



## Metropolitan Airports Commission

---

6040 - 28th Avenue South, Minneapolis, MN 55450 • 612-726-8100 • metroairports.org

August 29, 2024

RE: Metropolitan Airports Commission's Preliminary 2025-2031 Capital Improvement Program

Dear Sir or Madam:

Each year the Metropolitan Airports Commission (MAC) compiles its seven-year Capital Improvement Program (CIP) which outlines construction projects proposed for the Commission's system of airports. The projects shown in year one represent projects that have been reasonably defined for implementation in the upcoming calendar year. Staff will have authority to develop final plans and specifications and advertise for bids for these projects. Projects in year two have been identified as a need or potential need but require further study in order to properly determine the scope, feasibility, or cost of the project. Staff will have authority to develop plans and specifications for these projects to refine them for inclusion in next year's program. Projects in year three will be studied and preliminary plans prepared. The last four years of the program include projects that staff deems likely to be needed during this period. This portion of the program assists in financial planning and meets the requirements of the Metropolitan Council's investment framework.

In 1998, legislation was passed (MS 473.621, Subd. 6 as amended) concerning local review of the CIP. The legislation requires the MAC to complete a process to provide "affected municipalities" surrounding the airport the opportunity for discussion and public participation in the MAC's CIP process. An "affected municipality" is a municipality that is either adjacent to a MAC airport, is within the noise zone of a MAC airport as defined in the Metropolitan Development Guide or has notified the MAC that it considers itself an "affected municipality." Your community has been identified as an "affected municipality" by Metropolitan Council staff based upon the criteria as defined in the statute.

The legislation requires that the MAC provide adequate and timely notice, including a description of the projects in the CIP, to each affected municipality. The notices must include agendas and meeting minutes at which the proposed CIP was to be discussed or voted on in order to provide the municipalities the opportunity to solicit public comment and participate in the development of the CIP on an ongoing basis. Comments received from the affected municipalities will be reviewed and a response developed.

August 29, 2024  
Page 2

As has been done since 1999, the MAC has developed a schedule that will allow the affected municipalities the opportunity to participate in the CIP process. The implementation schedule for the 2025-2031 CIP is attached for your information. The shaded items represent actions/dates that pertain to the CIP. You will receive mailings regarding the CIP review and approval process. Once the Commission approves the preliminary CIP, you will have 60 days to provide comments on the proposed CIP to the MAC. Comments will be received until close of business on November 15, 2024. MAC staff will be available to attend any public meetings to answer questions regarding the projects in the CIP.

The Planning, Development, and Environment Committee of the Commission will be meeting on September 3, 2024, to review and make a recommendation to the full Commission on the Preliminary 2023 CIP. The approval of the Preliminary CIP will start the mandated environmental review process. Attached is the agenda for the Committee meeting, the Staff memo on the CIP, a spreadsheet showing the proposed 2025-2031 CIP, and project narratives for projects in year 2025.

All comments and questions on either the process or the CIP should be addressed to:

Heather Leide, Director of Airport Development (Project Initiation)  
Metropolitan Airports Commission  
6040-28<sup>th</sup> Avenue South  
Minneapolis, MN 55450  
Phone: 612.726.8128  
Email: [heather.leide@mspmac.org](mailto:heather.leide@mspmac.org)

Sincerely,



Heather J. Leide, AIA, C.M.  
Director, Airport Development (Project Initiation)

Attachments

ft

c: Bridget Rief, VP of Planning & Development  
Jenn Felger, PD&E Coordinator  
Marisa Trapp, Manager of Environmental Affairs  
CIP file

Capital Improvement Program Mailing Schedule 2024 for 2025

Schedule 2024	Capital Improvement Program	Responsibility
January 1	Initialize Capital Improvement Program (CIP) development discussions	Airport Development
January 1 - May 1	Requests for CIP Projects to Airport Development	MAC Departments
February 1 - July 31	Develop Project Scopes, Costs, and Prioritization	MAC Departments & Airport Development
February 1	Preliminary Target Funding Sources/Amounts	Airport Development & Finance
February 1 - July 31	Develop Draft Preliminary CIP	Airport Development & Finance
July 31 - October 6	Prepare Assessments of Environmental Effects (AOEEs)	Planning and Development & Environmental Affairs
Thursday, August 29, 2024	Mailing to Affected Municipalities: Notice of September Planning, Development, & Environment (PD&E) Committee Meeting & CIP document Availability	Airport Development
Tuesday, September 3, 2024	Recommendation by PD&E Committee to Commission of Preliminary CIP for Environmental Review/Authorization to Hold Public Hearing on AOEE	Airport Development
Thursday, September 12, 2024	Mailing to Affected Municipalities: Notice of September PD&E Committee Meeting Minutes and September Commission Meeting Agenda. <b>This starts the 60-day Preliminary CIP public</b>	Airport Development
Tuesday, September 17, 2024	Mailing to Affected Municipalities: Approval of Preliminary CIP by Commission for Environmental Review/Authorization to hold Public Hearing on AOEE	Airport Development
NO LATER THAN Tuesday, October 8, 2024	Submittal to EQB Monitor (Environmental Quality Board), Star Tribune & Pioneer Press: AOEE Public Hearing Notice	Environmental Affairs & Airport Development
Tuesday, October 15, 2024	AOEE Public Hearing Notice is Published in EQB Monitor, Star Tribune, & Pioneer Press. <b>This starts the 30-day AOEE public comment period</b>	Environmental Affairs & Airport Development
Tuesday, October 22, 2024	Mailing to Affected Municipalities: Approval of September Commission Meeting Minutes	Airport Development
Monday, November 4, 2024	Public Hearing on AOEE at November PD&E Committee	Planning and Development & Environmental Affairs
Thursday, November 14, 2024	Technical Advisory Committee (TAC) Planning Committee	Metropolitan Council
Friday, November 15, 2024	<b>End of 60-day Public Comment Period for Preliminary CIP</b>	Affected Municipalities

Capital Improvement Program Mailing Schedule 2024 for 2025

Schedule 2024	Capital Improvement Program	Responsibility
Friday, November 15, 2024	<b>End of 30-day Public Comment Period for AOEE</b>	Affected Municipalities
Wednesday, November 27, 2024	Mailing to Affected Communities: Notice of December PD&E Committee Meeting	Airport Development
Monday, December 2, 2024	Recommendation of Final CIP by PD&E Committee to Commission	Airport Development & Finance
Wednesday, December 4, 2024	Technical Advisory Committee (TAC)	Metropolitan Council
Thursday, December 12, 2024	Mailing to Affected Municipalities: Notice of December PD&E Committee Meeting Minutes and December Commission Meeting Agenda	Airport Development
Monday, December 16, 2024	<b>Approval of Final CIP by Commission</b>	Airport Development
Tuesday, December 17, 2024	Notification of Commission action to EQB	Environmental Affairs
Wednesday, December 18, 2024	Transportation Advisory Board (TAB)	Metropolitan Council
Monday, January 13, 2025	Metropolitan Council - Transportation Committee	Metropolitan Council
Wednesday, January 22, 2025	Mailing to Affected Municipalities: Approval of December Commission Meeting Minutes	Airport Development
Wednesday, January 22, 2025	Metropolitan Council	Metropolitan Council

**Shaded items represent actions/dates which pertain to the Affected Municipalities as defined in Minnesota Statutes 473.621, Subd. 6 as amended**

All dates are tentative and subject to change



## Metropolitan Airports Commission

---

TO: Planning, Development and Environment Committee

FROM: Heather J. Leide, Director – Airport Development Project Initiation (612-726-8128)

SUBJECT: **Preliminary 2025-2031 Capital Improvement Program  
Program Overview**

DATE: August 28, 2024

---

### FOR ACTION

#### Summary

Each year, MAC staff prepares a seven-year Capital Improvement Program (CIP) for review and approval by the full Commission. A preliminary version of the 2025-2031 CIP listing is provided in September in order to give Commissioners, Affected Municipalities, and the public an opportunity to see what is planned for the upcoming seven-year program, with specifics included for the proposed projects forthcoming for construction contract award in 2025.

The seven-year CIP includes projects for both the Minneapolis-St. Paul International Airport (MSP) and the six reliever airports in the Reliever Airport System. The majority of projects in the attached project listing focus on rehabilitation and replacement of airport infrastructure, existing assets, and terminal systems to ensure that airport safety, security, and operations are not compromised. This program advances the MAC's purpose to provide exceptional airport experiences so Minnesota thrives.

#### Fiscal Impact

No Impact       Operating Budget       CIP       Other

The Airport Development Department works closely with Finance staff during the CIP development process to review funding for the seven-year program. Any project changes to the preliminary CIP will be reflected in the final version brought to the Commission in December for final adoption. At that time, Finance will also provide a companion funding analysis for the first three years of the program for information.

## **Action Requested**

- 1. Recommend that the full Commission accept the attached preliminary 2025-2031 Capital Improvement Program for purposes of conducting the affected municipalities review and the Assessment of Environmental Effects (AOEE) process; and**
- 2. Authorize staff to proceed with these processes.**

## **Background**

The 2025-2031 preliminary CIP includes the following (attached to this memo):

- (a) Anticipated CIP process schedule;
- (b) Draft listing of projects by category with proposed year and estimated cost for each;
- and,
- (c) Draft project narratives for the projects listed in 2025.

## ***Applicable Legal Authority***

- (a) MAC's Bylaws, Minnesota Statutes Sec. 473.621, Subd. 6 and 7.

## **Analysis**

The projects in the first year of the program (2025) are primarily projects that have been carried forward from past years' programs. MAC staff works hard to forecast project needs and make requests three to four years or more in the future. This preliminary draft reflects updated scopes and estimates developed by the project teams in the course of their work authorized with approval of the current 2024-2030 CIP.

As is the case every year, the majority of projects and planned costs relate to maintenance upgrades and on-going programs across the MSP campus to protect assets and keep the operation up and running. Specifically for 2025, the CIP lists major projects associated with several airfield improvements, including apron and deicing pad pavement reconstruction, runway safety area grading and replacement of the Engineered Material Arresting System (EMAS) for Runway 12R-30L. Also included in 2025 is the construction of a new field maintenance building, campus-wide roofing replacements - including a continuation of the folded plate work over Terminal 1, and the third and final phase of the Concourse and Gatehold Modernization project to be completed with Delta Airlines.

Along with on-going project planning efforts for development outlined in the MSP Long Term Plan (LTP), there is also a project in 2025 to construct a new Ground Service Equipment (GSE) maintenance facility, as a replacement for the one located adjacent to Terminal 2, as preparation for future terminal expansion. Other LTP projects, like expansion of Terminal 2 to the south, are not currently reflected in the CIP until funding can be identified.

Also note that the CIP includes nearly \$35 million in 2025 for planning and development work at the Reliever Airports, including a new equipment storage building and reconstruction of the crosswind Runway 4-22 at the Lake Elmo Airport, and the construction of the Customs and Border Protection General Aviation Facility at the St. Paul Downtown Airport (previously shown as a 2024 project but delayed by site mitigation requirements).

This preliminary 2025-2031 CIP draft ensures that potential projects will be vetted through the affected municipalities review and AOEE processes. Staff will work closely to refine funding plans, coordinate grant opportunities, and consider critical timing with project stakeholders prior to bringing the final draft to the Commission in December.

The preliminary seven-year program as attached will be made available to affected municipalities for review and comment. Affected municipalities will have 60 days to review the proposed program and offer comments to MAC staff for consideration when preparing the final program recommendations for review by the full Commission in December. The 60-day comment period is anticipated to run from September 19 through November 15, 2024.

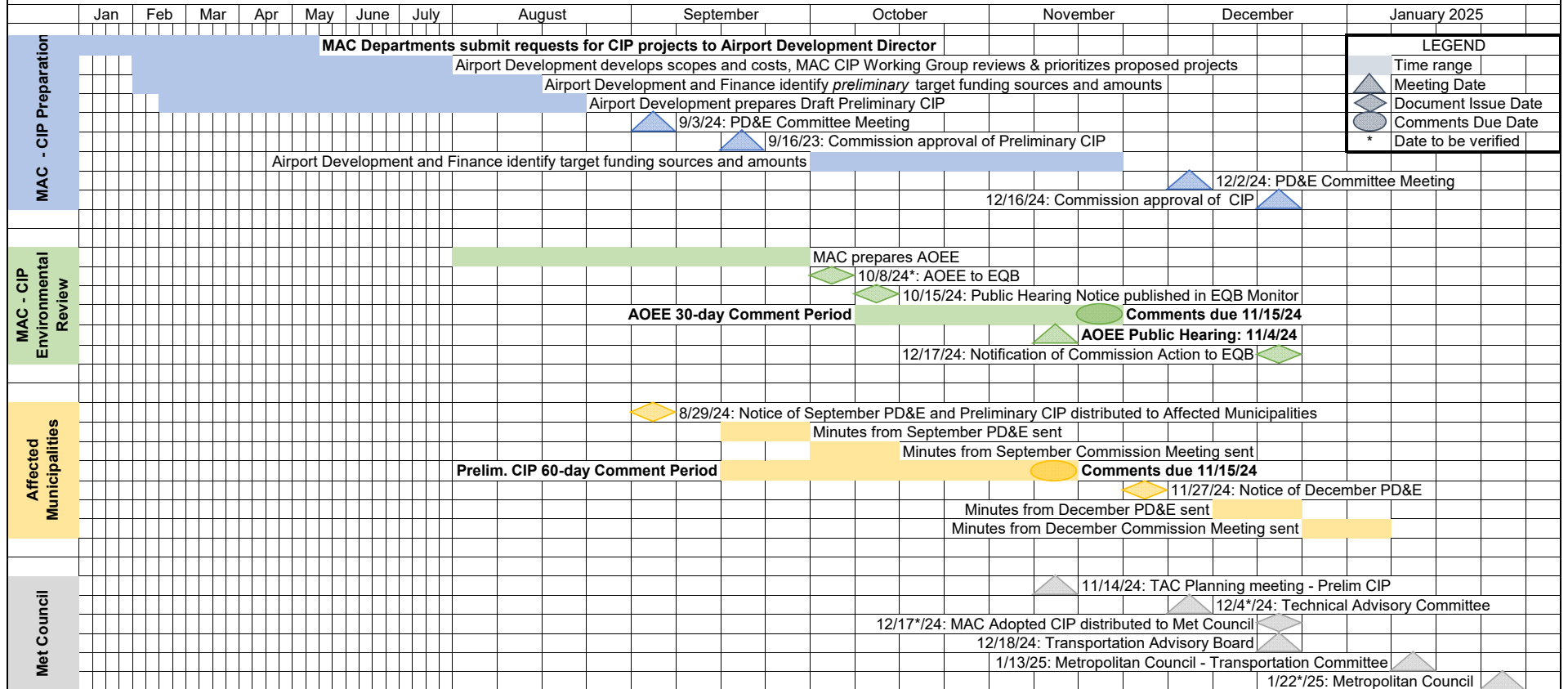
The preliminary program will also be utilized to develop the annual Assessment of Environmental Effects (AOEE) document, as outlined in the companion memorandum to this agenda item.

As required by Minnesota law, MAC's seven-year CIP must be reviewed by the Metropolitan Council. This preliminary program will be submitted to the sub-committees of the Metropolitan Council for initial review and discussion. Upon MAC's adoption of the final December version of the program, MAC will request review by the full Metropolitan Council of the adopted program in January 2025.

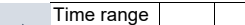




Looking forward, please note that the recommended action in December specific to the 2025-2031 CIP will include final adoption of a proposed final CIP as well as authorize staff to:

- (a) Prepare plans and specifications and advertise for bids for the 2025 projects.
- (b) Conduct further studies, including necessary destructive demolition and repair, to refine the scopes and costs, and to prepare plans and specifications for the 2026 projects.
- (c) Conduct studies and develop preliminary plans and specifications for the 2027 projects. Utilize consultants as necessary in accordance with MAC's consultant use policies.
- (d) Initiate appropriate documentation to apply for federal, state, and PFC funding.
- (e) Forward the adopted 2025-2031 CIP to the Metropolitan Council for their review.

### 2025 - 2031 CAPITAL IMPROVEMENT PROGRAM DEVELOPMENT SCHEDULE



**LEGEND**

-  Time range
-  Meeting Date
-  Document Issue Date
-  Comments Due Date
-  Date to be verified



2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP End of Life/Replacement Projects</b>							
<b>10 - Terminal 1</b>							
Concourse and Hub Tram Replacement			\$300,000,000	\$300,000,000			
Concourse C Moving Walkway Upgrade/Replacement			\$3,000,000				
Passenger Boarding Bridge Replacements	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	
Recarpeting Program	\$2,000,000						
Terminal 1 Media Mesh Replacement			\$1,400,000				
Terminal 1 Outbound Baggage Handling System Replacement						\$250,000,000	
<b>13 - Energy Management Center</b>							
Concourse E and F Bridge Heating and Cooling System Replacement	\$6,800,000						
GTC Dual-temperature Pump Improvements	\$2,600,000						
Terminal 1 Boiler & Chiller Replacement & EMC Expansion	\$250,000		\$420,000,000				
Variable Air Volume (VAV) Box Replacement		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	
<b>21 - Field and Runway</b>							
30L Deicing Pad Expansion				\$20,000,000			
30L Deicing Pad Reconstruction	\$12,000,000		\$15,000,000				
30L EMAS Replacement	\$19,000,000						
Airfield Snow Melter Replacement/Upgrades	\$1,800,000	\$1,800,000	\$2,000,000	\$2,000,000			
Bituminous Shoulder Reconstruction	\$1,000,000	\$1,000,000	\$1,000,000				
Concourse G Apron Pavement Reconstruction	\$13,500,000			\$15,000,000	\$14,000,000	\$16,000,000	
Runway 12L-30R Reconstruction						\$40,000,000	
Taxiway A Pavement Reconstruction		\$4,200,000					
Taxiway B Pavement Reconstruction	\$7,500,000			\$6,000,000	\$5,000,000	\$8,000,000	
Taxiway C Pavement Reconstruction					\$10,000,000		
Taxiway H Pavement Reconstruction			\$6,500,000				
Taxiway J Pavement Reconstruction			\$7,500,000				
Taxiway R Pavement Reconstruction		\$9,500,000					
Terminal 1 Apron Pavement Reconstruction		\$11,000,000	\$13,000,000	\$11,000,000			
Terminal 2 Apron Reconstruction			\$6,500,000	\$8,000,000	\$8,000,000		
<b>31 - Parking</b>							
Parking Ramp Snow Melter Replacement/Upgrades	\$1,350,000	\$1,400,000	\$1,400,000	\$1,400,000			
Parking Revenue Control System		\$4,200,000					
<b>39 - Public Areas/Roads</b>							
28th Avenue South Reconstruction				\$3,000,000			
East 62nd Street Reconstruction			\$4,100,000				
Post Road Reconstruction Project		\$5,000,000					
West Cell Phone Lot Reconstruction		\$500,000					
<b>70 - General Office/Administration</b>							
GO Building VAV Replacement and Upgrade	\$3,800,000						
<b>MSP End of Life/Replacement Projects Subtotal</b>	<b>\$81,600,000</b>	<b>\$50,600,000</b>	<b>\$793,400,000</b>	<b>\$378,400,000</b>	<b>\$49,000,000</b>	<b>\$326,000,000</b>	<b>\$0</b>

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP IT Projects</b>							
10 - Terminal 1							
Concourse C Directory Replacement	\$800,000						
MAC Technology Upgrades	\$12,800,000	\$14,000,000	\$13,000,000	\$11,000,000	\$11,000,000	\$12,000,000	
Telecom Room Equipment Continuity (TREC)	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	
12 - Federal Inspection Station (FIS)							
Customs and Border Protection Infrastructure	\$1,500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
36 - Terminal 2							
Common Use Passenger Boarding Bridges Cab Cameras	\$250,000						
Passenger Flow Tracking	\$2,000,000						
Upgrade and Modernize Terminal 2 Kiosks	\$1,000,000						
46 - Hangars and Other Buildings							
Multiple Points of Entry Facility		\$5,000,000	\$5,000,000	\$5,000,000			
63 - Police							
Badging and Door Access (SAACS/ProWatch) Modernization		\$2,100,000					
Card Access Modifications	\$2,500,000	\$2,800,000		\$2,500,000			
Public Safety Land Mobile Radio System Solutions	\$1,000,000						
Public Safety Video (IVISN) Modernization	\$1,100,000	\$1,000,000	\$1,000,000				
<b>MSP IT Projects Subtotal</b>	<b>\$24,700,000</b>	<b>\$27,650,000</b>	<b>\$21,750,000</b>	<b>\$21,250,000</b>	<b>\$13,750,000</b>	<b>\$14,750,000</b>	<b>\$1,000,000</b>
<b>MSP Long Term Comprehensive Plan Projects</b>							
10 - Terminal 1							
Checkpoint Expansion					\$11,000,000		
Concourses E and F Assessment	\$200,000						
D-Pod Outbound Baggage System			\$15,000,000				
MSP Airport Layout Plan		\$100,000	\$100,000				
MSP Environmental Review				\$2,000,000			
MSP Long Term Plan					\$3,000,000		
21 - Field and Runway							
MSP Obstructions Removals			\$1,000,000		\$1,000,000		
NAVAID Relocation				\$2,000,000		\$30,000,000	
Runway 30R Parallel Taxiway				\$12,000,000	\$10,000,000	\$14,000,000	
31 - Parking							
Parking Capacity Assessment	\$200,000						
36 - Terminal 2							
Terminal 2 South Expansion Enabling Work	\$123,600,000						
46 - Hangars and Other Buildings							
Ground Service Equipment (GSE) Maintenance Facility	\$36,400,000						
<b>MSP Long Term Comprehensive Plan Projects Subtotal</b>	<b>\$160,400,000</b>	<b>\$100,000</b>	<b>\$16,100,000</b>	<b>\$16,000,000</b>	<b>\$25,000,000</b>	<b>\$44,000,000</b>	<b>\$0</b>

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP Maintenance/Facility Upgrade Projects</b>							
10 - Terminal 1							
ADO Office Expansion	\$4,000,000						
Art Display Areas	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
Arts Master Plan	\$610,000	\$1,610,000	\$610,000	\$610,000	\$600,000	\$600,000	
Commission Chambers Lighting Upgrades	\$200,000						
Concourse A Heating System Upgrade	\$7,000,000						
Delivery Node Redevelopment	\$2,700,000	\$7,800,000	\$4,320,000	\$5,000,000			
F/G Connector Repairs and Improvements	\$1,100,000						
Folded Plate Surface Reconstruction	\$45,000,000		\$45,000,000				
Gold/Green Skyway Safety Improvements	\$100,000						
Lavatory Buildings Rehabilitation	\$4,400,000						
Lighting Infrastructure Technology and Equipment (LITE)	\$2,550,000	\$1,500,000	\$2,550,000	\$1,500,000	\$2,200,000	\$3,000,000	
LRT Stations Updates		\$15,000,000					
Main Mall Modernization				\$3,500,000	\$3,500,000		
MSP Courtesy Phone Updates and Removal	\$800,000	\$800,000	\$800,000				
Restroom Upgrade Program	\$2,400,000		\$2,625,000	\$2,050,000	\$2,050,000	\$2,050,000	
Skyclub Repairs and Improvements		\$4,000,000					
Steam System Upgrade Program	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000			
Terminal 1 Information Booth Replacements	\$850,000						
Terminal 1 Sand Dump Station	\$300,000						
Terminal 1 Tram Maintenance	\$1,250,000						
Terminal 1 Tug Drive Heater Replacement	\$4,500,000						
Terminal 1 Tug Drive Waterproofing	\$2,900,000	\$2,900,000	\$2,900,000	\$2,900,000			
Wayfinding Sign Replacement	\$6,500,000		\$2,000,000		\$2,000,000		\$2,000,000
West Mezzanine Improvements	\$16,700,000						
12 - Federal Inspection Station (FIS)							
FIS Facility Upgrades	\$2,175,000	\$845,000	\$2,000,000				
13 - Energy Management Center							
Building Management (IMACS) Replacement	\$800,000	\$3,400,000					
Chiller Plant Optimization	\$4,000,000						
Energy Savings Program	\$2,000,000		\$2,000,000				
Indoor Air Quality Monitoring System		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	
MAC Automation Infrastructure Program	\$7,600,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000		
Steam Trap Monitoring System		\$3,000,000					
Victaulic Piping Replacement	\$19,000,000	\$4,000,000	\$2,200,000	\$2,300,000	\$2,350,000		
21 - Field and Runway							
Airfield Thermoplastic Markings	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000		
Apron Lighting LED Upgrade	\$1,000,000	\$3,000,000	\$1,000,000	\$1,000,000			
Field Maintenance Building Efficiency Program	\$53,000,000				\$112,000,000		\$49,000,000
GBAS - SLS-4000 Installation	\$7,000,000						
Runway LED Lighting Upgrade			\$3,000,000				
Terminal 2 Glycol Lift Station/Forcemain	\$1,500,000						
Tunnel Lighting LED Upgrade	\$1,000,000	\$900,000	\$400,000	\$1,200,000			
26 - Terminal Roads/Landside							
Terminal 2 Cell Phone Lot Study	\$100,000						

