

2050 Regional Aviation System Plan

Info Item: Full Update and Re-adoption Overview
Transportation Advisory Board



2050 Regional Aviation System Plan



Agenda

- 1. Met Council Role in Regional Aviation
- 2. Connecting to the Regional Development Guide
- 3. Aviation Industry Trends and Key Takeaways
- 4. Regional Aviation System Plan Content and Updates
- 5. Next Steps

Met Council Role in Regional Aviation



Minnesota Statute 473.165, 473.611 & 473.621

- Aviation not federally mandated system, state statute tasks the Council to plan for the regional aviation system
- Council must prepare Regional Aviation System Plan (within TPP)
 - State requirement no federal requirement
- Requires regional airports to produce and update Long Term Comprehensive Plans
 - Met Council must review and determine if airport comprehensive plans <u>conform to regional systems</u> and are <u>consistent with regional policy</u>
- Review MAC's Capital Improvement Program and review and approve major capital projects that have a significant effect on the orderly and economic development of the region
- Met Council does not provide or allocate direct funding for aviation or operate regional aviation facilities

Connecting to the Regional Development Guide



Aligning Regional Policies

Key Element of Aviation System Plan – Reviewing and Updating Regional Policies to Align with 2050 Vision

Established small policy review teams made up of local communities and aviation stakeholders

- Held three meetings with both teams:
- 1. Review existing policies
- 2. Draft/review updated policies
- 3. Draft/review supporting actions

In addition, presented to regional industry groups and communities and solicited feedback when requested.

Teams consisted of representatives from:

- Local communities adjacent to regional airports
- MAC
- MnDOT Aeronautics
- FAA
- Other airport operators
- Industry stakeholders
- Met Council staff







Draft Regional Aviation System Policies

Draft 2050 Policy Language

Goal Area: Our Region is Equitable and Inclusive

Policy 1: 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.

Goal Area: Our Region is Healthy and Safe

Policy 2: 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.

Policy 3: Conduct planning, development, and operation of regional airports to minimize impacts to adjacent communities. Local land use compatibility policies and other mitigation efforts should be reviewed and updated as warranted to reflect the latest guidance to mitigate noise and other impacts to residents from aviation activities.

Policy 4: Work to reduce emissions from aviation activities that negatively impact air quality for adjacent communities. (new policy)

Draft Regional Aviation System Policies

Draft 2050 Policy Language

Goal Area: Our Region is Dynamic and Resilient

Policy 5: 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.

Policy 6: Coordinate planning and investments that promote aviation access to the state, nation and world from the Twin Cities metro. Ensure regional airports continue to support local economies and businesses.

Policy 7: Regularly review and update regional aviation system information to maintain consistency with state and federal planning. (new policy)

Policy 8: 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. (new policy)

Draft Regional Aviation System Policies

Draft 2050 Policy Language

Goal Area: We Protect and Restore Natural Systems

Policy 9: 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.

Goal Area: Not specific to regional goal

Policy 10: 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.

^{*}Full list of corresponding actions found in the Aviation Supporting Information document

Emerging Aviation Issues and Opportunities for the Region



Emerging Aviation Issues and Opportunities



Aviation Industry Trends and Analysis

Emerging trends in the industry were analyzed to monitor for regional planning considerations – incorporated into plan and informing regional policy

- Aviation Fuels and Alternative Power Sources
- Advanced Air Mobility
- Unmanned Aerial Systems (UAS)
- Airport Classifications
- Aircraft Noise
- FAA, MnDOT and Industry Changes

Full can be found papers here: <u>2050 Aviation Plan Update - Metropolitan</u> Council

