AVIATION SUPPORTING INFORMATION

IMAGINE 2050
transportation policy plan

Regional vision

A prosperous, equitable, and resilient region with abundant opportunities for all to live, work, play, and thrive.

Regional core values

Equity | Leadership | Accountability | Stewardship

Regional goals

Our region is equitable and inclusive

Racial inequities and injustices experienced by historically marginalized communities have been eliminated; and all residents and newcomers feel welcome, included, and empowered.

Our communities are healthy and safe

All our region's residents live healthy, productive, and rewarding lives with a sense of dignity and wellbeing.

Our region is dynamic and resilient

Our region meets the opportunities and challenges faced by our communities and economy including issues of choice, access, and affordability.

We lead on addressing climate change

We have mitigated greenhouse gas emissions and have adapted to ensure our communities and systems are resilient to climate impacts.

We protect and restore natural systems

We protect, integrate, and restore natural systems to protect habitat and ensure a high quality of life for the people of our region.

Table of Contents

Table of Figures

Cover photo provided by the Metropolitan Airports Commission.

Regional Aviation System Policies and Actions

Introduction

Imagine 2050, the Regional Development Guide, has developed a consistent definition of goals, objectives, policies, and actions:

- **Goals** are broad directional statements that more specifically describe the desired end states for the region.
- **Objectives** are the achievable results that advance each goal.
- **Policies** are the statement of intent and approach to regional issues or topics, independently and with partners.
- **Actions** are the specific activities to implement policies and achieve the goals and objectives.

There are five regional goals in *Imagine 2050*:

- Our region is equitable and inclusive.
- Our communities are healthy and safe.
- Our region is dynamic and resilient.
- We lead on addressing climate change.
- We protect and restore natural systems.

Each policy plan in *Imagine 2050* must develop plan specific objectives, policies, and actions that support these regional goals. The 2050 Transportation Policy Plan has summarized this plan's approach.

The update to the 2050 Regional Aviation System Plan included a detailed review and reworking of the regional aviation system policies and implementing actions. The following section details each regional aviation policy and connected actions.

To review regional policies and actions, Met Council staff convened two separate groups of regional stakeholders and partners to review existing policies and actions, develop updated policy and action language and provide feedback on the final list. The two groups convened for this process were split into regional communities which are adjacent to or host an airport and aviation community including airport sponsors, the FAA, MnDOT and industry stakeholders. Each group met three times between October 2024 and February 2025 to provide input and discussion into the draft list of 10 policies and 40 actions below. In addition to the structured meetings, Met Council staff attended multiple outside meetings to present policy considerations and solicit feedback during this period as well.

Understanding Policies and Action Guidance

Each policy and its supporting actions are currently nested under the primary goal it is intended to support. Policies are broad statements which support the region in meeting its transportation objectives and regional goals. Actions are specific activities which regional partners should be pursuing to implement the identified policies. This section does not mandate certain activities, rather this document is intended to set policy guidance for the Met Council and regional partners which will ensure the regional aviation system meets the regional goals identified in Imagine 2050. Goals are listed in no particular order. Many of the policies and related actions support multiple goals and objectives.

Under each policy, actions are shown in the tables. Please note:

- Each action included is assigned to an agency who will lead or support the implementation.
    - ✓: lead role. The lead agency is responsible for delivering the activities identified in the actions.
    - ◇: support role. Support agencies support the work through technical feedback, participating in technical work groups, or incorporating it into their planning work.

- **(LP)**: Actions tagged with **(LP)** are requirements or guidance for agencies to incorporate into the local planning efforts including comprehensive planning among other areas. Major items are noted but this is not intended to be a comprehensive list.
- **(WP)**: Actions tagged with **(WP)** are work program activities, including staff time and consultant studies, to be worked on until the next scheduled update of the plan in five years. These items are necessary to further research and policy guidance to support the region in achieving its goals and transportation objectives. Work program items are listed at the end of each policy.
- **(AP)**: Actions tagged with (AP) are requirements or guidance for agencies to incorporate into airport planning efforts including airport long term comprehensive planning and environmental review, among other areas. Major items that are relevant to airport planning activities are noted with this tag, but additional details for long term comprehensive plan elements can be found in the Aviation Supporting Information in the Long Term Comprehensive Plan section.

Policies that guide work not connected to specific goal area

Policies that guide all work are foundational elements of the region's 2050 Transportation Policy Plan. These policies and actions cut across all functional areas of the plan and can apply to all goals and objectives. These policies include the maintenance and updating of databases, applications, studies, and built infrastructure. They are intended to support a robust planning process and deliver a transportation system that meets the region's goal.

Policies and Actions

Policy 1. Prepare long-term comprehensive plans for MAC owned airports or expanded aviation elements of local comprehensive plans for each airport following FAA requirements and guidance in the Aviation System Plan based on an airport's classification.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
1A. Prepare long-term comprehensive plans for regional airports. LTCPs should be updated regularly according to the schedule defined in the Regional Aviation System Plan. **(AP)**	◇	✓	✓	◇	◇	
1B. Operate within a long-term financial plan that stresses maximizing non-regional funding sources including user fees and the aviation trust fund, continue to avoid direct financial impacts on regional taxpayers and maintain a high bond rating for aviation improvements.		✓	✓			
1C. Public investments in air transportation facilities should respond to forecast needs and to the region's ability to support the investments over time. **(AP)**		✓	✓	◇		◇ FAA
1D. LTCPs must include all the elements which are defined in this Plan. These are defined for different types of operators of facilities in this document and in the Aviation Supporting Information document. **(AP)**	✓	✓	✓			
1E. Submit LTCPs to the Met Council for review and approval according to state statute to ensure that airport plans are	✓	✓	✓			

consistent with regional policy and conform to the regional aviation system. **(AP)**						

FAA is the Federal Aviation Administration

Our region is equitable and inclusive.

Many of the policies and actions to advance transportation equity and inclusion have a basis in federal law and executive orders, like the Americans with Disabilities Act (ADA), Other policies and actions reflect ongoing studies and Met Council wide work in equity and anti-displacement.

Policies and Actions

Policy 2. Conduct public engagement activities in a way which promotes public participation and awareness of aviation issues in the region and promotes opportunities in the regional aviation industry.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communitie	Other
2A. Reduce or eliminate barriers to public participation. Provide accessible meeting opportunities and attendance options for community members to provide public input. Advance equitable engagement outcomes supported with translation, virtual options and other services.	✓	✓	✓	◇	✓	
2B. Consider means by which to better connect underrepresented groups with aviation employment opportunities in the region and educational opportunities in, or adjacent to, the region.	◇	✓	✓	✓	◇	◇ FAA
2C. Ensure virtual communications and information are updated regularly to provide relevant and up to date information for the public.	✓	✓	✓	✓	✓	◇ FAA

FAA is the Federal Aviation Administration

Our communities are healthy and safe.

Transportation is a key social determinant of health. These social determinants of health are the factors in the environment where people live that impact their health and quality of life. Safe and affordable access to housing, food, education, job opportunities, and community and cultural resources can contribute and support a region where our residents live healthy and rewarding lives with a sense of dignity and wellbeing.

Policies and Actions

Policy 3. Maintain and improve, as feasible, airport safety standards that meet FAA and MnDOT standards by addressing safety requirements and land use compatibility with local ordinances, policies and planning.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
3A. Minimize potential general airspace hazards by adopting federal and state regulations regarding airspace protection. Developers should be notified of the need to submit Federal Aviation Administration (FAA) form 7460-1 regarding structure height near an airport or when constructing a structure of more than 200 feet from ground level. **(LP)**	◇			◇	✓	
3B. Local comprehensive plans for communities located near regional airports should address land use compatibility and air safety requirements. **(LP)**	✓			◇	✓	
3C. Regional airports sponsors must coordinate with local communities to adopt and maintain airport safety zoning ordinances according to the standards in the MnDOT State Aviation System Plan. **(LP)**	◇	✓	✓	◇	✓	
3D. Explore potential safety issues and needed safety considerations for new or existing aviation activity that may take place off of airport locations. This could be helipads, vertiports, drone use or private aviation facilities.	✓			✓		✓ FAA
3E. Conduct research to prepare regional partners for future aviation activity to ensure safety standards are understood as they are developed by federal and state partners.	✓			◇		◇ FAA

FAA is the Federal Aviation Administration

Policy 4. Conduct planning, development, and operation of regional airports to minimize impacts to adjacent communities. Local land use compatibility standards should be reviewed and updated as warranted to reflect the latest guidance to mitigate noise and other environmental impacts to residents from aviation activities.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
4A. Communities affected by aircraft noise should incorporate the Land Use Compatibility Guidelines for Aircraft Noise into their local comprehensive plans and ordinances. **(LP)**	✓				✓	◇ FAA
4B. Coordinate flight activity at MSP Airport to limit noise impacts on people and the most densely populated areas, as is feasible. **(AP)**		◇				✓ FAA
4C. Continue noise abatement efforts at MSP Airport. Maintain mitigation efforts for impacted residential homes that meet existing mitigation guidelines.		✓				
4D. Voluntary noise mitigation efforts should be undertaken at non-Part 150 regional reliever airports to ensure noise impacts to people are minimized. Continue to coordinate with local affected communities, provide updates on noise abatement efforts and coordinate with airport users on voluntary operational noise abatement best practices. **(AP)**	◇	✓	✓		◇	
4E. Update Land Use Compatibility Guidelines as federal guidance is updated. Explore potential noise issues and other considerations for aviation activity that may take place off airport locations. **(WP)**	✓			◇	◇	◇ FAA
4F. Explore potential identification of regional UAM/UAS corridors or facility site selection to minimize noise and other impacts on sensitive communities.	◇			◇	◇	✓ FAA

FAA is the Federal Aviation Administration

Policy 5. Work to reduce emissions from aviation activities that negatively impact air quality for adjacent communities.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
5A. Coordinate efforts to reduce, and eventually eliminate, leaded aviation fuel use when permitted by federal law, while maintaining safe operational characteristics in the regionally based GA fleet. **(AP)**	◇	✓	✓	◇		✓ FAA
5B. Coordinate regional efforts to establish sustainable aviation fuel facilities and infrastructure to reduce greenhouse gas emissions and other air toxins from traditional jet fuel in commercial aircraft.	◇	◇		◇		✓ GMSP
5C. Implement the electrification of airport ground operations, where possible. **(AP)**	◇	◇	◇	◇		
5D. Conduct and implement the MnDOT MEAN study which will identify regional airports that are most conducive to electrification.	◇	◇	◇	✓		
5E.Conduct air quality assessments for regional airports. This includes greenhouse gas emissions estimates and strategies to meet the state designated reduction targets as well as estimates and reduction strategies for particulate emissions. **(AP)**	◇	✓	✓	◇		

FAA is the Federal Aviation Administration GMSP is GreaterMSP

Our region is dynamic and resilient.

People, businesses, and institutions in our region depend on transportation to meet their daily needs. A transportation system that is resilient and reliable provides affordable access to destinations by any mode of travel people may choose. This plan will support a reliable transportation system with predictable travel times; transportation choices that provide access to jobs, services, and community destinations; a resilient transportation system that withstands natural and human-caused disruptions.

Policies and Actions

Policy 6. Maintain and improve connections between the region's aviation facilities and the surface transportation system while taking into account local context. Plan for multimodal options to be available for regional airports as necessary and provided according to each airports role in the system.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
6A. Collaborate to achieve high-quality, ground accessibility through multiple mode choices, appropriate to the airport's role and function, to all portions of each airport's service area.	✓	◇	◇	◇	✓	✓ Transit
6B. Ensure adequate transit options to MSP Airport and expand coverage to ensure affordable accessibility for the region's residents.	✓	◇			◇	✓ Transit
6C. Implement biking connections to regional aviation facilities which connect to the Regional Bicycle Transportation Network.	◇	◇		◇	✓	

Transit is the regional transit providers

Policy 7. Coordinate planning and investments that continue to promote aviation access to the state, nation and world from the Twin Cities metro. Ensure regional airports continue to support local economies and businesses.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
7A. Maintain and enhance existing facilities to their maximum capability, consistent with the development framework, prior to investing in new facilities.		✓	✓	◇		◇ FAA
7B. Establish and maintain airport business plans and agreements to deliver high-quality services at affordable prices to users.		✓	✓	◇		

7C. Provide facilities that are safe and secure, affordable, and technologically current for all parts of the aviation industry.		✓	✓			
7D. Identify opportunities and support efforts to establish a sustainable aviation fuel hub in the Twin Cities and Minnesota.	◇	✓		◇	◇	✓ GMSP
7E. Study and report on the importance of regional airports to local and regional economic wellbeing.	✓	✓	✓	✓		

FAA is the Federal Aviation Administration GMSP is GreaterMSP

Policy 8. Regularly review and update regional aviation system information to maintain consistency with state and federal planning.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
8A. Maintain regional airport classifications to ensure that they are consistent with state and federal classifications, evolve as the regional system evolves and remain relevant for the region.	✓	◇	◇	◇		◇ FAA
8B. Monitor FAA and MnDOT regulation updates and incorporate them into regional policy and guidance as necessary.	✓					

Policy 9. Consider and plan for land use implications from aviation facilities which are not located within a regional airport or aviation activity which does not originate from a regional airport. This includes existing facilities like helipads and private air facilities in addition to Unmanned Aerial Systems, Advanced Air Mobility and any other emerging aviation technologies.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communities	Other
9A. Identify locations that would be best suited to support UAM operations and are most compatible with local land use in the region while considering means to integrate into the regional transportation system. Coordinate with state and federal partners. **(WP)**	✓	◇	◇	◇	◇	◇ FAA
9B. Coordinate land use planning and emerging aviation technologies to ensure aviation impacts do not significantly	✓			◇	✓	◇

impact residents' quality of life and provide maximum benefits. **(LP)**						FAA
9C. Study UAS emerging operations and potential land use implications from widespread commercial UAS use. (package delivery and other use cases) **(WP)**	✓			◇		◇ FAA

FAA is the Federal Aviation Administration

We protect and restore natural systems.

Natural systems include land, air, and water and their ecosystems. Transportation uses interact with these natural systems in a variety of ways: fragmenting natural habitats; noise, water, and air pollution; impacts from paved surfaces; and more. Typically, environmental analysis processes that are required by the state and federal governments address the impacts to natural systems caused by transportation projects. The policies that support the region's goal to protect and restore natural systems will promote and encourage protection, mitigation, and restoration efforts.

Policies and Actions

Policy 10. Implement policies, programs and plans which protects and mitigates impacts on the region's natural resources from the ongoing operation of the region's aviation system. This includes reducing impacts on air and water quality, and other natural systems impacted by regional aviation facilities.

✓ = lead agency ◇ = support agency	Met Council	MAC	Airport Sponsors	MnDOT	Local Communitie	Other
10A. Plan for and manage surface water runoff at regional airports in a way that is consistent with plans of watershed management organizations and the state wetland regulations. **(AP)**		✓	✓			
10B. Plan for and protect groundwater quality by planning and implementing strategies for preventing, detecting and responding to any release of contaminants at regional airports. **(AP)**		✓	✓			
10C. Include sustainability efforts in planning, operations, construction and project design for regional airport facilities. Produce annual reports as required by state statute on sustainability efforts at MSP Airport adopted by the Commission. **(AP)**	◇	✓	✓	◇		

National and State Airport Classification

The National Plan of Integrated Airports (NPIAS) is constantly updated as state and local airport and system plans are completed and accepted by the Federal Aviation Administration. Table 1 indicates the current mix of airports for the region included in the 2025-2029 national plan and officially eligible for federal airport funding. Current national plan information is summarized below.

Table 1. Current mix of airports included in national plan

Airport	Hub Type	Role (FY24)	Development Estimate 2025-2029	Based Aircraft (CY25)[1]
Buffalo		Local	$1.1 Million	62
Cambridge		Local	$1.9 Million	33
Faribault		Local	$6.1 Million	39
Le Sueur		Local	$2.5 Million	44
Princeton		Local	$2.2 Million	32
Red Wing		Regional	$10.9 Million	67
Rush City		Local	$3.6 Million	55
St. Cloud	Non-hub		$12.4 Million	92
Winsted		Local	$3.8 Million	20
Airlake		Regional	$12.0 Million	91
Anoka Co.-Blaine		National	$6.5 Million	422
Crystal		Regional	$5.8 Million	95
Flying Cloud		National	$34.7 Million	286
MSP International	Large		$653.9 Million	162
Lake Elmo		Regional	$5.0 Million	184
St. Paul Downtown		National	$17.6 Million	45
So. St. Paul		Regional	$4.1 Million	215
New Richmond		Regional	$4.3 Million	249
Osceola		Local	$3.1 Million	61

Other airports, in addition to those in the National Plan of Integrated Airports, are part of the Minnesota State Aviation System Plan. Several near-by airports in adjacent states are included to indicate where some Minnesota communities may access air service. Some of the ambiguities between the state and metro system designations are based upon state-wide requirements and laws and rules that apply only to the metro area.

Additional information on the National Plan of Integrated Airports can be found at: https://www.faa.gov/airports/planning_capacity/npias

Additional information on Statewide Aviation System Plan airports can be found at: https://mnsasp.org/

The existing Regional Airport System Plan for the metropolitan area identifies key parts of the system involving the hub airport, reliever airports, and special purpose facilities.

[1] Based aircraft totals for all airports other than MSP and St. Cloud derived from basedaircraft.com State Counts, , 05/21/2025

Regional Airport Classifications

The classification of airports has evolved to reflect the growing complexity of aviation and its role in regional and national transportation systems. Large airports like Minneapolis–St. Paul International (MSP) serve as major aviation hubs connecting national and global markets, while medium and small airports support more localized roles including business travel, emergency services, pilot training, and recreational flying. The Federal Aviation Administration (FAA) and the Minnesota Department of Transportation (MnDOT) utilize evolving classification systems to better prioritize infrastructure investments and reflect the functional role of each airport. In contrast, the Metropolitan Council's classification system for regional airports has remained largely unchanged for nearly 50 years, relying on few metrics with the state statue identified 5,000-foot runway length metric for Minor airports being the driving force for reliever airports. This approach fails to account for changes in aircraft types, airport operations, and user needs, leading to discrepancies between actual airport usage and assigned classifications.