MSP Maintenance/Facility Upgrade Projects continues on the next page

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP Maintenance/Facility Upgrade Projects (continued)</b>							
31 - Parking							
Electric Vehicle Charging Network Expansion	\$1,500,000	\$850,000	\$850,000	\$1,500,000	\$1,500,000	\$1,500,000	
Parking Guidance System	\$6,500,000						
Red/Blue Parking Levels 2 & 3			\$10,000,000				
Terminal 2 Landside Office Remodel	\$400,000						
36 - Terminal 2							
Ramp Information Display System (RIDS)	\$3,600,000						
Terminal 2 Baggage Handling System	\$410,000						
Terminal 2 Gate Area Improvements	\$3,000,000						
Terminal 2 Ground Transportation Waiting Area Expansion	\$400,000						
Terminal 2 MUFIDS/EVIDS Millwork Upgrades	\$350,000						
Terminal 2 Skyway to LRT Flooring Installation			\$1,000,000				
Terminal 2 Ticket Counter Insert Replacement			\$750,000				
Terminal 2 Digital Wait Time Display			\$200,000				
39 - Public Areas/Roads							
34th Avenue Reconstruction		\$8,200,000	\$8,200,000				
34th Avenue Sanitary Sewer Replacement		\$2,200,000					
Diverging Diamond Intersection Rehabilitation			\$380,000				
Terminal 1 Inbound Roadway Median Improvements	\$3,300,000						
Tunnel Fan Replacement		\$6,800,000					
46 - Hangars and Other Buildings							
Campus Out Building Study	\$300,000						
56 - Trades/Maintenance Buildings							
Fall Hazard Mitigation	\$100,000	\$0	\$0				
Trades Building Rehabilitation & Addition		\$25,000,000					
63 - Police							
APD Repsonse Training Room			\$500,000				
Critical Infrastructure Fencing	\$850,000						
Emergency Communications Center Updates			\$200,000				
Perimeter Fence Intrusion Detection System		\$1,000,000					
Perimeter Gate Security Improvements	\$6,500,000	\$6,500,000					
Police Department Remote Threat Isolation and Training Building			\$15,500,000				
Public Safety Modifications	\$1,000,000		\$850,000		\$850,000		
Squad Parking Modifications		\$140,000					
66 - Fire							
ARFF 1 Garage Door Replacement			\$1,500,000				
Fire Protection Systems Upgrades	\$10,000,000			\$10,000,000			\$10,000,000
70 - General Office/Administration							
Digital Signage In/At The GO		\$300,000					
76 - Environment							
Firefighting Foam System Conversion	\$3,000,000						
Glycol Sewer & Storm Sewer Inspection/Rehabilitation	\$600,000				\$2,000,000	\$1,000,000	
Glycol Tank Roof Repairs				\$700,000			
Infield Fueling Facility Secondary Containment	\$400,000						
Lift Station at Ponds 1 and 2	\$2,300,000						
MSP Pond 3 / 494 Pond Sediment Removal & Repairs	\$5,900,000					\$14,000,000	
<b>MSP Maintenance/Facility Upgrade Projects Subtotal</b>	<b>\$256,895,000</b>	<b>\$106,595,000</b>	<b>\$118,185,000</b>	<b>\$39,110,000</b>	<b>\$134,300,000</b>	<b>\$23,400,000</b>	<b>\$61,000,000</b>
<b>MSP Noise Mitigation Projects</b>	<b>\$500,000</b>	<b>\$500,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>		

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP Ongoing Maintenance Programs</b>							
10 - Terminal 1							
Air Handling Unit Replacement		\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	
Baggage System Upgrades	\$5,000,000	\$4,500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Conveyance System Upgrades	\$3,000,000						
Electrical Infrastructure Program (EIP)		\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$3,000,000	
Electrical Substation Replacement	\$10,000,000	\$10,000,000	\$10,000,000				
Emergency Power Upgrades		\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$3,000,000	
Ground Power Substation Replacement	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
Plumbing Infrastructure Upgrade Program	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$800,000	\$800,000
Terminal Building Remediation Program	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,500,000	\$3,500,000
Terminal Miscellaneous Modifications	\$2,600,000	\$2,600,000	\$2,600,000	\$3,100,000	\$3,100,000	\$3,100,000	\$3,600,000
13 - Energy Management Center							
EMC Life Safety Infrastructure Program	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
EMC Plant Upgrades	\$2,150,000	\$2,200,000	\$2,300,000	\$2,400,000	\$2,500,000		
21 - Field and Runway							
Airside Electrical Construction	\$2,500,000	\$5,100,000	\$2,000,000	\$2,000,000	\$2,000,000		
Airside Roadway Pavement Restoration	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$3,600,000	
Miscellaneous Airfield Construction	\$2,500,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000		\$3,000,000
Pavement Joint Sealing/Repair	\$800,000	\$800,000	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000	
26 - Terminal Roads/Landside							
Tunnel/Bridge Inspections	\$120,000	\$120,000	\$120,000	\$150,000	\$150,000	\$150,000	\$150,000
Tunnel/Bridge Miscellaneous Modifications	\$1,000,000		\$1,000,000		\$1,000,000		\$1,000,000
31 - Parking							
Parking Structure Rehabilitation	\$4,750,000	\$5,650,000	\$5,000,000	\$6,000,000	\$5,175,000	\$6,350,000	
39 - Public Areas/Roads							
Concrete Joint Repair	\$550,000	\$500,000	\$1,200,000	\$2,900,000	\$750,000	\$2,000,000	\$2,000,000
Landside Pavement Rehabilitation	\$500,000	\$600,000	\$1,500,000	\$900,000	\$1,600,000	\$950,000	\$2,200,000
Landside Utility Rehabilitation	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000		
Roadway Fixture Refurbishment	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$200,000	
46 - Hangars and Other Buildings							
Campus Building Rehab Program	\$1,500,000		\$1,500,000		\$1,500,000		
Campus Parking Lot Reconstructions			\$3,075,000	\$3,075,000			\$8,500,000
End of Life Campus Building Demolition	\$400,000	\$3,700,000					
MSP Campus Building Roof Replacements	\$17,100,000	\$10,200,000	\$10,000,000	\$10,000,000	\$15,000,000	\$8,000,000	\$5,000,000
56 - Trades/Maintenance Buildings							
North Field Maintenance Mechanical Infrastructure Project		\$5,000,000					
<b>Sump Pump Controls</b>	<b>\$4,000,000</b>	<b>\$3,500,000</b>					
70 - General Office/Administration							
GO Building Improvements		\$500,000		\$500,000		\$500,000	
<b>MSP Ongoing Maintenance Programs Subtotal</b>	<b>\$76,170,000</b>	<b>\$92,670,000</b>	<b>\$79,495,000</b>	<b>\$70,225,000</b>	<b>\$71,975,000</b>	<b>\$63,550,000</b>	<b>\$42,150,000</b>

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>MSP Tenant Projects</b>							
10 - Terminal 1							
Concessions Rebids	\$500,000						
Concessions Upgrades/Revenue Development and Strategic Partnerships	\$375,000	\$320,000	\$295,000	\$335,000	\$340,000	\$350,000	\$400,000
Concourse and Gatehold Modernization	\$73,100,000						
Elevator and Concourse Improvements Related to Relocated United Club				\$1,000,000			
Terminal 1 Food Court Digital Signage		\$400,000					
36 - Terminal 2							
Terminal 2 Concessions Marketing Digital Display		\$250,000					
Terminal 2 Concessions Redevelopment	\$2,000,000						
Terminal 2 JWO Kiosk Relocation			\$150,000				
Terminal 2 Supplemental Concessions	\$150,000						
39 - Public Areas/Roads							
Tenant Parking Lot Reconstruction	\$3,400,000						
46 - Hangars and Other Buildings							
Air Freight Facility Parking Expansion	\$2,600,000						
<b>MSP Tenant Projects Subtotal</b>	<b>\$81,625,000</b>	<b>\$970,000</b>	<b>\$445,000</b>	<b>\$1,335,000</b>	<b>\$340,000</b>	<b>\$350,000</b>	<b>\$400,000</b>
<b>Reliever Airports Long Term Comprehensive Plan Projects</b>							
80 - Reliever Airports							
Reliever Airports Planning Fees	\$600,000						
81 - St. Paul							
STP Environmental Review			\$800,000				
82 - Lake Elmo							
21D Airport Layout Plan	\$100,000				\$500,000		
21D Environmental Review							\$800,000
21D Long Term Comprehensive Plan					\$800,000		
83 - Airlake							
LVN Airport Layout Plan		\$100,000			\$500,000		
LVN Environmental Review							\$800,000
LVN Long Term Comprehensive Plan					\$800,000		
LVN Runway 12-30 Improvements			\$4,400,000				
84 - Flying Cloud							
FCM Environmental Review		\$800,000					
FCM South Building Area Utilities		\$800,000					
85 - Crystal							
MIC Airport Layout Plan				\$500,000			
MIC Environmental Review						\$800,000	
MIC Long Term Comprehensive Plan				\$800,000			
86 - Anoka County - Blaine							
ANE Airport Layout Plan	\$500,000						
ANE Building Area Development - Xylite St. Relocation				\$1,000,000			
ANE Environmental Review			\$800,000				
ANE Long Term Comprehensive Plan Update	\$800,000						
<b>Reliever Airports Long Term Comprehensive Plan Projects Subtotal</b>	<b>\$2,000,000</b>	<b>\$1,700,000</b>	<b>\$6,000,000</b>	<b>\$2,300,000</b>	<b>\$2,600,000</b>	<b>\$800,000</b>	<b>\$1,600,000</b>

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>Reliever Airports Maintenance/Facility Upgrade Projects</b>							
<b>80 - Reliever Airports</b>							
Reliever Airports Security Fencing, Gates & Lighting	\$200,000	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000
Reliever Indoor Air Quality Project			\$1,400,000				
Relievers Building Miscellaneous Modifications	\$400,000	\$400,000	\$475,000	\$475,000	\$475,000	\$475,000	\$550,000
Relievers Obstruction Removal	\$300,000		\$300,000		\$300,000		
Relievers Pavement Rehabilitation Miscellaneous Modifications	\$300,000	\$300,000	\$350,000	\$350,000	\$350,000	\$350,000	\$400,000
Relievers Used Oil Sheds and Tanks	\$550,000						
<b>81 - St. Paul</b>							
STP Airport Perimeter Roads	\$500,000						
STP Airport Road and Eaton Street Retaining Wall				\$900,000			
STP Cold Equipment Storage Building		\$750,000					
STP Customs and Border Protection General Aviation Facility	\$11,000,000						
STP Equipment Storage Building and Employee Crew Rooms				\$4,000,000			
STP Floodwall Inspection and Repairs						\$300,000	
STP Generator Replacement						\$800,000	
STP Infrastructure Replacement	\$1,200,000						
STP Intelligent Monitoring and Control System (IMACS) Expansion			\$2,250,000				
STP Joint and Crack Repairs		\$100,000					
STP MAC Building Improvements	\$200,000		\$200,000		\$200,000		\$200,000
STP Pavement Mill and Overlay of Administration Building Ramp						\$500,000	
STP Pavement Rehabilitation-Taxilanes/Tower Road		\$750,000					
STP Runway 13-31 Pavement Reconstruction		\$5,000,000					
STP Runway 14-32 EMAS Replacement			\$10,000,000				
STP Storm Sewer Improvements			\$2,000,000				
STP Taxiway B Reconstruction and LED Edge Lighting	\$1,100,000						
STP Taxiway Lima Rehabilitation			\$200,000				
<b>82 - Lake Elmo</b>							
21D AWOS Replacement	\$200,000						
21D Equipment Storage Building	\$5,000,000						
21D Intelligent Monitoring and Control System (IMACS)				\$3,800,000			
21D North Building Area Pavement Rehabilitation	\$900,000						
21D Runway 04-22 Pavement Rehabilitation	\$4,000,000						
21D Taxiway Echo Edge Lighting		\$600,000					
21D Taxiway H Reconstruction	\$600,000						
<b>83 - Airlake</b>							
LVN 225TH Street Paving	\$450,000						
LVN AWOS Replacement	\$100,000						
LVN Existing Runway 12-30 Reconstruction			\$3,500,000				
LVN Intelligent Monitoring and Control System (IMACS)					\$1,300,000		
LVN North Service Road Pavement Rehabilitation			\$500,000				
LVN North Taxilanes Pavement Rehabilitation			\$1,250,000				
LVN Perimeter Fencing and Gates			\$4,000,000				
LVN South Building Area Utilities and Taxilanes		\$1,300,000					
LVN Taxiway Bravo Pavement Rehabilitation		\$600,000					
<i>Reliever Airports Maintenance/Facility Upgrade Projects continues on the next page</i>							

2025 - 2031 Capital Improvement Program - Preliminary Draft	2025	2026	2027	2028	2029	2030	2031
<b>Reliever Airports Maintenance/Facility Upgrade Projects (continued)</b>							
<b>84 - Flying Cloud</b>							
FCM Airport Access Roads Pavement Rehabilitation			\$500,000	\$500,000	\$500,000		
FCM Electrical Vault Modifications			\$500,000				
FCM Gate Replacements	\$500,000						
FCM Infrastructure Replacement	\$1,750,000						
FCM Intelligent Monitoring and Control System (IMACS)			\$2,500,000				
FCM MAC Building Improvements		\$600,000					
FCM Northside Access Road from Bravo to November Lane	\$900,000						
FCM Runway 10R-28L Pavement Rehabilitation			\$2,700,000				
FCM Runway 18-36 Pavement Rehabilitation					\$700,000		
FCM Spring Lane Extension and Taxilane Connector			\$700,000				
FCM Tower Equipment for Airfield Lighting and Utilities		\$2,000,000					
<b>85 - Crystal</b>							
MIC East Taxilanes Pavement Rehabilitation		\$500,000					
MIC Eastside Service Road Pavement Reconstruction		\$1,500,000					
MIC Existing Hangar Revitalization		\$800,000					
MIC Gate Replacement		\$800,000					
MIC Intelligent Monitoring and Control System (IMACS)					\$1,300,000		
MIC Northside Service Road Pavement Reconstruction				\$1,200,000			
MIC Runway 6L-24R Pavement Rehabilitation			\$2,500,000				
MIC Service Road Pavement and Fencing			\$600,000				
MIC Stormwater Monitoring Location Drainage Repair	\$100,000						
MIC Taxilanes Pavement Rehabilitation	\$600,000		\$600,000				
MIC Taxiway Alpha Pavement Reconstruction					\$1,200,000		
MIC Tower Parking Lot Reconstruction	\$1,500,000						
<b>86 - Anoka County - Blaine</b>							
ANE Electrical Vault Improvements		\$750,000					
ANE Gate Controller Replacement		\$400,000					
ANE Intelligent Monitoring and Control System (IMACS)				\$1,300,000			
ANE Runway 18-36 Pavement Reconstruction		\$3,800,000					
ANE Runway 9-27 Edge Lighting and PAPI Replacement		\$900,000					
ANE Runway 9-27 Pavement Reconstruction				\$3,750,000			
ANE Taxilane Pavement Reconstruction - Fox Hollow			\$1,000,000				
ANE Taxiway B Pavement Rehabilitation					\$1,400,000		
<b>Reliever Airports Maintenance/Facility Upgrade Projects Subtotal</b>	<b>\$32,350,000</b>	<b>\$22,050,000</b>	<b>\$38,275,000</b>	<b>\$16,525,000</b>	<b>\$7,975,000</b>	<b>\$2,675,000</b>	<b>\$1,450,000</b>
MSP Subtotal	\$681,890,000	\$279,085,000	\$1,030,375,000	\$527,320,000	\$295,365,000	\$472,050,000	\$104,550,000
Relievers Subtotal	\$34,350,000	\$23,750,000	\$44,275,000	\$18,825,000	\$10,575,000	\$3,475,000	\$3,050,000
<b>Total</b>	<b>\$716,240,000</b>	<b>\$302,835,000</b>	<b>\$1,074,650,000</b>	<b>\$546,145,000</b>	<b>\$305,940,000</b>	<b>\$475,525,000</b>	<b>\$107,600,000</b>



## 2025 Capital Improvement Program Narratives – Preliminary Draft

### MSP END OF LIFE/REPLACEMENT PROJECTS

End of Life/Replacement projects include systems, components, and pavements that can no longer be economically or feasibly maintained and must be replaced.

#### **10 – Terminal 1**

##### **Passenger Boarding Bridge Replacements \$10,000,000**

This program replaces jet bridges at Terminal 1. Bridges to be replaced will be determined based on a condition assessment and input from the airlines. Aircraft parking positions will be optimized at the impacted gates and fuel pits adjusted as necessary. Podiums and door openings may also be adjusted to optimize gate hold area. It is assumed fixed walkways may need to be replaced or added to meet ADA slope requirements and gatehold areas will be upgraded with security doors, card readers, and cameras.

##### **Recarpeting Program \$2,000,000**

This project will replace carpet on Concourse E.

#### **13 – Energy Management Center**

##### **Concourse E and F Bridge Heating and Cooling System Replacement \$6,800,000**

This is the third of three phases of work to replace and improve the heating and cooling systems on the bridges to Concourses E and F. This phase will include steam and condensate piping above grade through E Bridge connector, steam pressure reducing station in ground level, heat exchangers and water pumps in penthouse of E will be replaced. In the penthouse of the F Bridge, heat exchangers and water pumps will be replaced.

##### **GTC Dual-temperature Pump Improvements \$2,600,000**

This project will replace end of life pumps and supporting infrastructure. This is the second of two phases of this work.

##### **Terminal 1 Boiler and Chiller Replacement and EMC Expansion \$250,000**

This study phase of the program will focus on project phasing for the replacement of equipment in the Energy Management Center with a more efficient design, as well as building impacts to remove the old equipment and bring the new equipment into the building.

#### **21 – Field and Runway**

##### **30L Deicing Pad Reconstruction \$12,000,000**

This is the second of three phases to reconstruct the deicing pad at Runway 30L.

##### **30L EMAS Replacement \$19,000,000**

This project will replace the Engineered Material Arresting System (EMAS) at the end of Runway 30L which is reaching the end of its useful life.

**Airfield Snow Melter Replacement/Upgrades** **\$1,800,000**

This project will replace, modify and/or upgrade snow melters on the airfield that are beyond their useful life.

**Bituminous Shoulder Reconstruction** **\$1,000,000**

This project will reconstruct full depth bituminous shoulders along Runway 12L-30R from Taxiway P10 to Taxiway M and from Taxiway P3 to Taxiway P1. This work will restore transverse grades to shoulders to improve drainage and meet FAA standards. Work will include removals, crushed aggregate base, bituminous pavement, pavement marking, and electrical construction.

**Concourse G Apron Pavement Reconstruction** **\$13,500,000**

This project will reconstruct a portion of the apron area adjacent to Concourse G. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, fuel pits, and pavement marking.

**Taxiway B Pavement Reconstruction** **\$7,500,000**

This project will reconstruct a portion of Taxiway B. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, bituminous shoulders, pavement marking, and taxiway centerline lights.

***31 – Parking***

**Parking Ramp Snow Melter Replacement/Upgrades** **\$1,350,000**

This project will replace, modify and/or upgrade snow melters in the parking ramps that are beyond their useful life.

***70 – General Office/Administration***

**GO Building VAV Replacement and Upgrade** **\$3,800,000**

This project consists of replacing 122 Variable Air Volume (VAV) boxes (91 with reheat coils), upgrading controls on 91 locations of perimeter radiation, and home-running all IP controls in the General Office (GO) building. VAVs regulate air flow coming off of air handling units and temper air temperature. Due to their age, the existing VAVs are not “smart” technology and heat spaces during cooling seasons when nighttime setback temperatures are utilized. In a sustainability pilot project approved by the Executive Sustainability Committee, nighttime setbacks were used in the GO as a way to reduce energy costs and GHG emissions. The existing VAVs not only prevent the use of nighttime setback temperatures but actually compound energy and emissions impacts by pulling heat from boilers to put extra heat into the building. The existing VAVs were installed in 1998 and are well past their end-of-life; continued use risks failures of controls, dampers and heating coils.

## **MSP IT PROJECTS**

MSP IT Projects include those that have a significant amount, if not all, technology-related enhancements, maintenance, or restructuring.

### **10 – Terminal 1**

#### **Concourse C Digital Directory Replacement \$800,000**

The digital displays on Concourses C will be replaced to provide a consistent customer experience similar to the displays in the Terminal 1 mall.

#### **MAC Technology Upgrades \$12,800,000**

Each year, there are several IT projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Work may include Fiber Optic Cable Upgrades, MACNet maintenance and upgrades, EVIDs/MUFIDs digital signs, Wireless System enhancements, and MAC Public Address System maintenance and upgrades. The list of potential projects will be finalized in early 2025.

#### **Telecom Room Equipment Continuity (TREC) \$1,750,000**

The MAC network (MACNet) carries, along with other information, credit card data collected from the landside parking revenue control system. Merchants like the MAC are required to meet credit card security standards created to protect card holder data. Among these requirements are security standards for the physical locations where MACNet equipment is located. Additionally, the network equipment itself must have added security features to prevent unauthorized network access. This multi-year program addresses these standards by providing security equipment and relevant network hardware for the 150 telecommunications rooms on the MAC campus.

### **12 – Federal Inspection Station (FIS)**

#### **Customs and Border Protection Infrastructure \$1,500,000**

MAC is responsible for supplying and maintaining Customs and Border Protection (CBP) infrastructure. In addition to the camera system, CBP has other infrastructure standards that need to be addressed. MAC and its project consultants will partner with CBP to create, schedule, and implement the new system equipment and operating requirements consistent with MAC and CBP Policies and Standards.

### **36 – Terminal 2**

#### **Common Use Passenger Boarding Bridges Cab Cameras \$250,000**

This project will add IVISN-connected cameras to the cab of the common use passenger boarding bridges that currently do not have them and are not under construction (H5-H10, E1 and E3).

#### **Passenger Flow Tracking \$2,000,000**

This project will provide a program to track and analyze passenger movements and predict facility performance.

#### **Upgrade and Modernize Terminal 2 Kiosks \$1,000,000**

This project will upgrade and modernize Terminal 2 common-use kiosks.

**63 – Police**

**Card Access Modifications**

**\$2,500,000**

This is a multi-year program to refresh the inventory of card access security readers as they get to end of life, add outdoor biometric readers, add mobile card readers, add other readers as needed throughout the campus, and align card access control with other surveillance technology including iVISON.