Regional Aviation System Plan Content



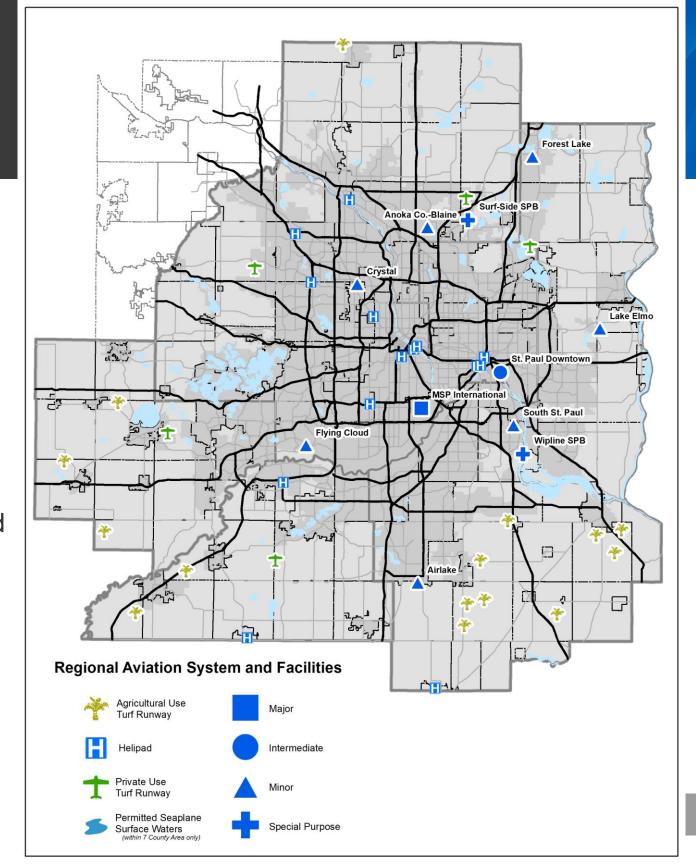
Metropolitan Council

Aviation System Plan Content₍₁₎

Regional Airport System - Mature system with limited changes

Aviation system in the region is built out and major changes are not expected

- Nine regional public use airports
 - MSP International Airport
 - Eight relievers to MSP
 - Two seaplane bases
 - All facilities projected to be able to meet forecast demand
- Additional aviation facilities (not regional system) identified in the region
 - Helipads
 - Private turf runways
 - Agricultural use runways
 - Certain lakes and rivers
 - Special Purpose = seaplane base



Aviation System Plan Content(2)



Airport Classifications

Identifying an airport's role in a system, infrastructure needs, facility improvements, airspace integration and safety, and environmental impacts and noise mitigation, requires a classification framework to prioritize investment and system improvement.

FAA Classifications

- The Federal Aviation Administration (FAA) classifies all airports that are a part of the National Plan of Integrated Airport Systems (NPIAS)
- 8 of the 9 regional airports are NPIAS airports

MnDOT

 The Minnesota Department of Transportation (MnDOT) Aeronautics branch classifies all public airports within the state, including those that are part of the NPIAS

Metropolitan Council

As a part of it's regional planning responsibility, The Metropolitan Council is required to classify the metropolitan airports