Historically, airport classification in the Twin Cities region responded to growing aviation demand, aircraft design innovations, and concerns over noise and airport expansion. Legislative action and community opposition significantly shaped airport development, especially for reliever airports near MSP. Currently, despite significant operational activity at airports like Flying Cloud (FCM) and Anoka County-Blaine (ANE), these remain classified as "Minor" airports due to state statute regarding the Minor Airport classification, even though they exceed total usage levels of the only designated "Intermediate" airport, St. Paul Downtown (STP), see significant business jet activity and generally have different needs than the other minor airports in the region which generally are focused on recreational and training activities with smaller piston aircraft. A realigned classification framework will be implemented in the 2050 Aviation System Plan. The updated framework will incorporate multiple metrics, such as types of aircraft served, jet operations, infrastructure needs, and environmental impact, to more accurately reflect each airport’s function in the regional system. This will better guide infrastructure planning and funding and enhance coordination and understanding of airport activity for local communities. The updated Regional Classification system can be seen in Figure 3 of the Regional Aviation System Plan. The full report cards detailing airport metrics for classification purposes will be found below. These existing conditions report cards will be updated every planning period and used as an ongoing assessment tool of the regional airports and the system classifications.

Regional Airport Report Cards

To better understand the role each regional airport plays within the regional air transportation system, individual report cards were developed that highlight the operational data points common to aviation planning, and the infrastructure/facilities unique to each airport. Each report card examines the classification metrics, inventory, and amenities of a regional airport against a common template. In addition, long-term based aircraft and operational forecasting were conducted for each airport within the system. Regional forecasts to 2050 are found in the Aviation System Plan Figure 10 through 13.

MSP forecasts

- To calculate the operational growth figures for MSP, the MSP 2040 Long-Term Plan (LTP) forecast of 1.0% annual growth in operations was applied to the Metropolitan Airports Commission (MACNOMS) operations data for 2024 and extrapolated from 2025 through 2050. The FY2024-2044 FAA Aerospace Forecast predicts a 1.7% growth in mainline airline aircraft and a 1.1% growth in regional airline aircraft through 2044. The more conservative regional growth figure was used in calculating the MSP based aircraft figure. This was applied to the 2025 basedaircraft.com figure for the airport.

Reliever Airports forecasts

- An examination of archived MACNOMS data for all Reliever airports within the MAC revealed substantial operational growth between 2016 and 2024, far exceeding that forecast for General Aviation (GA) airports nationally. As such, a more conservative growth rate obtained from the FAA Aerospace Forecast was used to estimate the annual growth in operations (0.8%) for all Reliever airports. This rate was applied to the 2024 MACNOMS operations data for each airport in 2024 and extrapolated from 2025 through 2050. South St. Paul (SGS) and Forest Lake (25D) are not MAC airports and are not included in MACNOMS data. Minnesota Department of Transportation State Aviation System Plan (MnSASP) data for 2025 was used as the 2025 operations figure for both airports and subsequent growth is derived from the FAA Aerospace Forecast figure.
- Based aircraft growth was calculated using the FAA Aerospace Forecast prediction of total GA aircraft fleet growth (0.4%) and similarly applied to 2025 basedaircraft.com numbers for each airport, creating a 2025 to 2050 based aircraft forecast. As Forest Lake is not within the federal NPIAS system, its based aircraft number is not included on basedaircraft.com. The 2019 25D Master Plan based aircraft number was used as a baseline, and the 2025-2050 figures were extrapolated using the same growth rate.

The 2024 jet aircraft operations were derived from MACNOMS data for all airports within the MAC, and FAA Traffic Flow Management System Count (TFMSC) data for SGS and 25D. Metropolitan Council Transportation Analysis Zone (TAZ) data was analyzed against the Airport Influence Areas (AIA) of each airport to determine the amount of employment (jobs) around each airport. An analysis of primary runway length for each airport was conducted using the FAAs Runway Length Advisory Circular (AC 150/5325-4B) to develop a baseline figure. Importantly, other mitigating factors related to runway length as a part of the long-term comprehensive planning process may determine a different needed length.

Table 2. MSP Airport Metrics Classification Report Card

Classification Table: MSP (Major Airport)			
Classification Metrics		**Amenities**	
System Role	Scheduled / Commercial Passenger Air Service Hub & Cargo Hub	Terminal/AD Building	2 Passenger Terminals
		Passenger Facilities	Commercial Passenger Terminals/120 Boarding Gates
Critical Design Aircraft (Up To)	D-V		
Most Demanding Airport Users	Commercial	Cargo Facilities	Cargo Terminal FEDEX, UPS
Total Annual Operations	338.929	Fuel: Jet A/100LL	Both
Total Annual Jet Operations	316,896	ARFF Facilities	2 ARFF Stations, Index E
Employment (Jobs) Within ACA	180,078	International Customs	Yes (0830-1700 daily)
Existing Leg. Statute / Community Ordinances / Agreements	N/A	FBO/On Airport Businesses	Signature Aviation, Delta Air Lines, Sun Country Airlines
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	11,006’ x 150'	Flight Training	No
FAA Recommended RWY Length & Width	11,000’ x 150'	Landing Fee	Yes
		Charter Operations	Yes
Runway Lighting	HIRL	Courtesy Car	Yes
Navigation Systems	MALSR, ILS, LOC, REIL, PAPI, ALSF2, DME, MALSF	Rental Car	Yes
		Automobile Parking	7 passenger parking ramps, parking lots at GA/Cargo/Employee facilities
Instrument Approach Procedures (Lowest Vis Min/Type)	ILS 600 RVR	Transient Storage (Tiedowns or Hangar)	FBO Hangar
Parallel Taxiway	Full (All Runways)		
Weather Reporting	ASOS	Security/Perimeter Fencing/Access	Full perimeter fence with controlled access. 4 TSA checkpoints
Air Traffic Control Tower	Yes (24 Hrs.)		
Based Aircraft	162		
LTCP/MP/ALP Up to Date	Yes, 2024		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	Yes, 2004		

Table 3. STP Airport Metrics Classification Report Card

STP (Intermediate Airport)			
Classification Metrics		**Amenities**	
System Role	Primary Reliever / Business Jet Reliever	Terminal/AD Building	FBO Terminal
		Passenger Facilities	FBO Passenger Lounge
Critical Design Aircraft (Up To)	D-III		
Most Demanding Airport Users	Corporate / Business / Commercial	Cargo Facilities	None
Total Annual Operations (2024)	39,043	Fuel: Jet A/100LL	Both

Total Annual Jet Ops. (2024)	11,141	ARFF Facilities	None
Employment (Jobs) Within AIA	163,251	International Customs	Yes (0800-1630 daily)
Existing Leg. Statute / Community Ordinances / Agreements	N/A	FBO/On Airport Businesses	St. Paul Flight Center, Signature Aviation
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	6,491’ x 150'	Flight Training	STP Flight
FAA Recommended RWY Length & Width	7,000’ x 100'	Landing Fee	Yes
		Charter Operations	Yes
Runway Lighting	HIRL	Courtesy Car	Courtesy Shuttle
Navigation Systems	ILS/DME, MALSR, REIL, PAPI	Rental Car	Limo Service
		Automobile Parking	Numerous parking lots at facilities around airfield
Instrument Approach Procedures (Lowest Vis Min/Type)	ILS 3/4-mile RVR		
		Transient Storage (Tiedowns or Hangar)	FBO Hangar
Parallel Taxiway	Full (Runways 14/32 and 13/31) Partial (Runway 9/27)		
Weather Reporting	ASOS	Security/Perimeter Fencing/Access	Complete perimeter fence with controlled access
Air Traffic Control Tower	Yes (0600-2200 Mon-Fri, 0700-2200 Sat-Sun)		
Based Aircraft	45		
LTCP/MP/ALP Up to Date	2010		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	No		

Table 4. LVN Airport Metrics Classification Report Card

LVN (Minor – Secondary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / G.A. Reliever	Terminal/AD Building	A/D Building
		Passenger Facilities	FBO Passenger Lounge
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Recreational / Training	Cargo Facilities	None
Total Annual Operations (2024)	42,611	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)	156	ARFF Facilities	None
Employment (Jobs) Within AIA	17,537	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Aloft Aviation
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	4,099’ x 75'	Flight Training	Aloft Aviation
	4,200’ x 75'	Landing Fee	No

FAA Recommended RWY Length & Width		Charter Operations	Yes
Runway Lighting	HIRL	Courtesy Car	Yes
Navigation Systems	ILS, MALSR, REIL, PAPI	Rental Car	No
		Automobile Parking	Parking lots by FBO and training center and south building area
Instrument Approach Procedures (Lowest Vis Min/Type)	ILS 3/4-mile RVR		
		Transient Storage (Tiedowns or Hangar)	FBO Hangar / Tiedowns
Parallel Taxiway	Full (All Runways)		
Weather Reporting	AWOS	Security/Perimeter Fencing/Access	No perimeter fence
Air Traffic Control Tower	No		
Based Aircraft	91		
LTCP/MP/ALP Up to Date	2017		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	No		

Table 5. ANE Airport Metrics Classification Report Card

ANE (Minor – Primary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / Business Jet Reliever	Terminal/AD Building	FBO Terminal
		Passenger Facilities	FBO Passenger Lounge
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Business / Recreational	Cargo Facilities	None
Total Annual Operations (2024)	68,803	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)	2,285	ARFF Facilities	None
Employment (Jobs) Within AIA	68,257	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Atlantic Aviation, R.C. Avionics, Twin Cities Aviation, Inc.
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	5,000’ x 100	Flight Training	ATP Flight School
FAA Recommended RWY Length & Width	5,400’ x 100'	Landing Fee	Yes for Turbine Aircraft
		Charter Operations	Yes
Runway Lighting	HIRL	Courtesy Car	Yes
Navigation Systems	ILS/DME, MALSR, REIL, PAPI	Rental Car	Yes
		Automobile Parking	Parking lot near the FBO
Instrument Approach Procedures (Lowest Vis Min/Type)	ILS 1/2-mile RVR		
		Transient Storage (Tiedowns or Hangar)	FBO Hangar / Tiedowns
Parallel Taxiway	Full (All Runways)		
Weather Reporting	AWOS	Security/Perimeter Fencing/Access	Complete perimeter fence with controlled access
Air Traffic Control Tower	Yes (0700-2200)		

Based Aircraft	422		
LTCP/MP/ALP Up to Date	2010		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	No		

Table 6. MIC Airport Metrics Classification Report Card

MIC (Minor – Secondary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / G.A. Reliever	Terminal/AD Building	A/D Building
		Passenger Facilities	None
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Recreational / Training	Cargo Facilities	None
Total Annual Operations (2024)	38,897	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)	2	ARFF Facilities	None
Employment (Jobs) Within AIA	82,471	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	N/A	FBO/On Airport Businesses	Maxwell Aircraft Service, Wentworth Aircraft, Inc.
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	3,751’ x 75	Flight Training	Thunderbird Aviation
FAA Recommended RWY Length & Width	3,850’ x 75'	Landing Fee	No
		Charter Operations	No
Runway Lighting	MIRL	Courtesy Car	No
Navigation Systems	REIL, PAPI, VASI	Rental Car	No
		Automobile Parking	Parking lots by main apron and flight training building
Instrument Approach Procedures (Lowest Vis Min/Type)	RNAV 1-mile RVR	Transient Storage (Tiedowns or Hangar)	Tiedowns
Parallel Taxiway	Full (All Runways)		
Weather Reporting	ASOS	Security/Perimeter Fencing/Access	Complete perimeter fence with controlled access
Air Traffic Control Tower	Yes (0700-2200)		
Based Aircraft	95		
LTCP/MP/ALP Up to Date	2017		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	Yes, 2023		

Table 7. FCM Airport Metrics Classification Report Card

FCM (Minor – Primary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / Business Jet Reliever	Terminal/AD Building	3 FBO Terminals

Critical Design Aircraft (Up To)	C-II	Passenger Facilities	FBO Passenger Lounge
Most Demanding Airport Users	Business / Recreational	Cargo Facilities	None
Total Annual Operations (2024)	134,284	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)	11,673	ARFF Facilities	None
Employment (Jobs) Within AIA	74,656	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Executive Aviation, Thunderbird Aviation, Premier Jet Center, Inflight Aviation
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service
Existing RWY Length & Width (Longest Runway)	5,001’ x 100’	Flight Training	ATP Flight School
FAA Recommended RWY Length & Width	5,500’ x 100'	Landing Fee	Yes
		Charter Operations	Yes
Runway Lighting	HIRL	Courtesy Car	Yes
Navigation Systems	MALSR, ILS, REIL, PAPI	Rental Car	Yes
		Automobile Parking	Numerous parking lots at facilities around the airfield
Instrument Approach Procedures (Lowest Vis Min/Type)	ILS 1/2-mile RVR	Transient Storage (Tiedowns or Hangar)	FBO Hangar
Parallel Taxiway	Full (All Runways)		
Weather Reporting	ASOS	Security/Perimeter Fencing/Access	Complete perimeter fence with controlled access
Air Traffic Control Tower	Yes (0600-2200)		
Based Aircraft	286		
LTCP/MP/ALP Up to Date	2025 (Anticipated)		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	Yes, 2019		

Table 8. 21D Airport Metrics Classification Report Card

21D (Minor – Secondary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / G.A Reliever	Terminal/AD Building	A/D Building
		Passenger Facilities	None
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Recreational / Training	Cargo Facilities	None
Total Annual Operations (2024)	41,854	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)	27	ARFF Facilities	None
Employment (Jobs) Within AIA	17,005	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Lake Elmo Aero
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, major powerplant service

Existing RWY Length & Width (Longest Runway)	3,504’ x 75’	Flight Training	Lake Elmo Aero
FAA Recommended RWY Length & Width	3,850 x 75'	Landing Fee	No
		Charter Operations	No
Runway Lighting	MIRL	Courtesy Car	No
Navigation Systems	REIL, PAPI	Rental Car	No
		Automobile Parking	Parking lot next to FBO
Instrument Approach Procedures (Lowest Vis Min/Type)	RNAV 1-mile RVR	Transient Storage (Tiedowns or Hangar)	Hangar rentals
Parallel Taxiway	Full (All Runways)		
Weather Reporting	AWOS	Security/Perimeter Fencing/Access	Partial perimeter fence, no gates
Air Traffic Control Tower	No		
Based Aircraft	184		
LTCP/MP/ALP Up to Date	2016		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	No		

Table 9. SGS Airport Metrics Classification Report Card

SGS (Minor – Secondary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / G.A Reliever	Terminal/AD Building	A/D Building
		Passenger Facilities	None
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Recreational / Training	Cargo Facilities	None
Total Annual Operations (2025)[2]	62,640	Fuel: Jet A/100LL	Both
Total Annual Jet Ops. (2024)[3]	97	ARFF Facilities	None
Employment (Jobs) Within AIA	39,092	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Wipaire
Classification Inventory		Aircraft Maintenance Comm./GA	Major airframe service, minor powerplant service
Existing RWY Length & Width (Longest Runway)	4,002’ x 100’	Flight Training	Air Trek North, Cadotte Teaching Systems, Lake and Air, Ready Room Aviation, Both Wings
FAA Recommended RWY Length & Width	3,850 x 75'	Landing Fee	No
		Charter Operations	No

[2] MnSASP Mixed Methodology Operations Forecast, 2025
[3] FAA Traffic Flow Management System Counts (TFMSC), Physical Class, 2024

Runway Lighting	MIRL	Courtesy Car	No
Navigation Systems	LOC/DME, REIL, PAPI	Rental Car	Yes
		Automobile Parking	Parking lots by A/D building
Instrument Approach Procedures (Lowest Vis Min/Type)	RNAV 1-mile RVR	Transient Storage (Tiedowns or Hangar)	Tiedowns
Parallel Taxiway	Full (All Runways)		
Weather Reporting	AWOS	Security/Perimeter Fencing/Access	Complete perimeter fence with controlled access
Air Traffic Control Tower	No		
Based Aircraft	215		
LTCP/MP/ALP Up to Date	2015		
Clear Zone Ownership	Partial		
Airport Zoning (Year)	1990		

Table 10 25D Airport Metrics Classification Report Card

25D (Minor – Secondary Airport)			
Classification Metrics		**Amenities**	
System Role	Secondary Reliever / G.A Reliever	Terminal/AD Building	A/D Building
		Passenger Facilities	None
Critical Design Aircraft (Up To)	B-II		
Most Demanding Airport Users	Recreational / Training	Cargo Facilities	None
Total Annual Operations (2025)[4]	7,765	Fuel: Jet A/100LL	100LL
Total Annual Jet Ops. (2024)[5]	None	ARFF Facilities	None
Employment (Jobs) Within AIA	11,683	International Customs	None
Existing Leg. Statute / Community Ordinances / Agreements	"Minor" Airport Max Runway Length 5,000'	FBO/On Airport Businesses	Hangar 97
Classification Inventory		Aircraft Maintenance Comm./GA	None
Existing RWY Length & Width (Longest Runway)	2,700’ x 75’	Flight Training	None
FAA Recommended RWY Length & Width	3,300’ x 75'	Landing Fee	No
		Charter Operations	No
Runway Lighting	MIRL	Courtesy Car	No
Navigation Systems	REIL, PAPI	Rental Car	No
		Automobile Parking	Yes
Instrument Approach Procedures (Lowest Vis Min/Type)	None	Transient Storage (Tiedowns or Hangar)	Tiedowns
Parallel Taxiway	Full (All Runways)		

[4] MnSASP Mixed Methodology Operations Forecast, 2025
[5] FAA Traffic Flow Management System Counts (TFMSC), Physical Class, 2024

Weather Reporting	None	Security/Perimeter Fencing/Access	No perimeter fence
Air Traffic Control Tower	No		
Based Aircraft	38		
LTCP/MP/ALP Up to Date	2021		
Clear Zone Ownership	Partial, CZAP in progress		
Airport Zoning (Year)	2002		

Regional Airspace

All of the open sky covering the United States, from less than an inch off the ground all the way to outer space, is part of America's airspace. This airspace resource is recognized in both the Minnesota State Aviation System Plan and the Minneapolis-St. Paul Metropolitan regional aviation system plan. All of this airspace is divided into several standardized types ranging from A through G, with A being the most restricted and G the least restrictive as depicted in Figure 1. Figure 2 includes those areas within U.S. airspace in which unmanned aircraft systems, also commonly referred to as drones, can be operated.