**Public Safety Land Mobile Radio System Solutions**

**\$1,000,000**

MAC public safety, along with additional MAC departments, operates on the statewide 800 MHz Allied Radio Matrix for Emergency Response (ARMER) system. All MAC departments with radio equipment that operates on the ARMER system have access to regional and statewide talk groups which support the ability to communicate during large-scale incidents where interoperability is crucial. As the MAC continues to flourish and grow there is a continuous need to both identify and correct radio frequency and LTE coverage deficiencies to ensure seamless communications during critical situations.

**Public Safety Video (iVISON) Modernization**

**\$1,100,000**

This project will assess, roadmap, and modernize our camera system with AI components.

**MSP LONG TERM COMPREHENSIVE PLAN PROJECTS**

MSP Long Term Comprehensive Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted passenger needs.

**10 – Terminal 1**

**Concourses E and F Assessment**

**\$200,000**

This study will document the condition and potential remaining useful life of Concourses E and F.

**31 – Parking**

**Parking Capacity Assessment**

**\$200,000**

This study will document parking capacity and identify catalysts for additional parking construction.

**36 – Terminal 2**

**Terminal 2 South Expansion Enabling Work**

**\$123,600,000**

This project funds preliminary planning efforts to better define a future expansion of Terminal 2 to the south.

**46 – Hangars and Other Buildings**

**Ground Service Equipment (GSE) Maintenance Facility**

**\$36,400,000**

This project will construct a stand-alone facility for lease to third party ground handling operators to maintain and repair ground handling equipment necessary to support ground operations for the airlines. This facility will replace one that no longer meets all tenant needs and obstructs future construction of the south expansion of Terminal 2.

## **MSP MAINTENANCE/FACILITY UPGRADE PROJECTS**

MSP Maintenance/Facility Upgrade projects include those that provide improvements to individual buildings or systems across the campus on a one-time or short-term basis.

### **10 – Terminal 1**

#### **ADO Office Expansion**

**\$4,000,000**

Additional office and meeting space is needed for the Airport Director's Office, suite 3000, to function properly. This expansion and remodel will support increasing MAC staffing numbers and changes in workspace needs.

#### **Art Display Areas**

**\$250,000**

This program is a continuation of the existing program, in partnership with the MSP Foundation, to provide opportunities and space build out for the display of permanent and temporary/rotating art exhibits.

#### **Arts Master Plan**

**\$610,000**

This program supports procurement of commissioned art and rotating exhibits as part of the Percent for Arts program.

#### **Commission Chambers Lighting Upgrades**

**\$200,000**

Update the lighting control system in the Commission Chambers.

#### **Concourse A Heating System Upgrade**

**\$7,000,000**

This project will replace the entire heating water system on Concourse A. The new system will include air handling unit fans, heat exchangers, pumps, piping, VAV boxes, FTR, and solar photovoltaic panels. All new equipment will have updated controls that connects into IMACS.

#### **Delivery Node Redevelopment**

**\$2,700,000**

MAC's existing node delivery and storage system requires long-term improvements at Terminal 2 and Terminal 1 (Concourses A, C, E, F, and G) to provide for safe and efficient delivery, by the logistics company, to MAC and airport tenants. This program will improve or replace existing nodes with more centralized locations that should include loading docks, elevators where needed, adjacent storage, trash and recycling, etc. The 2025 project is planned to improve the delivery node at Concourse D.

#### **F/G Connector Repairs and Improvements**

**\$1,100,000**

The project will make the needed repairs to the F/G Connector which has been hit by vehicles multiple times. The project will further assess and remediate any remaining cosmetic damage, add additional headache bars, clearance signage and/or warning systems, and make any other permanent repairs needed to bring the structure to its original condition.

#### **Folded Plate Surface Reconstruction**

**\$45,000,000**

This is the second of three phases to repair and replace the roof assembly on the folded plate roof at Terminal 1.

#### **Gold/Green Skyway Safety Improvements**

**\$100,000**

This project will study options to modify the slanted glass of the Green and Gold Skyways to address snow/ice buildup and fall concerns.

**Lavatory Buildings Rehabilitation** **\$4,400,000**

This project will address on-going maintenance issues and aging components of the lavatory buildings at Terminal 1. This project will include a verification and assessment of the structure and roof and make repairs as need. The project will also provide, where needed, new vapor proof LED lighting, IVISN cameras, personnel doors, concrete floor waterproofing, and new tricherators. The project will also provide an exterior connection or removal of the Delta glycol tank located inside the G lavatory building. This project will replace the Terminal 1 lavatory building coiling garage doors at G1 and D1 with new high traffic breakaway rubber doors. These doors are designed to break away upon impact which will greatly reduce the long-term repair and replacement costs associated with the existing overhead coiling doors.

**Lighting Infrastructure Technology and Equipment (LITE)** **\$2,550,000**

This is a multi-year program that will analyze, assemble, and organize lighting system upgrade recommendations for the MSP campus. Annual investment in lighting infrastructure is necessary to ensure its safe operation, reduce energy and maintenance costs, and to implement technology upgrades to improve lighting quality. Light fixtures age and degrade due to time, heat or exterior elements. Lighting technologies upgrades will also provide for more energy efficient lighting systems.

**MSP Courtesy Phone Updates and Removal** **\$800,000**

This project will replace courtesy phones with ADA-compliant phones and signage including new lights as needed, consistent with those addressed in the Operational Improvements program. The project will also remove phones as recommended by a subject matter expert consultant.

**Restroom Upgrade Program** **\$2,400,000**

A study of all restrooms in Terminal 1 was completed in 2010 and a program developed to upgrade/modernize the restrooms at Terminal 1. From this study, each restroom was prioritized based on its condition. This program provides for the phased modernization of the Terminal 1 restrooms to include upgraded finishes, lighting, air quality, energy saving upgrades, and ADA compliance. The 2025 phase of the program is planned to address restroom upgrades in the Ground Transportation Center.

**Steam System Upgrade Program** **\$1,600,000**

This program will replace steam pressure reducing stations that are near or past the end of their useful life. The program will also replace heat exchangers in two mechanical rooms and replace valves in the boiler fuel system piping.

**Terminal 1 Information Booth Replacements** **\$850,000**

Replacement of seven existing information booths with six new booths at Terminal 1 and one at Terminal 2, including assisted listening systems and other IT improvements.

**Terminal 1 Sand Dump Station** **\$300,000**

The project adds facilities for MAC and tenants to properly dispose of sand collected from tug drives and airside roadways.

**Terminal 1 Tram Maintenance** **\$1,250,000**

The project will provide replacement parts and maintenance for the concourse and hub tram systems to extend their useful life.

**Terminal 1 Tug Drive Heater Replacement** **\$4,500,000**

This project will replace all existing Terminal 1 tug drive steam unit heaters with hot water unit heaters.

**Terminal 1 Tug Drive Waterproofing** **\$2,900,000**

The Terminal 1 tug drive was last sealed and waterproofed in 2007-2010. Concrete waterproofing typically has a 10-year lifespan and needs to be redone in order to minimize water infiltration into the structure and lower-level spaces. This project would waterproof the concrete for the entire tug drive area located above basement level spaces.

**Wayfinding Sign Replacement** **\$6,500,000**

Wayfinding is a critical customer service piece of our passenger's experience at MSP. Existing wayfinding signs are outdated, provide information no longer relevant, or are no longer illuminated. This program replaces the failed cold-cathode illumination with LED backlit signs as it is not practical or cost effective to repair them. This program updates sign information, locations, and provides new illuminated signs and/or digital signs where needed at Terminal 1 and Terminal 2 and supports repair that exceeds routine maintenance budgets. The 2025 phase will also support improvements to the Tram wayfinding and address terminal naming consistency.

**West Mezzanine Improvements** **\$16,700,000**

This project provides Air Handling Unit replacement, an airport employee breakroom, and a restroom upgrade while efficiently improving and reallocating space on the West Mezzanine.

***12 – Federal Inspection Station (FIS)***

**FIS Facility Upgrades** **\$2,175,000**

The FIS Facility Upgrades project is a multi-year project to bring the FIS facilities in Terminal 1 and Terminal 2 up to the ATDS standards and other required improvements as prescribed by CBP.

***13 – Energy Management Center***

**Building Management (IMACS) Replacement** **\$800,000**

This project will assess, roadmap, and modernize MAC's energy, water, HVAC, & people mover management systems.

**Chiller Plant Optimization** **\$4,000,000**

This project installs new sensors throughout the chilled water system, installs variable frequency drives for pumps, and removes pumps in the system that are no longer necessary. Additionally, this project installs a new program on the MAC network, connected to IMACS, to operate the chiller plant at terminal 1. This program trends data within the system and proactively modifies its operations to run in the most efficient manner, while maintaining the cooling capacity to the terminal.

**Energy Savings Program** **\$2,000,000**

This phase of the program will replace aging transformers and chilled water valves.

**MAC Automation Infrastructure Program** **\$7,600,000**

This is a continuation of a multi-year program to upgrade all MAC building automation systems to an open architecture protocol so that MAC can bid maintenance and construction contracts more competitively. This project will replace sole-source controllers such as Siemens and Legacy Honeywell with controllers from Honeywell, Circon, Distech, and TAC systems that are LonMark certified products.

**Victaulic Piping Replacement** **\$19,000,000**

This phase of a multi-year program will replace the victaulic piping and valves in Terminal 2. While victaulic pipe fittings allow for the pipe to be quickly and easily disassembled when needed, it has been discovered that the joints cause leaking because the seals shrink when they cool due to shut downs and service disruptions which occur frequently at MSP and then don't hold tight when the system is restored to normal operation. In addition, this year's effort will support efficiency upgrades to the systems at Terminal 2 as part of the North Expansion project.

***21 – Field and Runway***

**Airfield Thermoplastic Markings** **\$1,600,000**

Following a successful pilot installation of thermoplastic markings, this program will install thermoplastic markings at complex taxiway/runway intersections. 2025 is the first of five planned phases of this work.

**Apron Lighting LED Upgrade** **\$1,000,000**

This project will replace the older apron lighting units with more efficient LED fixtures.

**Field Maintenance Building Efficiency Program** **\$53,000,000**

This program will develop a consolidated field maintenance campus to ensure improvement to winter operations and vehicle fueling for MAC campus. The 2025 phase will provide a salt and sand storage building and fueling facility.

**GBAS – SLS-4000 Installation** **\$7,000,000**

Delta Air Lines has requested increased precision approach capabilities to Runway 04 and has agreed that installation of a GBAS would help address the need. Due to a long-standing contract between MAC and Honeywell that grew out of an R&D partnership, MAC will receive the ground station and RMSUs at a discount.

**Terminal 2 Glycol Lift Station/Forcemain** **\$1,500,000**

Project provides for construction of a glycol lift station and forcemain to transport glycol-impacted stormwater, collected from the Terminal 2 Apron, across Runway 4-22, Taxiway C, and Taxiway M to the existing airfield glycol sewer located west of Service Road M. The lift station and forcemain will be sized to accommodate future expansion.



**Tunnel Lighting LED Upgrade** **\$1,000,000**

This program will replace existing high intensity discharge type lighting with LED to save energy and reduce maintenance.

***26 – Terminal Roads/Landside***

**Terminal 2 Cell Phone Lot Study** **\$100,000**

Traffic delays due to curbside queueing at Terminal 2 have dramatically increased during the past year. This trend can be expected to continue as Terminal 2 continues to expand gate space, airlines, and capacity. Many customers report being unaware of the existing cell phone lot on Post Road, or they perceive it as too far from Terminal 2. This study will evaluate options to address these needs.

***31 – Parking***

**Electric Vehicle Charging Network Expansion** **\$1,500,000**

This is the first of a six-year program to install electric vehicle chargers to meet passenger and employee demand and support MAC’s sustainability goals.

**Parking Guidance System** **\$6,500,000**

This project will install parking stall availability indicators in MAC’s parking ramps.

**Terminal 2 Landside Office Remodel** **\$400,000**

This project will remodel the Landside Office in the Terminal 2 Parking Management Office to support increased demand for TNC Driver Permits as well as taxi and commercial vehicle permits.

***36 – Terminal 2***

**Ramp Information Display System (RIDS)** **\$3,600,000**

This project will provide Ramp Information Display System (RIDS) including aircraft parking assistance at Terminal 2 gates not included in the Terminal 2 North Expansion scope. The system will be integrated with MAC’s Resource Management System (RMS).

**Terminal 2 Baggage Handling System** **\$410,000**

This project will provide touch screen activation to provide functionality consistent with Terminal 1 and carousel refurbishment as needed.

**Terminal 2 Gate Area Improvements** **\$3,000,000**

This project will conclude the multi-year recarpeting program, replacing end of life carpeting at gates H1-5 and on the passenger boarding bridges. The project will also provide gate area improvements, including replacement of gate desks and podiums, and seating with charging ports.

**Terminal 2 Ground Transportation Waiting Area Expansion** **\$400,000**

This project will expand the TNC and shuttle customer waiting area in the Terminal 2 Ground Transportation Center.

**Terminal 2 MUFIDS/EVIDS Millwork Upgrades** **\$350,000**  
Replace old MUFIDS display stands to current MAC standard design.

**39 – Public Areas/Roads**

**Terminal 1 Inbound Roadway Median Improvements** **\$3,300,000**  
This project will replace the Terminal 1 monument sign near Highway 5, improve the median landscaping, and replace the static overhead roadway signs with digital.

**46 – Hangars and Other Buildings**

**Campus Out Building Study** **\$300,000**  
This project will assess non-terminal buildings on the MSP campus and will include verifying existing mechanical, electrical, plumbing, HVAC and building envelope systems and any deferred maintenance needed. This study will aid in developing future CIP projects and/ or programs and develop information for building asset management. This study will also inform sustainability and resiliency goals to identify energy savings and emissions reductions.

**56 – Trades/Maintenance Buildings**

**Fall Hazard Mitigation** **\$100,000**  
This project study will survey the MAC campus and reliever airports to identify areas that are out of compliance with OSHA's requirements for fall protection in general industry (29 CFR 1910 Subpart D - Walking and Working Surfaces). Areas to be surveyed include: unprotected roof edges, openings in walls and mezzanines, manholes, fixed ladders greater than 24 feet, and fixed ladders with cages. This will inform planning of future phases of mitigation if necessary.

**63 – Police**

**Critical Infrastructure Fencing** **\$850,000**  
Install permanent security fencing North of Now Boarding and West of the FAA Building and the MAC General Office Building to run parallel with 28<sup>th</sup> Avenue until it connects with the Air Operations Area (AOA) Perimeter Security Fencing near Gate 405.

**Perimeter Gate Security Improvements** **\$6,500,000**  
The 2025 project will provide additional vehicle lanes at Gate 269 to improve throughput without compromising security.

**Public Safety Modifications** **\$1,000,000**  
This program enhances the safety of the MSP campus through door hardware, signage, security controls, and other equipment to provide for egress requirements, code compliance, security conformity, and emergency responder access.

**66 – Fire**

**Fire Protection Systems Upgrades** **\$10,000,000**  
This is the first of a multi-year program to upgrade fire alarm and water-based fire protection systems and associated components on the MSP campus.

## **76 – Environment**

### **Firefighting Foam System Conversion \$3,000,000**

This project will support converting firefighting foam from the AFFF mil-spec foam to F3 foam without intentionally added PFAS. This conversion includes multiple buildings, vehicle systems, project management, and firefighting equipment.

### **Glycol Sewer & Storm Sewer Inspection/Rehabilitation \$600,000**

This project provides for cleaning and video inspection of gravity sewers, including deicing pads, plug and pump deicing areas, and conveyance sewer. This project also includes pressure testing of glycol forcemains.

### **Infield Fueling Facility Secondary Containment \$400,000**

Modification to the Infield Fueling Facility to provide secondary containment around the 12,000-gallon aboveground storage tank.

### **Lift Station at Ponds 1 and 2 \$2,300,000**

This project provides for construction of two stormwater lift stations adjacent to MSP Ponds 1 and 2. The lift stations will utilize the existing 8-inch forcemain to divert water from one pond to the other to facilitate pond cleaning and maintenance.

### **MSP Pond 3 / 494 Pond Sediment Removal and Repairs \$5,900,000**

Removal of accumulated sediment in MSP Pond 3 and 494 Pond. Repair underflow baffle on 494 Pond outlet structure, repair or replace gate valves on the outlet pipes to the Minnesota River.

## **MSP NOISE MITIGATION PROJECTS**

### **Noise Mitigation Consent Decree Amendment \$500,000**

The Consent Decree First Amendment Program is a residential noise mitigation program that began in March 2014 under the terms of an amended legal agreement (Consent Decree) between the Metropolitan Airports Commission (MAC) and the cities of Richfield, Minneapolis, and Eagan, and approved by the Hennepin County District Court (effective until December 31, 2024). Under this program, eligibility of single-family and multi-family homes will be determined annually, based upon actual noise contours that are developed for the preceding calendar year, beginning in March 2014. This project will provide noise mitigation for those single family and multifamily homes meeting the eligibility requirements of the program.

## **MSP ONGOING MAINTENANCE PROJECTS**

MSP On-Going Maintenance projects include buildings, systems, pavements, and other infrastructure that require improvements on an annual basis in order to maintain the facilities and manage MAC assets.

### **10 – Terminal 1**

#### **Baggage System Upgrades**

**\$5,000,000**

This multi-year program will provide necessary upgrades to the inbound and outbound baggage system not covered by general system maintenance. The 2025 and 2026 projects will provide system stabilization to maintain functionality until the system reaches the end of its useful life and is replaced.

#### **Conveyance System Upgrades**

**\$3,000,000**

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 useful life of each system including the availability of replacement parts and technical support of the equipment. 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 safety devices or features that are commonly installed on modern equipment. This multi-year program modernizes and replaces elements of the conveyance systems and installs new conveyance systems if needed.

#### **Electrical Substation Replacement**

**\$10,000,000**

This is a multi-year program to replace electrical substations which are at or very near end of life. This program will also improve redundancy.

#### **Ground Power Substation Replacement**

**\$10,000,000**

This program is focuses on updating and improving substations that serve airside operations such as jet bridges, and providing heating, cooling, and power for parked aircraft. These substations also provide power for charging electric ground service vehicles. This program will position MSP to be able to meet new demands for ground equipment, including an increase in electric vehicle charging.

#### **Plumbing Infrastructure Upgrades**

**\$700,000**

In 2010, MAC staff prepared a preliminary study of the reliability and maintainability of the existing plumbing infrastructure. Portions of the existing plumbing infrastructure serving Terminal 1 are over 40 years old, have systems that are undersized for today’s demands, contain isolation valves that are either inaccessible or no longer functional, and utilize aging water meter systems. There are also deteriorated sections of the existing sanitary and storm water systems. This ongoing program was implemented to upgrade the plumbing infrastructure system to meet current code requirements and MAC standards.

#### **Terminal Building Remediation Program**

**\$3,000,000**

Continual maintenance of the terminal buildings is imperative to passenger comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. Building and concourse envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel repair/replacement, and soffit repair/replacement and insulation systems.

**Terminal Miscellaneous Modifications** **\$2,600,000**

Each year, there is a list of maintenance projects that are beyond the resources of MAC's maintenance and trades staff to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Typical work includes door replacements, emergency upgrades to mechanical, electrical, plumbing or HVAC systems, loading dock work, etc. The list of potential projects will be compiled and prioritized in early 2024.

**13 – Energy Management Center**  
**EMC Life Safety Infrastructure Program** **\$1,900,000**

This program will replace life safety equipment and devices associated with the heating, ventilation, and air conditioning system throughout MSP campus. Equipment includes gas detection sensors and life safety dampers. Additionally, all new equipment and devices will connect to IMACS for monitoring and control.

**EMC Plant Upgrades (T1 & T2)** **\$2,150,000**

This multi-year program provides upgrades to the MAC's Energy Management Center (EMC) Boiler and Chiller Plants at both Terminal 1 and Terminal 2 as well as other facilities on the MSP campus. The work includes upgrades to the aging Chilled Water and Heating Water systems. The pumping and piping systems on both the heating and cooling systems are aging and in need of repair work beyond regular maintenance.

**21 – Field and Runway**  
**Airside Electrical Construction** **\$2,500,000**

This program provides for the removal and replacement of airfield lighting and signage with LED technology, and lighting control upgrades.

**Airside Roadway Pavement Restoration** **\$1,200,000**

This is an ongoing program to rehabilitate roadways on the airfield through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. The pavement condition index report as well as an inspection of the pavement will be completed to determine the areas most in need of repair on an annual basis.

**Miscellaneous Airfield Construction** **\$2,500,000**

This program supports Part 139 Airport Certification through grading and drainage improvements within runway safety areas, airfield pavement marking modifications, and other miscellaneous airside projects that are too small to accomplish independently or arise unexpectedly.

**Pavement Joint Sealing/Repair** **\$800,000**

This is an ongoing program to provide for the resealing of joints, sealing of cracks, and limited surface repairs on existing concrete pavements. The areas scheduled for sealing will be as defined in the overall joint sealing program or as identified by staff inspection in the early spring of each year.

**26 – Terminal Roads/Landside**

**Tunnel/Bridge Inspections \$120,000**

The MSP Campus has MAC-owned bridges and tunnels. Bridge and tunnel inspections are conducted each year to identify maintenance and repairs which are then implemented in a timely fashion.

**Tunnel/Bridge Miscellaneous Modifications \$1,000,000**

This program will complete maintenance of the MAC-owned bridges and tunnels identified in the annual inspections. Maintenance work includes repairs, painting, bearing assembly and other miscellaneous items.

**31 – Parking**

**Parking Structure Rehabilitation \$4,750,000**

This is an annual 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, railing refinishing, and lighting improvements.

**39 – Public Areas/Roads**

**Concrete Joint Repair \$550,000**

This project will complete landside pavement joint repair on MSP campus roadways as a preventative maintenance activity to prolong the existing pavement from reconstruction.

**Landside Pavement Rehabilitation \$500,000**

This is an ongoing program of preventative maintenance activities such as crack sealing, surface treatments, and resurfacing on roadways located outside of the Air Operations Area (AOA). This program effectively slows deterioration rates, extends service life and delays need for total reconstruction of bituminous and concrete pavements. Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year’s project.

**Landside Utility Rehabilitation \$750,000**

Each year there are numerous landside utility projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized annually and completed with either a series of contracts or purchase orders. Electric power, sanitary sewer, storm sewer and watermain improvements will be addressed with this program. Also, a study will be conducted as part of the first year’s project to identify future potential projects. The study will be updated annually reflect current priorities.

**Roadway Fixture Refurbishment \$150,000**

Many of the light poles, clearance restriction boards, sign units, fence sections, and canopies on the airport roadways need repainting and maintenance. This project provides for fixture refurbishment.

#### **46 – Hangars and Other Buildings**

##### **Campus Building Rehab Program \$1,500,000**

Continual maintenance of MAC non-terminal buildings is imperative in providing a stable infrastructure and meeting the MAC's sustainability goals. Age and weather contribute to building deterioration, mold and other health issues. Building envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel replacement and/or painting/tuck-pointing, structural repair and insulation systems. This program will also include repair/replacement related to interior issues. This is part of an on-going program to maintain MAC buildings as assets.

##### **End of Life Campus Building Demolition \$400,000**

This is the first of multiple years of demolition of buildings to be replaced by the MAC Storage Facility being constructed in 2024.

##### **MSP Campus Building Roof Replacement \$17,100,000**

A report has been developed within the MAC that evaluates one-half of the roofs every other year. This on-going program allows these roofs that have been evaluated to be prioritized and programmed for repair. 2025 will focus on the MAC General Office Building,

#### **56 – Trades/Maintenance Buildings**

##### **Sump Pump Controls \$4,000,000**

This project will rehabilitate sump pumps older than five years across the campus and provide a new automation system at each location. Additionally, each sump pump will connect to IMACS for remote monitoring and control. This will help MAC Plumbing understand when there is a problem by receiving an alarm within their plumbing shop.

#### **MSP TENANT PROJECTS**

MSP Tenant projects include those that enhance or expand tenant or leasehold facilities that MAC supports, with the tenants reimbursing the costs to MAC for work within leasehold spaces.

