Humphrey Terminal to the north (6 gates) and to the south and east (11 gates) including the installation of the required fuel hydrant system. This project will also relocate the existing aircraft run-up pad.

Humphrey Terminal Expansion – Gates 1-6 \$104,000,000

This project will provide for the expansion of the Humphrey Terminal to the north by the construction of six new gates.

Humphrey Terminal Expansion – Gates 18-27 \$136,000,000

This project will provide for the expansion of the Humphrey Terminal to the south and east by the construction of up to nine new gates.

Auto Rental Facilities/QTA \$50,000,000

This project would provide accommodations for rental cars by expanding the existing parking garages and would include Quick Turn Around (QTA) facilities for washing and fueling of vehicles.

Reliever Airport Programs

LAKE ELMO

Runway 4/22 Extension \$1,500,000

This project includes extending Runway 4/22 from 2,500 feet to 3,200 feet, runway lighting and precision approach path indicator (PAPI) installation, and the clearing and grading of the runway safety area.

East Side Parallel Taxiway \$1,200,000

This project includes the construction of a full parallel taxiway to Runway 4/22 in conjunction with the extension of Runway 4/22 and a new east side hangar area.

AIRLAKE

South Building Area Development \$2,700,000**

This project will provide for alleyway construction, including aggregate base and bituminous pavements, along with the installation of sanitary sewer and water main including a stand alone restroom facility and fire protection hydrant line. The project also includes paving a section of 225th Street that will then connect to Cedar Avenue.

**Funding for this project to be provided by others.

Runway 12/30 Extension \$8,000,000

This project will provide for the extension of Runway 12/30 from 4,098 feet to 5,000 feet. The runway extension would have an impact on Cedar Avenue, that lies directly east of the airfield, and a segment of the road would be rerouted around the end of the runway end safety area.

FLYING CLOUD

South Building Area Development \$600,000**

This project provides for the installation of sanitary sewer and water services to serve the building area lots for which development has been delayed.

**Funding for this project to be provided by others.

ANOKA-COUNTY BLAINE

Building Area Development – East Annex

\$2,400,000 **

This project includes installation of sanitary sewer and water main, grading and paving of alleyways for up to 80 storage hangars and includes facilities to accommodate storm water run off.

**Funding for this project to be provided by others.

Building Area Development – Xylite St. Relocation

\$1,000,000

This project provides for the relocation of Xylite Street including the installation of curb and gutter and construction of a berm and landscaping.

Building Area Development – West Annex

\$850,000 **

This project provides for the construction of two alleyways for eight storage hangars and three corporate hangars, sanitary sewer and water main and accommodation of storm water drainage.

**Funding for this project to be provided by others.