



LAKE ELMO AIRPORT ENVIRONMENTAL ASSESSMENT

Frequently Asked Questions

Q 1: What is the proposed project and why is it being considered?

A: The MAC recently completed and adopted a Long-Term Comprehensive Plan (LTCP) for Lake Elmo Airport. The plan evaluated facility needs over the next 20 years and serves as a “road map” to guide future airport development. The LTCP addresses the following issues associated with the Lake Elmo Airport:

- **Failing infrastructure that’s at the end of its life**
- **Enhancing safety for airport users and the general public**
- **Improving facilities for the aircraft currently operating at the airport**

To achieve these objectives, the LTCP proposed the following:

- **Relocate Runway 14/32 by shifting it 615 feet to the northeast and extending it to 3,500 feet, including all necessary grading, clearing, and runway lighting.**
- **Realign 30th Street North around the new Runway 32 Runway Protection Zone (RPZ) and reconnect to the existing intersection with Neal Avenue.**
- **Construct a new cross-field taxiway to serve the new Runway 14 end, including taxiway lighting and/or reflectors.**
- **Convert existing Runway 14/32 to a partial parallel taxiway and construct other taxiways as needed to support the relocated runway, including taxiway lighting and/or reflectors.**
- **Reconstruct Runway 4/22 and extend it to 2,750 feet, including necessary lighting and taxiway connectors.**
- **Establish a new non-precision approach to Runway 14 and upgrade existing Runway 4 approach to RNAV (GPS).**

The Environmental Assessment (EA) will assess the environmental effects of the LTCP. An EA is necessary in order to receive Federal Aviation Administration approval and – ultimately – funding for such airport improvements.

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Q 2: What is a Federal Environmental Assessment (EA) and why is one being completed?

A: The National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental effects of proposed actions prior to making decisions. Based on the nature of the proposed project, the Federal Aviation Administration (FAA) has determined that an Environmental Assessment (EA) is required. An EA takes a close look at environmental effects that can be expected and addresses the purpose and need of the project with various alternatives. It then determines whether or not the proposed project has the potential to cause significant environmental effects compared to a no-action alternative.

Q 3: What is a State Environmental Assessment Worksheet (EAW) and why is one being completed?

A: The Minnesota Environmental Policy Act and the related Minnesota Environmental Quality Board guidelines require project proposers complete environmental reviews for various types of projects. According to Minnesota Rule 4410.4300, an Environmental Assessment Worksheet (EAW) is required for construction of a new, paved airport runway. An EAW provides an analysis of the potential environmental impacts of a specific project. The standard EAW form issued by the EQB will be completed and included as an appendix to the Federal EA.

Q 4: Why is Lake Elmo Airport important?

A: Lake Elmo Airport is an important part of the MAC General Aviation (GA) Airports system, which alleviates congestion at MSP and provides infrastructure to accommodate the region's GA needs. Lake Elmo is intended for use primarily by smaller propeller aircraft. In this regard, it is similar to Crystal Airport in the GA Airports system. Lake Elmo is also the only public airport in Washington County, providing the sole direct air connection to the northeast suburbs and outlying areas of the Twin Cities. The Airport accommodates personal, recreational, and some business aviation users. Businesses at the Airport include flight training and aircraft maintenance.

Q 5: How will Lake Elmo Airport development projects be funded?

A: Future development will continue to be self-funded by aviation users via FAA and/or Minnesota Department of Transportation grant programs, as well as Metropolitan Airports Commission funds. No local sales or property taxes will be used to fund airport improvements.

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Q 6: Will a longer runway mean larger airplanes?

A: No, that is not what projections indicate, and it is not the MAC's intent to design the new runway to accommodate a larger aircraft family. The purpose of the project is to conform to FAA guidance and standards, to better meet the needs of existing airport users and their aircraft operations. Information regarding past, current, and projected future operations and aircraft types operating at the airport, and associated aircraft noise levels, was presented at the community engagement panel meeting on August 8, 2017, and discussed at the second public event held August 17, 2017. For additional information, read the inside article and graphic included in our August newsletter for typical runway lengths needed for different types of aircraft, and why the Lake Elmo improvements are not likely to increase traffic from large jets.

Q 7: What type of road traffic will the relocated 30th Street be designed for?

A: While the long term comprehensive planning process contemplated a viable option for relocating the roadway, for the EA the MAC will research additional options. Through this process the MAC will keep the public's concerns about safety and travel time top of mind.