#### **10-Terminal 1**

##### **Concessions Rebids \$500,000**

This project will prepare five to six spaces in Terminal 1 to support the concessions rebid process.

##### **Concessions Upgrades/Revenue Development and Strategic Partnerships \$375,000**

This is an annual program to fund miscellaneous upgrades such as finishes, furniture, signage, and/or modified connections to utilities for the concession programs or other revenue generating programs at the airport. The budget will also provide leasehold improvements to the strategic partnerships activation sites in order to prepare space for the partners' construction.

##### **Concourse and Gatehold Modernization \$73,100,000**

This is the third phase of the Concourse and Gatehold Modernization program and will complete work in Concourses A, B, and G. Through a reimbursable agreement, Delta Air Lines will complete MAC-funded work including ceiling and lighting improvements, window tint, wainscoting, column wraps (excluding branding), paint (excluding branding), wayfinding information displays ("WIDS"), and flooring in the public area concourse

corridors (including terrazzo, tile, and carpet where applicable). The program budget will also support MAC consultant fees for design collaboration and project oversight.

**36-Terminal 2**

**Terminal 2 Concessions Redevelopment \$2,000,000**

This project will support concessions spaces at the central portion of Terminal 2 and be coordinated with lease rebidding.

**Terminal 2 Supplemental Concessions \$150,000**

Capital to invest into additional utilities, flooring, electrical, water, etc. for additional concessions at Terminal 2.

**39 – Public Areas/Roads**

**Tenant Parking Lot Reconstruction \$3,400,000**

This project reconstructs the pavement surrounding tenant space at 2120 East 77th Street (former DHL tenant space) due to deteriorating pavement. The project will include but is not limited to: pavement removal, excavation, grading, bituminous paving, pavement marking, and utility improvements.

**46 – Hangars and Other Buildings**

**Air Freight Facility Parking Expansion \$2,600,000**

This project will expand employee and ground service equipment parking areas at the Air Freight Facility.

**RELIEVER AIRPORTS LONG TERM COMPREHENSIVE PLAN PROJECTS**

Reliever Airport Long Term Comp Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted operational needs.

**80 – Reliever Airports**

**Reliever Airports Planning Fees \$600,000**

This project funds consultant support of FAA-required planning activities to be completed prior to project approvals.

**81 – St. Paul**

**STP Airport Layout Plan \$100,000**

The new ALP will show current conditions and any development proposed in the Long-Term Comprehensive Plan (LTCP). A portion of the budget will be used to acquire new AGIS base mapping to create a new Airport Layout Plan (ALP) set that complies with current FAA guidelines and criteria.



**86 – Anoka County - Blaine**

**ANE Airport Layout Plan \$500,000**

The new ALP will show current conditions and any development proposed in the Long-Term Comprehensive Plan (LTCP). A portion of the budget will be used to acquire new AGIS base mapping to create a new Airport Layout Plan (ALP) set that complies with current FAA guidelines and criteria.

**ANE Long Term Comprehensive Plan Update \$800,000**

This project will review current airport facilities, identify service gaps, and better facilitate the safe movement of aircraft at Anoka County - Blaine Airport, which is part of the MAC's system of reliever airports designated by the FAA to reduce congestion at the Minneapolis-St. Paul International Airport and to provide improved general aviation facilities in the overall community.

**RELIEVER AIRPORTS MAINTENANCE/FACILITY UPGRADE PROJECTS**

Reliever Airport Maintenance / Facility Upgrade projects include improvements to buildings, systems, pavements and other infrastructure across the Reliever Airport system on a one-time or short-term basis.

**80 – Reliever Airports**

**Relievers Security Fencing, Gates, and Lighting \$200,000**

This program will address ongoing needs for repairs and modifications to the Reliever Airports' perimeter chain link fencing, gate vehicle access points, and lighting to enhance safety and security in landside areas.

**Relievers Building Miscellaneous Modifications \$400,000**

This program will address ongoing needs for repairs and modifications of MAC-owned buildings at the five of the reliever airports, excluding St. Paul. These items may include crew rest areas, heating, air conditioning, structural repairs, and aesthetic updates. The list of potential projects will be compiled and prioritized in early 2025.

**Relievers Obstruction Removal \$300,000**

This program will address ongoing needs for obstruction removals at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2025.

**Relievers Pavement Rehabilitation Miscellaneous Modifications \$300,000**

This program will address ongoing needs for crack sealing, joint repairs, pavement rejuvenation, and pavement repairs at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2025.

**Relievers Used Oil Sheds and Tanks \$550,000**

This program will assess and subsequently decommission and/or add used oil sheds at the reliever airports.

**81 – St. Paul**

**STP Airport Perimeter Roads \$500,000**

This is part of an ongoing effort to rehabilitate airport pavements 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 rehabilitation of the airport perimeter road near the intersection of Bayfield Street and Airport Road.

**STP Customs and Border Protection General Aviation Facility \$11,000,000**

Customs and Border Protection (CBP) currently operates at STP out of a small space in the terminal building. The existing facility does not meet the requirements for space or security. Due to the restrictions of the existing space passengers generally remain on the aircraft for the customs screening process. A secure facility separate from other functions has been requested. This facility will meet current CBP guidelines, including plans for sizing of the facility. The new facility will include adequate secure space for pre and post processing of passengers. The facility is expected to handle between 100-150 flights annually, with staff traveling to STP from MSP to provide screening for flights.

**STP Infrastructure Replacement \$1,200,000**

This project will upgrade mechanical systems to make them easier and safer to maintain and increase the comfort of all areas, including leasable spaces in the Holman Field terminal.

**STP MAC Building Improvements \$200,000**

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings or modifications necessary to meet the requirements of the tenants. The list of potential projects will be compiled and prioritized in early 2025.

**STP Taxiway B Reconstruction and LED Edge Lighting \$1,100,000**

This project will reconstruct Taxiway B and install LED Edge Lighting to replace end of life lighting.

**82 – Lake Elmo**

**21D AWOS Replacement \$200,000**

This project provides the civil work associated with a MnDOT Aeronautics project to replace the existing Automated Weather Observing System (AWOS) with a new system.

**21D Equipment Storage Building \$5,000,000**

This project includes the construction of a MAC storage building for the containment of airfield maintenance equipment.

**21D North Building Area Pavement Rehabilitation \$900,000**

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons, taxilanes) through bituminous overlays, seal coats, or in some instances, reconstruction. The project will restore the surface to a smooth, even condition and improve overall operating conditions. The pavement condition index report, an inspection of the pavement, and geotechnical exploration will be completed to determine the extent of the repairs. This project includes the taxilanes and airport entrance road in the northwest building area.

**21D Runway 04-22 Pavement Rehabilitation** **\$4,000,000**

This project includes reconstruction of the full length of existing Runway 4-22. The updated long term comprehensive plan for this airport proposes an extension to the crosswind runway at the end of Runway 22. Construction of the extension is included in this project. Installation of runway edge lighting is also included.

**21D Taxiway H Reconstruction** **\$600,000**

This project will reconstruct the Taxiway H on the north side of the airport.

***83 – Airlake***

**LVN 225<sup>th</sup> Street Paving** **\$450,000**

Paving of gravel road from Cedar Avenue to Maynard Lane for the south building area.

**LVN AWOS Replacement** **\$100,000**

This project provides the civil work associated with a MnDOT Aeronautics project to replace the existing Automated Weather Observing System (AWOS) with a new system.

***84 – Flying Cloud***

**FCM Gate Replacements** **\$500,000**

This project will replace airfield gates.

**FCM Infrastructure Replacement** **\$1,750,000**

This project will replace aged HVAC equipment and systems to provide proper ventilation, heating, cooling, and monitoring of the systems. The scope includes roof top unit replacement, condensing units, exhaust fans, water heaters, and air compressors.

**FCM Northside Access Road from Bravo to November Lane** **\$900,000**

This project will provide pavement rehabilitation and drainage improvements to vehicle access roads serving a large user and tenant population to gain access to storage hangars.

***85 – Crystal***

**MIC Stormwater Monitoring Location Drainage Repair** **\$100,000**

Repair and regrading of the stormwater benchmark monitoring location near the self-serve fueling system oil-water separator at Crystal airport.

**MIC Taxilanes 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.

**MIC Tower Parking Lot Reconstruction** **\$1,500,000**

This project will provide a new oil water separator drainage discharge point for the parking lot and reconstruct the parking lot.

# Assessment of Environmental Effects (AOEE)

For the Preliminary 2025–2031  
Capital Improvement Program

Date: Published October 15, 2024



## Metropolitan Airports Commission



Minneapolis – Saint Paul International Airport  
Airlake · Anoka County-Blaine · Crystal · Flying Cloud · Lake Elmo · St. Paul Downtown

Table of Contents

1.0 Introduction..... 1

2.0 MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT (MSP)..... 4

    2.1 MSP Long-Term Plan Status ..... 4

    2.2 MSP Environmental Studies ..... 5

    2.3 MSP Projects Requiring Preparation of an Environmental Assessment Worksheet ..... 6

    2.1 MSP Cumulative Potential Environmental Effects..... 6

3.0 ST. PAUL DOWNTOWN AIRPORT (STP) ..... 8

    3.1 STP Long-Term Comprehensive Plan Status ..... 8

    3.2 STP Environmental Studies ..... 8

    3.3 STP Projects Requiring Preparation of an Environmental Assessment Worksheet ..... 8

    3.4 STP Cumulative Potential Environmental Effects..... 8

4.0 LAKE ELMO AIRPORT (21D)..... 10

    4.1 21D Long-Term Comprehensive Plan Status..... 10

    4.2 21D Environmental Studies..... 10

    4.3 21D Projects Requiring Preparation of an Environmental Assessment Worksheet..... 11

    4.4 21D Cumulative Potential Environmental Effects ..... 11

5.0 AIRLAKE AIRPORT (LVN) ..... 12

    5.1 LVN Long-Term Comprehensive Plan Status ..... 12

    5.2 LVN Environmental Studies ..... 12

    5.3 LVN Projects Requiring Preparation of an Environmental Assessment Worksheet .... 13

    5.4 LVN Cumulative Potential Environmental Effects..... 13

6.0 FLYING CLOUD AIRPORT (FCM)..... 14

    6.1 FCM Long-Term Comprehensive Plan Status ..... 14

    6.2 FCM Environmental Studies ..... 15

    6.3 FCM Projects Requiring Preparation of an Environmental Assessment Worksheet ... 15

    6.4 FCM Cumulative Potential Environmental Effects..... 15

7.0 CRYSTAL AIRPORT (MIC)..... 16

    7.1 MIC Long-Term Comprehensive Plan Status..... 16

    7.2 MIC Environmental Studies..... 16

    7.3 MIC Projects Requiring Preparation of an Environmental Assessment Worksheet..... 16

    7.4 MIC Cumulative Potential for Environmental Effects ..... 17

.....	17
8.0 ANOKA COUNTY–BLAINE AIRPORT (ANE) .....	18
8.1 ANE Long-Term Comprehensive Plan Status.....	18
8.2 ANE Environmental Studies.....	18
8.3 ANE Projects Requiring Preparation of an Environmental Assessment Worksheet....	18
8.4 ANE Cumulative Potential Environmental Effects .....	19
9.0 NEXT STEPS.....	20
10.0 APPENDICES.....	21
10.1 Appendix A – MAC Preliminary 2025-2031 CIP Listing.....	21
10.2 Appendix B – Descriptions for 2025 Proposed Projects.....	21
10.3 Appendix C – Draft Descriptions for 2026-2031 Projects that Meet Criteria Defined in Minnesota Statute Section 473.614 .....	21

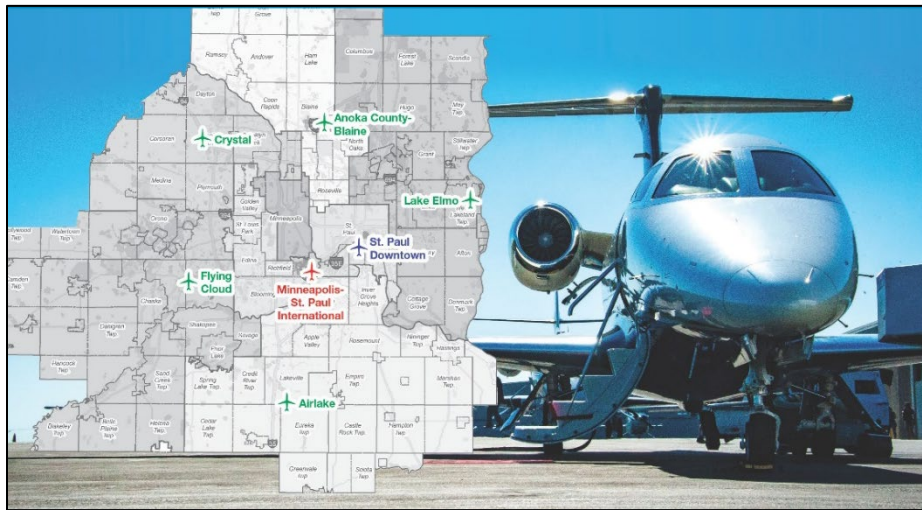
## List of Tables

Table 2.1 – MSP Airport Projects in the CIP that Require a Mandatory EAW .....	6
Table 4.1 – Lake Elmo Airport Projects in the CIP that Require a Mandatory EAW .....	11
Table 5.1 – Airlake Airport Projects in the CIP that Require a Mandatory EAW .....	13
Table 8.1 – Anoka County-Blaine Airport Projects in the CIP that Require a Mandatory EAW.....	19

# 1.0 INTRODUCTION

The Metropolitan Airports Commission (MAC) oversees coordinated air service throughout the Twin Cities Metro Area through its system of seven airports, including the Minneapolis-St. Paul International Airport (MSP) and six reliever airports. In 2023, MAC marked its 80<sup>th</sup> anniversary and celebrated another year of strong growth across the entire system of airports. MSP surpassed 34.7 million total passengers in 2023, an increase of 11% from 2022, and the general aviation airports saw an 8.3% increase in operations. Much of the growth at MSP was driven by new and returning international and domestic routes. Airlines added eleven nonstop routes in 2023, helping to drive a 9% increase in domestic travelers and a 45% increase in international fliers. Even with the growth, both passengers and operations at MSP remain below the pre-COVID levels seen in 2019.

MAC was created in 1943 to promote the efficient, safe handling of air commerce and to develop the full potential of the Minneapolis-Saint Paul metropolitan area as an aviation center. The MAC, as a public corporation of the state, generates the revenues it needs to operate through rents and user fees, not general tax appropriations. Bonding and financial authority – along with MAC generated cash and state and federal aviation grants and fees – fund capital investments in the MAC’s seven airport system.



The organization is governed by a 15-member board. The MAC board establishes policies and ordinances and provides financial oversight, including approval of budgets and large expenditures.

In 2023, MAC launched its the 2023-2027 enterprise strategic plan and a new purpose

statement: To provide exceptional airport experiences so Minnesota thrives. The purpose statement is the foundation for all we do, whether embarking upon the largest interior renovation in MSP’s history, investing in infrastructure and technology to streamline the passenger journey, or securing new international services to Canada and Europe from Delta Air Lines, Aer Lingus, WestJet and Lufthansa.

Each year, the MAC prepares a seven-year Capital Improvement Program (CIP). A preliminary version of the CIP is adopted by the Commission in September. The purpose for providing the Commission with a preview of the CIP is twofold. First, it gives the Commission an opportunity to consider the projects proposed by MAC staff in the upcoming years. Second, it provides a list of projects that the public may review as a part of this Assessment of Environmental Effects (AOEE) process.



Upon completion of this AOEE process, which includes a public hearing, the Commission will adopt a final version of the CIP in December.

On September 21, 2024, the MAC Commission adopted the Preliminary 2025–2031 CIP (shown in Appendix A). This AOEE report is prepared in accordance with the requirements of Minnesota Statutes Section 473.614, as amended in 1988 and 1996. It presents an assessment of the potential environmental effects of projects in the MAC preliminary seven-year CIP from 2025 to 2031 for each MAC-owned airport. Under Minnesota law, the MAC is required to “examine the cumulative environmental effects at each airport of projects at that airport (in the seven-year CIP), considered collectively.”



MSP Concourse G Apron and Taxiway B

Most of the projects in the CIP involve replacement and maintenance/upgrades of existing facilities and assets. Some projects involve information technology (IT) upgrades, and others include rehabilitation and/or upgrades to tenant facilities. These projects will not affect use of the facilities and therefore, will not add to or subtract from, cumulative environmental effects.

Minnesota Statutes Section 473.614 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:

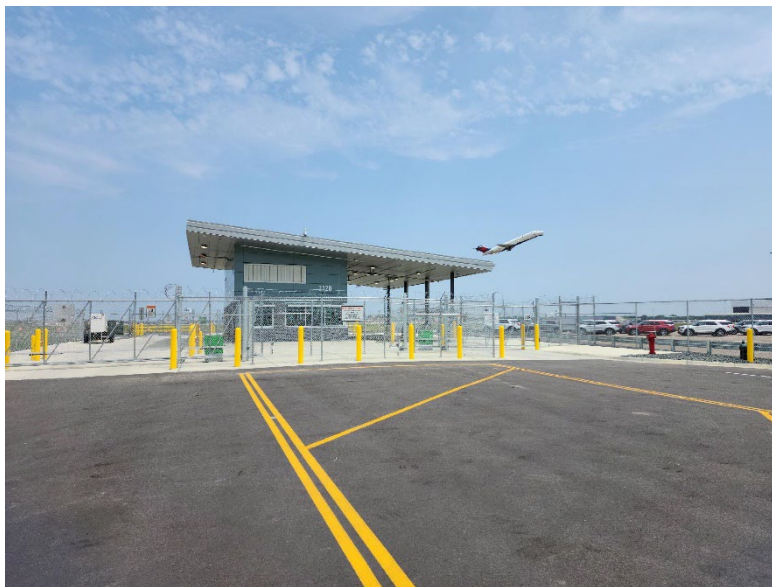
1. The project is scheduled in the CIP for the first CIP calendar year (2025 for this AOEE);
2. The project is located at MSP and is anticipated to cost \$5 million or more, or the project is located at one of the Reliever Airports an estimated to cost \$2 million or more; and,

3. The project involves the construction of:

- a. A new or expanded structure for handling passengers, cargo, vehicles, or aircraft; or
- b. A new runway or taxiway, or the extension of an existing runway or taxiway.

An EAW or state Environmental Impact Statement (EIS) has been prepared for all projects scheduled to be implemented in 2025 that meet the above three conditions in Minnesota Statutes Section 473.614 for a mandatory EAW.

This AOEE report analyzes each airport in the order in which the projects are presented in the CIP. Appendix A lists all projects included in the preliminary seven-year CIP (2025–2031). The notes on the last page of the Appendix A table explain the type of work for each proposed project and why the work may or may not have a potential effect on the environment. Appendix B provides a more detailed description for each project included in the first year (2025) of the preliminary CIP. Appendix C includes a draft description for projects in years 2026 through 2031 that meet the above three conditions in Minnesota Statutes Section 473.614 for a mandatory EAW.



MSP Airfield Security Gate

## 2.0 MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT (MSP)

MSP is situated approximately seven miles south of downtown Minneapolis, Minnesota and seven miles southwest of downtown St. Paul, Minnesota. MSP is not part of any city but is surrounded by Minneapolis, St. Paul and the suburban cities of Bloomington, Eagan, Mendota Heights, and Richfield.

The MSP airfield consists of four runways. Runway 12L-30R and Runway 17-35 are both 8,000 feet long. Runway 12R-30L is 10,000 feet long. And the crosswind Runway 4-22 is 11,000 feet long. There are multiple instrument approaches and an air traffic control tower.



Recent improvements at MSP include the doubling of the cell-phone waiting lot space, relocation of the Terminal 1 rideshare pick up area, implementation of pre-booked parking option, and Delta Air Lines completion of their new Concourse G Sky Club. MAC's overall upgrade of the ticket lobby and bag claim program has reached its final phase, and we embarked on the next expansion/infill on Concourse G.

MSP Terminal 1 Completed Ticket Lobby (North End)

### 2.1 MSP LONG-TERM PLAN STATUS

The MAC adopted the 2020-2040 Long Term Plan (LTP) for MSP in May 2024. The document includes forecasts for passenger levels and aircraft operations, an airfield capacity study, a review of the facility inventory and identification of service gaps, and development of alternatives to meet facility needs. The overall process involved a robust stakeholder engagement program.

The planning process evaluates when facility improvements are needed to accommodate projected demand in a manner that is safe, efficient, orderly, and cost-effective and in a way that maintains and enhances customer service. The LTP does not authorize construction or improvements to facilities, nor does it serve as the basis for determining eligibility for noise mitigation programs. Rather, it helps the MAC better understand and plan for future facility needs.

The MAC website: <https://www.mspairport.com/long-term-plan> contains the final document.

## 2.2 MSP ENVIRONMENTAL STUDIES

Under MEPA, an EAW or EIS must assess cumulative potential environmental effects. A cumulative potential effect under MEPA is a consequence on the environment that could result from the incremental potential effect from projects under review in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources. In other words, the cumulative potential effects analysis examines whether the incremental effects of a proposed project, combined with other projects in the same geographic area and taking place over the same time period, will have a significant effect on the same environmental resources.

In September 2010, the MAC and the Federal Aviation Administration (FAA) began preparation of the MSP 2020 Improvements EA/EAW, which was a joint document satisfying both MEPA and National Environmental Policy Act (NEPA) requirements for the projects the MAC may implement at MSP through the year 2020 as outlined in the 2010 LTCP.

In March 2013, the FAA determined that the MSP 2020 Improvements EA/EAW was adequate under NEPA and issued a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) for the projects analyzed in the document. In April 2013, the MAC concluded that the MSP 2020 Improvements EA/EAW was adequate under MEPA and issued an Adequacy Determination and Negative Declaration on the need for an EIS for the projects analyzed in the document.

Many projects that were included in the MSP 2020 Improvements EA/EAW review are now complete; some are programmed to begin construction in a year or two. One of these projects is noted in Table 2-1 on page 6, along with one other project listed in the 2025-2031 Preliminary CIP for MSP that meet the criteria for the preparation of an EAW.

In November 2023, the FAA completed a re-evaluation of the projects associated with Terminal 2, given the plans for near-term expansion projects. The projects associated with Terminal 2 (listed as Enabling Projects) and the Ground Service Equipment (GSE) Maintenance Facility were included in the MSP 2020 Improvements EA/EAW and the re-evaluation. They are not shown in the Table 2-1, however, because on their own, these projects would not meet the criteria for an EAW. It is possible the Enabling Projects may move further out in the CIP since at this time, we have no plans to move forward in 2025 with construction.

Now that the 2040 LTP is complete, MAC is evaluating other LTP projects for the appropriate timing for construction prior to slotting in the CIP. At this point, only one LTP related project is listed in the CIP - the Runway 30R Parallel Taxiway, which will require environmental review prior to construction.

As other new expansion projects outlined in the LTP are planned for in the CIP, MAC will evaluate and complete any required environmental review prior to their construction start.



MAC's New Fire Station is now open.

### 2.3 MSP PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

Of all the projects listed for the year 2025 at MSP, there are none listed in the Preliminary 2025-2031 CIP that meet the criteria in Minnesota Statutes Section 473.614 for the preparation of a mandatory EAW. There is one project listed beyond 2025 that requires environmental review: the Runway 30R Parallel Taxiway. This project exceeds \$5 million and involves the construction of a new taxiway. See Table 2-1. This project is proposed to be constructed in phases, but only one EAW would be prepared for the entire scope of the project.

Also listed is the D-Pod Outbound Baggage System project. This project has already been evaluated in the MSP 2020 Improvements EA/EAW.