Coordination and proper planning are required to make efficient and safe use of the airspace between the different classes of airports and air-transportation users. At lower altitudes this airspace is shared with the nation's communications industry and others that requires airport and airways protection from potential obstructions to air navigation, or activities that disrupt aviation communications and navigation/landing aids. Each type of airspace has its own required level of air traffic control services and its own minimum requirements for pilot qualifications, aircraft equipment, and weather conditions, including drone use. In addition, there is other airspace reserved for special purposes called special use airspace.

Within the United States, airspace is classified as either controlled or uncontrolled. Controlled airspace will have specific defined dimensions (for example, altitude ranges or vertical boundaries, and an applicable surface area or horizontal boundaries). Within controlled airspace air traffic control services are provided to all pilots operating under instrument flight rules, because they are flying solely by reference to instrument indicators. The services are also provided to some pilots operating under visual flight rules even though they are using points on the ground to navigate.

Class A airspace

Class A airspace covers the entire United States at altitudes between 18,000 and 60,000 feet mean sea level. All jet routes are in this airspace that is used primarily by jets and airliners traveling over long distances between major cities. Air traffic in this airspace operates under instrument flight rules and must maintain radio contact with enroute air traffic control. As aircraft transition from a jetway route to lower altitudes they are handed off to a specific destination airport's air traffic control. In most cases they will be arriving at an airport with an air traffic control tower that is surrounded by a Class B, C, or D airspace.

Class B airspace

Class B airspace extends from the surface to 10,000 feet and out to 30 nautical miles and is structured like an upside-down wedding cake. Class B airspace surrounds the nation's busiest airports, such as Minneapolis-St. Paul International Airport. At the outer limits of the Class B airspace, from the surface to 10,000 feet mean seal level at MSP airport, there is a Mode-C & ADS-B Out Veil. This is an imaginary vertical surface that delineates where an aircraft must have a Mode-C transponder as well as ADS-B Out equipment. This equipment allows air traffic control to track their flight in the airspace. Visual flight rules transition routes are specific designated flight paths used by air traffic control to route visual flight rules traffic through Class B airspace. Visual flight rules flyways are general flight paths through low altitudes for general aviation to fly from one ground-based radio beacon to another across the United States. It helps pilots plan flights into, out of, though, or near complex Class B terminal airspace, especially where instrument flight rules routes occur.

Class C airspace

Class C airspace extends from the surface to 4,000 feet above ground level for a 20 5 nautical mile distance from the airport for the inner ring and from 1,200 feet above the airport to 4,000 feet above the airport for a 10 nautical mile distance outer ring. This airspace surrounds other busy airports that have

radar services for arriving and departing aircraft. No Class C airport airspace is designated in the Twin Cities metro area airspace.

Class D airspace

Class D airspace surrounds airports with operating air traffic control towers and weather reporting services. This airspace extends from the surface to 2,500 feet above ground level within 4.3 nautical miles (5 statute miles) of the airport. In the metro area the Anoka County-Blaine, Crystal, Flying Cloud and St. Paul Downtown Airports have a Class D airspace designation. These airports have part-time air traffic control towers, and their airspace reverts to Class E airspace areas when the towers are not in operation.

Class E airspace

Class E airspace includes all other controlled airspace in the United States that is not designated as class A, B, C, D or G. This airspace extends to 18,000 feet MSL from various altitudes and can be extended to the surface. Class E airspace also surrounds airports with weather reporting services in support of instrument flight rules operations, but no operating control tower. In the Twin Cities area, the Airlake Airport is such a facility.

Class F airspace

Class F designated airspace is not used in the United States.

Class G airspace

Class G airspace is uncontrolled; it includes all airspace in the United States not classified as Class A, B, C, D, or E. No air traffic control services are provided and the only requirement for flight is certain visibility and cloud clearance minimums. Most of the airspace below 1,200 feet above ground level is Class G airspace.

Special conservation area

Special conservation area includes airspace surrounding national parks, monuments, recreation areas and wildlife refuges. In the Twin Cities region, the Minnesota Valley National Wildlife Refuge, St. Croix National Scenic Riverway, and the Carlos Avery State Wildlife Management Area are such areas, and pilots are requested to maintain a minimum altitude of 2,000 feet above ground level whenever possible. One objective is to avoid bird strikes and another is to minimize noise intrusion on wildlife and tranquility for user experience in protected natural settings. It is unlawful to land any aircraft or unmanned aircraft system within the boundaries of state parks, state recreation areas and state waysides. As such this discourages the use of aircraft and unmanned aircraft system within these areas.

Special use airspace

Special use airspace is where aeronautical activity must be limited, usually because of military use or national security concerns. (Note: None of the following airspace areas occur within the Twin Cities region.) Special use airspace includes the following:

- Prohibited areas (for example, Camp David)
- Restricted areas (military activities including controlled firing areas)
- Warning areas (extends outward from three nautical miles off the coast).
- Military operations areas (established for military training activities)
- Alert areas (for example, established for areas with a high volume of pilot training)

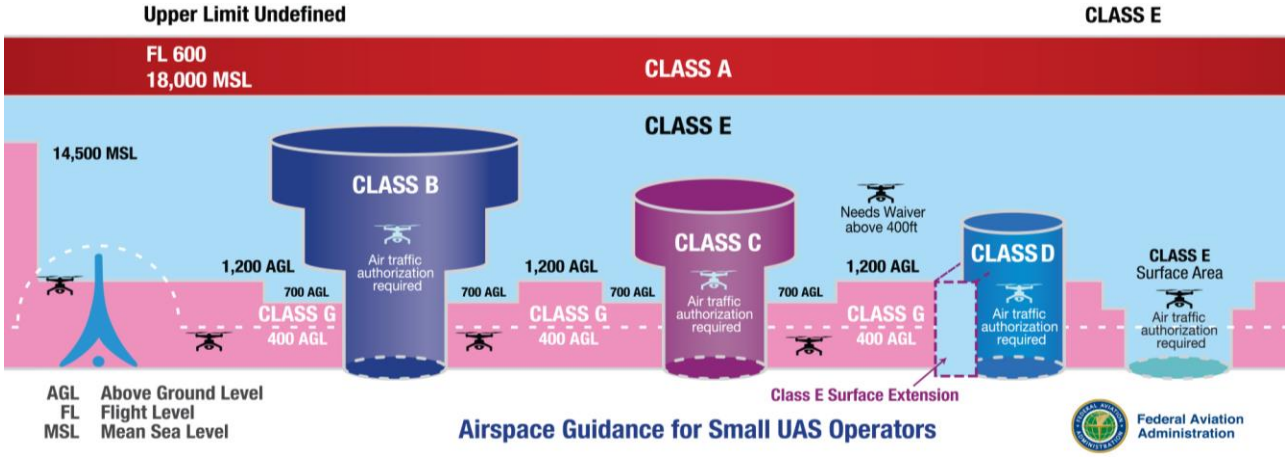
Other airspace areas

Other airspace areas are designated usually as temporary limitations for specific events and include:

- Airport advisory areas
- Military training routes
- National security area
- Temporary flight restrictions

Figure 1. U.S. airspace at a glance[6]

Figure 2. Airspace for unmanned aircraft systems operators[7]



[6] Federal Aviation Administration
[7] Federal Aviation Administration

Airport Capital Investment Review Process

The overall aviation planning process for the Twin Cities metro area is discussed in Chapter 9, "Aviation System Plan." Additional details on the state statutes affecting aviation capital investment review process are provided in this section. The typical annual process and schedule for preparation and review of the Metropolitan Airports Commission capital improvement plan is also included.

Statutory authority

As required under the following state statutes, the capital investments made at the region's public-use airports are reviewed and commented upon, or under some conditions approved, by the Metropolitan Council.

The Metropolitan Airports Commission prepares a capital improvement program for the metro area airports that the commission owns and operates. The Metropolitan Council annually reviews the Metropolitan Airports Commission's capital improvement program under the following key legislative authorizations:

MS 473.165, Metropolitan Council Review: Independent Commission, Board, Agency

Subd. 1

The Metropolitan Council shall review all long-term comprehensive plans of each independent commission [Metropolitan Airports Commission], board, or agency prepared for its operation and development within the metropolitan area but only if such plan is determined by the Metropolitan Council to have an area-wide effect, a multi-community effect, or to have a substantial effect on metropolitan development. Each plan shall be submitted to the Metropolitan Council before any action is taken to place the plan or any part thereof, into effect.

MS 473.181, [Additional] Metropolitan Council review powers

Subd. 5. Airports

The Metropolitan Council shall review Metropolitan Airports Commission capital projects pursuant to section 473.621, Sd6. The plans of the Metropolitan Airports Commission and the development of the metropolitan airports system by the commission shall, as provided in sections 473.611, Sd5 and 473.655, be consistent with the development guide of the Metropolitan Council.

MS 473.621, Powers of [Metropolitan Airports Commission] corporation

Subd. 6. Capital projects, review

All Minneapolis-St. Paul International Airport capital projects of the commission requiring expenditure of more than $5 million shall be submitted to the Metropolitan Council for review. All other capital projects of the commission requiring expenditure of more than $2 million shall be submitted to the Metropolitan Council for review. No such project that has a significant effect on the orderly and economic development of the metropolitan area may behave commenced without the approval of the Metropolitan Council.

In addition to any other criteria applied by the Metropolitan Council in reviewing a proposed project, the Metropolitan Council shall not approve a proposed project unless the Metropolitan Council finds that the commission has completed a process intended to provide affected municipalities the opportunity for discussion and public participation in the commission's decision-making process. An "affected municipality" is any municipality that (1) is adjacent to a commission airport, (2) is within the noise zone of a commission airport, as defined in the metropolitan development guide, or (3) has notified the commission's secretary that it considers itself an "affected municipality."

The Metropolitan Council must at a minimum determine that the commission:

- Provided adequate and timely notice of the proposed project to each affected municipality.
- Provided to each affected municipality a complete description of the proposed project.
- Provided to each affected municipality notices, agendas, and meeting minutes of all commission meetings, including advisory committee meetings, at which the proposed project was to be discussed or voted on in order to provide the municipalities the opportunity to solicit public comment and participate in the project development on an on-going basis; and considered the comments of each affected municipality.

Subd. 7 Capital projects
For purposes of this section, capital projects having a significant effect on the orderly and economic development of the metropolitan area shall be deemed to be the following:

- The location of a new airport
- A new runway at an existing airport
- A runway extension at an existing airport
- Runway strengthening other than routine maintenance to determine compliance with Federal Air Regulation, Part 36
- Construction or expansion of passenger handling or parking facilities which would permit a 25 percent or greater increase in passenger enplanement levels
- Land acquisition associated with any of the above items, or which would cause relocation of residential or business activities

In addition to overall federal National Environmental Protection Act and state Minnesota Environmental Protection Act environmental requirements the Metropolitan Airports Commission has the following state directives concerning preparation of environmental documentation in relation to development and implementation of capital improvements.

MS 473.614, Environmental Review

Subd 1. Capital Plan; environmental assessments
The commission shall prepare an assessment of the environmental effects of projects in the commission's seven-year capital improvement program and plan at each airport owned and operated by the commission. The assessment must examine the cumulative environmental effects at each airport of the projects at that airport, considered collectively. The commission need not prepare an assessment for an airport when the capital improvement program and plan for that airport has not changed from the one adopted the previous year or when the changes in the program and plan will have only trivial environmental effects.

Subd 2. Capital Program; environmental assessment worksheets
The commission shall prepare environmental assessment worksheets under chapter 116D, rules issued pursuant thereto, on the environmental effects of projects in the commission's capital improvement program at each airport owned and operated by the commission. The scope of the environmental assessment worksheets required by this section is limited to only those projects in the program for an airport that meet all of the following conditions:

- The project is scheduled in the program for the succeeding calendar period.
- The project is scheduled in the program for the expenditure of $5 million or more at MSP airport, or $2 million or more at any other airport.

- The project involves (i) the construction of a new or expanded structure for handling passengers, cargo, vehicles, or aircraft; or (ii) the construction of a new or the extension of an existing runway or taxiway.

After adopting its capital program, the commission may amend the program by adding or changing a project without amending or redoing the worksheets required by this subdivision, if the project to be added or the change to be made is one that the commission could not reasonably have foreseen at the time it completed the worksheets.

For the purpose of determining the need for an environmental impact statement, the commission shall consider the projects included in the scope of a worksheet as a single project and shall assess their environmental effects collectively and cumulatively. The commission's decision on whether an environmental impact statement is needed must be based on the worksheet and comments. The commission may not base a decision that an environmental impact statement is not needed on exemptions of projects in state or federal rules. The commission is not required to prepare an environmental impact statement on an individual project, or to include a project in the scope of an environmental impact statement that the commission determines is needed if the project is shown in the worksheet to have trivial environmental effects or if an environmental impact statement on the project has been determined to be adequate under state law.

The commission may incorporate into worksheets information from the commission's long-term plans, environmental assessments prepared under subdivision 1, or other environmental documents prepared on projects under state or federal law.

Subd 2a. Environmental impact report

Notwithstanding the provisions of subdivision 2, the commission shall prepare a report documenting the environmental effects of projects in the Minneapolis-St. Paul International Airport 2010 long-term comprehensive plan. Environmental effects of and costs associated with, noise impacts, noise mitigation measures, and land use compatibility measures must be evaluated according to alternative assumptions of 600,000, 650,000, 700,000 and 750,000 aircraft operations at the Minneapolis-St. Paul International Airport.

Subd 3. Procedure

The environmental assessments required under subdivision 1 and the environmental assessment worksheet required under subdivision 2 must be prepared each year before the commission adopts its capital improvement plan and program.

The commission shall hold a public hearing on each environmental assessments and environmental assessment worksheet before adopting the capital improvement plan and program. The commission may consolidate hearings.

The initial environmental assessments and environmental assessment worksheets must be completed before the commission adopts its capital improvement program for calendar years 1989-1995.

Subd.4. Other environmental review

Nothing in this section limits the responsibility of the commission or any other governmental unit or agency, under any other law or regulation, to conduct environmental review of any project, decision, or recommendation, except that the environmental assessment worksheets prepared under subdivision 2 satisfy the requirements under state law or rule for environmental assessment worksheets on individual projects covered by worksheets prepared under subdivision 2.

The following statute is not directly a part of the aviation capital improvement plan process but is included here to indicate the responsibilities of the Metropolitan Council to review applications for state and federal aid for aviation investments. This review authority is especially pertinent for grants to municipal owned or privately owned, public-use airports which are not included in the Metropolitan Airports Commission capital improvement plan. For investments at these airports the Metropolitan Council coordinates with MnDOT through its 7-year Aeronautics capital improvement program. This program is updated annually and is used for identifying project eligibility and defining state and federal funding participation levels/schedule.

MS 473.171, Metropolitan Council Review: Applications for federal, and state aid

Subd. 1. Federal

The Metropolitan Council shall review all applications of a metropolitan agency, independent commission, board or agency, and local governmental units for grants, loans or loan guarantees from the United States or agencies thereof submitted in connection with proposed matters of metropolitan significance, all other applications by metropolitan agencies, independent commission, boards and agencies and local governmental units for grants, loans, or loan guarantees from the United States or any agency thereof if review by a regional agency is required by federal law or the federal agency, and all applications for grants, loans or allocations from funds made available by the United States to the metropolitan area for regional facilities pursuant to a federal revenue sharing or similar program requiring that the funds be received and granted or allocated or that the grants and allocations be approved by a regional agency.

Subd. 2. State

The Metropolitan Council shall review all applications or requests of a metropolitan agency, independent commission, board or agency, and local governmental units for state funds allocated or granted for purposed matters of metropolitan significance, and all other applications by metropolitan agencies, independent commissions, boards, agencies, and local governmental units for state funds if review by a regional agency is required by state law or the granting state agency.

Capital improvement program review process materials

The Metropolitan Airports Commission annually prepares a capital improvement program and the associated environmental documents (including an assessment of environmental effects, as well as any needed environmental assessment worksheets) as specified in the statutes quoted previously. These materials inform the policy bodies and facilitate coordination with standing committees, advisory groups and the public. The Metropolitan Airports Commission process is depicted in schematic form in Figure 3, indicating the flow of various work /review elements to develop the capital improvement program and its review by Metropolitan Council and Environmental Quality Board.