Q 8: How can I stay up to date on what is happening with the project?

A: The best way to keep current is to sign up to receive updates via our e-news subscription. Regular updates will be sent to this email list, including notices about public meetings. Sign up to subscribe at www.metroairports.org/General-Aviation/Lake-Elmo-Environmental-Assessment/Overview. For meeting information and materials, visit the Documents and Links page.

Q 9: Will the public have an opportunity to view and comment on the document and its findings before it is finalized?

A: Public involvement is an important part of this project. Throughout the course of the environmental work, four public events will be held to provide information to the public. The dates, times and locations of these events will be determined before the event and posted to the project website, as well as published in the St. Paul Pioneer Press, the Stillwater Gazette, and in the Oakdale/Lake Elmo Review. A notice will also be sent to subscribers who've asked to receive email notices about the project.

Q 10: How can I share my ideas?

A: Throughout the process, interested citizens can submit comments via the "Contact Project Team" link on the project website, in writing sent to the email or mailing address posted on the project website, and/or in person at the public events.

Q 11: How will the MAC respond to and/or use public comments submitted about the project?

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A: Response to comments will be addressed in one or more of the following ways:

- Comments may be addressed by updating the FAQs on the project website.
- Comments received prior to release of the draft EA will be considered in development of the document.
- Comments received during the public comment period after release of the draft EA will be responded to and considered during its finalization.
- Comments may be answered verbally as part of a question and answer session in a public meeting.

Q 12: How will aircraft noise be evaluated in the EA?

A: The EA will evaluate aircraft noise using noise exposure maps, commonly referred to as noise contours, which will be overlaid on a map showing the airport and surrounding area. A preliminary look at aircraft noise exposure was included in the Long-Term Comprehensive Plan; however, the EA document will take a fresh look at aircraft noise impacts from potential development alternatives as compared to a “No Action” alternative.

To evaluate aviation noise in a federal EA, the Federal Aviation Administration (FAA) prescribes both the metric and the method in which aviation noise is evaluated. Accordingly, aircraft noise must be measured using a yearly Day/Night Average Sound Level (DNL). DNL is an energy-average noise level over a 24-hour period, with 10 decibels (dB) added to aircraft noise events occurring between 10 p.m. and 7 a.m. This weighting reflects the added intrusiveness of nighttime noise events due to lower background community noise levels.

In order to create the noise contours, the FAA requires a computer-based noise modeling software. The federally-approved Aviation Environmental Design Tool (AEDT) will be used to generate noise contours for a “No Action” scenario and compare it to noise contours for the preferred alternative. The AEDT model takes into account precise activity variables at the airport, such as the types of aircraft and engines, which runways are used, flight paths over the ground, vertical climb and descent profiles, time of day and frequency.

The FAA currently considers the 65 dB DNL contour line as the point at which aircraft noise becomes a significant impact on sensitive land uses, such as residential areas. If these residences are located within the 65 dB DNL contour or greater, they are considered by the FAA as incompatible. The EA will include an evaluation of these noise contours in relation to the land use surrounding the airport. The EA will consider both existing and forecasted operations at the airport, to take extra care in considering existing and future effects on residential development around the airport.

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For more information about the Aviation Environmental Design Tool you can visit the Noise Quest website under Noise Basics, Metrics and Models (<http://www.noisequest.psu.edu/noisebasics-noisemodels.html>).

Q 13: Is it possible homes will need to be insulated against aircraft noise?

A: Since the 65 dB DNL noise contour (the level at which the federal government says aircraft noise is incompatible with residences) is contained on airport property, no homes are expected to be within the area deemed incompatible. However, there are other steps an airport and its users can take to reduce aircraft noise and promote fly-friendly techniques for use by aircraft operators.

For example, pilots at Lake Elmo Airport are asked to follow a voluntary [Noise Abatement Plan](#) that spells out preferred flight procedures for reducing noise, like establishing a preferred runway, using higher approach (landing) angles and discouraging nighttime training operations. Signs posted throughout the airfield and airport remind pilots to follow the Noise Abatement Plan.

The Lake Elmo Airport Noise Abatement Plan will be re-evaluated with respect to the proposed improvements, and updated where necessary via the EA process. The EA will also evaluate if additional opportunities exist for reducing noise impacts while still meeting the purpose and need for the project.

Q 14: What is happening when I hear aircraft running up their engines on the ground?