Table 2-1  
MSP Projects in the CIP that Require a Mandatory EAW

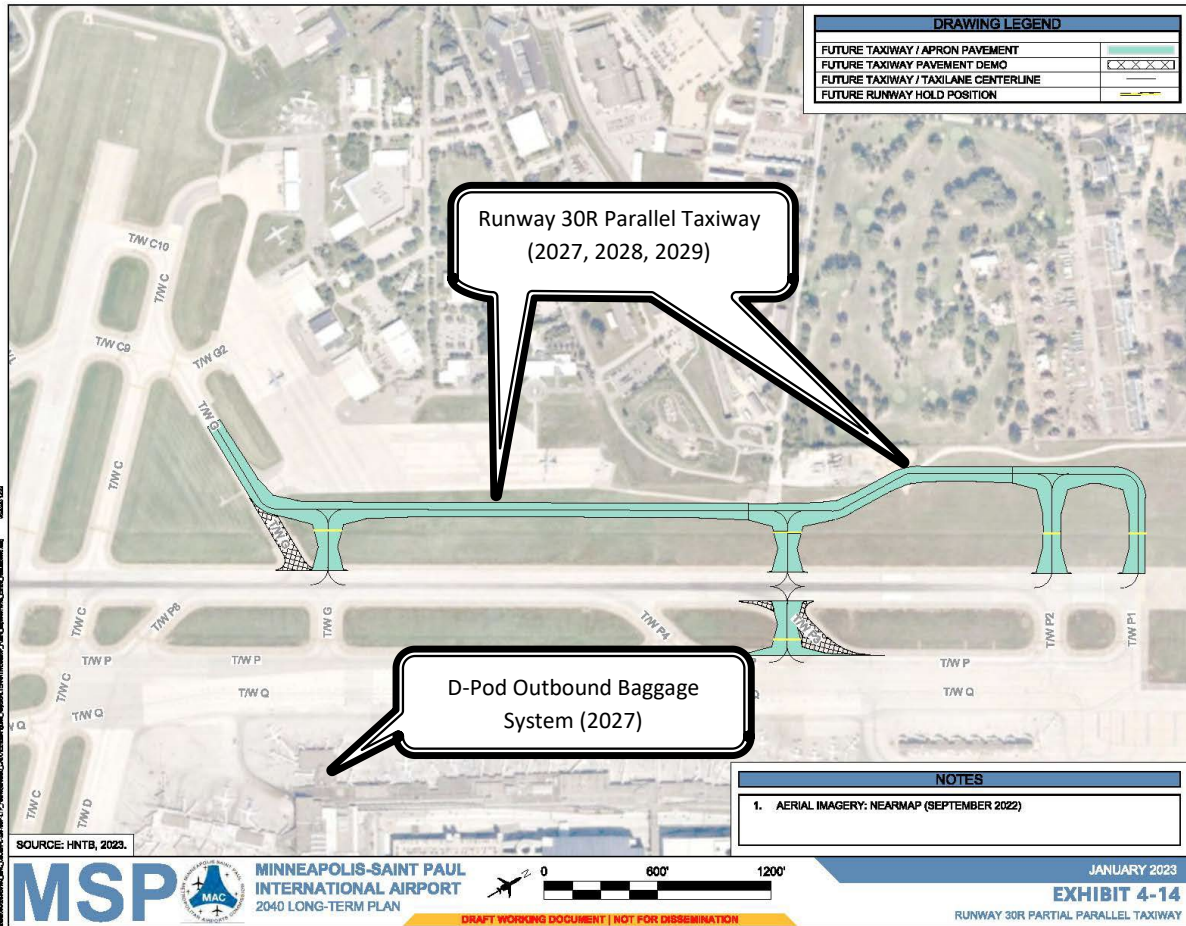
Project	CIP Year Proposed	EAW Status
<b>T1 D-Pod Outbound Baggage System</b>	2027	Included in MSP 2020 Improvements EA/EAW
<b>Runway 30R Parallel Taxiway</b>	2028	EAW Required
<b>Runway 30R Parallel Taxiway</b>	2029	EAW Required
<b>Runway 30R Parallel Taxiway</b>	2030	EAW Required

### 2.1 MSP CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

Under Minnesota Statutes Section 473.614, the MAC must examine the cumulative environmental effects of projects at each airport in the proposed CIP, considered collectively. Aside from those listed in Table 2-1, all other MSP projects listed in the CIP involve end-of-life replacement and maintenance/upgrades of existing MAC facilities and assets, security enhancements, information technology (IT) upgrades, residential noise mitigation, or rehabilitation of tenant facilities. While many MSP projects in the capital program exceed the \$5 million threshold, only those listed in Table 2-1 meet the criteria for preparation of a mandatory EAW under Minnesota Statutes Section 473.614.

In addition to the general projects outlined above, the preliminary CIP shows a 2025 project that entails the installation of a Ground Based Augmentation System (GBAS). This type of system provides an alternative to the Instrument Landing System (ILS). Both systems assist pilots and aircraft when landing during inclement weather conditions. There are no changes to flight paths or approaches associated with this system augmentation, but simply an overlay of existing ILS approaches. Therefore, the project does not meet the criteria for preparation of a mandatory EAW under Minnesota Statutes Section 473.614.

Locations for Terminal 1 Projects listed in Table 2-1



Of additional note, a two-year end-of-life project is listed in the CIP in 2027 and 2028 for tram replacement at MSP. The scope for this project is not yet finalized. MAC will be reviewing alternatives that include replacing the existing tram systems with a similar type of tram system or replacements as an autonomous or other type of vehicle option. Depending on the scope, the project may meet the criteria for a mandatory EAW. If the study reveals a preferred alternative that involves major modifications or different alignments for the tram systems, the need for environmental review will be determined at that time.

Although some of the MSP projects may have temporary impacts during construction, the MAC will use mitigation measures to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at MSP. The EAW documents that have been completed for MSP projects indicate that the potential for adverse cumulative effects from the projects when considered in conjunction with past, present and future projects is insignificant; or, that no single impact even when considered with past, present and future projects represents a substantial impact that cannot be mitigated and therefore, none of the proposed projects would result in significant cumulative impacts.

### 3.0 ST. PAUL DOWNTOWN AIRPORT (STP)

Located along the Mississippi River with scenic limestone bluffs just south of downtown St. Paul, the St. Paul Downtown Airport is a popular base for corporate aircraft due to its location and for being the only reliever airport in the MAC system with a runway longer than 5,000-feet. Of the airport's three runways, Runway 14-32 is the longest at 6,491 feet. The airport offers charter services, two fixed-base operators, a U.S. Customs facility and the popular Holman's Table restaurant. In 2023, STP saw an 8.2% decrease in operations, with only 38,167 takeoffs and landings.

#### 3.1 STP LONG-TERM COMPREHENSIVE PLAN STATUS

The last Long-Term Comprehensive Plan (LTCP) for STP was adopted by MAC in June 2010 and covered the 2010-2030 timeframe. No major projects or improvements have been planned for STP aside from pavement reconstruction and upgrades to existing MAC-owned buildings. MAC is currently planning to initiate the next update to the LTCP in earnest in 2025.



St. Paul Downtown Airport

#### 3.2 STP ENVIRONMENTAL STUDIES

No environmental reviews have been required for projects at the St. Paul Downtown Airport since 2005 when the federal EA was completed for the airfield subdrain project that preceded the construction of the airport floodwall. Prior to that, in 2003, an EAW was completed for the floodwall.

#### 3.3 STP PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

No STP projects in the 2025-2031 Preliminary CIP meet the criteria defined in Minnesota Statutes Section 473.614 for preparation of an EAW.

#### 3.4 STP CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

Projects identified at STP in the preliminary 2025-2031 CIP include primarily pavement reconstruction projects and connections to MAC's monitoring and control (IMACS) system. In 2025, the primary runway will close for approximately three months for in-kind pavement replacement of a major portion of the runway. The project includes no change in runway length or pavement strength. Larger projects in outer years include construction of a cold storage material building and improvements to equipment storage spaces. Also, MAC is planning to replace the aircraft Engineered Material Arresting System (EMAS) beds located at each end of Runway 14-32.

The Preliminary CIP also includes a Customs and Border Protection (CBP) facility. The project includes a stand-alone office structure which would be a replacement facility for the operations currently taking place today in the terminal building. The new building will provide a location that meets current CBP standards, but will not increase passenger processing capacity and therefore, no EAW is required.

None of the proposed projects listed in the preliminary 2025-2031 CIP meet the threshold in Minnesota Statutes Section 473.614 for an EAW. Although some of the STP projects may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at STP.



St. Paul Downtown Airport



## 4.0 LAKE ELMO AIRPORT (21D)

Located between downtown St. Paul and the St. Croix River, the Lake Elmo Airport is convenient for both business and leisure flying. While this airport experiences the fewest operations of all airports in the MAC general aviation system, it is still among the top 10 busiest airports in Minnesota. The airport saw a 29.2% increase in operations in 2023 with more than 41,000 takeoffs and landings.

The airport is served by a fixed base operator and an aircraft maintenance provider. Lake Elmo Airport has two runways, one of them newly opened in 2022. Runway 14-32 is now 3,500 feet long, while Runway 4-22 measures 2,497 feet in length. There is no air traffic control tower.

### 4.1 21D LONG-TERM COMPREHENSIVE PLAN STATUS

In September 2016, the MAC adopted the 2035 LTCP. Like previous plans, the LTCP objectives included improving runway safety in compliance with FAA guidelines, providing appropriate facilities for the aircraft types currently utilizing the airport, and delineating the future footprint of the airfield pavements.



2023 Aerial Photo of Lake Elmo

### 4.2 21D ENVIRONMENTAL STUDIES

The projects outlined in the 2035 LTCP required environmental review. A federal Environmental Assessment (EA)/state Environmental Assessment Worksheet (EAW) document was prepared in accordance with the Federal Aviation Administration (FAA) policies and procedures detailed in FAA Order 1050.1F under the National Environmental Policy Act (NEPA). In addition to addressing federal environmental review requirements, the document addresses state requirements under the Minnesota Environmental Policy Act (MEPA). The FAA issued a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) for the project on August 31, 2018, finding the federal EA satisfies NEPA. As the

Responsible Government Unit (RGU) for the project under MEPA, the MAC accepted the EAW and adopted the Findings of Fact and Hearing Officers Report at its full Commission meeting in October 2018.

The new 3,500-foot runway, which was the focus of the environmental review, includes new instrument approach technology, lights, signage, and other safety improvements, including 650 additional feet of pavement to enhance operational capability.

The recent airfield improvements at the Lake Elmo Airport represent a \$23.9 million investment in this vital public asset. Federal and state grants committed funds for nearly 75% of the project.

#### 4.3 21D PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

There is only one 21D project in the 2025-2031 Preliminary CIP meet the criteria defined in Minnesota Statutes Section 473.614 for preparation of an EAW. The reconstruction of the crosswind Runway 4-22 includes an approximate 10% increase to the runway length, as outlined in the long-term plan and EA/EAW completed in 2018. The study evaluated a 254-foot extension to Runway 4-22, bringing it to a total 2,750-feet in length.

Table 4-1  
Lake Elmo Projects in the CIP that Require a Mandatory EAW

Project	CIP Year Proposed	EAW Status
<b>Runway 4-22 Reconstruction</b>	2025	Included in the Runway Improvements EA/EAW

#### 4.4 21D CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

Other projects listed in the Preliminary CIP for Lake Elmo involve primarily pavement replacement or rehabilitation, replacement of the Automated Weather Observing System (AWOS) antenna, construction of a cold materials storage building, and connection of lighting circuits to MAC’s monitoring and control system. None of these meet all three criteria for preparation of a mandatory EAW under Minnesota Statutes Section 473.614.

Although some of the Lake Elmo projects may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at Lake Elmo.

## 5.0 AIRLAKE AIRPORT (LVN)

Situated adjacent to the south metro communities of Lakeville, Farmington, and Eureka Township, the Airlake Airport serves both business and recreational fliers. The existing precision approach instrument landing system offers training opportunities for pilots. The based aircraft population has been growing, too, with new hangars populating the south building area.

The Airlake Airport has a single runway, at 4,098 feet long. Runway 12-30 has a full-length parallel taxiway on the north side as well as a partial parallel taxiway on the south. The airport has no air traffic control tower. In 2023, there were 38,678 operations, which is a 1.1% increase over 2022.

### 5.1 LVN LONG-TERM COMPREHENSIVE PLAN STATUS

In April 2018, the MAC adopted the Airlake Airport 2035 Long-Term Comprehensive Plan (LTCP). The goals of the plan included better accommodating business aircraft need by maximizing the airfield's operational capabilities and existing property footprint; maintaining or improving the Runway Protection Zone (RPZ) land use compatibility; mitigating existing issues with airspace penetrations to the extent practical; and updating the taxiway layout to reflect current industry best practices and enhance safety.

To meet these goals, the Airlake 2035 LTCP proposed completion of the final phase of the south building area alleyways, access road and associated utilities, as well as an extension to Runway 12-30. Paving of associated taxilanes and the south airport entrance road is complete, along with installation of sanitary sewer and water mains, and new utility services to the south building area.



Airlake Airport

### 5.2 LVN ENVIRONMENTAL STUDIES

The proposed extension of Runway 12-30 as well as the planned pavement rehabilitation needed for the existing portion of the runway pavement are now programmed for 2027. The MAC is actively working through the early stages of the required environmental review process. As a result, the projects associated with the review have moved in the CIP. The planned review process includes both a federal Environmental Assessment (EA) and a state Environmental Assessment Worksheet (EAW). Construction will not begin until all environmental review is completed.

### 5.3 LVN PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

The proposed runway project currently shown in 2027 is the only one that meets the criteria defined in Minnesota Statutes Section 473.614. See Table 5-1. As noted, that environmental review process is currently underway.

Table 5-1  
Airlake Projects in the CIP that Require a Mandatory EAW

Project	CIP Year Proposed	EAW Status
Runway 12-30 Improvements	2027	EA/EAW in process

### 5.4 LVN CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

Projects in 2025 at Airlake shown in the MAC 2025-2031 Preliminary CIP involve replacement of the Automated Weather Observing System (AWOS), and potentially some work on 225<sup>th</sup> Street south of the airfield. Projects in outer years consist primarily of pavement rehabilitation, build out of the remaining south hangar area taxilanes, and fencing.

The proposed projects mentioned in this section do not meet the threshold in Minnesota Statutes Section 473.614 for an EAW. Although some of the projects may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at Airlake Airport.



Airlake Airport

## 6.0 FLYING CLOUD AIRPORT (FCM)

Flying Cloud is the busiest general aviation airport in the MAC reliever system and continues to be the number two busiest airport in the State of Minnesota, behind only MSP. In 2023, the airport experienced 136,622 operations, which is an 11.7% increase when compared to 2022. Businesses appreciate both the proximity to the Twin Cities and the airport's infrastructure, which help them safely and efficiently run their businesses.

### 6.1 FCM LONG-TERM COMPREHENSIVE PLAN STATUS

In October 2010, the MAC adopted the Flying Cloud Airport Long-Term Comprehensive Plan Update. Based on the forecasts and existing airfield configuration, no airside or landside expansions were proposed in that LTCP Update.

MAC is currently preparing a 2040 long-term plan for Flying Cloud. As a part of that process, MAC is holding numerous stakeholder engagement and public information meetings. The long-term plan has been delayed while MAC continues to evaluate airfield alternatives. The update is now scheduled for completion in 2025.



Flying Cloud Airport

## 6.2 FCM ENVIRONMENTAL STUDIES

The most recent environmental review for FCM was completed in the mid-2000's for the extension to the south parallel runway from 3,900 feet to 5,000, extension of the north parallel runway from 3,600 feet to 3,900 feet, and construction of a new south building area. No projects since that time have met the criteria for environmental review.

## 6.3 FCM PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

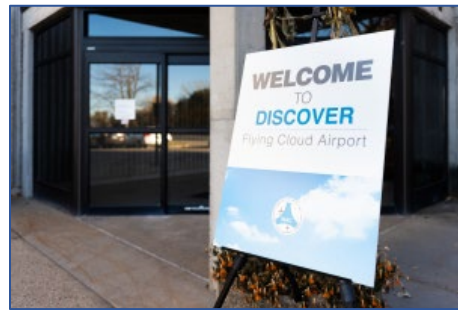
No projects in the 2025-2031 Preliminary CIP at FCM meet the criteria defined in Minnesota Statutes Section 473.614.

## 6.4 FCM CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

In the 2025-2031 Preliminary CIP, the projects proposed at Flying Cloud do not include any major improvements. Projects specifically listed in 2025 include security gate replacements, infrastructure modifications (heating and cooling equipment) to a MAC-owned facility, and access road rehabilitation.

Projects listed in later years include primarily pavement reconstruction and electrical vault modifications. The Federal Aviation Administration (FAA) is currently considering the construction of a new air traffic control tower. If construction moves forward, MAC may be required to provide new equipment and connections for existing airfield lighting, utilities, and road access. While the estimated project cost meets one of the EAW criteria, the scope of the project does not, and therefore, no EAW is required.

Although some of the projects in the outer years at FCM may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at FCM.



Flying Cloud Airport

## 7.0 CRYSTAL AIRPORT (MIC)

The Crystal Airport is located just northwest of the Minneapolis-St. Paul metropolitan area with portions of property in Crystal, Brooklyn Park and Brooklyn Center. Many businesses call the airport home, including a busy flight school, a nationally recognized airport parts and maintenance facility, and a nationally known propeller repair and overhaul facility. It also has the only turf runway within the metro area. The airport experienced a 6.9% increase in operations over 2022, with 45,541 takeoffs and landings.

### 7.1 MIC LONG-TERM COMPREHENSIVE PLAN STATUS

In October 2017, the MAC adopted the 2035 Crystal Airport Long-Term Comprehensive Plan (LTCP). The proposed improvements included converting a portion of existing blast pad pavement on each end of Runway 14L-32R to usable runway length, bringing the total length from 3,267 feet to 3,750 feet, as noted above. The parallel Runway 14R-32L has been decommissioned and was reconstructed as a taxiway. All associated electrical runway and taxiway lighting work was included along with taxiway reconfiguration to simplify airfield geometry. All construction on these improvements is now complete.

### 7.2 MIC ENVIRONMENTAL STUDIES

Based on the recommendations in the 2035 LTCP, the MAC completed a federal Environmental Assessment (EA) / state Environmental Assessment Worksheet (EAW) for the proposed improvements. The EA/EAW is a joint document prepared in accordance with the FAA policies and procedures detailed in FAA Order 1050.1F for compliance with NEPA. In addition to addressing federal environmental review requirements, the document addresses state review requirements in compliance with MEPA.

On July 31, 2019, the FAA issued a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) for the proposed Runway 14-32 Modifications project, finding the federal EA satisfies NEPA. As the Responsible Government Unit (RGU) for the project under MEPA, the MAC accepted the EAW and adopted the Findings of Fact and Hearing Officers Report at its full Commission meeting in August 2019.



Crystal Airport

### 7.3 MIC PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

There are no projects in the preliminary 2025-2031 CIP at the Crystal Airport that meet the criteria for environmental review as defined in Minnesota Statutes Section 473.614.

#### 7.4 MIC CUMULATIVE POTENTIAL FOR ENVIRONMENTAL EFFECTS

Projects in the preliminary 2025-2031 CIP at the Crystal Airport do not include any major improvements. Projects include primarily pavement reconstruction, but also security gate and fencing replacements, drainage work, improvements to MAC-owned buildings, and connection of lighting circuits to MAC's monitoring and control systems. Although some of the projects at MIC may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at MIC.

Crystal Airport





## 8.0 ANOKA COUNTY–BLAINE AIRPORT (ANE)

The Anoka County – Blaine Airport, located north of the Twin Cities metro area, is home to the most diverse aircraft fleet in the MAC’s general aviation system. A variety of vintage, experimental, recreational, and corporate aircraft are based at ANE. The airport hosted the Goodyear blimp in July 2023 during the 3M Open golf tournament.

Operations at ANE increased by 6.4% in 2023 compared to 2022, and it continued to be the second-busiest MAC airport with 69,908 operations.

### 8.1 ANE LONG-TERM COMPREHENSIVE PLAN STATUS

In June 2010, the Commission adopted the Anoka County-Blaine Airport Long-Term Comprehensive Plan Update. Based on the forecasts and existing airfield configuration, the MAC did not propose any airside or landside expansions in the LTCP Update.

The MAC anticipates the next update to the LTCP will be initiated in the next two to three years.



Anoka County-Blaine Airport

### 8.2 ANE ENVIRONMENTAL STUDIES

Prior to the 2006 extension of Runway 9-27 to 5,000 feet, MAC and the FAA completed a joint environmental review document combining a federal environmental assessment (EA) and a state environmental impact statement (EIS). The EA/EIS included review for the extension of Runway 9-27 and its corresponding taxiway from 4,000 to 5,000 feet, installation of an instrument approach system, construction of two building areas (northwest and east expansion), relocation of Xylite Street, and construction of the National Youth Golf Center.

All of these improvements are complete except for the Xylite Street relocation and the east building area expansion. The Xylite Street Relocation is currently listed in year 2028 in the preliminary 2025-2031 CIP. As a demand-driven project that ultimately supports an expansion of the east hangar area, it is possible the project could continue to be pushed out to later years in the CIP.

### 8.3 ANE PROJECTS REQUIRING PREPARATION OF AN ENVIRONMENTAL ASSESSMENT WORKSHEET

No projects in the 2025-2031 Preliminary CIP at ANE meet the criteria defined in Minnesota Statutes Section 473.614, except for one. As noted above and shown in Table 8-1 on page 19, the Xylite Street Relocation project was included in the environmental review already completed. While this project does not meet the criteria for a mandatory EAW as defined, it was included in the EA/EIS environmental review document as a component of the larger runway and hangar area program for which a Finding of No Significant Impact (FONSI) was issued in 2003.

Table 8-1  
Anoka County-Blaine Projects in the CIP that Require a Mandatory EAW

Project	CIP Year Proposed	EAW
<b>Xylite Street Relocation</b>	2028	Included in the Federal EA/State EIS Document Completed in 2003 for Proposed Improvements at ANE

#### 8.4 ANE CUMULATIVE POTENTIAL ENVIRONMENTAL EFFECTS

There are no projects currently proposed for 2025. Other projects in the Preliminary CIP in the out years include mostly pavement reconstruction, replacement of runway lighting systems, and electrical vault improvements.

Although some of the projects at ANE may have temporary impacts during construction, the MAC will use mitigation measures during construction to minimize potential adverse effects such as noise, dust, and erosion. The environmental effects of construction are temporary, will be minimized using conventional mitigation measures and best management practices, and do not constitute long-term cumulative potential effects when combined with other projects at ANE.



Hangar at Anoka County-Blaine Airport

## 9.0 NEXT STEPS

This report is being made available to the public for a 30-day review and comment period. The comment period will run from October 15, 2024 through November 15, 2024. Comments may be submitted either in writing or as part of the formal Public Hearing.

During the public comment period, comments may be submitted in writing. Please include “**MAC 2025-2031 AOEE**” in the email or letter header, and address the correspondence to:

Ms. Jenn Felger, Planning and Environment Coordinator  
Metropolitan Airports Commission  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450  
Jenn.felger@mspmac.org

A public hearing for this AOEE is scheduled as part of the regular meeting of the MAC Planning Development and Environment (PD&E) Committee on November 4, 2024, at 10:30 a.m. This committee meeting will be held on the secure side of Minneapolis-St. Paul International Airport’s Terminal 1. Be sure to give yourself time to park and enter through security screening prior to the meeting.

Please allow for ample time to arrive and get through security. Follow these instructions to attend the MAC Public Hearing:

- Park in Hourly Parking at Terminal 1. Please touch the kiosk screen to wake it, pull a ticket and bring it with you to have it validated at the meeting to avoid parking fees.
- Present a government-issued photo ID (driver's license) to the personnel at the Information Booth on Level T. They will prepare a security pass for you and direct you to the Ticketing Level and Security Checkpoint.
- At the security checkpoint, you will be asked to show your ID and security pass at that time.
- Once through security, proceed into the airport mall area. Once inside the airport mall, look for the staircase/elevator to the left of the entrance to Concourse F near the Stone Arch restaurant.

