

T Transportation Committee

Meeting date: October 13, 2008

Council meeting October 22, 2008

Date:	October 8, 2008
Subject:	Airlake Airport 2025 Long-term Comprehensive Plan Review
District(s), Member(s):	Districts 4 - Peterson, 15 - Wolter, 16 - McDaniel
Policy/Legal Reference:	MS 473.145, 473.165, 473.621 Sd. 6&7
Staff Prepared/Presented:	Arlene McCarthy, Director MTS (651-602-1754) Amy Vennewitz, Dep. Dir. Fin. & Planning (651-602-1058) Connie Kozlak, Mgr. Transportation Planning (651-602-1720) Chauncey Case, Sr. Planner - MTS/Aviation (651-602-1724) Jim Larsen, Senior Planner - LPA (651-602-1159)
Division/Department:	Metropolitan Transportation Services

Proposed Action That the Metropolitan Council:

- Determine that the Metropolitan Airport Commission’s (MAC) Airlake Airport 2025 Long-term Comprehensive Plan (LTCP) is consistent with the Metropolitan Council’s development guide.
- Recommend MAC establish a joint airport zoning board with Dakota County and affected communities of Lakeville, Farmington and Eureka Township to prepare an airport zoning ordinance as defined under state requirements and the airport’s system role.
- Recommend MAC continue coordination with communities of Lakeville and Eureka Township in provision of sanitary sewer and water service to the airport.
- Recommend MAC continue coordination concerning land use compatibility for communities affected by aircraft noise operations at the Airlake Airport.
- Recommend MAC continue coordination with the City of Lakeville and Dakota County in efforts to relocate Cedar Ave., thus allowing for runway extension at Airlake Airport in the long-term.
- Recommend amendment of the LTCP and review by the Council when parcels on airport property are developed for non-aviation uses.

Background Under MS 473.611 and MS 473.165 the Council reviews the individual LTCP’s for each airport owned and operated by the (MAC). LTCP’s are periodically updated, and plans must be consistent with the Council’s metropolitan development guide. LTCP’s are used as basic input to the Council’s update of the regional aviation system plan.

Rationale This 2008 Update of the LTCP replaces the 1997 LTCP and moves the planning horizon to 2025. The MAC has adopted a preferred development alternative for the Airlake Airport that retains its system role as a *Minor* general aviation facility and is consistent with the TPP.

Funding This action has no funding implications for the Council.

Known Support / Opposition The LTCP development process included public involvement. Airport users support an extended main-wind runway. The MAC has responded to concerns raised by Dakota County, affected communities and general public prior to adopting the 2025 LTCP.

AIRLAKE AIRPORT 2025 LTCP REVIEW

Authority: MS 473.611 indicates that any LTCP adopted by the Commission shall be consistent with the development guide of the Council; also, MS 473.165 states that if a plan or any part thereof is inconsistent with the guide the Council may direct the operation of the plan or such part thereof be indefinitely suspended.

Background: The Airlake Airport is located on the city limits of Lakeville and Eureka Township, on the western edge of Dakota County. The airport opened originally as a private facility and the MAC purchased the airport in 1981. The airport is 595 acres in size, has one 4,098 foot paved runway, 159 based aircraft, and 57,000 operations conducted in 2007. It is classified as a *Minor* airport serving general aviation in the south metro area. The previous LTCP update was approved by the Council in 1998; only parts of that plan were implemented.

Public Involvement: The development of the Airlake Airport 2025 LTCP Update included two meetings with the Lakeville, Farmington, Eureka Township, community representatives, coordination with Dakota County, two meetings with airport users, and one public informational meeting for residents living around the airport. A full draft LTCP, defining the preferred alternative, was made available for a 30-day public comment period. Responses were prepared and reviewed by the MAC prior to their adoption of the LTCP.