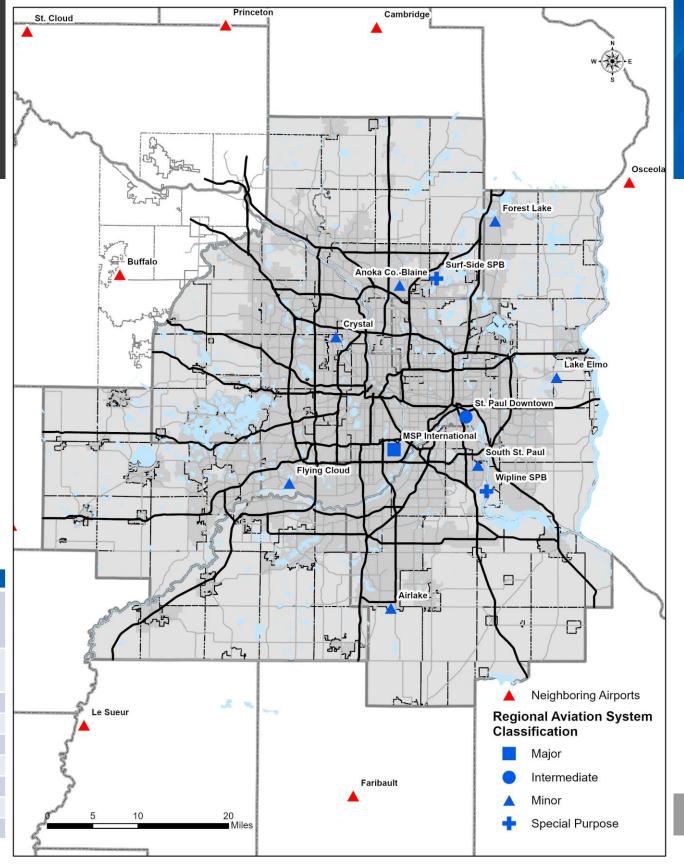
Aviation System Plan Content(3)

Regional System – existing airport classifications

The aviation system has three distinct classification types

- FAA: National Plan of Integrated Airport Systems (NPIAS)
- State: State Aviation System Plan
- Regional: Regional Aviation System Plan

Airport (code)	Federal (NPIAS)	State (MNSASP)	Regional
Minneapolis-Saint Paul International (MSP)	Commercial Service - Primary	Key Commercial Service	Major
St Paul Downtown (STP)	National - Reliever	Key General Aviation	Intermediate
Flying Cloud (FCM)	National - Reliever	Key General Aviation	Minor
Anoka-Blaine (ANE)	National - Reliever	Key General Aviation	Minor
Airlake (LVN)	Regional - Reliever	Intermediate - Large	Minor
South St. Paul (SGS)	Regional - Reliever	Intermediate - Large	Minor
Crystal (MIC)	Regional - Reliever	Intermediate - Small	Minor
Lake Elmo (21D)	Regional - Reliever	Intermediate - Small	Minor
Forest Lake (25D)	N/A	Intermediate - Small	Minor



Aviation System Plan Content(4)



Reviewing and Maintaining the Classification System for the Region

Establishing, reviewing and updating regional airport classifications is one of the roles that fall under the purview of the Met Council

Existing classification system established in 1977

Has seen limited and minor updates from previous regional plan updates

- Last review of the system was done for 2030 TPP in 2008
- Recommendations were not adopted

State law dictates that Minor Airports must have runways at a maximum of 5,000 feet

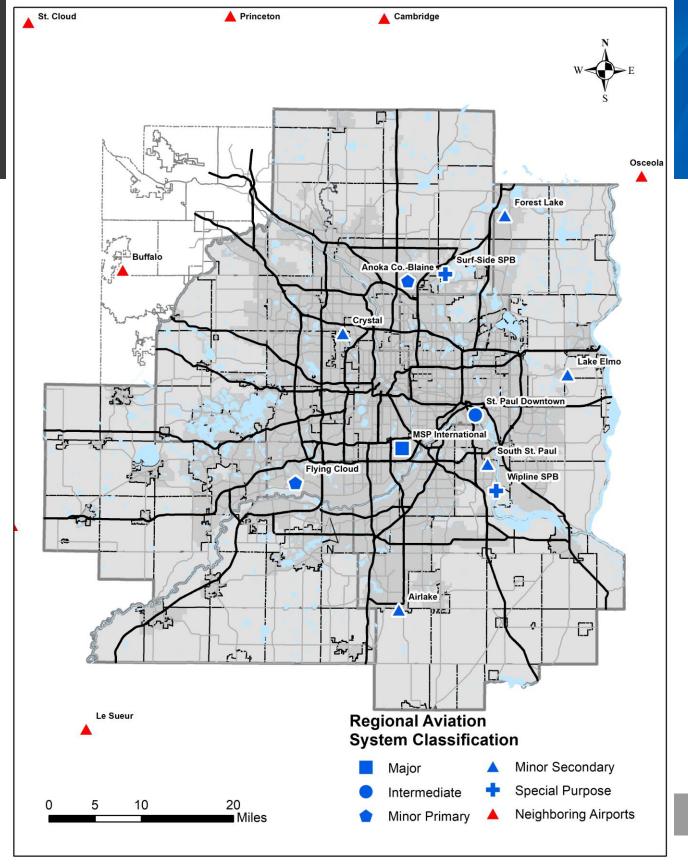
- No other metrics required by state law nor restrictions on subclassifications
- MnDOT Aeronautics overhauled state classifications with 2022 State Aviation System Plan (SASP)
- Regional system now more out of step with state and federal classifications

