

Action Transmittal

Transportation Advisory Board



Committee Meeting Date: January 11, 2024

Date: January 4, 2024

Action Transmittal: 2024-07

Review of Minneapolis-St Paul International Airport 2040 Long Term Comprehensive Plan

To: TAC Planning Committee

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Requested Action

Minnesota statutes sections 473.165 and 473.611 require the Metropolitan Airports Commission (MAC), prior to putting it into effect, to submit the Draft Minneapolis-St Paul International Airport (MSP) 2040 Long Term Comprehensive Plan to the Council for review and a determination that the plan will have an areawide, multi-community or substantial effect on metropolitan development and that the plan is consistent with the comprehensive development guide for the metropolitan area (Thrive MSP 2040).

Recommended Motion

That the TAC Planning Committee recommend a determination that the Draft MSP International Airport 2040 LTCP has an areawide and multi-community effect, and is consistent with the Metropolitan Council comprehensive development guide.

Background and Purpose

The Metropolitan Airports Commission (MAC) regularly prepares a long-term comprehensive plan (LTCP) for each airport in their system to update activity forecasts, identify airport infrastructure needs, and potential impacts to the surrounding communities and environment.

Under Minnesota statute, the Council reviews the individual LTCP for each airport owned and operated by the MAC. The Draft MSP International Airport 2040 LTCP will replace the 2030 LTCP approved in 2010 and moves the planning horizon to 2040.

The MSP 2040 LTCP has been in the works since 2019, prior to the COVID-19 pandemic in 2020. The planning process was delayed as airports around the world were particularly hard hit by the pandemic related economic shutdowns. The first phase included inventory assessments and initial forecasting. The second phase proceeded in October 2021 and included revised activity forecasts that considered the impacts from the pandemic, projecting future infrastructure needs, and evaluating and selecting a preferred airport development alternative. Community engagement took place continually to help inform the planning process. The MAC held or participated in 27 meetings during the MSP LTCP development including public events, stakeholder advisory panel meetings, meetings to update and gather feedback with adjacent communities, and update meetings with the Council.

Relationship to Regional Policy

Under the aviation planning process and TPP policy, airport LTCP's are to be periodically updated.

MAC plans are to be consistent with all components of the metropolitan comprehensive development guide and LTCP's are used as a basic input to the Council's update of the regional aviation system plan and in reviewing community comprehensive plans.

To determine consistency with Council systems and policies the Council looks to establish if the plan:

- Is consistent with the 2040 Transportation Policy Plan;
- Contains required LTCP elements as outlined in Appendix K of the TPP;
- Significantly impacts any regional systems; and,
- Is compatible with surrounding land uses and outlines necessary mitigation measures.

Staff Analysis

Note on key terms used within this analysis:

- Airside facilities are defined as the portion of an airport accessible to aircraft including runways, taxiways, aprons, aircraft gates and airfield support facilities.
- Landside facilities are defined as all other facilities on airport property including terminals, parking facilities, access roads, transit facilities etc.

MSP International Airport is located in Hennepin County, approximately six miles south of downtown Minneapolis and is located within the unincorporated territory of Fort Snelling between Minneapolis, Richfield, Bloomington, and St Paul. MSP International Airport is the main commercial service airport for the state and neighboring states and the 15th busiest airport in the nation. The airport has four runways, ranging from 8,000 feet to 11,000 feet in length, and can serve all types of aircraft.

MSP Airport is classified as the Major Airport in the regional aviation system and a Key Commercial Service airport in the state aviation system. The airport's primary role in the airport system is to provide general commercial service for the region and state, and the role and classification of the airport will not change with this LTCP. There are additional general aviation and military operations at the airport, but these activities constitute a small share of total operations.

The Plan identified three main objectives to be achieved through the 2040 LTCP:

- Plan for future facilities that will meet forecast planning activity levels (PALs) in a manner that maintains and enhances customer service, while facilitating a seamless experience for users.
- Produce a development plan that positions the MAC to meet future demand levels, enhances financial strength, leverages environmental stewardship, and infuses sustainable thinking.
- Conduct the planning process in a way that includes meaningful stakeholder engagement.

Activity Forecasts:

Overall, the plan projects continued passenger and cargo growth and flight activity at the airport to 2040 and outlines investments in order to facilitate that growth. The updated forecasts project that enplanements (passenger boardings) will increase from an existing condition in 2019 of 20 million to an estimated 28.1 million in 2040. This projected amount is the same as the estimate prior to the pandemic, but includes a recovery period from the pandemic that will last from 2020 to 2024 or 2026. Aircraft operations (aircraft landing and taking off on airport runways) have seen a decline over the previous decade prior to the pandemic due to utilizing larger aircraft, less frequent regional flights, and Delta Airline's merger with Northwest Airlines. This is true even though passenger activity has continued to increase. Updated forecasts show operations resume growth at a slower rate than passenger activity, but will not reach peak operations seen in the past before 2040 (actual operations in 2019 totaled 407,000 with an estimated increase to 517,000 by 2040 and peak aircraft operations at MSP took place in 2004 at 543,000).