Airlake Airport 2025 LTCP Proposal: The LTCP update is a 20-year planning document, extending from 2005 to 2025. The LTCP serves as the basis for identifying needed projects, maintaining funding eligibility to meet state and federal financial and plan consistency requirements, and to ensure that projects are responsive to system needs and conditions. Several development alternatives were evaluated as part of the update process:

- No Build Alternative
- Hangar Area Development only
- Reduce Instrument Landing System Minimums on Existing Runway with Hangar Area Development
- Extend Runway 12-30 to 5,000 Feet with Hangar Area Development (**Preferred Alternative**)
- Cross-wind Runway

The preferred development plan is depicted in Figure ES-1. It would extend the existing runway in the long-term.

Existing Aviation Activity and Future Demand

Forecasts were completed for both aircraft operations and based aircraft. A baseline forecast (using 2005 as the base year) assumed reasonable growth in the economy, fuel costs, fractional ownership, new very light jets (VLJs) just coming on the market, and general aviation taxes and fees. In addition to the baseline forecast, high and low range forecasts were prepared. In the high forecasts, it is assumed that the economy thrives, VLJs are very successful and fractional ownership increases; the opposite assumptions were used for the low forecasts. Development concepts for Airlake Airport include an extended runway; therefore, a forecast assuming a runway extension was also prepared.

Aircraft operations for 2005 are estimated at 57,001. Baseline aircraft activity by 2025 is projected to be 105,500 annual operations, and 133,461 for the high forecast. The maximum number of operations the airport can handle annually is 230,000 operations. Therefore, from an

airside standpoint, the airport is currently at 25 % capacity. Even under the high scenario, the forecasted number of operations in 2025 does not trigger the need for additional runways. The historical high for operations at Airlake occurred in 1994, with approximately 82,000 annual operations.

Existing Conditions and Future Airside Facility Needs

The existing runway 12-30 at Airlake Airport is 4,098 feet and compares favorably with other system reliever airport primary runways. The existing runway length accommodates about 75% of the category BII aircraft types currently using the airport. The forecasts assume no VLJ operations will occur unless more runway length is provided. The same is assumed for jet aircraft operations. The runway extension would provide greater utility and safety for these aircraft. The airport benefits from the installation of an automated weather monitoring system that replaced using the MSP weather information. This more accurate Airlake information was used to determine that there is no need for a cross-wind runway.

Existing Conditions and Future Landside Facility Needs

The existing hangar space at the airport is 99 percent full. There is sufficient vacant land in the new building area to construct new hangar facilities. Aircraft based at the airport currently number 159; the historical high number of based aircraft was in 2003 with 190 aircraft. Total capacity within existing hangars is estimated at 160 spaces. By 2025 some 79 new spaces are forecast to be needed for a total of 239 spaces. The location for new hangars is already provided on the airport's south side. All additional hangar space is to be provided by private funding.

Conformity with Aviation System Plan:

In preparing the aviation forecasts the MAC used the Council's regional socio-economic data. Based upon the aviation demand forecasts there is no need for additional runways at the airport. It will retain its *Minor* airport system role as a reliever serving general aviation in the south portion of the region. The proposed extension of the main-wind Runway 12 -30 from 4,098 feet to 5,000 feet can be accommodated on airport property without land acquisition, but requires road relocation for a section of Cedar Ave. South. The cost for this alternative is less than acquiring land and constructing a cross-wind runway and taxiways. With an extension to 5,000 feet the airport could accommodate all aircraft under 12,500 pounds, and come much closer to meeting demands of the critical aircraft types under 60,000 pounds. The runway extension would be lighted and also provide safer operations for the aircraft already using the airport.

The existing on-site weather monitoring/reporting system already enhances airport user safety. Retaining a potential to extend the primary [main-wind] runway in the airport layout plan preserves the opportunity for long-term development and use of existing resources within the airport's *Minor* system role. The preferred alternative would enhance the precision runway approach capability and improve airport utilization. The preferred development alternative is in conformance with the regional aviation system plan.