A: Aircraft engine “run-ups” (running the engine at different power settings on the ground without moving) are performed for two reasons: pre-departure checks and maintenance. Pre-departure run-ups are most frequent and take place when a pilot is performing a series of safety checks on the aircraft before taking off. Typically, pilots conduct pre-departure run-ups prior to departing the airport for the first time that day. It is usually performed at the end of the runway on which the pilot intends to depart and only lasts a short period of time.

Maintenance run-ups are performed when the aircraft is undergoing maintenance or repairs. These occur less often, but may last longer. Lake Elmo Airport has two designated locations for maintenance run-ups, which were selected to minimize the amount of noise projected toward adjacent residences.

The Noise Abatement Plan states:

- A. Between 5:00 PM and 10:00 PM local time, all engine tests and maintenance run-ups in excess of 5 minutes shall be conducted in one of the designated areas.
- B. Aircraft will be parked on a heading of 180 to 200 degrees whenever practical.
- C. Except in emergencies, engine tests and maintenance run-ups are prohibited between 10:00 PM and 8:00 AM local time.

Q 15: Why do aircraft repeatedly fly over the same areas?

A: Every airport runway has an associated traffic pattern. These patterns and the flight procedures pilots follow are standardized from airport to airport to ensure the safety of those onboard, as well as people on the ground.

Aircraft operating in the vicinity of an airport, follow specified paths that place them where they will remain safe from obstacles, such as buildings, terrain or towers.

Q 16: Can the airport restrict certain types of aircraft or operations to certain times?

A: The MAC encourages tenants at Lake Elmo Airport to be good neighbors by following the voluntary Noise Abatement Plan, and takes its responsibility to respond to community concerns seriously. However, there are many circumstances when the impacts from the airport cannot be abated.

Federal grant provisions require that the airport be operated in a manner that does not discriminate on the basis of type or class of aircraft or aviation activity and does not restrict or place an undue burden on interstate commerce. As a “public-use” airport, Lake Elmo Airport is subject to federal regulations, much like another important transportation asset – our interstate highway system. A congressional act passed in 1990 (the Airport Noise and Capacity Act) limits the ability of airports to impose access or use restrictions based on aircraft noise. The result is that it is extremely difficult to restrict aircraft operations at an airport (such as closing the airport to jets or closing it at night) to control noise.

Today, any U.S. airport that employs access or use restrictions designed for noise control had them in place prior to the 1990 act and were grandfathered in by Congress.

Q 17: What type of aircraft operate at the airport today? Is this expected to change?

A: For the next 20 years, Lake Elmo Airport is expected to experience between 24,000 and 27,000 flights annually.

A review of the number of aircraft currently based at the airport, operations data, and flight track information indicates that the majority of flights at the airport today are by single-engine piston aircraft (about 94.0%). The remaining 6% are flown by multi-engine piston aircraft (2.0%), helicopters (3.8%), turboprop aircraft (0.3%) and light jets (less than 0.1%).

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Future estimates, based on the proposed scenario to extend the main runway to 3,500 feet, are similar to what is occurring today. Single-engine piston aircraft are expected to continue operating with the most regularity, contributing to 93.0% of flights. Multi-engine piston aircraft are anticipated to account for 2.5% of flights, helicopters for 3.4%, turboprop aircraft for 1.0%, and light jets are expected to remain near 0.1%.

The purpose of the 650-foot runway extension to 3,500 feet is to increase the margin of safety for and accommodate the needs of aircraft operating at the airport today. It is not to change the role of the airport. If that would have been the goal, the MAC would have proposed 3,900 feet, which is the FAA's suggested high-end runway length. However, MAC staff determined a 3,900-foot runway would likely attract regular use by larger aircraft, which is not something the MAC is seeking to do. Nearby St. Paul Downtown Airport is already well-suited for larger aircraft. The extension of the primary runway is to fulfill the needs of the aircraft operating at the airport today.

Q 18: Will the planned improvements have an impact on the value of my property?

A: The relationship between cumulative noise levels and property values is complex. The property value impacts of aviation noise have been studied on multiple occasions, with published study results beginning in the mid-1970s. Study results differ due to numerous airport-specific variables, including: (1) the level and frequency of noise; (2) the property location with respect to overflights; (3) the perceived amenities and quality of the affected neighborhood/community; (4) the local supply and demand for housing; (5) the local and regional economy; and (6) other market conditions that cannot be controlled or are difficult to predict.