While the overall function of the airport will not change or expand in airfield capacity, the aviation industry has changed since the previous plan was adopted. The changes that the 2040 LTCP



address include the evolution of airline aircraft fleets, growth in non-traditional airline companies, development of the ride-share industry, changes in passenger characteristics and travel needs, and needing flexibility in development plans to accommodate demand. There have been two previous LTCPs for MSP. The 2010 LTCP saw the construction of the fourth runway at the airport in 2005 and recommended the reassignment of airlines between Terminal 1 and Terminal 2 to balance passenger demand and improve efficiency and customer service of both terminals. The 2030 LTCP recommended Terminal 1 be utilized for Delta Air Lines and its partner airlines, while relocating all others to Terminal 2 with specific capital improvements based on this reassignment. In developing the alternatives for the 2040 LTCP, MAC used the 2030 LTCP preferred alternative as a guide and carried over some of the recommended improvements that have yet to be completed.

Preferred Alternative:

The MAC examined three overall “families” of alternatives for the airport terminals, two updating and expanding upon the 2030 preferred alternative and one which would establish a unified terminal by connecting both Terminal 1 and Terminal 2 with a direct airside connection behind security. Additionally, multiple alternatives were examined for the airfield, separate from the terminal alternatives. These alternatives covered aircraft taxiways, de-icing facilities, remain-overnight parking, air cargo facilities, and fixed-based operator facilities. Finally, three families of landside alternatives were considered for improvements to parking and transit facilities, terminal curbside use, airport access and non-aviation revenue generating opportunities. These various alternatives were evaluated against each other in how they meet different evaluation criteria including passenger convenience, terminal, landside, airside, operation and capital expenses and mission/goals of the MAC.

Through the evaluation process, the MAC selected alternative 3.1A which incorporates multiple elements from each of the three preliminary alternatives and the balance between airside, landside and terminal functions. The preferred alternative was then vetted and refined with extensive stakeholder input from airlines, airport tenants, MAC staff, other agencies, the stakeholder advisory panel and members of the public.

Projected growth in passenger and freight activity, obsolete facilities, and airport circulation improvements (both landside and airside) dominate the outlined improvements found in the preferred alternative. The 2040 Final Preferred Alternative is split between near, medium- and long-term improvements. The preferred alternative includes general taxiway, deicing and other minor airfield improvements in addition to the following major items:

Near-Term:

- Terminal 2 South Expansion
- US Postal Service Site Redevelopment
- Orange and Purple Parking Ramp Expansions
- Terminal 2 Curb Frontage Improvements

Medium-Term:

- Terminal 1 – Reconstruct Concourse A and F, Demolish Concourse B
- West Cargo Apron and Facility
- Fixed-Operator Base Relocation
- Terminal 1 Roadway Reconstruction
- Green and Gold Parking Ramp Reconstruction including new Federal Inspection Service Facility
- 34th Avenue Parking Redevelopment
- Highway 5 Interchange Reconstruction

Long-Term:

- Terminal 2 North Expansion
- Terminal 1 Concourse G South Expansion and Concourse E Reconstruction
- Terminal 2 Curb Frontage Improvements



- Terminal 1 and 2 Airside Connection

Advantages of this preferred alternative include:

- Current airport classification does not change.
- Expanding operations capacity without the growth of the airport grounds or runways.
- Right sizing terminal facilities to accommodate changing aircraft types.
- Improved circulation and access to both Terminals with improved regional access to Terminal 2.
- Maintaining and expanding processing facilities at both terminals to allow for maximum flight flexibility.
- Providing an airside connection between terminals to enhance connectivity between terminals.
- On-site parking consolidation to respond to, prepare for and facilitate additional off-site parking redevelopment in Bloomington and St Paul.

It is anticipated that some of these improvements may impact the surrounding regional systems, the MAC will next follow up this plan with an environmental review of the preferred alternative which will examine potential impacts to the natural environment and the surrounding transportation system, and any needed mitigation efforts to respond to those impacts.