Compatibility of Airport/Community Plans

Environmental Considerations

1. Runway Development – a runway extension project requires the completion of an Environmental Assessment (EA) or an Environmental Assessment Worksheet (EAW), depending on whether federal funds are involved.
2. Hangar Area Development - typically involves the preparation of an EAW, unless federal funds are proposed to be used; then, a federal EA could be required.

3. Aircraft Noise - a 2025 noise contour was prepared for the preferred alternative at Airlake Airport. Most of the DNL 60 future noise area is on the airport property or within areas that need to be controlled by the airport for safety reasons. The Council's land use compatibility guidelines for aircraft noise apply to community areas within the noise contours. The communities and the MAC should continue to coordinate their planning efforts concerning compatibility of future land use due to noise effects.
4. Sanitary Sewer and Water – the Airlake Airport lies mostly outside of the MUSA boundary. However, the Metropolitan Council has requested that the MAC provide sanitary sewer and water services to all reliever airports. At present there are limited central sewer and water services available at the airport through the City of Lakeville systems. Lakeville is annexing property around the airport (Figure 2), and has expressed its condition of annexing the airport if the city is to provide central sewer and water service to the entire airport. Eureka Township believes the airport should remain part of their community. The airport area will soon be traversed by the new regional sewer interceptor to the Elko-New Market area. The MAC is encouraged to pursue an agreement with the city of Lakeville and Eureka Twp. for the provision of service to the airport.
5. Wetlands - there are streams and wetlands in existence at the Airlake Airport. Implementation of the preferred development alternative at the airport will be studied closely to prevent environmental impacts. If wetlands are unavoidable, designs will be adjusted as much as possible to minimize impacts.

Land Use Considerations

1. Ground Access – capacity of the roadways adjacent to the airport are adequate to handle projected traffic needs of the airport.
2. Parks – the preferred development alternative does not affect any regional parks or open space.
3. Airport Safety Zoning – there are several areas off-airport where runway safety zoning and airspace protection need to occur. The MAC, working with Dakota County and affected communities should implement a joint zoning board and airport ordinance. Application of the state airport safety zoning requirements should reflect the system role of the airport.
4. Non-Aviation Development – potential non-aviation development of parcels on the airport property were identified during the LTCP process; when this program is implemented the LTCP should be amended and reviewed by the Council.

Consistency with Council Policy:

Operations are expected to grow at the Airlake Airport with or without any improvements, and although use of the airport by small jets is forecasted to increase with a runway extension, the aircraft types operating at the airport will not change due to the proposed runway extension.

Regarding the other alternatives reviewed, the no-build alternative clearly does not meet the needs of the airport. Hangar development addresses the landside capacity issue, but does not provide a runway length that meets the FAA recommendation for this type of airport. An