The Airport Cooperative Research Program Synthesis 9, *Effects of Aircraft Noise: Research Update on Selected Topics*, provides the following overview of research conducted on the effect of aviation noise on property value:

"In summary, the studies of the effects of aviation noise on property values are highly complex owing to the differences in methodologies, airport/community environments, market conditions, and demand variables involved. Whereas most studies concluded that aviation noise effects on property value range from some negative impacts to significant negative impacts, some studies combined airport noise and proximity and concluded that the net effect on property value was positive." (Transportation Research Board of the National Academies, ACRP Synthesis 9 Effect of Aircraft Noise: Research Update on Selected Topics, 2008, p. 20.)

In the case of Lake Elmo Airport, the proposed improvements do not result in a change in the airport's role and are not expected to attract larger aircraft or significant increases in flights. MAC staff is also not aware of any long-term or substantial property devaluations that can be attributed to recent airport

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improvements at Flying Cloud or Anoka County-Blaine Airports. In both cases, runways were extended to 5,000 feet to accommodate increases in corporate jet activity.

Q 19: How much will it cost to make the improvements and where will the money come from?

A: The estimated costs for the proposed improvements, as laid out in the Long Term Comprehensive Plan, is \$13,325,000. The cost of reconstructing the existing airfield (minimum needed to continue operating the airport) is \$5,400,000. These estimates will be re-evaluated in the EA.

No local sales or property taxes will be used to fund the project.

The project will be funded with revenues from various user fees. User fees are paid by people who use local and national airport and aviation facilities. This includes airport tenants and passengers. A combination of funding sources and financing mechanisms, including federal Airport Improvement Program (AIP) grants, state Airport Construction Program grants, and revenues generated by the MAC, could be used to fund the project.

The MAC anticipates most of the funding will come from AIP discretionary grants, which are awarded to airports by the federal government on the basis of priority and available funding. These funds are collected from fees and taxes assessed only on those who use public airports throughout the country, such as airline ticket taxes, taxes on freight waybills, international departure fees and taxes on general aviation gas and jet fuel.

Q 20: How will my property taxes be impacted?

A: Development at the airport will continue to be self-funded by users of the airport and aviation system. No local sales or property taxes are or will be used for the proposed improvements.

Q 21: Who will pay for the reconstruction of 30th Street?

A: As part of the project, the MAC will pay for the construction of the realigned section of 30th Street North.

Q 22: Who will be responsible for maintaining 30th Street?

A: The project proposes to realign a section of 30th Street North, which would move from a shared boundary between West Lakeland and Baytown Townships fully into West Lakeland's jurisdiction. The Baytown Township draft 2040 Comprehensive Plan document states: "Baytown has offered to continuing the current shared maintenance if the land area between the relocated road and the

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Baytown Township boundary becomes part of Baytown Township after the roadway is relocated. The boundary relocation would result in the entire airport remaining in Baytown Township.”

Q 23: What changes will be made to the lighting on the airfield?

A: The project calls for installation of runway lights on Runway 4/22 (not currently there) and taxiway lights to serve the new Runway 14 end. These improvements will make these areas usable during times of lower visibility. The project would also include installing runway end identifier lights (REILs) on the ends of Runway 4/22. These are synchronized flashing lights that help pilots see the runway as they approach for landing. As with the existing primary runway, the lights will only be on when a pilot activates them. Installing these lights is not expected to increase nighttime flight activity, but will enhance safety by allowing pilots the option of landing on the runway most aligned with the winds during low-visibility conditions.

Q 24: Why not simply rehabilitate the runway without extending it?

A: The existing runway pavement is at the end of its useful life and needs to be reconstructed in the near future. Simply repairing the surface of the runways will be ineffective in the future because the subgrade – the foundation of the pavement – is in need of reconstruction.

The specific objectives of the airport improvements, as outlined in the Lake Elmo Airport EA/EAW, are:

- 1) Improve the runway pavement conditions
- 2) Minimize incompatible land uses in the Runway Protection Zones
- 3) Meet runway length needs for existing users
- 4) Upgrade the instrument approach procedures

The improvements are not being proposed to increase airport capacity, nor are the improvements dependent upon achieving a certain level of aircraft operations. The above objectives remain the same regardless of the number of aircraft operations at Lake Elmo Airport.