Figure 3. Development of MAC Capital Improvement Program

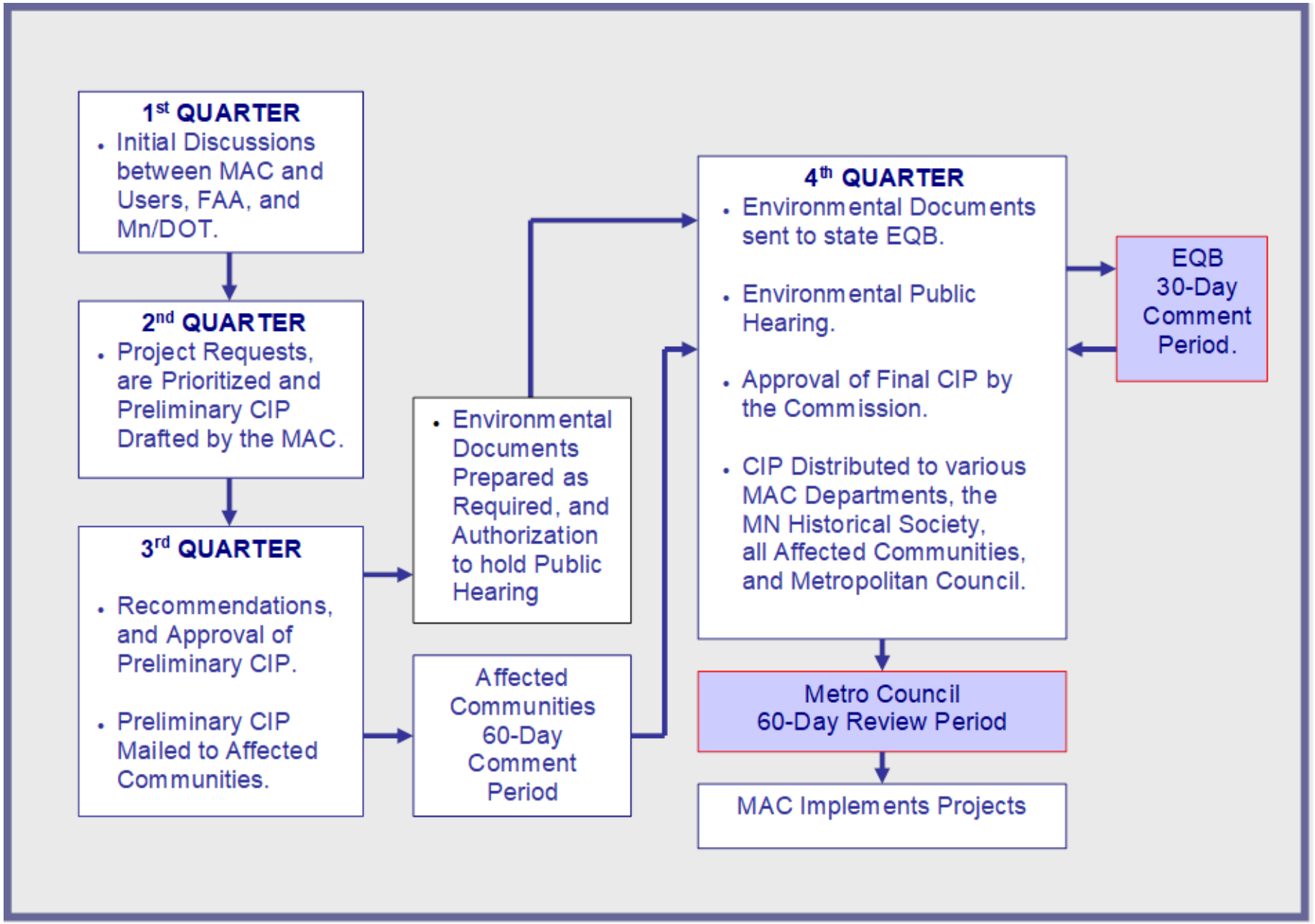


Table 11 indicates the actual review schedule that was programmed for calendar year 2023. This same process is repeated annually with a slight variance to the dates involved for specific actions. Figure 4 shows the capital improvement program review process in graphic form as conducted for the 2024-2030 capital improvement program. The review dates for the Metropolitan Council's Technical Advisory Committee and the Transportation Advisory Board (TAB) are also included.

The Metropolitan Airports Commission capital improvement program is reviewed for consistency with Metropolitan Council plans for the region and in relation to each airport's current long-term comprehensive airport development plan, environmental evaluation or required environmental assessment worksheet or environmental impact statement, and the project criteria as defined in the statutes.

Table 11. Annual Capital Improvement Program review and implementation process

	Metropolitan Airports Commission capital improvement program	Responsibility	2023 schedule
Projects Definition	Initial capital improvement program discussions	Airport Development	January
	Requests for capital improvement program projects to airport development	Departments	Jan. 1 – May 15
	Develop project scopes/cost/prioritization	Departments/Airport Development/Consultants	Feb. 1 – July 31
	Develop draft preliminary capital improvement program	Airport Development	Feb. 15 – August 31
Projects Environmental Review	Prepare assessments of environmental effects and environmental assessment worksheets as required	Environment	July 31-Sept. 30
	Notice of project development and environment meeting mailed to affected communities	Airport Development	August
	Project development and environment recommendation of preliminary capital improvement program to Metropolitan Airports Commission for environmental review/authorization to hold public hearing on assessments of environmental effects and environmental assessment worksheets.	Airport Development	September 6
	Project development and environment minutes of September meeting and notices of September commission meeting maled to affected communities	Airport Development	September
	MAC approval of preliminary capital improvement program for environmental review/authorization to hold public hearing on assessments of environmental effects and environmental assessment worksheets	Airport Development	September 18
	Preliminary capital improvement program mailed to affected communities	Environment	September

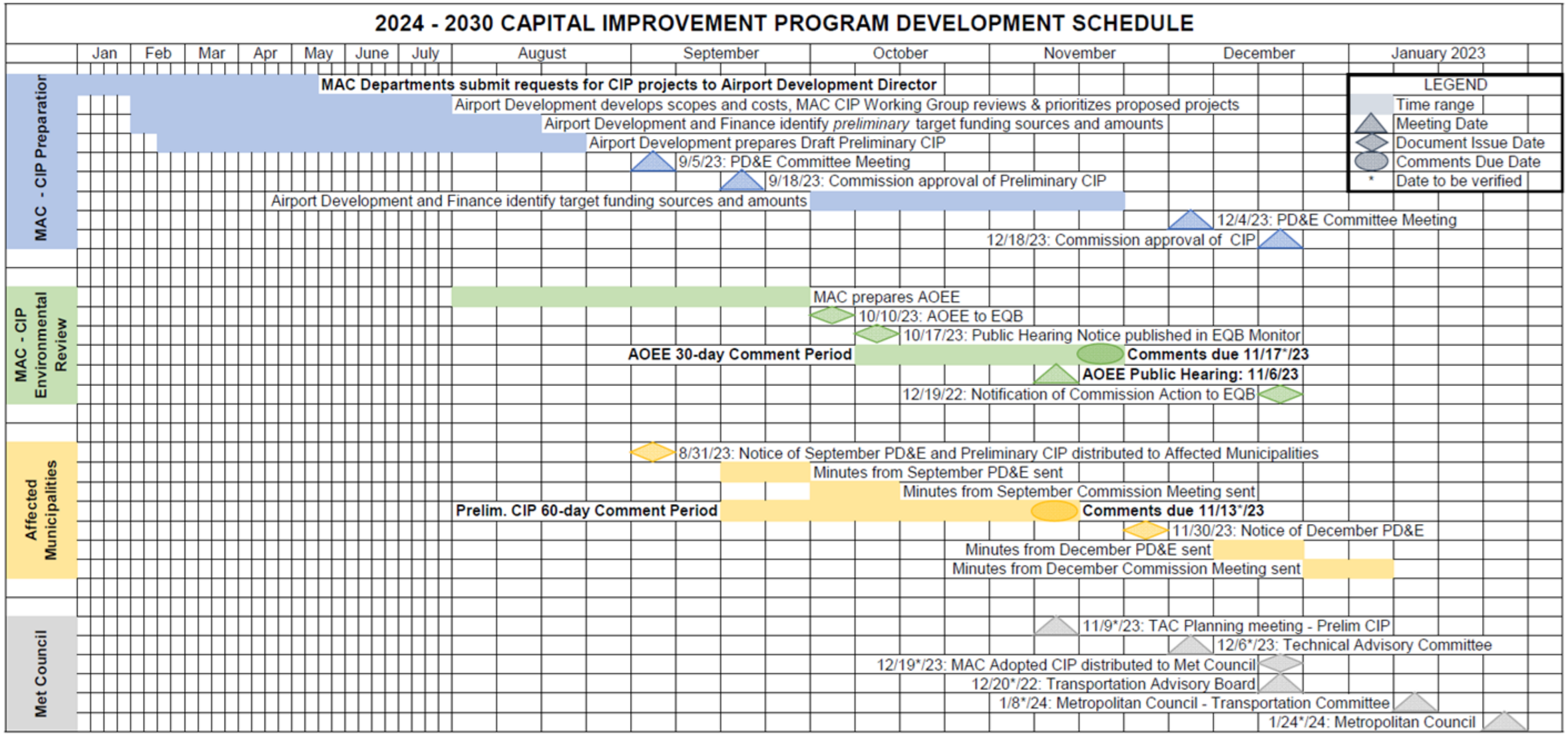
	Metropolitan Airports Commission capital improvement program	Responsibility	2023 schedule
	Assessments of environmental effects and environmental assessment worksheets to Environmental Quality Board Public Hearing Notice published in EQB Monitor, starting 30-day comment period	Environment	October 10
	Minutes of September commission meeting mailed to affected communities	Airport Development	October
	Public hearing on assessments of environmental effects and environmental assessment worksheets at November Finance Development and Environment Committee meeting	Environment	November 6
	30-day comment period on assessments of environmental effects and environmental assessment worksheets ends	Environment	November 17
	Metropolitan Council - TAC Planning committee	Metropolitan Council - TAC Planning	November 9
	Final Date for Affected Communities Comments on Preliminary CIP to MAC	Affected Communities	November 13
	Metropolitan Council - TAB Technical Advisory Committee (TAC)	Technical Advisory Committee	December 6
	Notice of December Finance Development and Environment Committee mailed to affected communities	Airport Development	November 30
	Recommendation by Finance Development and Environment Committee to commission on final capital improvement program	Airport Development	December 4
	Minutes of December Finance Development and Environment Committee and notice of December commission meeting mailed to affected communities	Airport Development	December
	Metropolitan Council - Transportation Advisory Board (TAB)	Transportation Advisory Board	December 20
Projects Planning and Financial Review	Approval of final capital improvement program by commission	Airport Development	December 18
	Notification of commission action to Environmental Quality Board	Airport Development	December 19
	Capital improvement program distributed to MAC departments, Met Council, State Historical Society and affected communities	Airport Development	December 19
	Metropolitan Council – Transportation Committee	Transportation Committee	January 8 (Next Year)
	Metropolitan Council	Metropolitan Council	January 24 (Next Year)
	Minutes of December commission meeting mailed to affected communities	Airport Development	January (Next Year)

Note: 1) All dates are respective for the 2023 process and subject to annual changes. 2) PD&E = Metropolitan Airports Commission Planning, Development and Environment Committee. 3) AOEE = Assessment of Environmental Effects. 4) EAW = Environmental Assessment Work Sheet. 5) EQB = Minnesota Environmental Quality Board

When the TAC Planning committee begins its review of the draft capital improvement program in November the Metropolitan Airports Commission 30-day public review and comment period is just ending and proposed capital improvement program funding information is not completed and acted upon by the Commission. Therefore, the latest capital improvement program changes are addressed verbally at the full Technical Advisory Committee if they are different than the initial action item submitted for review. Final action by the Commission's Planning, Development & Environment Committee (PD&E), including any changes different from the information provided to the TAC, are reported to the full Transportation Advisory Board and addressed in its review. Comments/recommendations made by the TAB are forwarded for consideration by the Metropolitan Council's Transportation Committee who then reports to the full Metropolitan Council for action.

Table 3 is the form designed to reflect the statutory criteria used to determine if Met Council approval of a project in the capital improvement program is necessary. Table 13 and Table 14 display projects that are planned to begin construction in the first year of the capital improvement program and their environmental review status. These tables aid the Met Council and other reviewers in determining if a proposed project requires an environmental review and the status of those reviews, including documenting potential impacts. The Metropolitan Council does not officially review the Metropolitan Airports Commission's annual operating budget or bonding proposals but may use information from these documents to help clarify capital improvement program proposals and their implementation.

Figure 4. Metropolitan Airports Commission (MAC) public participation process



Notes: All dates are tentative and subject to change. Affected Communities are defined in Minnesota Statutes § 473.621, Subd. 6, as amended.

Table 12. Projects meeting statutory review criteria and requiring approval

2024 Capital Improvement Program projects, by airport	Long-Term Comp Plan Reviews/ Actions	AOEE Actions: • Environmental assessment/ worksheet prepared • Environmental impact statement reviewed • National Pollutant Discharge Elimination System approved • Legislative requirement • Regulatory requirement • Legal requirement	Capital Review Criteria (A): Project meets dollar threshold at: MSP = $5 million Relievers = $2 million	Capital Review Criteria (B): Location of a new Airport	Capital Review Criteria (C): New Runway at an Existing Airport	Capital Review Criteria (D): A Runway Extension at an Existing Airport	Capital Review Criteria (E): Runway Strengthening other than Routine Maintenance	Capital Review Criteria (F): New or Expanded Passenger Handling or Parking Facilities for 25% or more capacity Increase.	Capital Review Criteria (G): Land Acquisition associated with the other criteria, or that would cause relocation of residential or business activities	Capital Review Criteria (H): Project information made available by the MAC to affected cities for review
MSP International Airport 2024 Program	2030 long-term plan Update Approved in 2010, 2040 long-term plan to be reviewed in Jan 2024		Several projects, see business item	N/A	N/A	N/A	N/A	N/A	N/A	N/A
St. Paul Downtown Airport (STP)	2025 long-term plan Approved in 2010, update anticipated to begin in 2024		Customs and Border Protection general aviation facility, Runway 14-32 Reconstruction	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Flying Cloud Airport (FCM)	2025 long-term plan Approved in 2010, 2040 long-term plan to be reviewed in 2024	MAC-City Agreement concluded; FAA review of Agreement & R.O.D. on final environmental impact statement completed as part of MAC/airline agreement.	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crystal Airport (MIC)	2035 long-term plan Approved in 2017	FAA Issued Finding of No Significant Impact in July 2019	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anoka County-Blaine Airport (ANE)	2025 long-term plan Approved in 2010, update anticipated to begin in 2025		Airport Rd and GA Blvd Pavement Reconstruction, Equipment Storage and Maintenance Building	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lake Elmo Airport (25D)	2035 long-term plan Approved 2016	FAA issues Finding of No Significant Impact for Environmental Assessment in Aug 2018	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Airlake Airport (LVN)	2035 long-term plan Approval in 2018	Runway 12-30 improvements environmental assessment/worksheet currently underway	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If an assessment of environmental effects or environmental assessment worksheet is required for projects in the annual capital improvement program, the form in Table 13 or Table 14 indicates the types of environmental categories that are examined and whether it has an environmental effect or cumulative effect for a particular airport. The assessment of environmental effects or environmental assessment worksheet, along with the capital improvement program, provide more detailed information that is required if the project has an environmental effect.

Table 13. Projects requiring an Assessment of Environmental Effects (AOEEs) and environmental categories affected, MSP Airport

Project Description	Are the effects of the project addressed in an approved environmental assessment worksheet, environmental assessment or environmental impact statement?	Air Quality	Compatible Land Use	Fish Wildlife and Plants	Floodplains and Floodways	Hazardous Materials, Pollution Prevention and Solid Waste	Historical, Architectural, Archaeological and Cultural Resources	Light Emissions and Visual Effects	Parks & Rec. Areas and Trails	Noise	Water Quality (Storm, Waste and Ground Water)	Wetlands	Infra-structure and Public Services	Farmland	Erosion and Sedimentation
T1 Baggage Claim/Ticket Lobby Improvements Terminal 2 North Gate Expansion Concourse G Infill – pod 2-3 Phase 2	MSP 2020 Improvements environmental assessment/worksheet MSP – Concourse G Infill – Pod 2-3 environmental assessment worksheet	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Table 14. Projects requiring an Assessment of Environmental Effects (AOEEs) and environmental categories affected, reliever airports

Project Description	Are the effects of the project addressed in an approved environmental assessment worksheet, environmental assessment or environmental impact statement?	Air Quality	Compatible Land Use	Fish Wildlife and Plants	Floodplains and Floodways	Hazardous Materials, Pollution Prevention and Solid Waste	Historical, Architectural, Archaeological and Cultural Resources	Light Emissions and Visual Effects	Parks & Rec. Areas and Trails	Noise	Water Quality (Storm, Waste and Ground Water)	Wetlands	Infra-structure and Public Services	Farmland	Erosion and Sedimentation
No projects for 2024	N/A	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Long Term Comprehensive Plans

Plan context

The 20-year long-term comprehensive airport plan is intended to integrate all information pertinent to planning, developing and operating an airport in a manner that reflects its system role and compatibility with its surrounding environment. The plan content guidelines apply to major, intermediate and minor airports; therefore, some flexibility for emphasis or level of detail on certain plan elements will be necessary. Standalone long-term comprehensive plans for airports are required for MAC-owned airports. For municipal owned airports, these requirements may be satisfied with an expanded aviation element within their community comprehensive plans, which also cover a 20-year planning period and allow the community to integrate aviation and land use planning into a single document. Municipal airports may also complete Airport Master Plans separate from this process, but those documents must be integrated into the community comprehensive plan update to meet this requirement.

As regional airports have different needs to update planning documents based on activity growth and facilities updates, plans should be reassessed based on their classification in the regional system. As communities are required to update comprehensive planning documents once every decade, and the reality of airport planning, which may take years from a planning document being approved to actual projects beginning construction, airport long-term comprehensive plans must be updated at least once every 10 years. Plans may be updated more frequently if needed as conditions change over time. As has been seen in the recent past, major shocks to the economy may impact airport operations significantly and may warrant reassessment of planning documents sooner than the required ten years. For the purposes of this guidance, the beginning of the update process is issuing a Request for Proposals for planning support or initiating the plan development process with an internal team. The start of an LTCP update processes should be identified on an Airport CIP to indicate when these planning processes are expected to begin.