The board meetings take place at the MSP Airport Conference Center on the Mezzanine Level above the Delta Air Lines Sky Club. Use the stairs or elevator to go up one level. For more information, call 612-726-5555.

Upon completion of the AOEE process, MAC staff will finalize the 2025-2031 Capital Improvement Program (CIP) and present it to the full Commission for adoption during the month of December 2024. The December PD&E Committee meeting, scheduled for December 2, 2024, 10:30 a.m., will include a hearing officer’s report and responses to any comments received during the AOEE public comment period.

## 10.0 APPENDICES

### 10.1 APPENDIX A – MAC PRELIMINARY 2025-2031 CIP LISTING

### 10.2 APPENDIX B – DESCRIPTIONS FOR 2025 PROPOSED PROJECTS

### 10.3 APPENDIX C – DRAFT DESCRIPTIONS FOR 2026-2031 PROJECTS THAT MEET CRITERIA DEFINED IN MINNESOTA STATUTE SECTION 473.614

Please note that the project names, scopes, dollar amounts, and construction years scheduled are shown in the Appendices just as they are included in the MAC Preliminary 2025-2031 CIP. These are subject to change in the Final version of the 2025-2031 CIP or other future CIP documents.



Artwork in the MSP Terminal 1 Ticket Lobby

Notes	MSP End of Life/Replacement Projects	2025	2026	2027	2028	2029	2030	2031
<b>10 - Terminal 1</b>								
2	Concourse and Hub Tram Replacement			\$300,000,000	\$300,000,000			
4	Concourse C Moving Walkway Upgrade/Replacement			\$3,000,000				
4	Passenger Boarding Bridge Replacements	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	
5	Recarpeting Program	\$2,000,000						
5	Terminal 1 Media Mesh Replacement			\$1,400,000				
5	Terminal 1 Outbound Baggage Handling System Replacement						\$250,000,000	
<b>13 - Energy Management Center</b>								
5	Concourse E and F Bridge Heating and Cooling System Replacement	\$6,800,000						
3	GTC Dual-temperature Pump Improvements	\$2,600,000						
7	Terminal 1 Boiler & Chiller Replacement & EMC Expansion	\$250,000		\$420,000,000				
3	Variable Air Volume (VAV) Box Replacement		\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	
<b>21 - Field and Runway</b>								
2	30L Deicing Pad Expansion				\$20,000,000			
2	30L Deicing Pad Reconstruction	\$12,000,000		\$15,000,000				
5	30L EMAS Replacement	\$19,000,000						
2	Airfield Snow Melter Replacement/Upgrades	\$1,800,000	\$1,800,000	\$2,000,000	\$2,000,000			
2	Bituminous Shoulder Reconstruction	\$1,000,000	\$1,000,000	\$1,000,000				
2	Concourse G Apron Pavement Reconstruction	\$13,500,000			\$15,000,000	\$14,000,000	\$16,000,000	
2	Runway 12L-30R Reconstruction						\$40,000,000	
2	Taxiway A Pavement Reconstruction		\$4,200,000					
2	Taxiway B Pavement Reconstruction	\$7,500,000			\$6,000,000	\$5,000,000	\$8,000,000	
2	Taxiway C Pavement Reconstruction					\$10,000,000		
2	Taxiway H Pavement Reconstruction			\$6,500,000				
2	Taxiway J Pavement Reconstruction			\$7,500,000				
2	Taxiway R Pavement Reconstruction		\$9,500,000					
2	Terminal 1 Apron Pavement Reconstruction		\$11,000,000	\$13,000,000	\$11,000,000			
2	Terminal 2 Apron Reconstruction			\$6,500,000	\$8,000,000	\$8,000,000		
<b>31 - Parking</b>								
5	Parking Ramp Snow Melter Replacement/Upgrades	\$1,350,000	\$1,400,000	\$1,400,000	\$1,400,000			
3	Parking Revenue Control System		\$4,200,000					
<b>39 - Public Areas/Roads</b>								
2	28th Avenue South Reconstruction				\$3,000,000			
2	East 62nd Street Reconstruction			\$4,100,000				
2	Post Road Reconstruction Project		\$5,000,000					
2	West Cell Phone Lot Reconstruction		\$500,000					
<b>70 - General Office/Administration</b>								
3	GO Building VAV Replacement and Upgrade		\$2,000,000					
<b>MSP End of Life/Replacement Projects Subtotal</b>		<b>\$81,600,000</b>	<b>\$50,600,000</b>	<b>\$793,400,000</b>	<b>\$378,400,000</b>	<b>\$49,000,000</b>	<b>\$326,000,000</b>	<b>\$0</b>

Notes	MSP IT Projects	2025	2026	2027	2028	2029	2030	2031
	<b>10 - Terminal 1</b>							
4	Concourse C and G Digital Directory Replacement	\$800,000						
4	MAC Technology Upgrades	\$12,800,000	\$14,000,000	\$13,000,000	\$11,000,000	\$11,000,000	\$12,000,000	
5	Telecom Room Equipment Continuity (TREC)	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	
	<b>12 – Federal Inspection Station (FIS).</b>							
5	Customs and Border Protection Infrastructure	\$1,500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
	<b>36 - Terminal 2</b>							
5	Common Use Passenger Boarding Bridges Cab Cameras	\$250,000						
3	Passenger Flow Tracking	\$2,000,000						
4	Upgrade and Modernize Terminal 2 Kiosks	\$1,000,000						
	<b>46 - Hangars and Other Buildings</b>							
5	Multiple Points of Entry Facility		\$5,000,000	\$5,000,000	\$5,000,000			
	<b>63 - Police</b>							
5	Badging and Door Access (SAACS/ProWatch) Modernization		\$2,100,000					
5	Card Access Modifications	\$2,500,000	\$2,800,000		\$2,500,000			
5	Public Safety Land Mobile Radio System Solutions	\$1,000,000						
5	Public Safety Video (IVISN) Modernization	\$1,100,000	\$1,000,000	\$1,000,000				
<b>MSP IT Projects Subtotal</b>		<b>\$24,700,000</b>	<b>\$27,650,000</b>	<b>\$21,750,000</b>	<b>\$21,250,000</b>	<b>\$13,750,000</b>	<b>\$14,750,000</b>	<b>\$1,000,000</b>

Notes	MSP Long Term Comprehensive Plan Projects	2025	2026	2027	2028	2029	2030	2031
	<b>10 - Terminal 1</b>							
6	Checkpoint Expansion					\$11,000,000		
7	Concourses E and F Assessment	\$200,000						
1	D-Pod Outbound Baggage System			\$15,000,000				
7	MSP Airport Layout Plan		\$100,000	\$100,000				
7	MSP Environmental Review				\$2,000,000			
7	MSP Long Term Plan					\$3,000,000		
	<b>21 - Field and Runway</b>							
5	MSP Obstructions Removals			\$1,000,000		\$1,000,000		
5	NAVAID Relocation				\$2,000,000		\$30,000,000	
1	Runway 30R Parallel Taxiway				\$12,000,000	\$10,000,000	\$14,000,000	
	<b>31 - Parking</b>							
	Parking Capacity Assessment	\$200,000						
	<b>36 - Terminal 2</b>							
6	Terminal 2 South Expansion Enabling Work	\$123,600,000						
	<b>46 - Hangars and Other Buildings</b>							
6	Ground Service Equipment (GSE) Maintenance Facility	\$36,400,000						
<b>MSP Long Term Comprehensive Plan Projects Subtotal</b>		<b>\$160,400,000</b>	<b>\$100,000</b>	<b>\$16,100,000</b>	<b>\$16,000,000</b>	<b>\$25,000,000</b>	<b>\$44,000,000</b>	<b>\$0</b>

Notes	MSP Maintenance/Facility Upgrade Projects	2025	2026	2027	2028	2029	2030	2031
	<b>10 - Terminal 1</b>							
5	ADO Office Expansion	\$4,000,000						
9	Art Display Areas	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
9	Arts Master Plan	\$610,000	\$1,610,000	\$610,000	\$610,000	\$600,000	\$600,000	
4	Commission Chambers Lighting Upgrades	\$200,000						
4	Concourse A Heating System Upgrade	\$7,000,000						
5	Delivery Node Redevelopment	\$2,700,000	\$7,800,000	\$4,320,000	\$5,000,000			
5	F/G Connector Repairs and Improvements	\$1,100,000						
2	Folded Plate Surface Reconstruction	\$45,000,000		\$45,000,000				
2	Gold/Green Skyway Safety Improvements	\$100,000						
5	Lavatory Buildings Rehabilitation	\$4,400,000						
4	Lighting Infrastructure Technology and Equipment (LITE)	\$2,550,000	\$1,500,000	\$2,550,000	\$1,500,000	\$2,200,000	\$3,000,000	
5	LRT Stations Updates		\$15,000,000					
2	Main Mall Modernization				\$3,500,000	\$3,500,000		
4	MSP Courtesy Phone Updates and Removal	\$800,000	\$800,000	\$800,000				
5	Restroom Upgrade Program	\$2,400,000		\$2,625,000	\$2,050,000	\$2,050,000	\$2,050,000	
5	Skyclub Repairs and Improvements		\$4,000,000					
4	Steam System Upgrade Program	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000			
2	Terminal 1 Information Booth Replacements	\$850,000						
5	Terminal 1 Sand Dump Station	\$300,000						
5	Terminal 1 Tram Maintenance	\$1,250,000						
2	Terminal 1 Tug Drive Heater Replacement	\$4,500,000						
5	Terminal 1 Tug Drive Waterproofing	\$2,900,000	\$2,900,000	\$2,900,000	\$2,900,000			
4	Wayfinding Sign Replacement	\$6,500,000		\$2,000,000		\$2,000,000		\$2,000,000
5	West Mezzanine Improvements	\$16,700,000						
	<b>12 – Federal Inspection Station (FIS)</b>							
6	FIS Facility Upgrades	\$2,175,000	\$845,000	\$2,000,000				
	<b>13 - Energy Management Center</b>							
4	Building Management (IMACS) Replacement	\$800,000	\$3,400,000					
4	Chiller Plant Optimization	\$4,000,000						
4	Energy Savings Program	\$2,000,000		\$2,000,000				
4	Indoor Air Quality Monitoring System		\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	
4	MAC Automation Infrastructure Program	\$7,600,000	\$2,400,000	\$2,400,000	\$2,400,000	\$2,400,000		
3	Steam Trap Monitoring System		\$3,000,000					
4	Victaulic Piping Replacement	\$19,000,000	\$4,000,000	\$2,200,000	\$2,300,000	\$2,350,000		
	<b>21 - Field and Runway</b>							
5	Airfield Thermoplastic Markings	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000		
4	Apron Lighting LED Upgrade	\$1,000,000	\$3,000,000	\$1,000,000	\$1,000,000			
6	Field Maintenance Building Efficiency Program	\$53,000,000				\$112,000,000		\$49,000,000
5	GBAS - SLS-4000 Installation	\$7,000,000						
4	Runway LED Lighting Upgrade			\$3,000,000				
2	Terminal 2 Glycol Lift Station/Forcemain	\$1,500,000						
4	Tunnel Lighting LED Upgrade	\$1,000,000	\$900,000	\$400,000	\$1,200,000			
	<b>26 - Terminal Roads/Landside</b>							
7	Terminal 2 Cell Phone Lot Study	\$100,000						

MSP Maintenance/Facility Upgrade Projects continues on the next page

Notes	MSP Maintenance/Facility Upgrade Projects (continued)	2025	2026	2027	2028	2029	2030	2031
<b>31 - Parking</b>								
4	Electric Vehicle Charging Network Expansion	\$1,500,000	\$850,000	\$850,000	\$1,500,000	\$1,500,000	\$1,500,000	
3	Parking Guidance System	\$6,500,000						
2	Red/Blue Parking Levels 2 & 3			\$10,000,000				
2	Terminal 2 Landside Office Remodel	\$400,000						
<b>36 - Terminal 2</b>								
5	Ramp Information Display System (RIDS)	\$3,600,000						
5	Terminal 2 Baggage Handling System	\$410,000						
5	Terminal 2 Gate Area Improvements	\$3,000,000						
6	Terminal 2 Ground Transportation Waiting Area Expansion	\$400,000						
2	Terminal 2 MUFIDS/EVIDS Millwork Upgrades	\$350,000						
5	Terminal 2 Skyway to LRT Flooring Installation			\$1,000,000				
5	Terminal 2 Ticket Counter Insert Replacement			\$750,000				
3	Terminal 2 Digital Wait Time Display			\$200,000				
<b>39 - Public Areas/Roads</b>								
2	34th Avenue Reconstruction		\$8,200,000	\$8,200,000				
2	34th Avenue Sanitary Sewer Replacement		\$2,200,000					
2	Diverging Diamond Intersection Rehabilitation			\$380,000				
2	Terminal 1 Inbound Roadway Median Improvements	\$3,300,000						
4	Tunnel Fan Replacement		\$6,800,000					
<b>46 - Hangars and Other Buildings</b>								
7	Campus Out Building Study	\$300,000						
<b>56 - Trades/Maintenance Buildings</b>								
5	Fall Hazard Mitigation	\$100,000						
6	Trades Building Rehabilitation & Addition		\$25,000,000					
<b>63 - Police</b>								
5	APD Response Training Room			\$500,000				
5	Critical Infrastructure Fencing	\$850,000						
5	Emergency Communications Center Updates			\$200,000				
5	Perimeter Fence Intrusion Detection System		\$1,000,000					
5	Perimeter Gate Security Improvements	\$6,500,000	\$6,500,000					
6	Police Department Remote Threat Isolation and Training Building				\$15,500,000			
5	Public Safety Modifications	\$1,000,000		\$850,000		\$850,000		
2	Squad Parking Modifications		\$140,000					
<b>66 - Fire</b>								
4	ARFF 1 Garage Door Replacement			\$1,500,000				
5	Fire Protection Systems Upgrades	\$10,000,000			\$10,000,000			\$10,000,000
<b>70 - General Office/Administration</b>								
4	Digital Signage In/At The GO		\$300,000					
<b>76 - Environment</b>								
4	Firefighting Foam System Conversion	\$3,000,000						
4	Glycol Sewer & Storm Sewer Inspection/Rehabilitation	\$600,000				\$2,000,000	\$1,000,000	
2	Glycol Tank Roof Repairs				\$700,000			

MSP Maintenance/Facility Upgrade Projects continues on the next page



Notes	MSP Maintenance/Facility Upgrade Projects (continued)	2025	2026	2027	2028	2029	2030	2031
<b>76 - Environment, continued</b>								
4	Infield Fueling Facility Secondary Containment	\$400,000						
5	Lift Station at Ponds 1 and 2	\$2,300,000						
5	MSP Pond 3 / 494 Pond Sediment Removal & Repairs	\$5,900,000					\$14,000,000	
<b>MSP Maintenance/Facility Upgrade Projects Subtotal</b>		<b>\$256,895,000</b>	<b>\$106,595,000</b>	<b>\$118,185,000</b>	<b>\$39,110,000</b>	<b>\$134,300,000</b>	<b>\$23,400,000</b>	<b>\$61,000,000</b>

Notes	MSP Noise Mitigation Projects	2025	2026	2027	2028	2029	2030	2031
8	Noise Mitigation Projects	\$5,000,000	\$5,000,000	\$1,000,000	\$1,000,000	\$1,000,000		
<b>MSP Noise Mitigation Projects</b>		<b>\$500,000</b>	<b>\$500,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>	<b>\$1,000,000</b>		

Notes	MSP Ongoing Maintenance Programs	2025	2026	2027	2028	2029	2030	2031
	<b>10 - Terminal 1</b>							
4	Air Handling Unit Replacement		\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	
4	Baggage System Upgrades	\$5,000,000	\$4,500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
4	Conveyance System Upgrades	\$3,000,000						
4	Electrical Infrastructure Program (EIP)		\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$3,000,000	
4	Electrical Substation Replacement	\$10,000,000	\$10,000,000	\$10,000,000				
4	Emergency Power Upgrades		\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000	\$3,000,000	
4	Ground Power Substation Replacement	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
4	Plumbing Infrastructure Upgrade Program	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$800,000	\$800,000
5	Terminal Building Remediation Program	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,500,000	\$3,500,000
4	Terminal Miscellaneous Modifications	\$2,600,000	\$2,600,000	\$2,600,000	\$3,100,000	\$3,100,000	\$3,100,000	\$3,600,000
	<b>13 - Energy Management Center</b>							
4	EMC Life Safety Infrastructure Program	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
4	EMC Plant Upgrades	\$2,150,000	\$2,200,000	\$2,300,000	\$2,400,000	\$2,500,000		
	<b>21 - Field and Runway</b>							
2	Airside Electrical Construction	\$2,500,000	\$5,100,000	\$2,000,000	\$2,000,000	\$2,000,000		
2	Airside Roadway Pavement Restoration	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$3,600,000	
2	Miscellaneous Airfield Construction	\$2,500,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000		\$3,000,000
2	Pavement Joint Sealing/Repair	\$800,000	\$800,000	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000	
	<b>26 - Terminal Roads/Landside</b>							
2	Tunnel/Bridge Inspections	\$120,000	\$120,000	\$120,000	\$150,000	\$150,000	\$150,000	\$150,000
5	Tunnel/Bridge Miscellaneous Modifications	\$1,000,000		\$1,000,000		\$1,000,000		\$1,000,000
	<b>31 - Parking</b>							
2	Parking Structure Rehabilitation	\$4,750,000	\$5,650,000	\$5,000,000	\$6,000,000	\$5,175,000	\$6,350,000	
	<b>39 - Public Areas/Roads</b>							
2	Concrete Joint Repair	\$550,000	\$500,000	\$1,200,000	\$2,900,000	\$750,000	\$2,000,000	\$2,000,000
2	Landside Pavement Rehabilitation	\$500,000	\$600,000	\$1,500,000	\$900,000	\$1,600,000	\$950,000	\$2,200,000
2	Landside Utility Rehabilitation	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000		
2	Roadway Fixture Refurbishment	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$200,000	
	<b>46 - Hangars and Other Buildings</b>							
5	Campus Building Rehabilitation Program	\$1,500,000		\$1,500,000		\$1,500,000		
2	Campus Parking Lot Reconstructions			\$3,075,000	\$3,075,000			\$8,500,000
10	End of Life Campus Building Demolition	\$400,000	\$3,700,000					
2	MSP Campus Building Roof Replacements	\$17,100,000	\$10,200,000	\$10,000,000	\$10,000,000	\$15,000,000	\$8,000,000	\$5,000,000
	<b>56 - Trades/Maintenance Buildings</b>							
5	North Field Maintenance Mechanical Infrastructure Project		\$5,000,000					
4	Sump Pump Controls	\$4,000,000	\$3,500,000					
	<b>70 - General Office/Administration</b>							
5	GO Building Improvements		\$500,000		\$500,000		\$500,000	
	<b>MSP Ongoing Maintenance Programs Subtotal</b>	<b>\$76,170,000</b>	<b>\$92,670,000</b>	<b>\$79,495,000</b>	<b>\$70,225,000</b>	<b>\$71,975,000</b>	<b>\$63,550,000</b>	<b>\$42,150,000</b>

Notes	MSP Tenant Projects	2025	2026	2027	2028	2029	2030	2031
	<b>10 - Terminal 1</b>							
2	Concessions Rebids	\$500,000						
2	Concessions Upgrades/Revenue Development and Strategic Partnerships	\$375,000	\$320,000	\$295,000	\$335,000	\$340,000	\$350,000	\$400,000
5	Concourse and Gatehold Modernization	\$73,100,000						
6	Elevator and Concourse Improvements Related to Relocated United Club				\$1,000,000			
4	Terminal 1 Food Court Digital Signage		\$400,000					
	<b>36 - Terminal 2</b>							
4	Terminal 2 Concessions Marketing Digital Display		\$250,000					
2	Terminal 2 Concessions Redevelopment	\$2,000,000						
4	Terminal 2 JWO Kiosk Relocation			\$150,000				
6	Terminal 2 Supplemental Concessions	\$150,000						
	<b>39 - Public Areas/Roads</b>							
2	Tenant Parking Lot Reconstruction	\$3,400,000						
	<b>46 - Hangars and Other Buildings</b>							
6	Air Freight Facility Parking Expansion	\$2,600,000						
<b>MSP Tenant Projects Subtotal</b>		<b>\$82,125,000</b>	<b>\$970,000</b>	<b>\$445,000</b>	<b>\$1,335,000</b>	<b>\$340,000</b>	<b>\$350,000</b>	<b>\$400,000</b>

Notes	Reliever Airports Long Term Comprehensive Plan Projects	2025	2026	2027	2028	2029	2030	2031
	<b>80 - Reliever Airports</b>							
7	Reliever Airports Planning Fees	\$600,000						
	<b>81 - St. Paul</b>							
7	STP Environmental Review			\$800,000				
	<b>82 - Lake Elmo</b>							
7	21D Airport Layout Plan	\$100,000				\$500,000		
7	21D Environmental Review							\$800,000
7	21D Long Term Comprehensive Plan					\$800,000		
	<b>83 - Airlake</b>							
7	LVN Airport Layout Plan		\$100,000			\$500,000		
7	LVN Environmental Review							\$800,000
7	LVN Long Term Comprehensive Plan					\$800,000		
1	LVN Runway 12-30 Improvements			\$4,400,000				
	<b>84 - Flying Cloud</b>							
7	FCM Environmental Review		\$800,000					
6	FCM South Building Area Utilities		\$800,000					
	<b>85 - Crystal</b>							
7	MIC Airport Layout Plan				\$500,000			
7	MIC Environmental Review						\$800,000	
7	MIC Long Term Comprehensive Plan				\$800,000			
	<b>86 - Anoka County - Blaine</b>							
7	ANE Airport Layout Plan	\$500,000						
6	ANE Building Area Development - Xylite St. Relocation				\$1,000,000			
7	ANE Environmental Review			\$800,000				
7	ANE Long Term Comprehensive Plan Update	\$800,000						
<b>Reliever Airports Long Term Comprehensive Plan Projects Subtotal</b>		<b>\$2,000,000</b>	<b>\$1,700,000</b>	<b>\$6,000,000</b>	<b>\$2,300,000</b>	<b>\$2,600,000</b>	<b>\$800,000</b>	<b>\$1,600,000</b>