These objectives serve as a guide for evaluating a series of alternatives. The alternative to rehabilitate the runways without realigning and lengthening the primary runway would not satisfy the objective to minimize incompatible land uses within the Runway Protection Zone (objective 2) and the objective to meet runway length needs for existing users (objective 3). The estimated cost for reconstructing the existing runway is \$5.4 million. Investing these funds in a long-term solution that includes a realigned and extended runway more adequately addresses existing issues.

The FAA’s guidance to airports to minimize incompatible land uses within the Runway Protection Zone drives the need for a realigned runway, by allowing these zones to move completely within the airport’s boundaries, thus allowing MAC to keep them clear of incompatible land uses. Doing this also provides

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certainty for the surrounding communities and jurisdictions while they engage in their own future planning processes.

Objective 3 addresses a long-standing runway length deficiency. A runway length of 2,849 feet is a safety concern for pilots operating at the airport today, as supported by the following comments from by airport pilots:

“There have been real winter operations where I have not been comfortable with the short length of runway 14/32 under poor braking conditions with the piston Piper Saratoga [a multi-engine piston aircraft]...”

- Lake Elmo resident and business pilot of a Socata TBM850 aircraft based at Lake Elmo Airport

“As a regional development office our company’s territory is the Eastern 1/3 of MN and the Western 1/3 of WI. This airport is perfect for our operations other than the fact that it is saddle[d] with short runways and no instrument approaches landing to the south...Our sincere hopes are that the runways will be lengthened to add a safety factor for all aircraft operations, not just ours and that an approach (GPS) will be authorized for runway 14.”

- Lake Elmo Airport based pilot of a Cirrus aircraft

“I am a principal in a consulting company that operates out of the Twin Cities. Our firm advises the leaders of the nation’s largest regional health systems on their marketing strategy, M&A, and program strategies. To support my consulting company and travel, I own a hangar at Lake Elmo [Airport]...At less than 2,900, inclement weather or any runway contamination (e.g., ice/snow) makes landing at Lake Elmo challenging with my plane...”

- Lake Elmo Airport based pilot for regional health systems consulting

Q 25: How much has the MAC spent on future planning for Lake Elmo Airport?

A: Since 2013, the MAC has spent approximately \$327,000 on future planning for the Lake Elmo Airport. No general or state income taxes have been used.

Q 26: What are the social and economic benefits of Lake Elmo Airport?

A: The Lake Elmo Airport contributes to the local and regional economy by facilitating the movement of people, goods, and services throughout the region and nation, allowing the economy to operate more efficiently.

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Lake Elmo Airport contributes to the regional economy in several ways, like:

- Economic activity generated by overnighting pilots and visitors accessing the region via Lake Elmo Airport.
- Economic activity generated by tenants and users who purchase goods and services at the local hardware stores, grocery stores, banks, auto repair and service shops, barbers, and restaurants.
- Airport tenants pay property taxes on their hangars based on taxable market value. For 2014, total property taxes billed equaled approximately \$105,000. Of these tax revenues, 42% went to the Stillwater School District (ISD 834), 40% went to Washington County, 12% went to Baytown Township and the remaining 6% was split among the Valley Branch Watershed District, Met Council, Metro Transit, and Metro Mosquito Control.
- Expenditures for annual operations and maintenance activities.
- Expenditures for capital improvements, such as pavement rehabilitation.
- Employment provided by the Fixed Base Operator (Valters Aviation).
- Portions of the Airport are farmed, as well, providing revenue-generating opportunities for a tenant farmer.

Additionally, tenants participate in community-focused activities, such as:

- The Experimental Aircraft Association (EAA) Chapter 54, based at Lake Elmo Airport, has more than 100 members and participates in the EAA Young Eagles program to introduce young people to aviation; hosts an annual aviation day; actively supports programs at the Farnsworth Aerospace magnet school in St. Paul; and conducts an annual ground school to teach aviation rules, regulations, and safe flight practices.
- The local [Civil Air Patrol](#) squadron is trained to assist in search and rescue, disaster relief, and humanitarian activities, while providing aviation education and training for young people.
- Local pilots participate in the [Angel Flight](#) program, which provides free air transportation via volunteer pilots for financially distressed children and adults with medical and humanitarian needs.
- Local pilots participate in the [Pilots-N-Paws](#) program, which facilitates transportation of rescued, sheltered, or foster animals.

The MAC is currently conducting studies that will, in the near future, provide information about the economic benefits of its system of airports.