The long-term comprehensive plan does not replace any other planning or reporting requirements of another governmental unit. The scope and emphasis of a long-term comprehensive airport plan should reflect the airport's system role and the objectives for each plan content category as described below. LTCPs should be considered higher level planning documents for use both for airport sponsors and affected communities, which outlines projected aircraft activity and conceptual facility improvements through the planning period. These plans should include an inventory of existing conditions at the airport and identify any major potential issues, if applicable. These plans should incorporate information from other required documents when they can, like Airport Layout Plans, environmental review documents and airport master plans (for non-MAC owned airports). The following requirements will note what level of detail is required to be included into an LTCP, many of these will be completed in detail at other steps of the review process and may only require high level information on the topic while noting when or if this information will be provided in greater detail. Plan updates may use information from previous plans if proposed facility improvements are minor and do not impact certain resources.

Plan content

Airport development

Objective: To portray the type and location of airport physical and operational development in a systematic fashion, reflecting both the historical and forecast levels of unconstrained aviation demand.

The LTCP should include:

- Background data including a description of previous planning studies and development efforts; each item described should contain a synopsis of pertinent dates, funding sources, objectives and results.
- An overview of both historical and forecasted aviation activity (number of based aircraft, aircraft mix, number of annual and peak hour aircraft operations) and the demand compared to the existing and proposed facilities.
- An airport map showing land use areas, by type, within the airport property boundary or under airport control. Maps showing airport development phasing based upon key demand and capacity levels.
- A description of facilities staging, by phase, for specific land use areas.
- A copy of the latest FAA-approved airport layout plan with associated data tables as described in FAA SOP 2.0 and AC 150/5070-6B.

Airport and airspace safety

Objective: To identify planning and operating practices required to ensure the safety of aircraft operations and protect the regional airspace resource. The plan should include:

- An airport map depicting the airport zoning district, land use safety zones and a description of the associated airport zoning ordinance as required under Minnesota Statutes 360.061-360.074 and defined in MN Rules 8800.2400. This map should contain appropriate topographical reference and depict those areas under aviation easements.
- An airport area map showing the FAA FAR Part 77 airspace surfaces and airspace surface obstructions, as described in FAA AC 150/5070-6B.
- The FAA Runway Protection Zone and MnDOT Clear Zone are trapezoidal shaped land use control zones, on the ground, that begin 200 feet from the end of the paved runway, extending out along the runway centerline. They are open space, clear of incompatible objects and land uses, with the goal of protecting people and property on the ground under aircraft approach and departure paths. Prohibited land uses include residences and places of public assembly (in other words, churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons).
    - If the airport zoning ordinance includes custom zones established during the creation and adoption of the airport zoning ordinance, a description of the custom zone(s) and rationale for the custom zone(s) should be included.
- A map of aircraft flight tracks depicting the local aircraft traffic pattern and general description of operating parameters in relation to the physical construction and operational development phasing of the airport. Flight tracks and traffic pattern figures are not a required component of an airport layout plan.

Airport and aircraft environmental capability

Objective: To identify planning and operational practices considerations to reduce the impact on the people and environment of the region impacted by regional airports.

- Aircraft on-ground and over-flight activities described within a historical and forecast context, including seasonal and daily traffic. Maps of aircraft noise impact areas depicted by contours of day-night average noise sound level noise levels for annualized aircraft activity.
- Description of adopted Noise Abatement Operations Plan and/or operational abatement measures being implemented.
- Description of land use measures and proposed strategy for off-airport land uses affected by aircraft noise as defined in the Land Use Compatibility Guidelines for Aircraft Noise.

- Description of aircraft, ground vehicle and point-source air pollution emissions within a historical and forecast context, including definition of the seasonal and daily operating environment. Identify existing and potential air-quality problem areas. This should include measures being taken to reduce GHG emissions as required to meet state GHG reduction targets for non-surface transportation. This may be covered in greater detail in the environmental review process.
- Description and map of existing drainage system including natural drainage-ways and wetlands by type. Provide description of existing surface water management plan for water quantity and quality including proposed facilities, storage volumes, rates and volumes of runoff from the site, and pollutant loadings associated with planned airport site facilities (as identified in spill prevention, control and countermeasure and stormwater pollution prevention plan) that could affect surface water quality. Proposed mitigation measures and facilities (during construction and long-term) to avoid off-site flooding and minimize polluting of surface waters. A description of measures to mitigate the potential impact or compensate for the loss or alteration of wetlands, if applicable. As these features may not be impacted by updates to LTCPs, this requirement can be met by referencing and/or including information and figures from previous LTCPs or by noting that this will be met by a subsequent environmental review process for proposed projects.
- Description of the types of potential groundwater contaminants present on the site and proposed measures for the safe handling, storage and disposal of these substances to protect ground water, including description of the Metropolitan Airports Commission and private operator's roles for managing these materials. This may be covered in greater detail in the environmental review process.
- Projection of the annual average volume of wastewater to be generated for the next 20 years by five-year increments from terminals, operators and the proposed facilities (description and map) for handling and treating wastewater including public sewer service, private treatment plants and individual on-site sewage disposal systems. Include a description of proposed management for private facilities and roles of the Metropolitan Airports Commission and private operators in implementation. As these features may not be impacted by updates to LTCPs, this requirement can be met by referencing and/or including information and figures from previous LTCPs or by noting that this will be met by a subsequent environmental review process for proposed projects. Description of recommended air, water and noise control plans, including monitoring programs.

Compatibility with metropolitan and local plans

Objective: To identify demand and capacity relationships between airport and community systems and define a management plan for maintaining compatibility. The plan should include:

- For commercial service airports, a description of historical and forecast ground traffic activities, including average and peak-flow characteristics on a seasonal, daily, and peak hour basis. Map showing location of ground access points, parking areas and associated traffic counts. Include the identification and description of potential problem areas and plan for traffic management. Traffic impact reports may be included in subsequent environmental review process.
- Description of water supply, sanitary and storm sewer and solid waste systems. Definition of historical and forecast use levels and capacities. Depictions of locations where airport systems interface with local or regional systems. Identification of potential problem areas and the plan(s) for waste management. As this information may not be impacted by some updates to LTCPs, this can be met by referencing and/or including information and figures from previous LTCPs.
- Description of other airport service needs (for example, police and fire) that may require changes in agreements or types/levels of governmental and/or general public support.

Implementation strategy

Objective: To establish the type, scope and economic feasibility of airport development and recommended actions to implement a compatible airport and community plan. The plan should include:

- Description of the overall physical and operational development phasing needed over the next 20 years.
- A capital improvement plan to cover a seven-year prospective period. The first three years of the development plan should be project-specific, and the other four years of the plan, including projects of more than four years duration and new projects, may be aggregate projections. Estimates of federal, state and local funding shares should be included for all projects included in the plans.
- Identification of future planning activities needed for implementation of the comprehensive airport plan including all potential required state and federal environmental reviews.
- A summary of the planning process used to develop the plan and a list of the activities and stakeholders engaged through the process.

Plan amendment

The long-term comprehensive plan is to be prepared on a regular basis for each affected airport. The document should be prepared to meet the plan content information discussed previously. In the event that a change to the plan for any projects proposed in the implementation plan cannot be accommodated during its scheduled update, the long-term comprehensive plan, or parts thereof, should be amended, if necessary. In the event that a major project is completed which was identified from an in-effect plan, which substantially alters the airport's use or operations, amendments may also be necessary to reassess activity forecasts, adjacent community impacts and airport development needs. Proposed amendments are assumed to have required planning and environmental work substantially in progress. An amendment should be prepared and reviewed by the Met Council prior to project inclusion in that year's capital improvement program. Examples of potential amendments include the following items:

- Projects meeting the capital review thresholds of $5 million at the Minneapolis-St. Paul International Airport, and $2 million at reliever airports
- Changes requiring an update to FAA airport layout plan
- Runway changes
- Projects having potential off-airport effects
- Reliever airport non-aviation land use changes. This involves land use parcels on-airport that are not being released by the FAA for sale but remain as part of the airport property and are made available by the airport operator through lease agreements with private parties to enhance revenues to the airport sponsor. The size of parcels and lease period may vary considerably; location and use of potential parcels were not part of individual long-term comprehensive plan reviews. Met Council review objectives are:
  - To monitor such parcel changes for purposes of maintaining its overall land use database
  - To know the location and use of the parcels in relation to the approved long-term comprehensive plan
  - To appraise airport operators of any recent local or metro system changes they may not be aware of that may need additional review/coordination
  - To establish an administrative review process in coordination with airport sponsors for review of non-aviation land use change proposals

Table 15. Update schedule for airport long-term comprehensive plans

Metro Area Public Use Airports	Plan Status
Minneapolis-St. Paul Int'l	2040 long-term plan approved May 2024
St. Paul Downtown	2030 long-term plan approved April 2010
Anoka County-Blaine	2030 long-term plan approved April 2010
Flying Cloud	2040 long-term plan approved August 2025
Airlake	2035 long-term plan approved March April 2018
Crystal	2035 long-term plan approved October September 2017
Lake Elmo	2035 long-term plan approved October August 2016
South. St. Paul Municipal	Community comprehensive plan update approved September 2020 Airport master plan approved June 2015
Forest Lake Municipal	Community comprehensive plan update approved March 2020 Airport master plan approved January 2021
Lino Lakes Seaplane Base	Community comprehensive plan update approved November 2020
Wipline Seaplane Base	Inver Grove Heights Community comprehensive plan update approved October 2019

Land Use Compatibility Guidelines

The regional land use compatibility guidelines for aircraft noise have been prepared to assist communities in preventative and corrective mitigation efforts that focus on compatible land use. The compatibility guidelines are one of several aviation system elements to be addressed in the comprehensive plans and plan amendments of communities affected by aircraft and facility operational impacts. The Metropolitan Land Planning Act requires all local government units to prepare a comprehensive plan for submittal to the Metropolitan Council for review; updated plans in the next cycle of will be due in December 2028. The new plans will reflect the Imagine 2050 vision, and the 2025 Metro Systems Statements. The following overall process and schedule applies:

- In 2025, after adoption of the new 2050 Transportation Policy Plan, the Metropolitan Council transmits new systems statements to each metro community.
- Within nine months after receipt of the systems statements each community reviews its comprehensive plan and determines if a plan amendment is needed to ensure consistency with 2050 Transportation Policy Plan. If an amendment is needed, the community prepares a plan amendment and submits it to the Metropolitan Council for review.
- Each community affected by aircraft noise and the airport owner jointly prepare a noise program to reduce, prevent or mitigate aircraft noise impacts on land uses that are incompatible with the guidelines; both operational and land use measures should be evaluated. Communities should assess their noise impact areas and include a noise program in the 2028 comprehensive plan update, if deemed necessary.
- Owners/Operators of system airports should include their part of the noise program in preparation or update of each airport's long-term comprehensive plan. See Table 16 Noise Impacted Communities for listing of noise-impacted communities.
- Metropolitan Council reviews community plan submittal and approves or requires a plan modification.
- Airport owner submits long-term comprehensive airport plan or plan update for Metropolitan Council review and approval.

Airport noise

The airport section of the land use compatibility guidelines assumes:

- Federal and Manufactures programs for reduction of noise at its source (engines, airframes)
- Airport operational noise abatement measures plan/in place
- Community comprehensive plans reflect compatible land use efforts occurring through land acquisition, "preventive" land use measures, or "corrective" land use measures
- Availability of a Metropolitan Council noise policy area map (from the most recently approved long-term comprehensive plan) for the facility under consideration - the noise policy exposure maps identify where, geographically, the land use compatibility guidelines are to be applied

Preventive and corrective land use measures

Airport noise programs, and the application of land use compatibility guidelines for aircraft noise, are developed within the context of both local community and comprehensive plans, and individual airports long-term comprehensive plans. Both the airport and community plans should be structured around an overall scheme of preventive and corrective measures. Table 17 and Table 18 depict the current land use measures adopted in conjunction with development of the MSP noise compatibility programs.

The status of noise compatibility programs at other system airports, in relation to the land use measures adopted at Minneapolis-St. Paul International, are also included to indicate the extent of the

current noise control effort on a system-wide basis. Other land use measures may also need to be considered at reliever system airports. The level and extent of noise impacts vary widely between the airports and therefore not all land use measures may be appropriate for each specific airport, in addition, the level of noise abatement emphasis may need to be different for neighborhoods with the same community.

The compatibility guidelines indicate that some uses be discouraged. Prior to applying the guidelines, the comprehensive plan or plan amendment needs to assess what has been or can be done to discourage noise sensitive uses. This should be done when the overall preventive and corrective land use guidelines (contained in Table 17 and Table 18) are defined and described below. All new land uses are categorized according to whether they are considered new/major redevelopment or new/in-fill/redevelopment.

The land uses are listed in Table 8 Land Use Compatibility Guidelines for Aircraft Noise as specific categories grouped to reflect similar general noise attenuation properties and what the normally associated indoor and outdoor use activities are. The listing is ranked from most to least sensitive uses in each category based upon the acoustic properties of typical land uses by the standard land use coding manual. The Metropolitan Council has prepared a builder's guide to assist in determining acoustic attenuation of proposed new single-family detached housing, which is discouraged, but may be allowed by communities in zone 4 and the buffer zone.

Table 16. Noise impacted communities

Airport	Community
MSP International*	Minneapolis, Bloomington, Richfield, Mendota Heights, Mendota, Eagan, Burnsville, Fort Snelling
St. Paul Downtown	St. Paul
Anoka County- Blaine	Blaine
Flying Cloud	Eden Prairie
Crystal	Crystal, Brooklyn Park, Brooklyn Center
Airlake	Eureka Twp., Lakeville
South St. Paul	South St Paul, Inver Grove Heights
Lake Elmo	Baytown, West Lakeland, Lake Elmo

* As defined under MS 473.621, Sd 6.

Table 17. Current preventive land use measures

Measure	MSP International Airport Communities	Other Regional Airport Communities
Amend local land use plans to bring them into conformance with regional land use compatibility guidelines for aircraft noise.	Yes	Yes
Apply zoning performance standards	Yes	Yes
Establish a public information program	Yes	Yes
Revise building code	Yes/MS 473.192	Yes/MS 473.192
Fair property disclosure policy	Yes/Usually applied by developer or builder.	Yes/Usually applied by developer or builder.
Dedication of aviation easements/releases	Yes	Yes
Transfer of development rights	No	No
Land banking (acquisition of undeveloped property)	No	No

Table 18. Current corrective land use measures

	Measure	MSP International Airport Communities	Other Regional Airport Communities
Airport Developed Property	Within runway protection zones	Yes	Yes
	Within MnDOT safety zones	Yes	FCM & STP
	Within day-night average sound level 65	Yes	All Airports
	Part 150 sound insulation program	Yes	No
	Property purchase guarantee	No	No
Creation of Sound Barriers	Walls	Yes	Yes
	Berms	Yes	Yes
	Ground runup enclosures	Yes	Yes

Table 19. Land use compatibility guidelines for aircraft noise levels

Land Use Category	New Development or Major Redevelopment					Infill Development or Additions to Existing Structures				
Noise Exposure Zones	1 DNL 75+	2 DNL 74-70	3 DNL 69-65	4 DNL 64-60	Buffer Zone*	1 DNL 75+	2 DNL 74-70	3 DNL 69-65	4 DNL 64-60	Buffer Zone *
Residential										
Single / Multiplex with Individual Entrance	INCO	INCO	INCO	INCO		COND	COND	COND	COND	
Multiplex / Apartment with Shared Entrance	INCO	INCO	COND	PROV		COND	COND	PROV	PROV	
Mobile Home	INCO	INCO	INCO	COND		COND	COND	COND	COND	
Educational, Medical, Schools, Churches, Hospitals, Nursing Homes	INCO	INCO	INCO	COND		COND	COND	COND	PROV	
Cultural/Entertainment/Recreational										
Indoor	COND	COND	COND	PROV		COND	COND	COND	PROV	
Outdoor	COND	COND	COND	COND		COND	COND	COND	COMP	
Office/Commercial/Retail	COND	PROV	PROV	COMP		COND	PROV	PROV	COMP	
Transportation-Passenger Facilities	COND	PROV	PROV	COMP		COND	PROV	PROV	COMP	
Transient Lodging	INCO	COND	PROV	PROV		COND	COND	PROV	PROV	
Other medical, Health & Educational	COND	PROV	PROV	COMP		COND	PROV	PROV	COMP	
Other Services	COND	PROV	PROV	COMP		COND	PROV	PROV	COMP	
Industrial/Communication / Utility	PROV	COMP	COMP	COMP		PROV	COMP	COMP	COMP	
Agriculture Land/Water Areas / Resource Extraction	COMP	COMP	COMP	COMP		COMP	COMP	COMP	COMP	

NOTE: COMP = Compatible; PROV = Provisional; COND = Conditional; INCO = Incompatible.

New development: major redevelopment or infill and/or reconstruction

New development – means a relatively large, undeveloped tract of land proposed for development. For example, a residential subdivision, industrial park, or shopping center.

Major redevelopment - means a relatively large parcel of land with old structures proposed for extensive rehabilitation or demolition and different uses. For example, demolition of an entire block of old office or hotel buildings for new housing, office, commercial uses; conversion of warehouse to office and commercial uses

Infill development - pertains to an undeveloped parcel or parcels of land proposed for development similar to or less noise-sensitive than the developed parcels surrounding it. For example, a new house on a vacant lot in a residential neighborhood, or a new industry on a vacant parcel in an established industrial area.

Reconstruction of additions to existing structures - pertains to replacing a structure destroyed by fire, age, etc. to accommodate the same use that existed before destruction or expanding a structure to accommodate increased demand for existing use (for example, rebuilding and modernizing an old hotel, or adding a room to a house). Decks, patios, and swimming pools are considered allowable uses in all cases.

Definition of compatible land use

The four land use ratings in land use compatibility Table 8 are explained as follows:

COMP/Compatible – uses are acoustically acceptable for both indoors and outdoors.

PROV/Provisional – uses that should be discouraged if at all feasible; if allowed, must meet certain structural performance standards to be acceptable according to Minnesota Statute 473.192 (Metropolitan Area Aircraft Noise Attenuation Act). Structures built after December 1983 shall be acoustically constructed so as to achieve the interior sound levels described in Table 8. Each local government unit having land within the airport noise zones is responsible for implementing and enforcing the structure performance standards in its jurisdiction.