Notes	Reliever Airports Maintenance/Facility Upgrade Projects	2025	2026	2027	2028	2029	2030	2031
<b>80 – Reliever Airports</b>								
5	Reliever Airports Security Fencing, Gates & Lighting	\$200,000	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	\$300,000
4	Reliever Indoor Air Quality Project			\$1,400,000				
4	Relievers Building Miscellaneous Modifications	\$400,000	\$400,000	\$475,000	\$475,000	\$475,000	\$475,000	\$550,000
5	Relievers Obstruction Removal	\$300,000		\$300,000		\$300,000		
2	Relievers Pavement Rehabilitation Miscellaneous Modifications	\$300,000	\$300,000	\$350,000	\$350,000	\$350,000	\$350,000	\$400,000
6	Relievers Used Oil Sheds & Tanks	\$550,000						
<b>81 - St. Paul</b>								
6	STP Airport Perimeter Roads	\$500,000						
2	STP Airport Road and Eaton Street Retaining Wall				\$900,000			
6	STP Cold Equipment Storage Building		\$750,000					
6	STP Customs and Border Protection General Aviation Facility	\$11,000,000						
6	STP Equipment Storage Building and Employee Crew Rooms				\$4,000,000			
2	STP Floodwall Inspection and Repairs						\$300,000	
3	STP Generator Replacement						\$800,000	
2	STP Infrastructure Replacement	\$1,200,000						
3	STP Intelligent Monitoring and Control System (IMACS) Expansion			\$2,250,000				
2	STP Joint and Crack Repairs		\$100,000					
5	STP MAC Building Improvements	\$200,000		\$200,000		\$200,000		\$200,000
2	STP Pavement Mill and Overlay of Administration Building Ramp						\$500,000	
2	STP Pavement Rehabilitation-Taxilanes/Tower Road		\$750,000					
2	STP Runway 13-31 Pavement Reconstruction		\$5,000,000					
5	STP Runway 14-32 EMAS Replacement			\$10,000,000				
2	STP Storm Sewer Improvements			\$2,000,000				
2	STP Taxiway B Reconstruction and LED Edge Lighting	\$1,100,000						
2	STP Taxiway Lima Rehabilitation			\$200,000				
<b>82 - Lake Elmo</b>								
3	21D AWOS Replacement	\$200,000						
6	21D Equipment Storage Building	\$5,000,000						
3	21D Intelligent Monitoring and Control System (IMACS)				\$3,800,000			
2	21D North Building Area Pavement Rehabilitation	\$900,000						
1	21D Runway 04-22 Pavement Rehabilitation	\$4,000,000						
4	21D Taxiway Echo Edge Lighting		\$600,000					
2	21D Taxiway H Reconstruction	\$600,000						
<b>83 - Airlake</b>								
2	LVN 225TH Street Paving	\$450,000						
3	LVN AWOS Replacement	\$100,000						
2	LVN Existing Runway 12-30 Reconstruction			\$3,500,000				
3	LVN Intelligent Monitoring and Control System (IMACS)					\$1,300,000		
2	LVN North Service Road Pavement Rehabilitation			\$500,000				
2	LVN North Taxilanes Pavement Rehabilitation			\$1,250,000				
5	LVN Perimeter Fencing and Gates			\$4,000,000				
2	LVN South Building Area Utilities and Taxilanes		\$1,300,000					
2	LVN Taxiway Bravo Pavement Rehabilitation		\$600,000					

Reliever Airports Maintenance/Facility Upgrade Projects continues on the next page

Notes	Reliever Airports Maintenance/Facility Upgrade Projects (continued)	2025	2026	2027	2028	2029	2030	2031
<b>84 - Flying Cloud</b>								
2	FCM Airport Access Roads Pavement Rehabilitation			\$500,000	\$500,000	\$500,000		
6	FCM Electrical Vault Modifications			\$500,000				
5	FCM Gate Replacements	\$500,000						
2	FCM Infrastructure Replacement	\$1,750,000						
3	FCM Intelligent Monitoring and Control System (IMACS)			\$2,500,000				
5	FCM MAC Building Improvements		\$600,000					
2	FCM Northside Access Road from Bravo to November Lane	\$900,000						
2	FCM Runway 10R-28L Pavement Rehabilitation			\$2,700,000				
2	FCM Runway 18-36 Pavement Rehabilitation					\$700,000		
2	FCM Spring Lane Extension and Taxilane Connector			\$700,000				
5	FCM Tower Equipment for Airfield Lighting and Utilities		\$2,000,000					
<b>85 - Crystal</b>								
2	MIC East Taxilanes Pavement Rehabilitation		\$500,000					
2	MIC Eastside Service Road Pavement Reconstruction		\$1,500,000					
4	MIC Existing Hangar Revitalization		\$800,000					
5	MIC Gate Replacement		\$800,000					
3	MIC Intelligent Monitoring and Control System (IMACS)					\$1,300,000		
2	MIC Northside Service Road Pavement Reconstruction				\$1,200,000			
2	MIC Runway 6L-24R Pavement Rehabilitation			\$2,500,000				
2	MIC Service Road Pavement and Fencing			\$600,000				
2	MIC Stormwater Monitoring Location Drainage Repair	\$100,000						
2	MIC Taxilanes Pavement Rehabilitation	\$600,000		\$600,000				
2	MIC Taxiway Alpha Pavement Reconstruction					\$1,200,000		
2	MIC Tower Parking Lot Reconstruction	\$1,500,000						
<b>86 - Anoka County - Blaine</b>								
4	ANE Electrical Vault Improvements		\$750,000					
5	ANE Gate Controller Replacement		\$400,000					
3	ANE Intelligent Monitoring and Control System (IMACS)				\$1,300,000			
2	ANE Runway 18-36 Pavement Reconstruction		\$3,800,000					
4	ANE Runway 9-27 Edge Lighting and PAPI Replacement		\$900,000					
2	ANE Runway 9-27 Pavement Reconstruction				\$3,750,000			
2	ANE Taxilane Pavement Reconstruction - Fox Hollow			\$1,000,000				
2	ANE Taxiway B Pavement Rehabilitation					\$1,400,000		
<b>Reliever Airports Maintenance/Facility Upgrade Projects Subtotal</b>		<b>\$32,350,000</b>	<b>\$22,050,000</b>	<b>\$38,275,000</b>	<b>\$16,525,000</b>	<b>\$7,975,000</b>	<b>\$2,675,000</b>	<b>\$1,450,000</b>

OVERALL TOTALS for the PRELIMINARY CIP		2025	2026	2027	2028	2029	2030	2031
MSP Subtotal		\$681,890,000	\$279,085,000	\$1,030,375,000	\$527,320,000	\$295,365,000	\$472,050,000	\$104,550,000
Relievers Subtotal		\$34,350,000	\$23,750,000	\$44,275,000	\$18,825,000	\$10,575,000	\$3,475,000	\$3,050,000
<b>Total</b>		<b>\$716,240,000</b>	<b>\$302,835,000</b>	<b>\$1,074,650,000</b>	<b>\$546,145,000</b>	<b>\$305,940,000</b>	<b>\$475,525,000</b>	<b>\$107,600,000</b>

NOTES:

1. A project that has the potential for substantial environmental effects.
2. A reconstruction, rehabilitation, repair, or replacement that does not physically alter the original size (an EAW or EIS is not required).
3. An electrical or mechanical device that monitors, indicates or controls existing conditions (an EAW or EIS is not required).
4. An electrical, mechanical, or structural device and/or modification of an existing structure that does not significantly increase the size or passenger capacity (an EAW or EIS is not required).
5. A project that consists of safety or security enhancements, facility maintenance, or facility upgrades (an EAW or EIS is not required).
6. A new, replacement, or expansion project that does not have substantial effect (an EAW or EIS is not required).
7. Consultant fees only for planning, design, or environmental work.
8. Residential noise mitigation efforts that are designed to alleviate the impact of aircraft noise (an EAW or EIS is not required).
9. Projects associated with the Airport Foundation art program (an EAW or EIS is not required).
10. Projects involving the demolition of existing buildings (an EAW or EIS is not required).

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

## 10 – Terminal 1

**Passenger Boarding Bridge Replacements** **\$10,000,000**

This program replaces jet bridges at Terminal 1. Bridges to be replaced will be determined based on a condition assessment and input from the airlines. Aircraft parking positions will be optimized at the impacted gates and fuel pits adjusted as necessary. Podiums and door openings may also be adjusted to optimize gate hold area. It is assumed fixed walkways may need to be replaced or added to meet ADA slope requirements and gatehold areas will be upgraded with security doors, card readers, and cameras.

**Recarpeting Program** **\$2,000,000**

This project will replace carpet on Concourse E.

## 13 – Energy Management Center

**Concourse E and F Bridge Heating and Cooling System Replacement** **\$6,800,000**

This is the third of three phases of work to replace and improve the heating and cooling systems on the bridges to Concourses E and F. This phase will include steam and condensate piping above grade through E Bridge connector, steam pressure reducing station in ground level, heat exchangers and water pumps in penthouse of E will be replaced. In the penthouse of the F Bridge, heat exchangers and water pumps will be replaced.

**GTC Dual-temperature Pump Improvements** **\$2,600,000**

This project will replace end of life pumps and supporting infrastructure. This is the second of two phases of this work.

**Terminal 1 Boiler and Chiller Replacement and EMC Expansion** **\$250,000**

This study phase of the program will focus on project phasing for the replacement of equipment in the Energy Management Center with a more efficient design, as well as building impacts to remove the old equipment and bring the new equipment into the building.

## 21 – Field and Runway

**30L Deicing Pad Reconstruction** **\$12,000,000**

This is the second of three phases to reconstruct the deicing pad at Runway 30L.

**30L EMAS Replacement** **\$19,000,000**

This project will replace the Engineered Material Arresting System (EMAS) at the end of Runway 30L which is reaching the end of its useful life.

**Airfield Snow Melter Replacement/Upgrades** **\$1,800,000**

This project will replace, modify and/or upgrade snow melters on the airfield that are beyond their useful life.

**Bituminous Shoulder Reconstruction** **\$1,000,000**

This project will reconstruct full depth bituminous shoulders along Runway 12L-30R from Taxiway P10 to Taxiway M and from Taxiway P3 to Taxiway P1. This work will restore transverse grades to shoulders to improve drainage and meet FAA standards. Work will include removals, crushed aggregate base, bituminous pavement, pavement marking, and electrical construction.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**Concourse G Apron Pavement Reconstruction** **\$13,500,000**

This project will reconstruct a portion of the apron area adjacent to Concourse G. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, fuel pits, and pavement marking.

**Taxiway B Pavement Reconstruction** **\$7,500,000**

This project will reconstruct a portion of Taxiway B. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, bituminous shoulders, pavement marking, and taxiway centerline lights.

**31 – Parking**

**Parking Ramp Snow Melter Replacement/Upgrades** **\$1,350,000**

This project will replace, modify and/or upgrade snow melters in the parking ramps that are beyond their useful life.

**70 – General Office/Administration**

**GO Building VAV Replacement and Upgrade** **\$3,800,000**

This project consists of replacing 122 Variable Air Volume (VAV) boxes (91 with reheat coils), upgrading controls on 91 locations of perimeter radiation, and home-running all IP controls in the General Office (GO) building. VAVs regulate air flow coming off of air handling units and temper air temperature. Due to their age, the existing VAVs are not “smart” technology and heat spaces during cooling seasons when nighttime setback temperatures are utilized. In a sustainability pilot project approved by the Executive Sustainability Committee, nighttime setbacks were used in the GO as a way to reduce energy costs and GHG emissions. The existing VAVs not only prevent the use of nighttime setback temperatures but actually compound energy and emissions impacts by pulling heat from boilers to put extra heat into the building. The existing VAVs were installed in 1998 and are well past their end-of-life; continued use risks failures of controls, dampers and heating coils.

**MSP IT PROJECTS**

MSP IT Projects include those that have a significant amount, if not all, technology-related enhancements, maintenance, or restructuring.

**10 – Terminal 1**

**Concourse C Digital Directory Replacement** **\$800,000**

The digital displays on Concourses C will be replaced to provide a consistent customer experience similar to the displays in the Terminal 1 mall.

**MAC Technology Upgrades** **\$12,800,000**

Each year, there are several IT projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Work may include Fiber Optic Cable Upgrades, MACNet maintenance and upgrades, EVIDs/MUFIDs digital signs, Wireless System enhancements, and MAC Public Address System maintenance and upgrades. The list of potential projects will be finalized in early 2025.



## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**Telecom Room Equipment Continuity (TREC)** **\$1,750,000**

The MAC network (MACNet) carries, along with other information, credit card data collected from the landside parking revenue control system. Merchants like the MAC are required to meet credit card security standards created to protect card holder data. Among these requirements are security standards for the physical locations where MACNet equipment is located. Additionally, the network equipment itself must have added security features to prevent unauthorized network access. This multi-year program addresses these standards by providing security equipment and relevant network hardware for the 150 telecommunications rooms on the MAC campus.

**12 – Federal Inspection Station (FIS)**

**Customs and Border Protection Infrastructure** **\$1,500,000**

MAC is responsible for supplying and maintaining Customs and Border Protection (CBP) infrastructure. In addition to the camera system, CBP has other infrastructure standards that need to be addressed. MAC and its project consultants will partner with CBP to create, schedule, and implement the new system equipment and operating requirements consistent with MAC and CBP Policies and Standards.

**36 – Terminal 2**

**Common Use Passenger Boarding Bridges Cab Cameras** **\$250,000**

This project will add IVISN-connected cameras to the cab of the common use passenger boarding bridges that currently do not have them and are not under construction (H5-H10, E1 and E3).

**Passenger Flow Tracking** **\$2,000,000**

This project will provide a program to track and analyze passenger movements and predict facility performance.

**Upgrade and Modernize Terminal 2 Kiosks** **\$1,000,000**

This project will upgrade and modernize Terminal 2 common-use kiosks.

**63 – Police**

**Card Access Modifications** **\$2,500,000**

This is a multi-year program to refresh the inventory of card access security readers as they get to end of life, add outdoor biometric readers, add mobile card readers, add other readers as needed throughout the campus, and align card access control with other surveillance technology including IVISN.

**Public Safety Land Mobile Radio System Solutions** **\$1,000,000**

MAC public safety, along with additional MAC departments, operates on the statewide 800 MHz Allied Radio Matrix for Emergency Response (ARMER) system. All MAC departments with radio equipment that operates on the ARMER system have access to regional and statewide talk groups which support the ability to communicate during large-scale incidents where interoperability is crucial. As the MAC continues to flourish and grow there is a continuous need to both identify and correct radio frequency and LTE coverage deficiencies to ensure seamless communications during critical situations.

**Public Safety Video (iVISN) Modernization** **\$1,100,000**

This project will assess, roadmap, and modernize our camera system with AI components.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

## MSP LONG TERM COMPREHENSIVE PLAN PROJECTS

MSP Long Term Comprehensive Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted passenger needs.

### 10 – Terminal 1

**Concourses E and F Assessment** **\$200,000**

This study will document the condition and potential remaining useful life of Concourses E and F.

### 31 – Parking

**Parking Capacity Assessment** **\$200,000**

This study will document parking capacity and identify catalysts for additional parking construction.

### 36 – Terminal 2

**Terminal 2 South Expansion Enabling Work** **\$123,600,000**

This project funds preliminary planning efforts to better define a future expansion of Terminal 2 to the south.

### 46 – Hangars and Other Buildings

**Ground Service Equipment (GSE) Maintenance Facility** **\$36,400,000**

This project will construct a stand-alone facility for lease to third party ground handling operators to maintain and repair ground handling equipment necessary to support ground operations for the airlines. This facility will replace one that no longer meets all tenant needs and obstructs future construction of the south expansion of Terminal 2.

## MSP MAINTENANCE/FACILITY UPGRADE PROJECTS

MSP Maintenance/Facility Upgrade projects include those that provide improvements to individual buildings or systems across the campus on a one-time or short-term basis.

### 10 – Terminal 1

**ADO Office Expansion** **\$4,000,000**

Additional office and meeting space is needed for the Airport Director's Office, suite 3000, to function properly. This expansion and remodel will support increasing MAC staffing numbers and changes in workspace needs.

**Art Display Areas** **\$250,000**

This program is a continuation of the existing program, in partnership with the MSP Foundation, to provide opportunities and space build out for the display of permanent and temporary/rotating art exhibits.

**Arts Master Plan** **\$610,000**

This program supports procurement of commissioned art and rotating exhibits as part of the Percent for Arts program.

**Commission Chambers Lighting Upgrades** **\$200,000**

Update the lighting control system in the Commission Chambers.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**Concourse A Heating System Upgrade** **\$7,000,000**

This project will replace the entire heating water system on Concourse A. The new system will include air handling unit fans, heat exchangers, pumps, piping, VAV boxes, FTR, and solar photovoltaic panels. All new equipment will have updated controls that connects into IMACS.

**Delivery Node Redevelopment** **\$2,700,000**

MAC’s existing node delivery and storage system requires long-term improvements at Terminal 2 and Terminal 1 (Concourses A, C, E, F, and G) to provide for safe and efficient delivery, by the logistics company, to MAC and airport tenants. This program will improve or replace existing nodes with more centralized locations that should include loading docks, elevators where needed, adjacent storage, trash and recycling, etc. The 2025 project is planned to improve the delivery node at Concourse D.

**F/G Connector Repairs and Improvements** **\$1,100,000**

The project will make the needed repairs to the F/G Connector which has been hit by vehicles multiple times. The project will further assess and remediate any remaining cosmetic damage, add additional headache bars, clearance signage and/or warning systems, and make any other permanent repairs needed to bring the structure to its original condition.

**Folded Plate Surface Reconstruction** **\$45,000,000**

This is the second of three phases to repair and replace the roof assembly on the folded plate roof at Terminal 1.

**Gold/Green Skyway Safety Improvements** **\$100,000**

This project will study options to modify the slanted glass of the Green and Gold Skyways to address snow/ice buildup and fall concerns.

**Lavatory Buildings Rehabilitation** **\$4,400,000**

This project will address on-going maintenance issues and aging components of the lavatory buildings at Terminal 1. This project will include a verification and assessment of the structure and roof and make repairs as need. The project will also provide, where needed, new vapor proof LED lighting, IVISN cameras, personnel doors, concrete floor waterproofing, and new tricherators. The project will also provide an exterior connection or removal of the Delta glycol tank located inside the G lavatory building. This project will replace the Terminal 1 lavatory building coiling garage doors at G1 and D1 with new high traffic breakaway rubber doors. These doors are designed to break away upon impact which will greatly reduce the long-term repair and replacement costs associated with the existing overhead coiling doors.

**Lighting Infrastructure Technology and Equipment (LITE)** **\$2,550,000**

This is a multi-year program that will analyze, assemble, and organize lighting system upgrade recommendations for the MSP campus. Annual investment in lighting infrastructure is necessary to ensure its safe operation, reduce energy and maintenance costs, and to implement technology upgrades to improve lighting quality. Light fixtures age and degrade due to time, heat or exterior elements. Lighting technologies upgrades will also provide for more energy efficient lighting systems.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **MSP Courtesy Phone Updates and Removal** **\$800,000**

This project will replace courtesy phones with ADA-compliant phones and signage including new lights as needed, consistent with those addressed in the Operational Improvements program. The project will also remove phones as recommended by a subject matter expert consultant.

### **Restroom Upgrade Program** **\$2,400,000**

A study of all restrooms in Terminal 1 was completed in 2010 and a program developed to upgrade/modernize the restrooms at Terminal 1. From this study, each restroom was prioritized based on its condition. This program provides for the phased modernization of the Terminal 1 restrooms to include upgraded finishes, lighting, air quality, energy saving upgrades, and ADA compliance. The 2025 phase of the program is planned to address restroom upgrades in the Ground Transportation Center.

### **Steam System Upgrade Program** **\$1,600,000**

This program will replace steam pressure reducing stations that are near or past the end of their useful life. The program will also replace heat exchangers in two mechanical rooms and replace valves in the boiler fuel system piping.

### **Terminal 1 Information Booth Replacements** **\$850,000**

Replacement of seven existing information booths with six new booths at Terminal 1 and one at Terminal 2, including assisted listening systems and other IT improvements.

### **Terminal 1 Sand Dump Station** **\$300,000**

The project adds facilities for MAC and tenants to properly dispose of sand collected from tug drives and airside roadways.

### **Terminal 1 Tram Maintenance** **\$1,250,000**

The project will provide replacement parts and maintenance for the concourse and hub tram systems to extend their useful life.

### **Terminal 1 Tug Drive Heater Replacement** **\$4,500,000**

This project will replace all existing Terminal 1 tug drive steam unit heaters with hot water unit heaters.

### **Terminal 1 Tug Drive Waterproofing** **\$2,900,000**

The Terminal 1 tug drive was last sealed and waterproofed in 2007-2010. Concrete waterproofing typically has a 10-year lifespan and needs to be redone in order to minimize water infiltration into the structure and lower-level spaces. This project would waterproof the concrete for the entire tug drive area located above basement level spaces.

### **Wayfinding Sign Replacement** **\$6,500,000**

Wayfinding is a critical customer service piece of our passenger's experience at MSP. Existing wayfinding signs are outdated, provide information no longer relevant, or are no longer illuminated. This program replaces the failed cold-cathode illumination with LED backlit signs as it is not practical or cost effective to repair them. This program updates sign information, locations, and provides new illuminated signs and/or digital signs where needed at Terminal 1 and Terminal 2 and supports repair that exceeds routine maintenance budgets. The 2025 phase will also support improvements to the Tram wayfinding and address terminal naming consistency.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **West Mezzanine Improvements** **\$16,700,000**

This project provides Air Handling Unit replacement, an airport employee breakroom, and a restroom upgrade while efficiently improving and reallocating space on the West Mezzanine.

### ***12 – Federal Inspection Station (FIS)***

#### **FIS Facility Upgrades** **\$2,175,000**

The FIS Facility Upgrades project is a multi-year project to bring the FIS facilities in Terminal 1 and Terminal 2 up to the ATDS standards and other required improvements as prescribed by CBP.

### ***13 – Energy Management Center***

#### **Building Management (IMACS) Replacement** **\$800,000**

This project will assess, roadmap, and modernize MAC’s energy, water, HVAC, & people mover management systems.

#### **Chiller Plant Optimization** **\$4,000,000**

This project installs new sensors throughout the chilled water system, installs variable frequency drives for pumps, and removes pumps in the system that are no longer necessary. Additionally, this project installs a new program on the MAC network, connected to IMACS, to operate the chiller plant at terminal 1. This program trends data within the system and proactively modifies its operations to run in the most efficient manner, while maintaining the cooling capacity to the terminal.

#### **Energy Savings Program** **\$2,000,000**

This phase of the program will replace aging transformers and chilled water valves.

#### **MAC Automation Infrastructure Program** **\$7,600,000**

This is a continuation of a multi-year program to upgrade all MAC building automation systems to an open architecture protocol so that MAC can bid maintenance and construction contracts more competitively. This project will replace sole-source controllers such as Siemens and Legacy Honeywell with controllers from Honeywell, Circon, Distech, and TAC systems that are LonMark certified products.

#### **Victaulic Piping Replacement** **\$19,000,000**

This phase of a multi-year program will replace the victaulic piping and valves in Terminal 2. While victaulic pipe fittings allow for the pipe to be quickly and easily disassembled when needed, it has been discovered that the joints cause leaking because the seals shrink when they cool due to shutdowns and service disruptions which occur frequently at MSP and then don’t hold tight when the system is restored to normal operation. In addition, this year’s effort will support efficiency upgrades to the systems at Terminal 2 as part of the North Expansion project.

### ***21 – Field and Runway***

#### **Airfield Thermoplastic Markings** **\$1,600,000**

Following a successful pilot installation of thermoplastic markings, this program will install thermoplastic markings at complex taxiway/runway intersections. 2025 is the first of five planned phases of this work.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **Apron Lighting LED Upgrade** **\$1,000,000**

This project will replace the older apron lighting units with more efficient LED fixtures.

### **Field Maintenance Building Efficiency Program** **\$53,000,000**

This program will develop a consolidated field maintenance campus to ensure improvement to winter operations and vehicle fueling for MAC campus. The 2025 phase will provide a salt and sand storage building and fueling facility.

### **GBAS – SLS-4000 Installation** **\$7,000,000**

Delta Air Lines has requested increased precision approach capabilities to Runway 04 and has agreed that installation of a GBAS would help address the need. Due to a long-standing contract between MAC and Honeywell that grew out of an R&D partnership, MAC will receive the ground station and RMSUs at a discount.

### **Terminal 2 Glycol Lift Station/Forcemain** **\$1,500,000**

Project provides for construction of a glycol lift station and forcemain to transport glycol-impacted stormwater, collected from the Terminal 2 Apron, across Runway 4-22, Taxiway C, and Taxiway M to the existing airfield glycol sewer located west of Service Road M. The lift station and forcemain will be sized to accommodate future expansion.

### **Tunnel Lighting LED Upgrade** **\$1,000,000**

This program will replace existing high intensity discharge type lighting with LED to save energy and reduce maintenance.