Q 27: [What do you mean by ‘no-action alternative?’](#)

A: The no-action alternative is essentially a no-expansion alternative. It’s important to note, upgrades are both needed and planned for Lake Elmo. The no-action alternative would maintain the existing pavements but would not upgrade any navigational equipment, nor would it include runway extensions, relocations or improvements besides addressing the deteriorating airfield pavement. The no-action alternative would not resolve the deficiencies identified in the planning process. The runway protection zones (RPZs) would not be cleared of incompatible land uses (i.e., Manning Ave., 30th Street N., and the

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railroad), the runway lengths would continue to pose operational constraints for current aircraft operators and the airport would continue to lack the most current navigational technology for landing aircraft. The no-action alternative serves as a baseline to compare the environmental effects of the preferred alternative. While the no-action alternative does not meet several of the project objectives identified in the Purpose & Need, it will be evaluated across the full range of environmental categories required by federal and state regulations.

Q 28: How are wetland impacts addressed?

A: Addressing impacts to wetlands is a necessary component of any environmental assessment. A permitting process under the US Clean Water Act requires replacement of any wetlands that are filled in to mitigate, or reduce the severity of, the impacts. For a federal action of any kind, there are certain ratios that must be applied. The replacement ratio for Washington County is 2.5 replacement credits for every 1 acre of impacted wetland. For example, our analysis for the preferred alternative shows a wetland impact (fill area) of 2.36 acres associated with the runways, taxiways, and road realignment. To determine the replacement area, we would take 2.36 times 2.5, which would be 5.9. That's the number of acres that would need to be replaced somewhere else. The replacement ratio may be reduced to 2 replacement credits for every 1 acre of impacted wetland when the replacement consists of either: (1) withdrawal of available credits from an approved wetland bank site within the same bank service area as the impacted wetland; or (2) project-specific replacement within the same major watershed or county as the impacted wetland. There are different ways to accomplish this wetland replacement. Ideally, wetlands would be replaced within the same watershed, to provide the same function as those existing wetlands. Through this environmental process, the project team will identify and document mitigation options.

Q 29: How are estimates of existing aircraft activity levels determined?

A: It is important to first note that the proposed improvements at the airport are not dependent on a specific number of aircraft operations. The MAC would be making the same project recommendations regardless of the number of aircraft operations.

Per aviation industry criteria, each touch-and-go counts as two aircraft operations (a takeoff and a landing).

Since there is no Air Traffic Control Tower at Lake Elmo Airport, there is no "official" count of aircraft operations. The Environmental Assessment process included a detailed analysis of airport-specific operations data available from both the FAA Traffic Flow Management System counts (TFMSC) and the MAC's Noise and Operations Monitoring System (MACNOMS) databases. The TFMSC database provides information on nationwide traffic counts by airport and city pairs, and includes data for flights

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conducted under Instrument Flight Rules (IFR) plans. The MACNOMS data correlates information from a state-of-the-art flight tracking data with noise data collected at 39 remote monitoring towers located around Minneapolis-St. Paul International Airport.

There were 19,757 total aircraft flight tracks captured by MACNOMS at Lake Elmo Airport in 2016. Based on analysis of flight track start and end points, Mead & Hunt estimates that 18,542 of these flight tracks represent aircraft that took off or landed at Lake Elmo Airport. These tracks were analyzed and assigned to general aircraft engine type categories (i.e. single/multi-engine piston, single/multi-engine turboprop, jet, and helicopter) and then adjusted to account for typical MACNOMS capture rates observed at towered airports within the MAC's system of airports. Using this method, Mead & Hunt estimates that there were 25,596 aircraft operations at Lake Elmo Airport in 2016.

Q 30: Why is the MAC proposing to make airport improvements based on a plan that appears to be outdated?

A: Based on the previous planning efforts, the MAC purchased land in the late 1960s and early 1970s to facilitate the airfield improvements being proposed. Although scaled back in terms of runway length and the number of runways, the plan that was proposed in the long-term comprehensive plan and the current environmental assessment remains consistent with the vision offered in previous plans, which have included a longer primary runway and the realignment of a section of 30th Street N. The fact that the current plan is similar to the legacy plans bears testament to the validity of the original vision expressed many years ago. The vision for the future of Lake Elmo Airport has been consistently articulated over the years to guide communities and adjacent landowners in making decisions about how to develop their properties and homes.

Q 31: How will the realignment of 30th Street North affect emergency response times and the safety of drivers?

