

Action Transmittal

Transportation Advisory Board



Committee Meeting Date: February 7, 2024

Date: January 31, 2024

Action Transmittal: 2024-07

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

To: Technical Advisory Committee

From: TAC Planning Committee

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Requested Action

State statute (473.165, 473.611) requires the Metropolitan Airports Commission (MAC) to submit a determination of conformance of the Final Draft Minneapolis-St Paul International Airport (MSP) 2040 Long Term Comprehensive Plan with Council systems and consistency with Council policy.

Recommended Motion

That the TAC Planning Committee recommend that the Metropolitan Council:

- Find that the Final Draft MSP International Airport 2040 LTCP has a multi-city impact as well as conforms to the Council systems and is consistent with Council policies.

Background and Purpose

The Metropolitan Airports Commission (MAC) prepares a Long-Term Comprehensive Plan for each airport in its system regularly to update activity forecasts, identify airport needs and potential impacts to the surrounding community and environment.

Under MS 473.165 and MS 473.611 the Council reviews the individual Long Term Comprehensive Plan (LTCP) for each airport owned and operated by the Metropolitan Airports Commission (MAC). The MSP International Airport 2040 LTCP replaces the 2035 plan approved in 2010 and moves the planning horizon to 2040. The MAC has adopted a preferred development alternative for MSP International Airport that retains its system role as the Major commercial service hub for the region and plans for modest capacity enhancements and airfield improvements, which is consistent with the Transportation Policy Plan.

Relationship to Regional Policy

Under the aviation planning process and TPP policy, airport LTCPs are to be periodically updated. MAC plans are to be consistent with all components of the metropolitan development guide. LTCPs are used as a basic input to the Council's update of the regional aviation system plan and in reviewing community comprehensive plans. The 2040 MSP LTCP anticipates steady growth in both passengers and operations through 2040. However, this growth will not require significant new airside (runways and airfield including support facilities) improvements or capacity enhancements. Landside improvements include targeted terminal and parking expansions, terminal circulation improvements and increased terminal connectivity. Operations are anticipated

to be lower to the plan horizon than previous LTCPs and historical peaks. As such, environmental impacts are expected to be less than what previous LTCPs anticipated. It is also noted that a full understanding of potential impacts will be studied in the follow-up environmental review for outlined projects found in this Plan. MSP's footprint is not planned to increase, and its role in the regional system is not anticipated to change. As such, the MSP 2040 LTCP conforms to regional policy.

Staff Analysis

MSP International Airport is located in Hennepin County, approximately six miles south of downtown Minneapolis. MSP International Airport is located within the unincorporated territory of Fort Snelling between Minneapolis, Richfield, Bloomington and St Paul. MSP 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. The airport 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 system. The airport's primary role in the airport system is to provide general commercial service for the region and state; the role and classification of the airport will not change with this plan. There are additional general aviation and military operations at the airport. However, these activities constitute a small share of total operations.

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 which included revised forecasts that included the impacts from the pandemic, projecting infrastructure needs, evaluating alternatives and selecting a preferred alternative. Included through this entire process, continual community engagement took place to help inform the planning process.

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 (actual planes landing and taking off on airport runways) saw a decline over the previous decade prior to the pandemic while enplanements continued to increase. Updated forecast shows operations resume growth at a slower rate than passenger activity but will not reach peak operations seen in the past by 2040. Actual operations in 2019 totaled 407 thousand with an estimated increase to 517 thousand by 2040. For reference, peak aircraft operations at MSP were in 2004 with 543 thousand.

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. These changes that the 2040 Plan 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, which was adopted in 1996, saw the construction of the fourth runway at the airport, 17-35, in 2005. The previous LTCP 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 Plan recommended T1 be utilized for Delta Air Lines and its partner airlines, while relocating all others to T2 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 improvements recommended which 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 (RON), 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 Ramp Expansions
- Terminal 2 Curb Frontage Improvements

Medium-Term:

- Reconstruct Concourse A and F, Demolish Concourse B
- West Cargo Apron and Facility
- Fixed Operator Base Relocation
- Terminal 1 Roadway Reconstruction
- Green and Gold Ramp Reconstruction including new Federal Inspection Service Facility
- 34th Avenue Parking Development
- TH5 Interchange Reconstruction

Long-Term:

- Terminal 2 North Expansion
- 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.
- Maintaining and expanding federal inspection facilities at both terminals to allow for maximum flight flexibility.
- Providing an airside connection between terminals to enhance connectivity between terminals.
- Future activation of a street corridor (34th Ave S) with non-aviation and potential active uses.

The refined preferred alternative is responsive to the most prominent stakeholder concerns while still meeting the stated planning objectives. The 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. The full list of public events and stakeholder meetings held can be found in attachment 4.

Environmental compatibility:

Due to the geographic location and immediate adjacency to densely developed land, the 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 FAA and the MAC measure noise impacts around MSP. The 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 2 details land use compatibility with respect to DNL levels. 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 in future years. The MAC tracks real impacts annually to understand noise impacts from aircraft operations. 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 not analyzed in the document, however following the adoption of the 2040 Plan, the MAC will begin the environmental review process for many of the projects outlined in the preferred alternative. The 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 detail the preferred alternative, runway safety zones, 2040 noise contours and public engagement process overview. The Executive Summary of the Plan is also included as an attachment. The full plan can be found on the web at [Long-Term Planning | MSP Airport](#).

Committee Comments and Actions

At its January 11, 2023 meeting, the TAC Planning Committee reviewed and discussed the 2040 MSP LTCP. Committee members commented on the age of previous environmental studies for MSP referring to air quality and emissions from operations. MAC staff noted that the 2040 LTCP is a conceptual document and that all required environmental review will need to be conducted and approved prior to any projects in the plan commencing construction. Committee members recommended acceptance of the staff analysis of the 2040 MSP LTCP and forwarding these comments to the Metropolitan Council for its consideration.

Routing

To	Action Requested	Date Completed
TAC Planning Committee	Review & Recommend	January 11, 2024
Technical Advisory Committee	Review & Recommend	February 7, 2024
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