COND/Conditional – uses that should be strongly discouraged; if allowed, must meet the structural performance standards, and requires a comprehensive plan amendment for review of the project under the factors described in Table 8.

INCO/Incompatible – Land uses that are not acceptable even if acoustical treatment were incorporated in the structure and outsides uses restricted.

Noise policy areas

A noise policy area is defined for each system airport and includes – aircraft noise exposure zones, an optional buffer zone; and the preventative and corrective land use measures that apply to that facility. This section of the land use compatibility guidelines for aircraft noise contains maps depicting the latest noise information being used to define the noise policy areas for each system airport. The noise policy area is established as part of the [latest] long-term comprehensive plan reviewed and approved by the Metropolitan Council. The following maps depict noise contours over the 2020 generalized land use as defined by the Met Council. An airport noise study was not completed as a component of the 2021 Forest Lake Airport Master Plan.

Figure 5. 2040 preferred alternative contours, Minneapolis-St. Paul International Airport

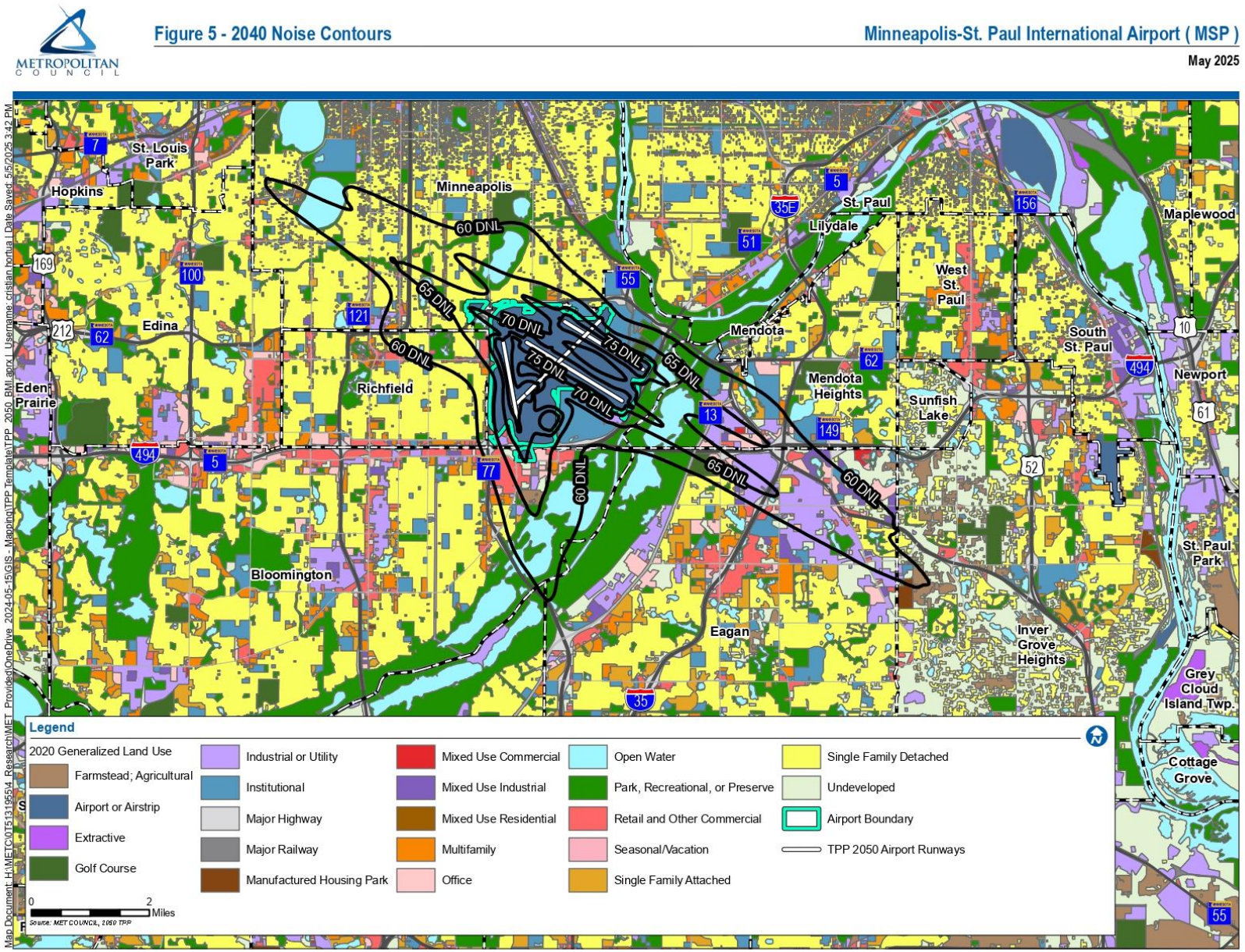


Figure 6. 2025 preferred alternative contours, St. Paul Downtown Airport

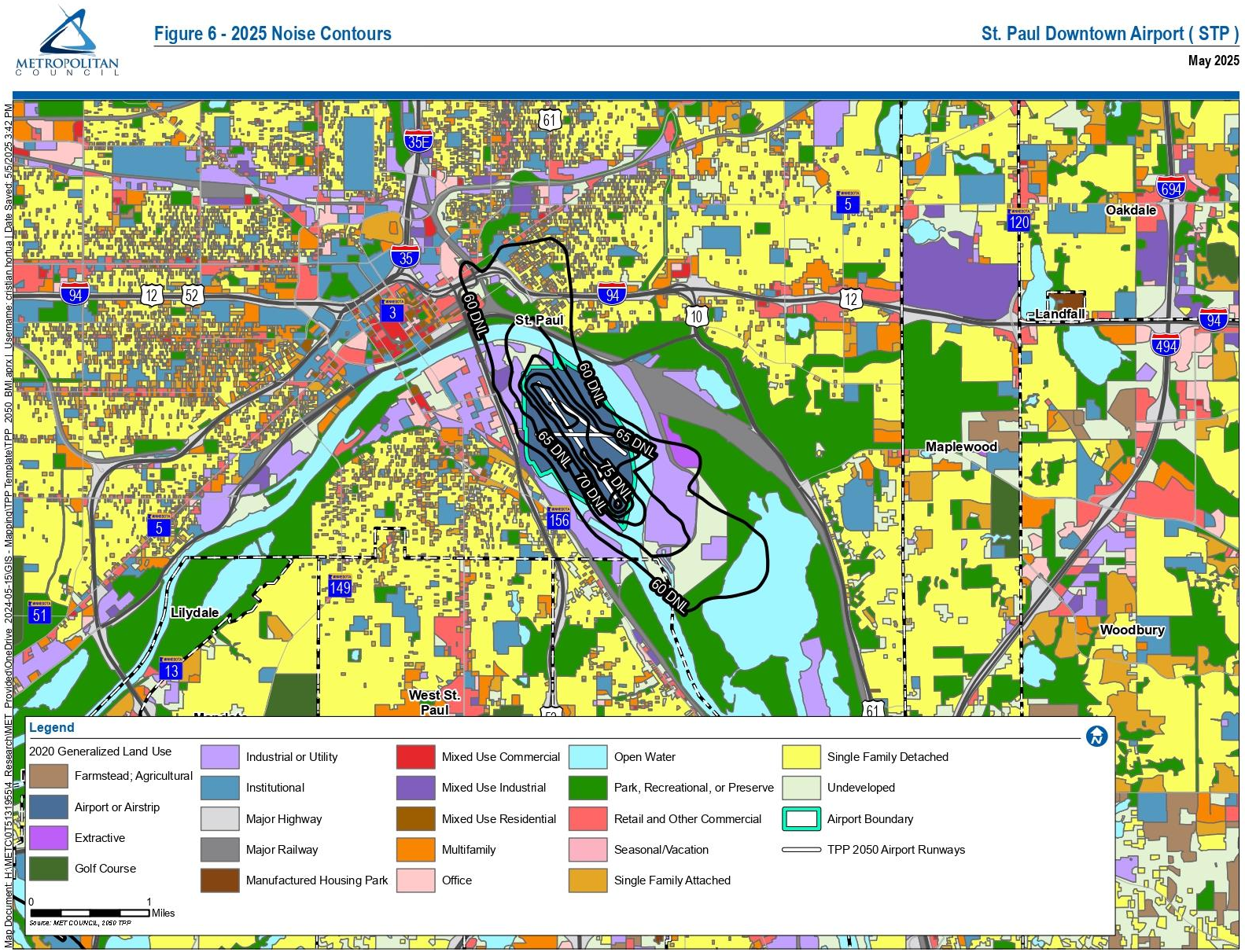


Figure 7. 2035 preferred alternative contours, Airlake Airport

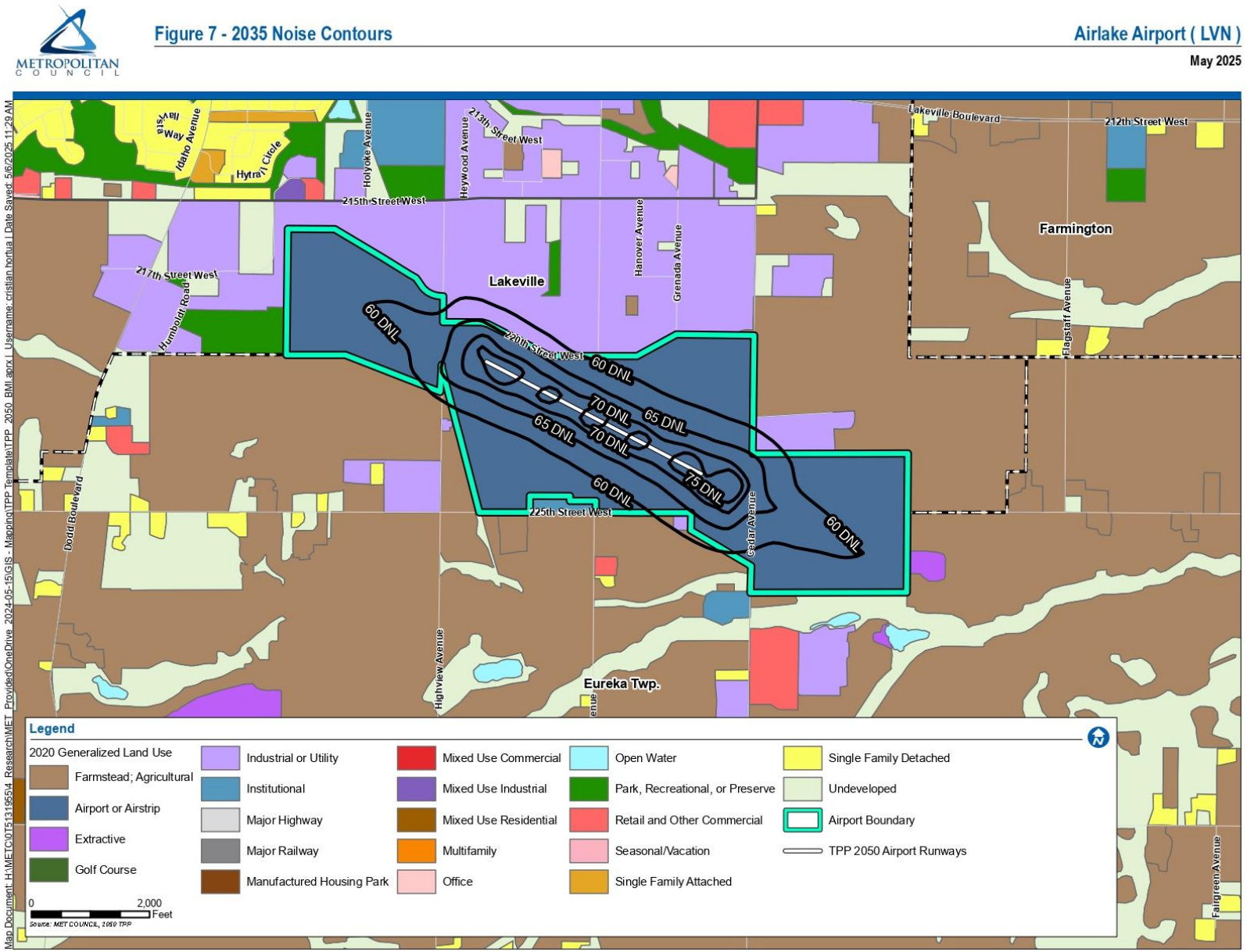


Figure 8. 2025 preferred alternative contours, Anoka County – Blaine Airport

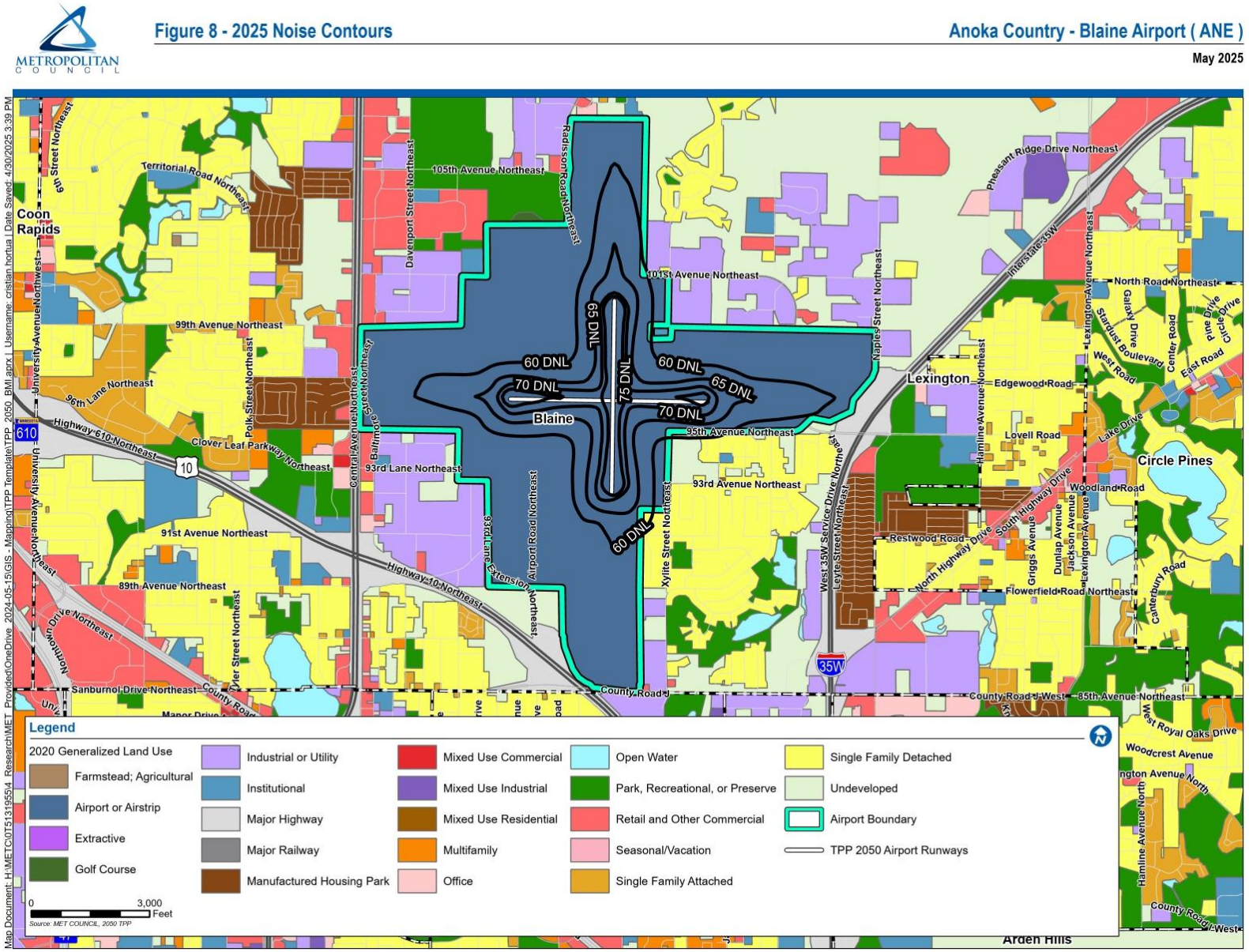


Figure 9. 2035 preferred alternative contours, Crystal Airport

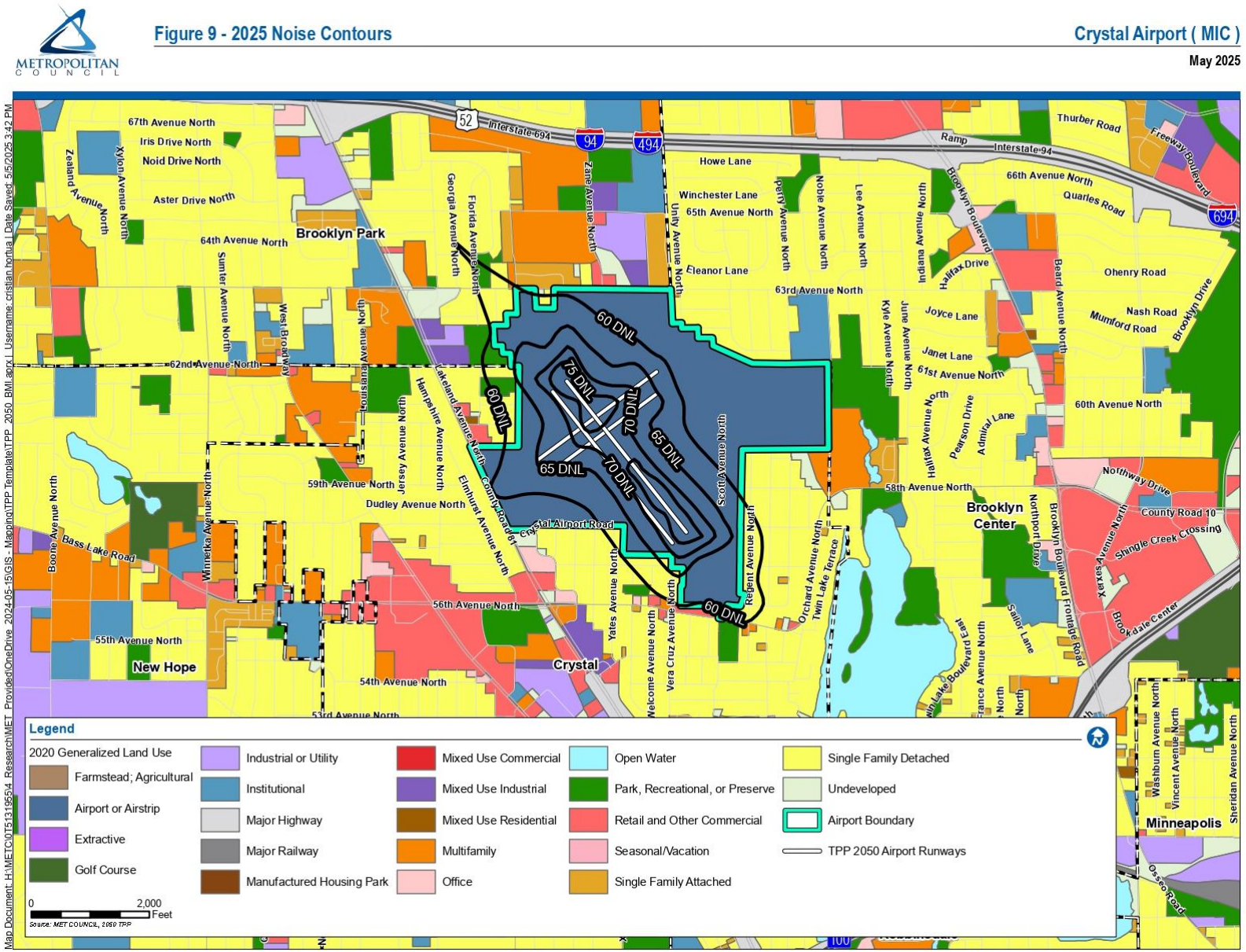


Figure 10. 2040 preferred alternative contours, Flying Cloud Airport

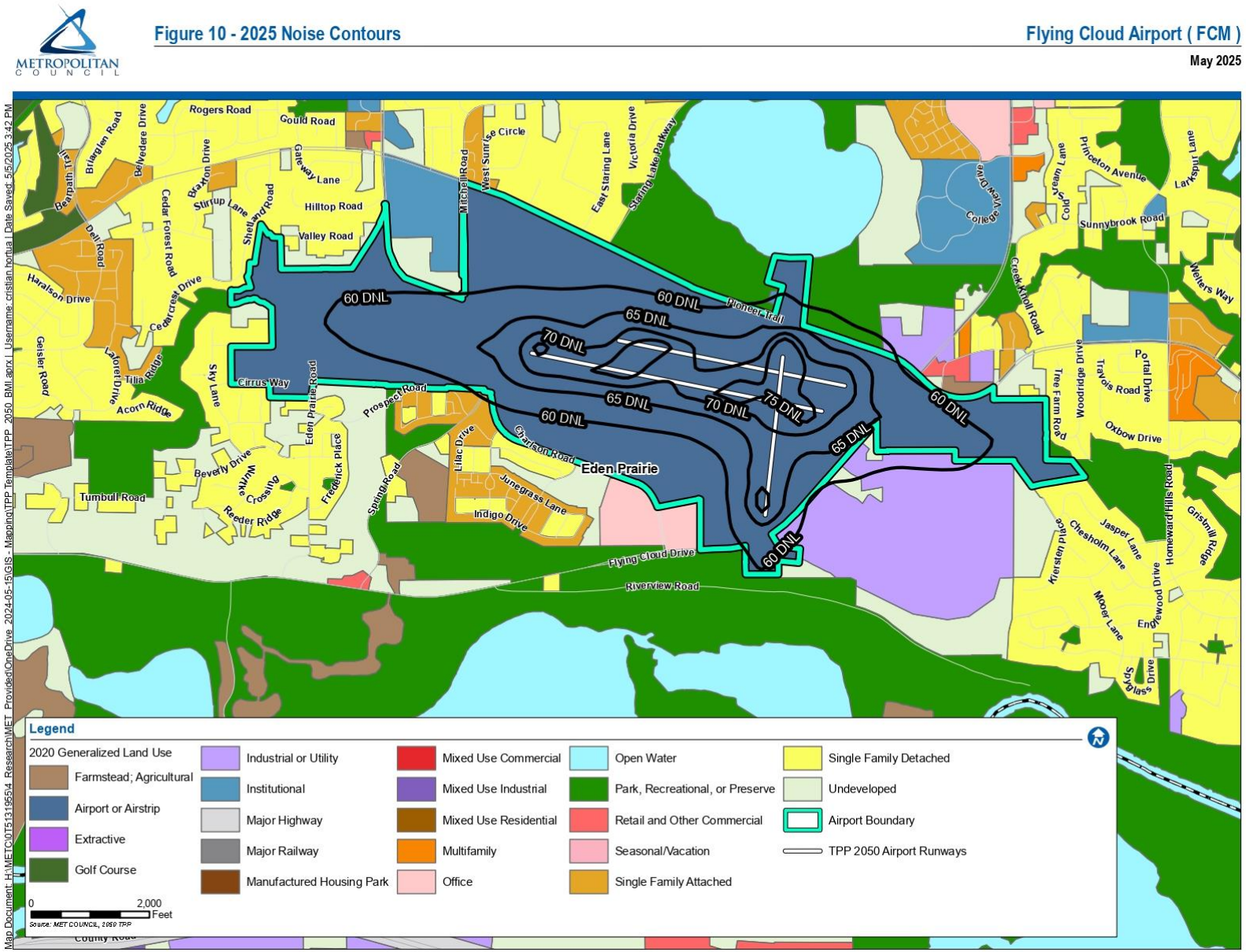


Figure 11. 2035 preferred alternative contours, Lake Elmo Airport

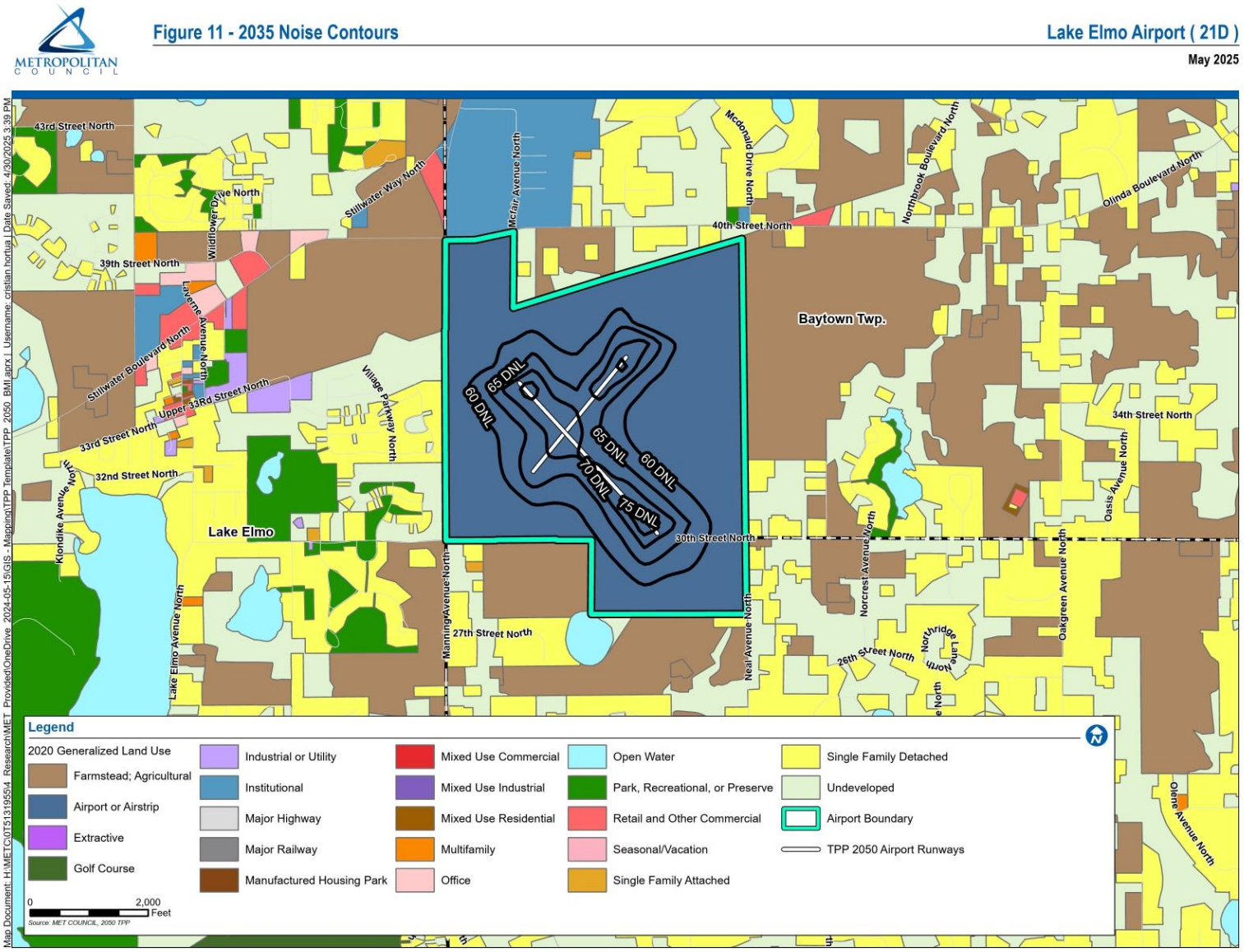
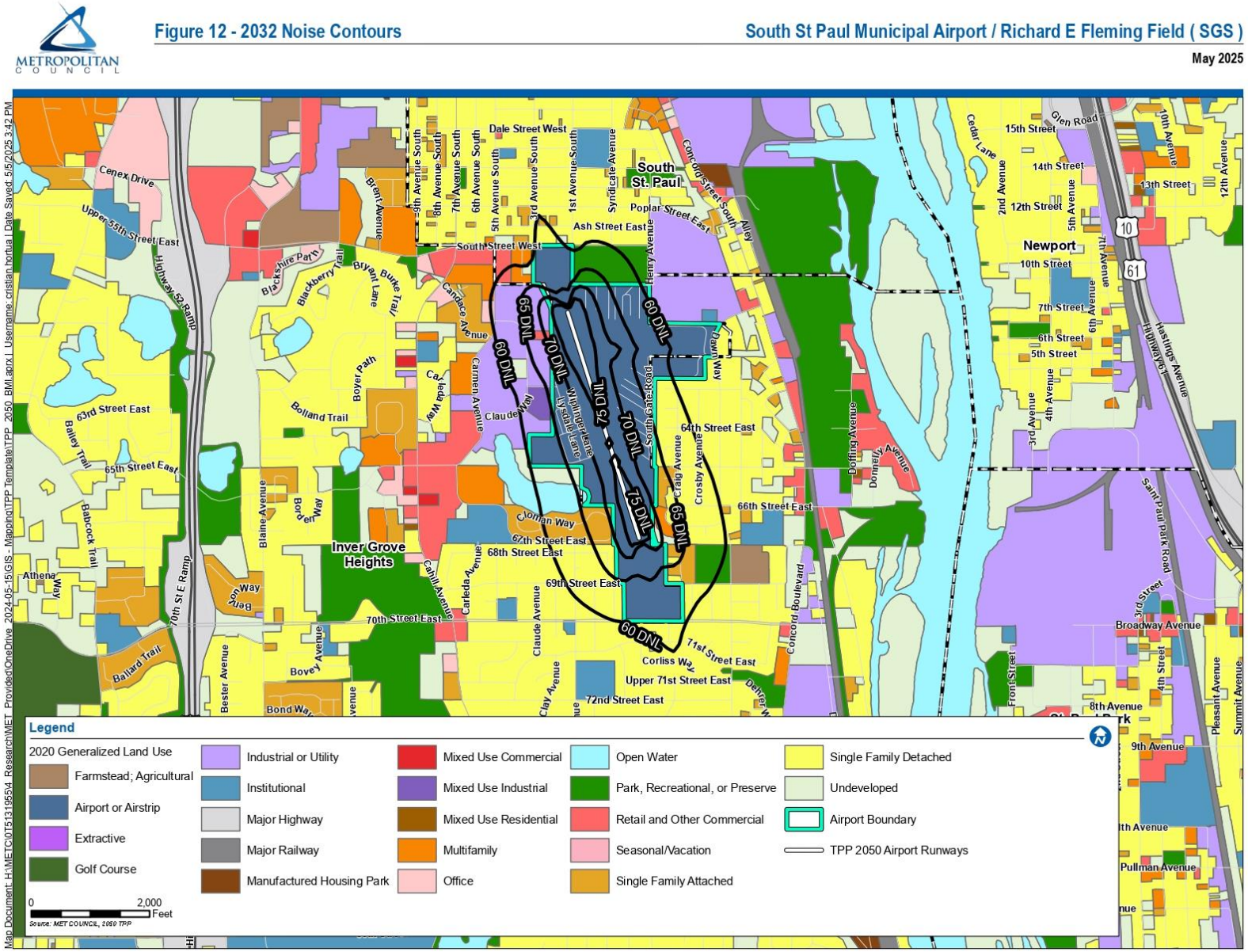


Figure 12. 2035 preferred alternative contours, South St Paul Airport (Fleming Field)



Noise exposure zones

Zone 1 – Occurs on and immediately adjacent to the airport property. Existing and projected noise intensity in the zone is severe and permanent. It is an area affected by frequent landings and takeoffs and subjected to aircraft noise greater than 75 day-night average noise level. Proximity of the airfield operating area, particularly runway thresholds, reduces the probability or relief resulting from changes in the operating characteristics of either the aircraft or the airport. Only, new, non-sensitive, land uses should be considered - in addition to preventing future noise problems the severely noise-impacted areas should be fully evaluated to determine alternative land use strategies including eventual changes in existing land uses.