The refined preferred alternative is responsive to the most prominent stakeholder concerns while still meeting the stated planning objectives. The Final Draft 2040 MSP LTCP underwent an extensive public engagement process that began prior to the COVID-19 pandemic and continued in 2021 after a year hiatus. This process included a public comment period in which Met Council staff offered several comments relating to potential regional impacts. The full list of public meetings held, and a summary of public comments received and MAC response, can be found in attachment 4.

Environmental compatibility:

Due to the geographic location and immediate adjacency to densely developed land, the Final Draft MSP 2040 LTCP includes discussion on land use and environmental compatibility including modeling future noise impacts from projected aviation operations to 2040. The Day-Night Average Sound Level (DNL) noise metric is used to reflect a person’s cumulative exposure to sound over a 24-hour period and is how the Federal Aviation Administration (FAA) and the MAC measure noise impacts around MSP International Airport. The Metropolitan Council has established noise compatibility guidelines relating to certain levels of noise and land use which are appropriate within those noise levels. The key levels of DNL which are measured are 75 DNL, 70 DNL, 65 DNL and 60 DNL. In general, the lower the DNL the less the noise impacts. Attachment 3 depicts modeled noise impacts. As the runway configuration is not going to change, runway protection and safety zones will not change. However, it is anticipated that noise impacts will expand as flight operations increase to 2040. The following table compares how much land is within the existing noise impact contours and how much is modeled to 2040 preferred alternative contours.

DNL Level	2018 Acres within Contour	2040 Acres within Contour
75 DNL	638 acres (within airport property)	826 acres (within airport property)
70 DNL	1,588 acres	2,212 acres
65 DNL	4,444 acres	5,933 acres
60 DNL	11,323 acres	15,755 acres

The contours are projected to grow in acreage by 29% (75 DNL) to 39% (60 DNL) by 2040. The projected contours are meant to establish land use practices to avoid preventable incompatible uses. If existing properties become impacted by greater levels of noise, the MAC will continue its abatement program for properties that fall within the 60 DNL contour for three consecutive years as measured annually.

As this is a long-range plan, similar to community comprehensive plans, direct environmental impacts from the preferred alternative are discussed, but not analyzed in depth in the document.



Following the adoption of the Final Draft 2040 LTCP Plan, the MAC will begin the environmental review process for many of the projects outlined in the preferred alternative. The Metropolitan Council will work with the MAC on this effort to ensure that environmental impacts are minimized and mitigated for future airport development projects.

This plan will also give the surrounding communities assurance of the airport’s future footprint and impacts for comprehensive community planning. MAC staff will continue to work with the surrounding communities to ensure proper zoning exists and to address noise and other issues that arise from airport activities. The attachments will detail the preferred alternative, runway safety zones, 2040 noise contours and public engagement process overview, including public comments summary. The full plan can be found on the web at [Long-Term Planning | MSP Airport](#).

The Final Draft 2040 MSP LTCP anticipates steady growth in both passengers and operations through 2040. However, this growth will not require significant new airside improvements or capacity enhancements. The plan proposes a new cargo terminal that is well positioned to use existing regional roadways. Landside improvements include targeted terminal and parking expansions and improvements, terminal circulation improvements, increased terminal connectivity, and improved regional access to Terminal 2. Operations are anticipated to be lower to the planning horizon than what previous LTCPs projected and observed historical peaks. MSP’s footprint is not planned to increase nor are new or altered runways planned, and its role in the regional system is not anticipated to change. Finally, the Final Draft 2040 LTCP contains the required information outlined in Appendix K of the TPP. As such, the MSP 2040 LTCP is consistent with regional policy.

Committee Comments and Actions

N/A

Routing

To	Action Requested	Date Completed
TAC Planning Committee	Review & Recommend	January 11, 2024
Technical Advisory Committee	Review & Recommend	<i>February 7, 2024</i>
Transportation Advisory Board	Review & Recommend	<i>February 21, 2024</i>
Metropolitan Council Transportation Committee	Review & Recommend	<i>March 11, 2024</i>
Metropolitan Council	Review & Adopt	<i>March 27, 2024</i>

MAC Minneapolis-St Paul International Airport 2040 Long Term Comprehensive Plan

The MAC 2040 MSP LTCP material included in this memorandum reflects the actions of the Metropolitan Airports Commission to submit for the Council’s consistency determination review on Nov. 20, 2023.

Materials for the Met Council/TAB review are included in the following summaries:

Attachment 1: MSP 2040 LTCP Preferred Alternative and Project Descriptions

Attachment 2: MSP 2040 LTCP Runway Protection Zones

Attachment 3: MSP 2040 LTCP Preferred Alternative 2040 Noise Contours

Attachment 4: MSP 2040 LTCP Public Engagement Overview and Public Comments Summary

Attachment 5: MSP 2040 LTCP Executive Summary