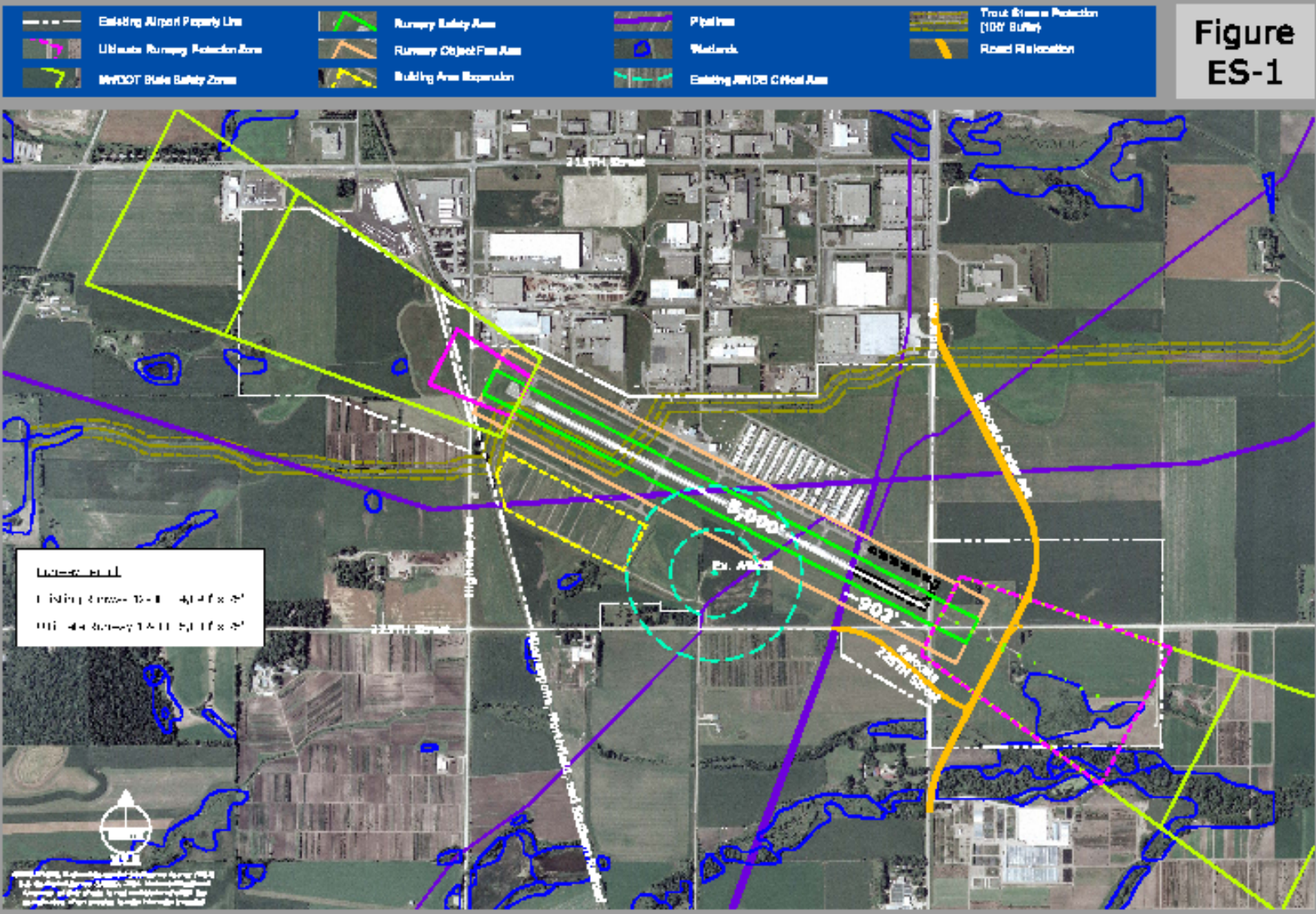
extension to 5,000 feet is not justified in the short term, but it is recommended the primary runway remain as a future development option for this airport in the long-term, and that airport layout plans show this ultimate configuration.

The preferred alternative recognizes the need to keep the airport viable, but within the region’s ability to support the investments over time. The alternative also enhances the safety and usability of the facility within its assigned system role. Environmental and land use considerations have been identified and process for implementation addressed. The proposal appears to be consistent with metro systems in general and consistent specifically with aviation policies.