A: The Airport and adjacent areas in Bayport and West Lakeland Townships to the immediate north, south, and east are within the Bayport Fire Department service area, while adjacent areas to the immediate west are within the City of Lake Elmo Fire Department service area. Because it is located outside the City of Lake Elmo, the proposed realignment of 30th Street North would not affect primary emergency response west of the Airport. The realigned segment of 30th Street North is located entirely within the Bayport Fire Department service area. The Bayport Fire Department headquarters building is located approximately four and a half miles northeast of and is an approximately seven-minute drive from the Airport.

The project team met with Bayport City and Bayport Fire Department staff during the EA process to assess potential impacts to emergency response associated with the realignment of 30th Street North. The realignment of 30th Street North is not anticipated to be a detriment to initial emergency response

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times from the Bayport Fire Department to any locations within its service area. This conclusion is based on information provided by the Bayport Fire Department that indicates the affected segment of 30th Street North would not be used during its initial response to emergencies at any location within its service area. The primary use of 30th Street North with respect to emergency response would be for shuttling municipal water from hydrants in the City of Lake Elmo to replenish water capacity when fighting fires in areas east of the airport that do not have water service. The Bayport Fire Department fleet has a combined water tank capacity of over 4,000 gallons, and is supported by mutual aid responders from Stillwater, Lower St. Croix, Lake Elmo, and Hudson with a combined fleet capacity of over 10,000 gallons. Based on fleet capacity and planned extension of water services to new residential areas immediately west of the Airport, the project team does not believe that the minor changes in travel times along 30th Street North represent an adverse effect to water shuttles. The Bayport Fire Department concurs in this assessment

The realigned road concept and ensuing design will meet all applicable local and state standards.

Q 32: [How are biological resources \(trees and wildlife\) addressed?](#)

A: The proposed action will require the removal of trees on airport property. Approximately 20 acres of trees will be affected on airport property. Off-site trees are being evaluated in coordination with the FAA.

Land uses that attract wildlife, such as refuges, landfills, and lakes, can present hazards to aircraft operations. The proposed development does not create any new wildlife attractants at Lake Elmo Airport. In fact, the reduction in agricultural farmland and the on-airport tree removal associated with the proposed development is expected to reduce wildlife attractants on the airport.

There are three federal and/or state-listed species with habitat in the area: the Northern long-eared bat, Rusty patched bumblebee, and Blanding's turtle. Impacts will be avoided and minimized using measures recommended by the Department of Natural Resources and U.S. Fish & Wildlife Service.

Q 33: [How is the MAC fulfilling its responsibility to reduce environmental effects for airport neighbors?](#)

A: The MAC made notable changes to the 2015 long-term comprehensive plan based on community concerns and feedback. Initially, the MAC began with an examination of the 2008 plan, which recommended an initial 3,200-foot primary runway, with an ultimate extension to 3,900 feet, and a 3,200-foot crosswind runway. It was determined that a 3,900-foot runway is not necessary to achieve the objectives of the plan and did not fit with a viable 30th Street North realignment option, considering the Federal Aviation Administration's new guidance on Runway Protection Zones. Therefore, the plan was updated with a more modest primary runway extension to 3,600 feet and the crosswind runway to

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2,750 feet. These lengths are based on FAA guidance and manufacturers' performance charts for several aircraft using Lake Elmo Airport.

Through the 2015 planning process, the MAC made a commitment to consider the concerns voiced by neighbors and evaluate if any adjustments to the proposed plan might be feasible to address some items of concern while preserving the desired objectives for improving the Airport's facilities. In the spirit of this commitment, the long-term comprehensive plan was further refined with a new preferred alternative to cut 100 feet off the primary runway extension, based on community input. At 3,500 feet, staff believes the primary runway will sufficiently serve the aircraft types operating at the airport today—but with a higher margin of safety.

This shorter runway length also allows 30th Street North to tie in with the existing four-way intersection at Neal Avenue North and eliminates the need for a new intersection—a point of concern for the community.

Additional 30th Street North concepts were a main focus during this environmental review as the team set out to address the primary concerns expressed by the Community Engagement Panel: travel time and safety.

New concepts were drawn up to effectively reduce travel time compared with the original plan, and to soften the curve; however, the proposed concepts were not supported by the community, which expressed concerns about introducing a cul-de-sac and potentially a roundabout in the roadway design. The project team met with Bayport City and Fire Department staff were engaged during the EA process to assess potential impacts to emergency response associated with the realignment of 30th Street N, and determined that the realignment of 30th Street N would not be a detriment to initial emergency response times from BFD to any locations within its service area.