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Aviation System Plan Content(5)

Proposed Update to Regional Airport Classifications

- Proposed to update classification criteria
 - Better define and communicate roles of reliever airports in region
 - Align with state and federal classifications
- Split Minor Airport Classification
 - Minor Primary: Primary relievers to MSP including most regional business jet activity, higher overall activity and more substantial facility needs.
 - Flying Cloud
 - Anoka-Blaine
 - Minor Secondary: Secondary relievers to MSP primarily smaller piston aircraft for training and recreation purposes with reduced facility needs.



Aviation System Plan Content(6)

Airport Zoning (Year)

Airport Classification Report Cards

In-depth report to track key airport metrics to understand airport capabilities and aid in identifying the role within regional system as they evolve

To be updated with each aviation system plan update

Classification Table: MSP (Major Airport)						
Classification	tion Metrics	Amenities				
	Scheduled / Commercial	Terminal/AD Building	2 Passenger Terminals			
System Role	Passenger Air Service Hub & Cargo Hub	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			
Existing RWY Length & Width	11,006' x 150'		powerplant service			
(Longest Runway)	,	Flight Training	No			
FAA Recommended RWY Length & Width	11,000' x 150'	Landing Fee	Yes			
	LUDI	Charter Operations	Yes			
Runway Lighting	HIRL	Courtesy Car	Yes			
Navigation Systems	MALSR, ILS, LOC, REIL, PAPI, ALSF2, DME, MALSF	Rental Car	Yes			
Instrument Approach		Automobile Parking	7 passenger parking ramps, parking lots at GA/Cargo/Employee facilities			
Procedures (Lowest Vis Min/Type)	ILS 600 RVR	Transient Storage (Tiedowns or	FBO Hangar			
Parallel Taxiway	Full (All Runways)	Hangar)				
Weather Reporting	ASOS	Security/Perimeter Fencing/Access	Full perimeter fence with controlled			
Air Traffic Control Tower	Yes (24 Hrs.)	Security/Ferimeter Fericing/Access	access. 4 TSA checkpoints			
Based Aircraft	162					
LTCP/MP/ALP Up to Date	2024					
Clear Zone Ownership	Partial					

Yes, 2004

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Aviation System Plan Content₍₇₎

Regional System – Flight Activity Rebounding

MSP is nearing passenger levels of 2019, operations still down

- Operations at MSP will continue to trail enplanements as aircraft operators fly less operations with larger planes
- Passenger growth expected to outpace operations growth
- No capacity issues expected for aircraft operations at MSP

General aviation operations continue to grow after years of declines

- General aviation traffic at relievers hit lowest point in 2020 from a peak in 1998
- GA activity is forecasted to continue modest growth through 2050 but not meet previous peaks – no capacity issues anticipated

Forecasts have been updated where possible in update

Activity	2019	2020	2021	2022	2023
Total GA Operations	274,039	254,017	336,139	390,459	425,981
Total MSP Operations	403,665	242,937	299,363	306,385	320,803
Total MSP Enplanements	19,783,380	7,418,648	12,581,412	15,614,084	17,375,590
Total MSP Cargo (metric tons)	228,964	203,697	234,747	237,430	203,643