Development Costs and Implementation of Preferred Alternative

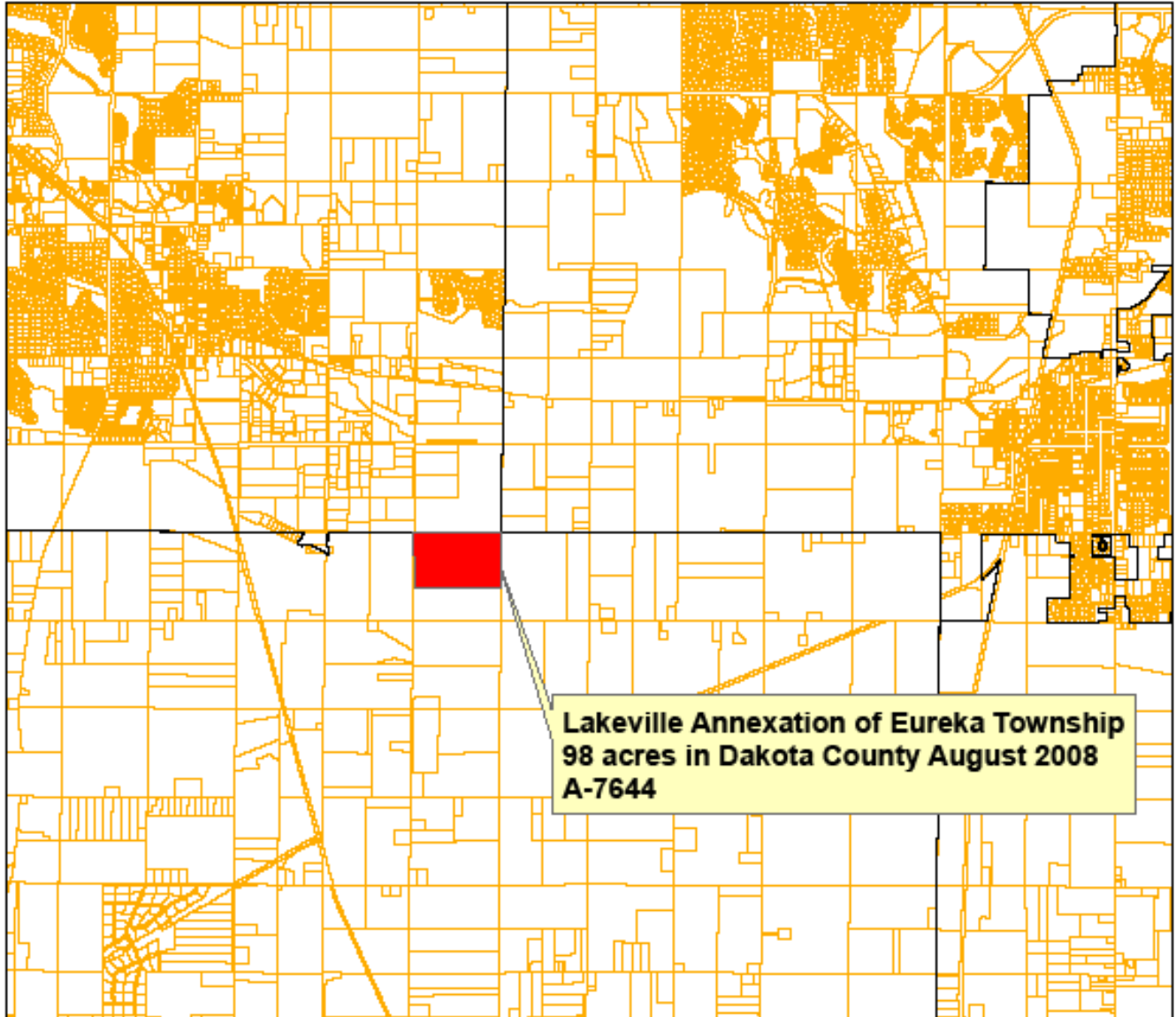
Recommended Elements	Timeline	Estimated Cost/Funding	
Pursue sanitary sewer and water agreements	0 – 5 Years	Local	\$0
Pursue an agreement with land owners for property acquisition/exchange to protect for the future relocation of Cedar Avenue	0 – 5 Years	Local	\$0
Complete the south hangar area to accommodate the 2025 needs	0 – 5 Years	Private	\$1,300,000
Provide sanitary sewer and water services as outlined above	In conjunction with hangar area construction	Private	\$1,200,000
Extend Runway and Taxiway A to 5,000 Feet, including ILS relocation and improved minimums	10 – 15 Years	FAA Funds	\$6,900,000
Reconstruct the Existing Runway Length	15 – 20 Years	FAA Funds	\$900,000

**Figure
ES-1**



Airlake Airport (LVN)
Preferred Alternative - Extend to 5,000-foot with Building Area Development

Annexation A-7644 - Lakeville / Eureka Township 98 Acres August 25, 2008



 Annexation Area