The MAC recognizes that aircraft noise resulting from operations at the Airport is another area of community concern. The Aviation Environmental Design Tool (AEDT), an FAA-approved software system, was used to model aircraft noise for the no-action and preferred alternatives. The AEDT modeling effort resulted in noise contours that identify existing and expected future aircraft noise impact areas, both with and without the proposed project. The model uses the Federal Aviation Regulations (FAR) Part 150 yearly day-night average sound level (DNL) metric, which is measured in decibels (dB). The FAA, EPA, and HUD established the 65 DNL as the threshold indicating significant cumulative noise impacts. The 65 DNL contour would be contained entirely on Airport property under both the no-action and preferred alternative scenarios. As a result, there are no significant noise impacts to mitigate for the no-action or preferred alternatives. Nonetheless, the MAC maintains a voluntary noise abatement plan at the airport that prescribes preferred flight procedures, preferred runway use, designated maintenance run-up areas, and nighttime training procedures for minimizing aircraft noise exposure in noise-sensitive areas surrounding the airport. The MAC has also installed “fly neighborly” signs around the airport and

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provides resources such as pilot briefings and guides to educate Airport users about the importance of minimizing noise effects to Airport neighbors.

Tree removal associated with the project will eliminate an existing visual screen between the runways and residential areas southeast and northeast of the Airport. However, lighting impacts from the MIRL and PAPI will likely be minimal due to their location and steady illumination. Impacts from the REIL systems, which are directional strobing lights, can be mitigated by the addition of baffles to reduce unnecessary glare visible to residents. Lighting systems at the Airport can be remotely activated by pilots via radio such that the systems are only in full effect when in use by approaching and departing aircraft. As high intensity lighting at night can be disorienting for pilots, this setting is typically used by pilots only to aid in initially locating the airport.

Because the MAC values its relationship with the community, it created a Stakeholder Engagement Plan for the environmental review process that has provided additional opportunities for all stakeholders to participate and be heard. The Stakeholder Engagement Plan is available for public review on the project website. It includes regular updates about project activities and notification of opportunities for input.

Q 34: [How will future safety zoning be addressed?](#)

A: The MAC will convene a Joint Airport Zoning Board (JAZB) prior to completion of the environmental process in a manner consistent with relevant portions of Minnesota Statutes Chapter 360. The process will consider public input as part of the analysis associated with the specific components of developing an airport zoning ordinance. This process could result in a zoning ordinance recommendation to the MnDOT Office of Aeronautics that deviates from the State's Model Zoning Ordinance.

Q 35: [How are residents in newly developed areas adjacent to the airport made aware of the planned improvements?](#)

A: As an adjacent jurisdiction, the MAC reviews and comments on proposed development activity in the vicinity of Lake Elmo Airport. MAC staff reviewed the development proposals from the City of Lake Elmo for both the adjacent Village Park Preserve and Easton Village residential neighborhoods.

On several occasions, the MAC provided written comment to the City expressing concern with several aspects of these developments, including the proximity of the development to aircraft overflights and noise and the potential for storm water ponds to attract wildlife. While the MAC cannot object to development on land it does not own, our letters did request that prospective property buyers be provided information about the properties' location relative to Lake Elmo Airport, existing aircraft operations over the area, and the fact that the MAC is anticipating to construct a longer primary runway parallel to but shifted north and east of the existing northwest/southeast runway alignment and an extension to the crosswind runway.

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Q 36: What is the role/objective of the Community Engagement Panel?

A: While there is not a specific objective statement for the Community Engagement Panel (CEP), the Stakeholder Engagement Plan outlines the roles and responsibilities for the major stakeholder groups. It states:

Community Engagement Panel (CEP): *The CEP is an advisory board representing major community stakeholder groups that is more closely involved in the EA/EAW project than the public at large. The CEP serves several important functions including: representing a broad range of stakeholder groups in the EA, receiving information about the EA/EAW and sharing it with constituencies; providing input to the EA/EAW as the voice of key stakeholders; and in some cases, providing technical advice to the M&H Team. Experience has shown that environmental review projects can benefit from the creation and participation of a CEP as part of the EA/EAW process.*

It is important to note that the CEP is advisory only to the EA/EAW. That is, the CEP may offer opinions, advice and guidance, but the MAC has the sole discretion to act on the CEP recommendations.

Project Website 

www.metroairports.org/General-Aviation/Lake-Elmo-Environmental-Assessment.aspx