MSP Forecast Enplanements	2020	2025	2030	2035	2040	2050
Original (2040 LTCP)	20,000,000	22,500,000	24,400,000	26,300,000	28,100,000	32,300,000
Revised	7,400,000	21,600,000	24,100,000	26,100,000	28,100,000	32,300,000
Revised (Aggressive Recovery)	7,400,000	22,300,000	24,100,000	26,100,000	28,100,000	32,300,000

MSP Forecast Operations	2020	2025	2030	2035	2040	2050
Original	411,300	433,000	462,400	490,600	517,200	566,417
Revised	245,900	409,800	450,100	479,600	509,800	566,417

Reliever Forecast Activity	2025	2030	2035	2040	2045	2050
Total G.A. Based Aircraft	1,376	1,405	1,433	1,461	1,492	1,521
Total G.A. Operations	431,873	449,429	467,694	486,704	506,487	527,072

Aviation System Plan Content(8)

Aviation Planning Process

Aviation Plan

- First plans standalone now section of TPP
- System statements: Compiled after TPP adoption, informs local communities of regional system needs (regional airports)

Long Term Comprehensive Plans

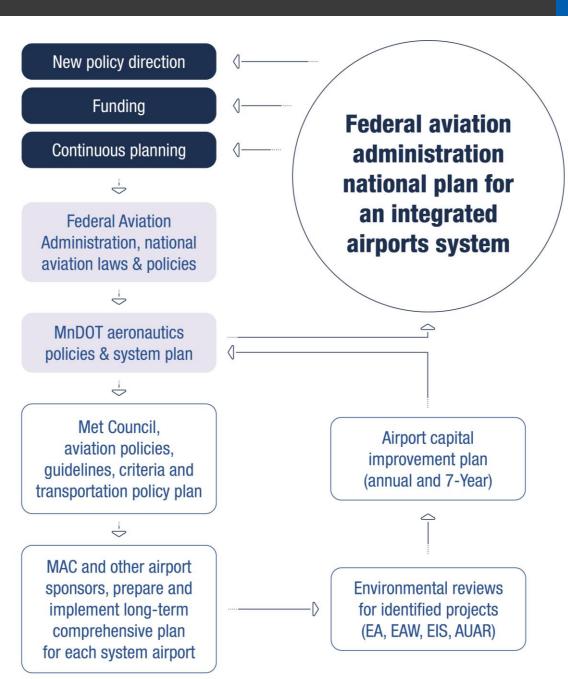
Environmental Compatibility

- Noise/land use/safety
- Natural environment impacts
- Environmental review requirements

Federal Compliance

 Federal government much more involved with aviation planning than other modes

MAC Capital Improvement Plan



Aviation System Plan Content(9)

Aviation Planning Process

Long Term Comprehensive Plans

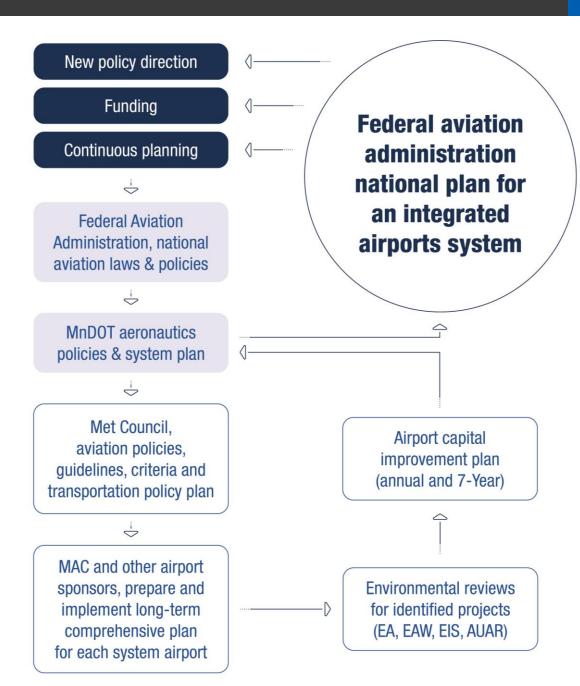
Long Term Comprehensive Plans are a major component of the Aviation System Plan