### ***26 – Terminal Roads/Landside***

#### **Terminal 2 Cell Phone Lot Study** **\$100,000**

Traffic delays due to curbside queueing at Terminal 2 have dramatically increased during the past year. This trend can be expected to continue as Terminal 2 continues to expand gate space, airlines, and capacity. Many customers report being unaware of the existing cell phone lot on Post Road, or they perceive it as too far from Terminal 2. This study will evaluate options to address these needs.

### ***31 – Parking***

#### **Electric Vehicle Charging Network Expansion** **\$1,500,000**

This is the first of a six-year program to install electric vehicle chargers to meet passenger and employee demand and support MAC's sustainability goals.

#### **Parking Guidance System** **\$6,500,000**

This project will install parking stall availability indicators in MAC's parking ramps.

#### **Terminal 2 Landside Office Remodel** **\$400,000**

This project will remodel the Landside Office in the Terminal 2 Parking Management Office to support increased demand for TNC Driver Permits as well as taxi and commercial vehicle permits.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **36 – Terminal 2**

#### **Ramp Information Display System (RIDS) \$3,600,000**

This project will provide Ramp Information Display System (RIDS) including aircraft parking assistance at Terminal 2 gates not included in the Terminal 2 North Expansion scope. The system will be integrated with MAC's Resource Management System (RMS).

#### **Terminal 2 Baggage Handling System \$410,000**

This project will provide touch screen activation to provide functionality consistent with Terminal 1 and carousel refurbishment as needed.

#### **Terminal 2 Gate Area Improvements \$3,000,000**

This project will conclude the multi-year recarpeting program, replacing end of life carpeting at gates H1-5 and on the passenger boarding bridges. The project will also provide gate area improvements, including replacement of gate desks and podiums, and seating with charging ports.

#### **Terminal 2 Ground Transportation Waiting Area Expansion \$400,000**

This project will expand the TNC and shuttle customer waiting area in the Terminal 2 Ground Transportation Center.

#### **Terminal 2 MUFIDS/EVIDS Millwork Upgrades \$350,000**

Replace old MUFIDS display stands to current MAC standard design.

### **39 – Public Areas/Roads**

#### **Terminal 1 Inbound Roadway Median Improvements \$3,300,000**

This project will replace the Terminal 1 monument sign near Highway 5, improve the median landscaping, and replace the static overhead roadway signs with digital.

### **46 – Hangars and Other Buildings**

#### **Campus Out Building Study \$300,000**

This project will assess non-terminal buildings on the MSP campus and will include verifying existing mechanical, electrical, plumbing, HVAC and building envelope systems and any deferred maintenance needed. This study will aid in developing future CIP projects and/ or programs and develop information for building asset management. This study will also inform sustainability and resiliency goals to identify energy savings and emissions reductions.

### **56 – Trades/Maintenance Buildings**

#### **Fall Hazard Mitigation \$100,000**

This project study will survey the MAC campus and reliever airports to identify areas that are out of compliance with OSHA's requirements for fall protection in general industry (29 CFR 1910 Subpart D - Walking and Working Surfaces). Areas to be surveyed include: unprotected roof edges, openings in walls and mezzanines, manholes, fixed ladders greater than 24 feet, and fixed ladders with cages. This will inform planning of future phases of mitigation if necessary.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **63 – Police**

#### **Critical Infrastructure Fencing** **\$850,000**

Install permanent security fencing North of Now Boarding and West of the FAA Building and the MAC General Office Building to run parallel with 28<sup>th</sup> Avenue until it connects with the Air Operations Area (AOA) Perimeter Security Fencing near Gate 405.

#### **Perimeter Gate Security Improvements** **\$6,500,000**

The 2025 project will provide additional vehicle lanes at Gate 269 to improve throughput without compromising security.

#### **Public Safety Modifications** **\$1,000,000**

This program enhances the safety of the MSP campus through door hardware, signage, security controls, and other equipment to provide for egress requirements, code compliance, security conformity, and emergency responder access.

### **66 – Fire**

#### **Fire Protection Systems Upgrades** **\$10,000,000**

This is the first of a multi-year program to upgrade fire alarm and water-based fire protection systems and associated components on the MSP campus.

### **76 – Environment**

#### **Firefighting Foam System Conversion** **\$3,000,000**

This project will support converting firefighting foam from the AFFF mil-spec foam to F3 foam without intentionally added PFAS. This conversion includes multiple buildings, vehicle systems, project management, and firefighting equipment.

#### **Glycol Sewer & Storm Sewer Inspection/Rehabilitation** **\$600,000**

This project provides for cleaning and video inspection of gravity sewers, including deicing pads, plug and pump deicing areas, and conveyance sewer. This project also includes pressure testing of glycol forcemains.

#### **Infield Fueling Facility Secondary Containment** **\$400,000**

Modification to the Infield Fueling Facility to provide secondary containment around the 12,000-gallon aboveground storage tank.

#### **Lift Station at Ponds 1 and 2** **\$2,300,000**

This project provides for construction of two stormwater lift stations adjacent to MSP Ponds 1 and 2. The lift stations will utilize the existing 8-inch forcemain to divert water from one pond to the other to facilitate pond cleaning and maintenance.

#### **MSP Pond 3 / 494 Pond Sediment Removal and Repairs** **\$5,900,000**

Removal of accumulated sediment in MSP Pond 3 and 494 Pond. Repair underflow baffle on 494 Pond outlet structure, repair or replace gate valves on the outlet pipes to the Minnesota River.



# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

## MSP NOISE MITIGATION PROJECTS

**Noise Mitigation Consent Decree Amendment** **\$500,000**

The Consent Decree First Amendment Program is a residential noise mitigation program that began in March 2014 under the terms of an amended legal agreement (Consent Decree) between the Metropolitan Airports Commission (MAC) and the cities of Richfield, Minneapolis, and Eagan, and approved by the Hennepin County District Court (effective until December 31, 2024). Under this program, eligibility of single-family and multi-family homes will be determined annually, based upon actual noise contours that are developed for the preceding calendar year, beginning in March 2014. This project will provide noise mitigation for those single family and multifamily homes meeting the eligibility requirements of the program.

## MSP ONGOING MAINTENANCE PROJECTS

MSP On-Going Maintenance projects include buildings, systems, pavements, and other infrastructure that require improvements on an annual basis in order to maintain the facilities and manage MAC assets.

### 10 – Terminal 1

**Baggage System Upgrades** **\$5,000,000**

This multi-year program will provide necessary upgrades to the inbound and outbound baggage system not covered by general system maintenance. The 2025 and 2026 projects will provide system stabilization to maintain functionality until the system reaches the end of its useful life and is replaced.

**Conveyance System Upgrades** **\$3,000,000**

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 useful life of each system including the availability of replacement parts and technical support of the equipment. 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 safety devices or features that are commonly installed on modern equipment. This multi-year program modernizes and replaces elements of the conveyance systems and installs new conveyance systems if needed.

**Electrical Substation Replacement** **\$10,000,000**

This is a multi-year program to replace electrical substations which are at or very near end of life. This program will also improve redundancy.

**Ground Power Substation Replacement** **\$10,000,000**

This program is focuses on updating and improving substations that serve airside operations such as jet bridges, and providing heating, cooling, and power for parked aircraft. These substations also provide power for charging electric ground service vehicles. This program will position MSP to be able to meet new demands for ground equipment, including an increase in electric vehicle charging.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**Plumbing Infrastructure Upgrades \$700,000**

In 2010, MAC staff prepared a preliminary study of the reliability and maintainability of the existing plumbing infrastructure. Portions of the existing plumbing infrastructure serving Terminal 1 are over 40 years old, have systems that are undersized for today’s demands, contain isolation valves that are either inaccessible or no longer functional, and utilize aging water meter systems. There are also deteriorated sections of the existing sanitary and storm water systems. This ongoing program was implemented to upgrade the plumbing infrastructure system to meet current code requirements and MAC standards.

**Terminal Building Remediation Program \$3,000,000**

Continual maintenance of the terminal buildings is imperative to passenger comfort and safety as well as sustainability of the MAC asset. Age and weather contribute to building deterioration, mold, and other health issues. Building and concourse envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel repair/replacement, and soffit repair/replacement and insulation systems.

**Terminal Miscellaneous Modifications \$2,600,000**

Each year, there is a list of maintenance projects that are beyond the resources of MAC’s maintenance and trades staff to accomplish. These projects are prioritized and completed either as a series of contracts or as purchase orders. Typical work includes door replacements, emergency upgrades to mechanical, electrical, plumbing or HVAC systems, loading dock work, etc. The list of potential projects will be compiled and prioritized in early 2024.

**13 – Energy Management Center**

**EMC Life Safety Infrastructure Program \$1,900,000**

This program will replace life safety equipment and devices associated with the heating, ventilation, and air conditioning system throughout MSP campus. Equipment includes gas detection sensors and life safety dampers. Additionally, all new equipment and devices will connect to IMACS for monitoring and control.

**EMC Plant Upgrades (T1 & T2) \$2,150,000**

This multi-year program provides upgrades to the MAC’s Energy Management Center (EMC) Boiler and Chiller Plants at both Terminal 1 and Terminal 2 as well as other facilities on the MSP campus. The work includes upgrades to the aging Chilled Water and Heating Water systems. The pumping and piping systems on both the heating and cooling systems are aging and in need of repair work beyond regular maintenance.

**21 – Field and Runway**

**Airside Electrical Construction \$2,500,000**

This program provides for the removal and replacement of airfield lighting and signage with LED technology, and lighting control upgrades.

**Airside Roadway Pavement Restoration \$1,200,000**

This is an ongoing program to rehabilitate roadways on the airfield through bituminous overlays, seal coats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. The pavement condition index report as well as an inspection of the pavement will be completed to determine the areas most in need of repair on an annual basis.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **Miscellaneous Airfield Construction** **\$2,500,000**

This program supports Part 139 Airport Certification through grading and drainage improvements within runway safety areas, airfield pavement marking modifications, and other miscellaneous airside projects that are too small to accomplish independently or arise unexpectedly.

### **Pavement Joint Sealing/Repair** **\$800,000**

This is an ongoing program to provide for the resealing of joints, sealing of cracks, and limited surface repairs on existing concrete pavements. The areas scheduled for sealing will be as defined in the overall joint sealing program or as identified by staff inspection in the early spring of each year.

### ***26 – Terminal Roads/Landside***

#### **Tunnel/Bridge Inspections** **\$120,000**

The MSP Campus has MAC-owned bridges and tunnels. Bridge and tunnel inspections are conducted each year to identify maintenance and repairs which are then implemented in a timely fashion.

#### **Tunnel/Bridge Miscellaneous Modifications** **\$1,000,000**

This program will complete maintenance of the MAC-owned bridges and tunnels identified in the annual inspections. Maintenance work includes repairs, painting, bearing assembly and other miscellaneous items.

### ***31 – Parking***

#### **Parking Structure Rehabilitation** **\$4,750,000**

This is an annual 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, railing refinishing, and lighting improvements.

### ***39 – Public Areas/Roads***

#### **Concrete Joint Repair** **\$550,000**

This project will complete landside pavement joint repair on MSP campus roadways as a preventative maintenance activity to prolong the existing pavement from reconstruction.

#### **Landside Pavement Rehabilitation** **\$500,000**

This is an ongoing program of preventative maintenance activities such as crack sealing, surface treatments, and resurfacing on roadways located outside of the Air Operations Area (AOA). This program effectively slows deterioration rates, extends service life and delays need for total reconstruction of bituminous and concrete pavements. Inspection of pavements and appurtenances determines what areas are to be prioritized for rehabilitation under each year’s project.

#### **Landside Utility Rehabilitation** **\$750,000**

Each year there are numerous landside utility projects that are beyond the resources of MAC’s staff and operating budget to accomplish. These projects are prioritized annually and completed with either a series of contracts or purchase orders. Electric power, sanitary sewer, storm sewer and watermain improvements will be addressed with this program. Also, a study will be conducted as part of the first year’s project to identify future potential projects. The study will be updated annually reflect current priorities.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**Roadway Fixture Refurbishment** **\$150,000**

Many of the light poles, clearance restriction boards, sign units, fence sections, and canopies on the airport roadways need repainting and maintenance. This project provides for fixture refurbishment.

***46 – Hangars and Other Buildings***

**Campus Building Rehab Program** **\$1,500,000**

Continual maintenance of MAC non-terminal buildings is imperative in providing a stable infrastructure and meeting the MAC’s sustainability goals. Age and weather contribute to building deterioration, mold and other health issues. Building envelope issues include curtain wall systems, glazing, sealant repair/replacement, louver repair/replacement, metal panel replacement and/or painting/tuck-pointing, structural repair and insulation systems. This program will also include repair/replacement related to interior issues. This is part of an on-going program to maintain MAC buildings as assets.

**End of Life Campus Building Demolition** **\$400,000**

This is the first of multiple years of demolition of buildings to be replaced by the MAC Storage Facility being constructed in 2024.

**MSP Campus Building Roof Replacement** **\$17,100,000**

A report has been developed within the MAC that evaluates one-half of the roofs every other year. This on-going program allows these roofs that have been evaluated to be prioritized and programmed for repair. 2025 will focus on the MAC General Office Building,

***56 – Trades/Maintenance Buildings***

**Sump Pump Controls** **\$4,000,000**

This project will rehabilitate sump pumps older than five years across the campus and provide a new automation system at each location. Additionally, each sump pump will connect to IMACS for remote monitoring and control. This will help MAC Plumbing understand when there is a problem by receiving an alarm within their plumbing shop.

**MSP TENANT PROJECTS**

MSP Tenant projects include those that enhance or expand tenant or leasehold facilities that MAC supports, with the tenants reimbursing the costs to MAC for work within leasehold spaces.

***10-Terminal 1***

**Concessions Rebids** **\$500,000**

This project will prepare five to six spaces in Terminal 1 to support the concessions rebid process.

**Concessions Upgrades/Revenue Development and Strategic Partnerships** **\$375,000**

This is an annual program to fund miscellaneous upgrades such as finishes, furniture, signage, and/or modified connections to utilities for the concession programs or other revenue generating programs at the airport. The budget will also provide leasehold improvements to the strategic partnerships activation sites in order to prepare space for the partners’ construction.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **Concourse and Gatehold Modernization** **\$73,100,000**

This is the third phase of the Concourse and Gatehold Modernization program and will complete work in Concourses A, B, and G. Through a reimbursable agreement, Delta Air Lines will complete MAC-funded work including ceiling and lighting improvements, window tint, wainscoting, column wraps (excluding branding), paint (excluding branding), wayfinding information displays (“WIDS”), and flooring in the public area concourse corridors (including terrazzo, tile, and carpet where applicable). The program budget will also support MAC consultant fees for design collaboration and project oversight.

### ***36-Terminal 2***

#### **Terminal 2 Concessions Redevelopment** **\$2,000,000**

This project will support concessions spaces at the central portion of Terminal 2 and be coordinated with lease rebidding.

#### **Terminal 2 Supplemental Concessions** **\$150,000**

Capital to invest into additional utilities, flooring, electrical, water, etc. for additional concessions at Terminal 2.

### ***39 – Public Areas/Roads***

#### **Tenant Parking Lot Reconstruction** **\$3,400,000**

This project reconstructs the pavement surrounding tenant space at 2120 East 77th Street (former DHL tenant space) due to deteriorating pavement. The project will include but is not limited to: pavement removal, excavation, grading, bituminous paving, pavement marking, and utility improvements.

### ***46 – Hangars and Other Buildings***

#### **Air Freight Facility Parking Expansion** **\$2,600,000**

This project will expand employee and ground service equipment parking areas at the Air Freight Facility.

## **RELIEVER AIRPORTS LONG TERM COMPREHENSIVE PLAN PROJECTS**

Reliever Airport Long Term Comp Plan projects include projects that enhance or expand the airport facilities in order to meet existing or forecasted operational needs.

### ***80 – Reliever Airports***

#### **Reliever Airports Planning Fees** **\$600,000**

This project funds consultant support of FAA-required planning activities to be completed prior to project approvals.

### ***82 – Lake Elmo***

#### **21D Airport Layout Plan** **\$100,000**

The new ALP will show current conditions and any development proposed in the Long-Term Comprehensive Plan (LTCP). A portion of the budget will be used to acquire new AGIS base mapping to create a new Airport Layout Plan (ALP) set that complies with current FAA guidelines and criteria.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **86 – Anoka County - Blaine**

#### **ANE Airport Layout Plan \$500,000**

The new ALP will show current conditions and any development proposed in the Long-Term Comprehensive Plan (LTCP). A portion of the budget will be used to acquire new AGIS base mapping to create a new Airport Layout Plan (ALP) set that complies with current FAA guidelines and criteria.

#### **ANE Long Term Comprehensive Plan Update \$800,000**

This project will review current airport facilities, identify service gaps, and better facilitate the safe movement of aircraft at Anoka County - Blaine Airport, which is part of the MAC's system of reliever airports designated by the FAA to reduce congestion at the Minneapolis-St. Paul International Airport and to provide improved general aviation facilities in the overall community.

### **RELIEVER AIRPORTS MAINTENANCE/FACILITY UPGRADE PROJECTS**

Reliever Airport Maintenance / Facility Upgrade projects include improvements to buildings, systems, pavements and other infrastructure across the Reliever Airport system on a one-time or short-term basis.

### **80 – Reliever Airports**

#### **Relievers Security Fencing, Gates, and Lighting \$200,000**

This program will address ongoing needs for repairs and modifications to the Reliever Airports' perimeter chain link fencing, gate vehicle access points, and lighting to enhance safety and security in landside areas.

#### **Relievers Building Miscellaneous Modifications \$400,000**

This program will address ongoing needs for repairs and modifications of MAC-owned buildings at the five of the reliever airports, excluding St. Paul. These items may include crew rest areas, heating, air conditioning, structural repairs, and aesthetic updates. The list of potential projects will be compiled and prioritized in early 2025.

#### **Relievers Obstruction Removal \$300,000**

This program will address ongoing needs for obstruction removals at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2025.

#### **Relievers Pavement Rehabilitation Miscellaneous Modifications \$300,000**

This program will address ongoing needs for crack sealing, joint repairs, pavement rejuvenation, and pavement repairs at the six reliever airports. The list of potential projects will be compiled and prioritized in early 2025.

#### **Relievers Used Oil Sheds and Tanks \$550,000**

This program will assess and subsequently decommission and/or add used oil sheds at the reliever airports.

## 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

### **81 – St. Paul**

#### **STP Airport Perimeter Roads** **\$500,000**

This is part of an ongoing effort to rehabilitate airport pavements 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 rehabilitation of the airport perimeter road near the intersection of Bayfield Street and Airport Road.

#### **STP Customs and Border Protection General Aviation Facility** **\$11,000,000**

Customs and Border Protection (CBP) currently operates at STP out of a small space in the terminal building. The existing facility does not meet the requirements for space or security. Due to the restrictions of the existing space passengers generally remain on the aircraft for the customs screening process. A secure facility separate from other functions has been requested. This facility will meet current CBP guidelines, including plans for sizing of the facility. The new facility will include adequate secure space for pre and post processing of passengers. The facility is expected to handle between 100-150 flights annually, with staff traveling to STP from MSP to provide screening for flights.

#### **STP Infrastructure Replacement** **\$1,200,000**

This project will upgrade mechanical systems to make them easier and safer to maintain and increase the comfort of all areas, including leasable spaces in the Holman Field terminal.

#### **STP MAC Building Improvements** **\$200,000**

This is an ongoing program to provide for facility modifications to ensure continued efficient operation of MAC buildings or modifications necessary to meet the requirements of the tenants. The list of potential projects will be compiled and prioritized in early 2025.

#### **STP Taxiway B Reconstruction and LED Edge Lighting** **\$1,100,000**

This project will reconstruct Taxiway B and install LED Edge Lighting to replace end of life lighting.

### **82 – Lake Elmo**

#### **21D AWOS Replacement** **\$200,000**

This project provides the civil work associated with a MnDOT Aeronautics project to replace the existing Automated Weather Observing System (AWOS) with a new system.

#### **21D Equipment Storage Building** **\$5,000,000**

This project includes the construction of a MAC storage building for the containment of airfield maintenance equipment.

#### **21D North Building Area Pavement Rehabilitation** **\$900,000**

This is an ongoing program to rehabilitate aircraft operational areas (runways, taxiways, aprons, taxilanes) through bituminous overlays, seal coats, or in some instances, reconstruction. The project will restore the surface to a smooth, even condition and improve overall operating conditions. The pavement condition index report, an inspection of the pavement, and geotechnical exploration will be completed to determine the extent of the repairs. This project includes the taxilanes and airport entrance road in the northwest building area.

# 10.2 APPENDIX B – Descriptions for 2025 Proposed Projects

**21D Runway 04-22 Pavement Rehabilitation** **\$4,000,000**

This project includes reconstruction of the full length of existing Runway 4-22. The updated long term comprehensive plan for this airport proposes an extension to the crosswind runway at the end of Runway 22. Construction of the extension is included in this project. Installation of runway edge lighting is also included.

**21D Taxiway H Reconstruction** **\$600,000**

This project will reconstruct the Taxiway H on the north side of the airport.

**83 – Airlake**

**LVN 225<sup>th</sup> Street Paving** **\$450,000**

Paving of gravel road from Cedar Avenue to Maynard Lane for the south building area.

**LVN AWOS Replacement** **\$100,000**

This project provides the civil work associated with a MnDOT Aeronautics project to replace the existing Automated Weather Observing System (AWOS) with a new system.

**84 – Flying Cloud**

**FCM Gate Replacements** **\$500,000**

This project will replace airfield gates.

**FCM Infrastructure Replacement** **\$1,750,000**

This project will replace aged HVAC equipment and systems to provide proper ventilation, heating, cooling, and monitoring of the systems. The scope includes roof top unit replacement, condensing units, exhaust fans, water heaters, and air compressors.

**FCM Northside Access Road from Bravo to November Lane** **\$900,000**

This project will provide pavement rehabilitation and drainage improvements to vehicle access roads serving a large user and tenant population to gain access to storage hangars.

**85 – Crystal**

**MIC Stormwater Monitoring Location Drainage Repair** **\$100,000**

Repair and regrading of the stormwater benchmark monitoring location near the self-serve fueling system oil-water separator at Crystal airport.

**MIC Taxilanes 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.

**MIC Tower Parking Lot Reconstruction** **\$1,500,000**

This project will provide a new oil water separator drainage discharge point for the parking lot and reconstruct the parking lot.

**86 – Anoka County-Blaine**

No projects listed in the preliminary CIP for ANE in 2025.



## 10.3 APPENDIX C – Draft Descriptions for 2026-2031 Projects that Meet Criteria Defined in Minnesota Statute Section 473.614

### MSP LONG TERM COMPREHENSIVE PLAN PROJECTS

#### 10 – Terminal 1

##### 2027 D-Pod Outbound Baggage System **\$15,000,000**

This project will provide an expansion of the existing outbound baggage handling system in the lower level of the Concourse D-Pod area and may require an expansion to the building footprint.

#### 21 – Field and Runway

##### 2028 Runway 30R Parallel Taxiway Construction **\$12,000,000**

This project involves the construction of a new taxiway on the north side of Runway 30R. The first phase is envisioned to include construction at the approach end of Runway 30R, with a 600-foot section of new taxiway and two new taxiway feeder connections. Future phases will extend the taxiway to connect with Taxiway G.

##### 2029 Runway 30R Parallel Taxiway Construction **\$10,000,000**

Please see the 2027 description.

##### 2030 Runway 30R Parallel Taxiway Construction **\$14,000,000**

Please see the 2027 description.

### RELIEVER AIRPORTS LONG TERM COMPREHENSIVE PLAN PROJECTS

#### 83 – Airlake

##### 2027 Runway 12-30 Improvements **\$4,400,000**

This project will provide for the extension of Runway 12-30 from 4,098 feet to the maximum feasible length (approximately 4,850 feet) that can be provided by using declared distances without having to physically relocate Cedar Avenue, which lies directly east of the airfield. The project will also include taxiway and roadway modifications, and electrical lighting upgrades.