Zone 2 – Noise impacts are generally sustained, especially close to runway ends. Noise levels are in the 70-74 day-night average noise level range. Based upon proximity to the airfield the seriousness of the noise exposure routinely interferes with sleep and speech activity. The noise intensity in this area is generally serious and continuing. New development should be limited to uses that have been constructed to achieve certain exterior to - interior noise attenuation and that discourage certain outdoor uses.

Zone 3 – Noise impacts can be categorized as sustaining. Noise levels are in the 65-69 day-night average noise level range. In addition to the intensity of the noise, the location of buildings receiving the noise must also be fully considered. Aircraft and runway use operational changes can provide some relief for certain uses in this area. Residential development may be acceptable if it is located outside areas exposed to frequent landings and takeoffs, is constructed to achieve certain exterior-to-interior noise attenuation and is restrictive as to outdoor use. Certain medical and educational facilities that involve permanent lodging and outdoor use should be discouraged.

Zone 4 – Defined as a transition area where noise exposure might be considered moderate. Noise levels are in the 60-64 day-night average noise level range. The area is considered transitional since potential changes in airport and aircraft operating procedures could lower or raise noise levels. Development in this area can benefit from insulation levels above typical new construction standards in Minnesota, but insulation cannot eliminate outdoor noise problems.

Noise Buffer zones – Additional areas that can be protected at the option of the affected community; generally, the buffer zone becomes an extension of Noise zone 4. At MSP, a one-mile buffer zone beyond the day-night average noise level 60 has been established to address the range of variability in noise impact, by allowing implementation of additional local noise mitigation efforts. A buffer zone, out to day-night average noise level 55, is optional at those reliever airports with noise policy areas outside of the Metropolitan Urban Services Area.

Low Altitude Authorization and Notification Capability (LAANC) System

As unmanned aerial systems (UAS) operations grow in the country and their application is used for a wider variety of uses, the LAANC system may play a role future land use considerations for businesses who utilize UAS for the delivery of goods or other uses. The following maps are intended to provide greater understanding in the region on where UAS operations face restrictions today to aid in future decision making for local community and business partners as the UAS industry matures. For more information on how the system is used and how it was developed, see the FAA's webpage on the topic.

Figure 13. ***LAANC airspace restrictions for UAS operations surrounding MSP International airport.***

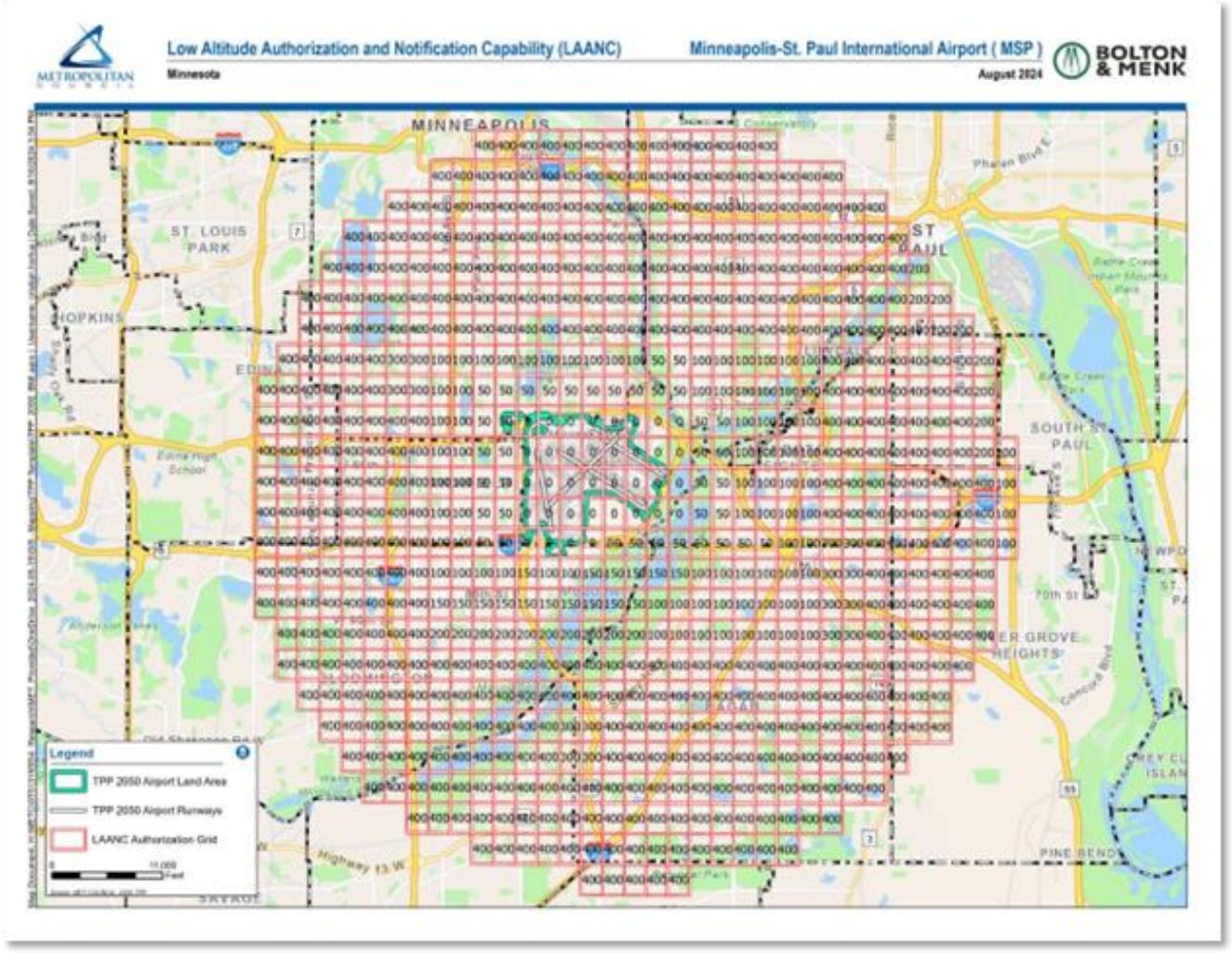


Figure 14. *LAANC airspace restrictions for UAS operations surrounding ANE airport.*

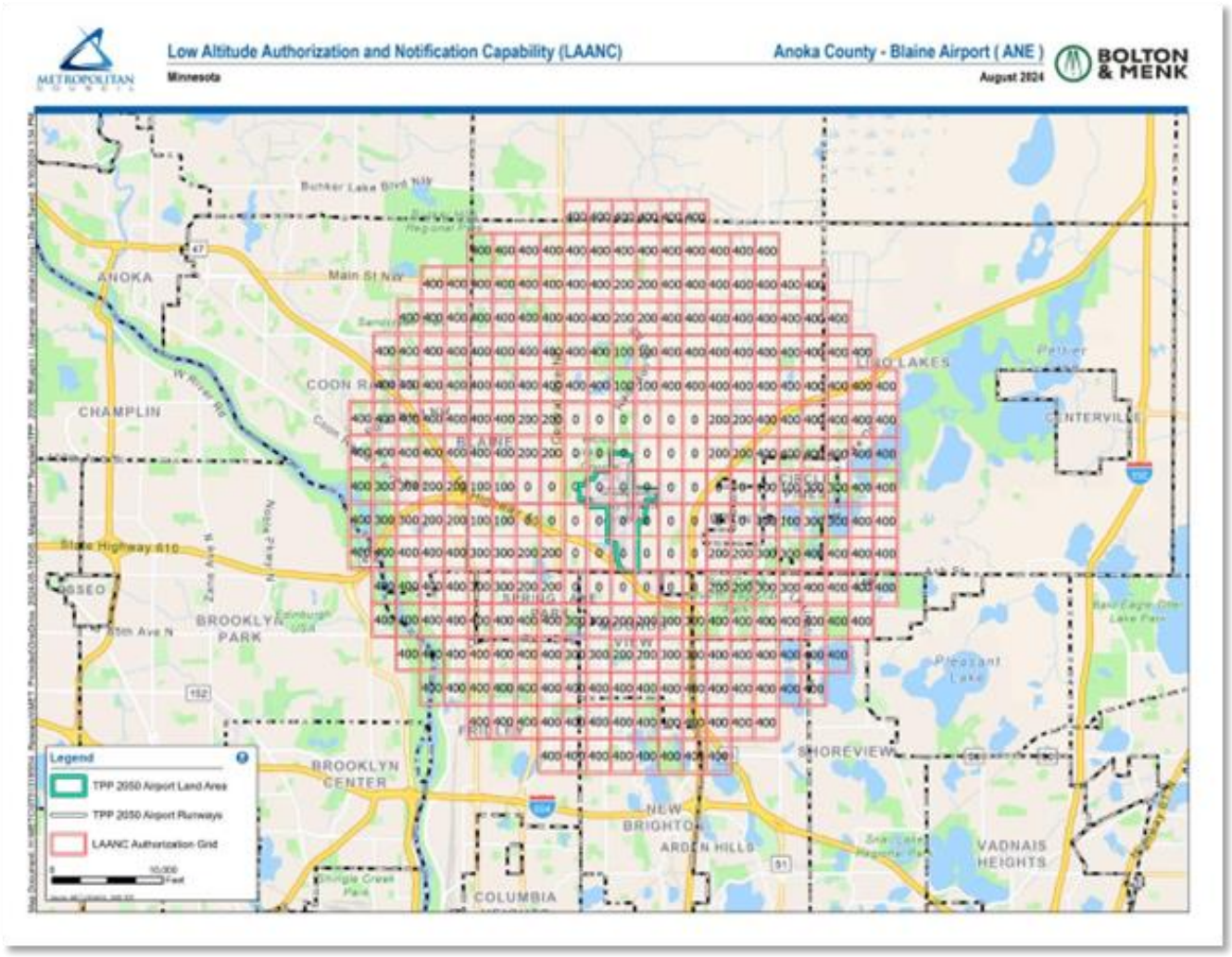


Figure 15. *LAANC airspace restrictions for UAS operations surrounding FCM airport.*

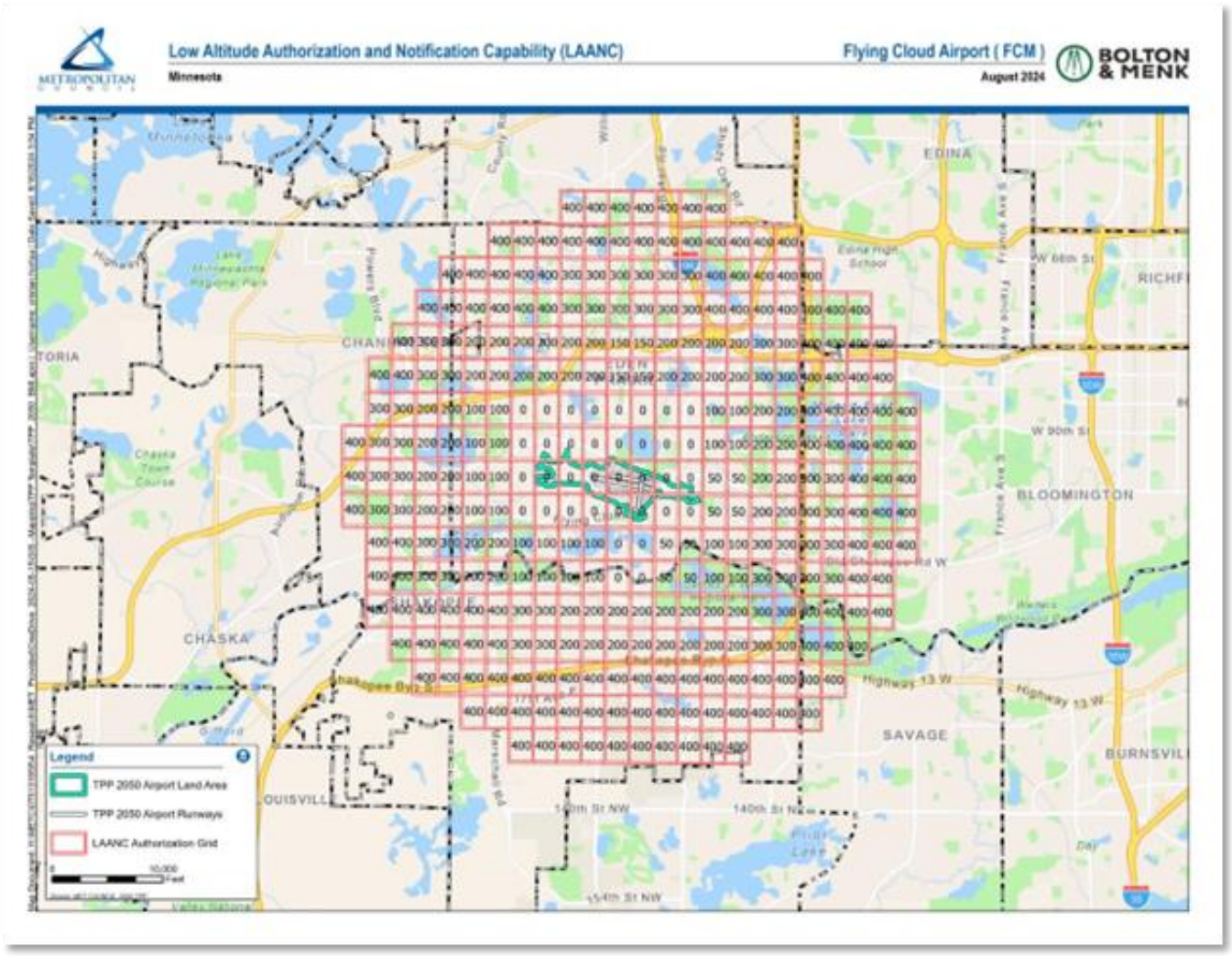


Figure 16. ***LAANC airspace restrictions for UAS operations surrounding MIC airport.***

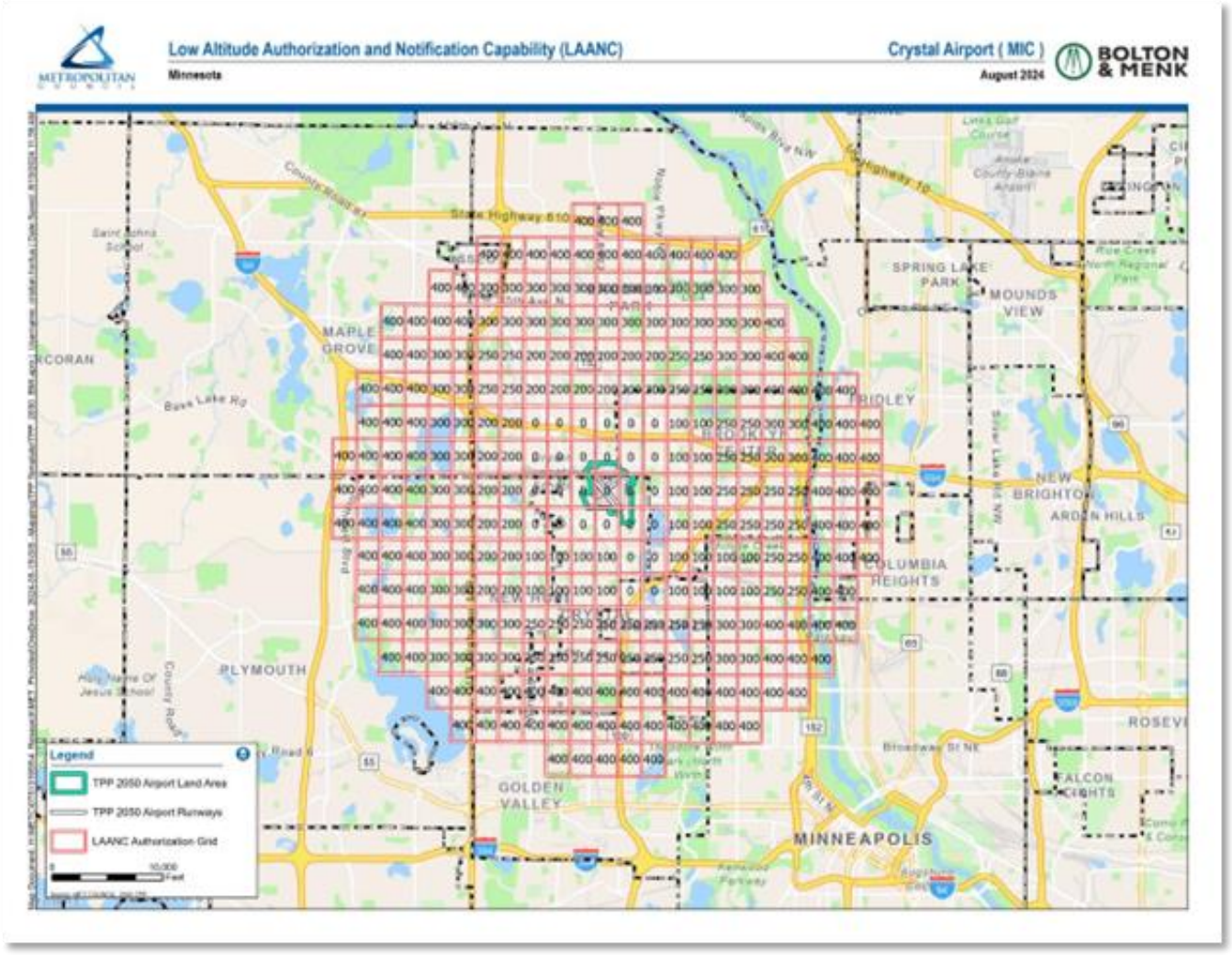
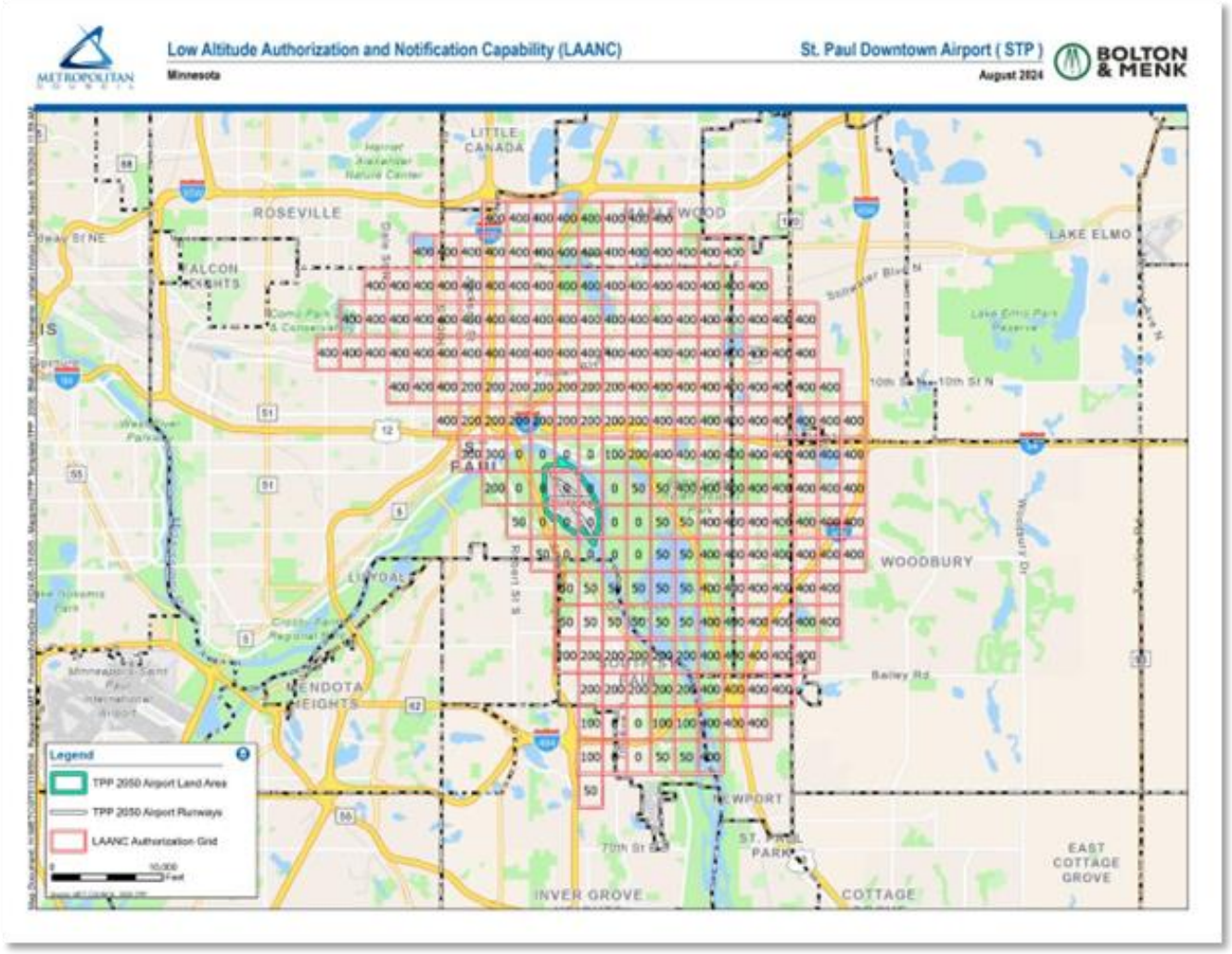


Figure 17. ***LAANC airspace restrictions for UAS operations surrounding STP airport.***



Contacts

Joe Widing
Senior Planner, Metropolitan Transportation Services

METROPOLITAN COUNCIL

390 Robert Street North
Saint Paul, MN 55101-1805

651-602-1000
TTY 651-291-0904
public.info@metc.state.mn.us
metrocouncil.org/imagine2050

IMAGINE 2050