Planning documents for airports which identify projected aircraft activity, high level impacts and phased facility needs

- MSP approved in 2024 and incorporated into TPP
- Flying Cloud to be reviewed in 2025 and incorporated into update

Updating LTCP requirements per feedback through review process to align with community desires and reality of long-term airport planning.

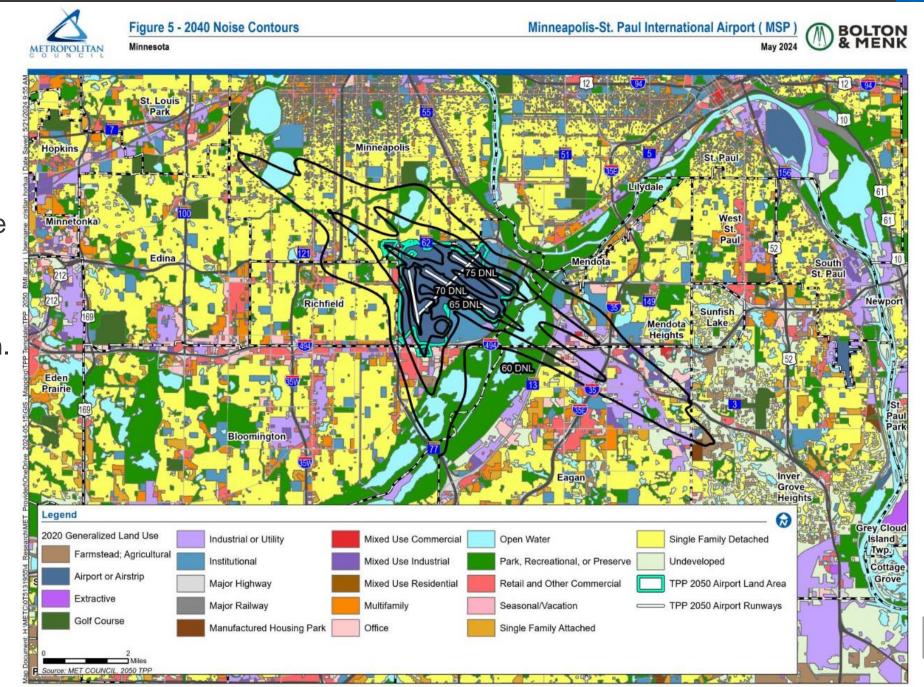
- Aligning plan development timeline with community comprehensive planning requirements – every ten years
- Better identifying when expected environmental considerations to be reviewed/addressed
 - LTCP vs environmental review period (EA, EAW, EIS)



Aviation System Plan Content(10)

Land Use Compatibility

- Major component of the Plan regional airports and surrounding land use compatibility.
- Met Council maintains the Builders Guide to Mitigating Aircraft Noise in New Residential Construction.
 - Mitigation measures for aircraft noise for land use and construction.
- Plan will now include standardized exposure maps with existing land use data (updated 2040 contours for MSP and Flying Could)
- Plan also includes additional locations where aviation activity may take place to aid local planning considerations (helipads, private runways)



Next Steps



Public Comment Draft Process

Information item

• TAC Planning: 5/8

• TAC: 6/4 – 7/2

• TAB: 6/18

• Transportation Committee: 6/23

Action item

• TAC Planning: 7/10

• TAC: 8/6

• TAB: 8/20

• Transportation Committee: 9/7

• Metropolitan Council: 9/24



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To learn more:

https://metrocouncil.org/transportation/system/aviation.aspx

Or follow the QR Code:



