U.S. Department of Transportation
Federal Aviation Administration
Great Lakes Region
Dakota-Minnesota Airports District Office

Finding of No Significant Impact/ Record of Decision

For Airfield and Associated Improvements at the Crystal Airport
Cities of Crystal, Brooklyn Park and Brooklyn Center
Hennepin County, Minnesota

July 2019

I. Introduction

The Federal Aviation Administration (FAA) prepared this Finding of No Significant Impact/Record of Decision (FONSI/ROD) for a project analyzing airfield and associated improvements at the Crystal Airport (MIC), which is owned and operated by the Metropolitan Airports Commission (MAC). The attached Final Environmental Assessment (FEA), dated July 2019, has been prepared in accordance with the guidelines and requirements set forth by the Council on Environmental Quality (CEQ) and the FAA to implement the environmental review and disclosure provisions of the National Environmental Policy Act of 1969 (NEPA).

In accordance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*, and based on the evaluation in the FEA, there are no significant impacts associated with the proposed project. Therefore, a Federal Environmental Impact Statement (EIS) will not be prepared and a FONSI/ROD is being issued. This FONSI/ROD provides a summary of the Proposed Action, mitigation requirements, and the basis for the FAA's finding.

Since the project was reviewed under a joint Federal Environmental Assessment/Minnesota Environmental Assessment Worksheet, this FONSI/ROD will only be used to fulfill Federal requirements under the NEPA. As the Responsible Government Unit (RGU) for the project under the Minnesota Environmental Policy Act (MEPA), the MAC has prepared separate Findings of Fact and Conclusions of Law in order to fulfill the requirements of MEPA and Minnesota Rule 4410.1700.

II. Purpose and Need (Chapter 2 of FEA)

The purpose of the proposed action at MIC is to address airfield safety concerns through implementation of goals outlined in the 2035 long-term comprehensive plan (LTCP) including:

1) Align airfield infrastructure to meet existing and forecasted operations;

2) Preserve and improve operational capabilities for critical design aircraft; and

3) Enhance safety by simplifying the runway and taxiway layout.

The frequency of runway incursions at MIC has caused the FAA to include the Airport in its national initiative known as the runway incursion mitigation (RIM) program.

The proposed action is needed to create a safer operating environment, address deficiencies identified in the RIM program, and diversify Airport revenue opportunities. The following seven objectives define the proposed action:

1) Enhance safety by simplifying airfield geometry;

2) Provide the required runway length for critical design aircraft needs;

3) Enhance instrument approach capability and mitigate penetrations for both ends of the main primary runway;

4) Improve Airport ground vehicle circulation;

5) Increase aircraft apron parking capacity;

6) Seek a land release for non-aeronautical use for certain Airport property; and

7) Keep Runway Protection Zones (RPZs) on Airport property to the extent practicable.

III. Alternatives (Chapter 3 of the FEA)

In accordance with FAA Order 1050.1F, the EA identified and evaluated an array of reasonable alternatives, including the no-action and proposed action. The Final EA provides analysis on the alternatives analyzed.

The no-action alternative would result in some tree removal or trimming to keep existing threshold siting surfaces free from obstructions. This alternative would not meet the purpose and need, as it 1) does not enhance safety by simplifying airfield geometry, 2) does not provide the required primary runway length, 3) does not enhance instrument approach capability, 4) does not improve ground vehicle circulation, 5) does not increase aircraft apron parking capacity, 6) does not seek a land release for non-aeronautical use, and 7) does not keep RPZs on Airport property to the extent practicable.

Relocate Airport. Finding a new site in the northwest metropolitan area that could accommodate the based and transient general aviation users of MIC was considered. The site would have to be in an undeveloped area with the ability to control existing and future land use around the site and maintain compatibility with airport operations on the site. MIC currently comprises approximately 436 acres of land. Development of a new site to replace the Airport's size and function would likely result in substantial impacts to one or more environmental resources such as wetlands, woodlands, surface waters, natural areas, public parks, and existing urban infrastructure. Closing the Airport would mean abandoning substantial public and private investment in the Airport site and burden existing tenants by forcing them to relocate to the new airport. Furthermore,

given land acquisition and other costs associated with the construction of a new airport, relocating the Airport is not practicable or feasible.

Use Alternate Existing Airports. MAC also considered using MAC's six other reliever airports rather than making the improvements at MIC. Crystal Airport is an important part of the MAC's general aviation reliever airports system and serves a vital function in helping MAC fulfill its legislative mandates. The FAA designates MIC as a "Reliever Airport" for Minneapolis-St. Paul International Airport (MSP). Federal statutes define a "Reliever Airport" under U.S. Code § 47102 as "an airport the Secretary designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community." The FAA further designates MIC as a Regional General Aviation Airport, which is defined by a 2012 FAA ASSET study as an airport that "supports regional economies by connecting communities to statewide and interstate markets."

The MAC operates MIC and five other general aviation airports as reliever airports for MSP. The purpose of these airports is to relieve congestion at MSP by providing infrastructure to accommodate the region's general aviation needs. MIC complements the primary relievers in the MAC's system by accommodating personal, recreational, and some business aviation users within a specific service area. MIC is intended for use primarily by small propeller-driven aircraft and provides direct air connection to the northwest suburbs of the Twin Cities. Use of the other reliever airports in lieu of improving MIC would not address the needs of the MAC's airport system and would detract from each airport's ability to serve its intended purpose within the system.

In addition, use of alternate existing airports in lieu of improving MIC would not meet the project purpose, because using alternative existing airports would not preserve and improve operational capabilities for the design aircraft. For these reasons, using MAC's five other reliever airports in lieu of making the improvements at MIC is not a reasonable alternative.

Primary Runway Alternative A: Convert Runway 14/32 Blast Pads to Stopway

Primary Runway Alternative A considered converting the 500-foot paved blast pads at the ends of Runway 14/32 to stopways. Pavement designated as stopway can be considered useable length for decelerating during an aborted takeoff and can therefore be used for accelerate-stop distance calculations. An accelerate-stop distance (ASDA) of nearly 3,800 feet can be provided by converting Runway 14/32 blast pads to stopway, which may allow some aircraft to depart at a higher takeoff weight when ASDA is a limiting factor. This alternative increases ASDA, but not the landing distance available (LDA), takeoff distance available (TODA), or takeoff run available (TORA), and the published runway length of 3,267 feet would not change. This length is lower than the recommended runway length determined during the LTCP process. Therefore, this

alternative was removed from further consideration because it does not provide the required runway length for critical design aircraft needs.

Primary Runway Alternative B: Convert Runway 14/32 Blast Pads to Runway

Primary Runway Alternative B considered converting the 500-foot paved blast pads on each end of Runway 14/32 into useable runway. Taxiway extensions would be added to the ends of the existing blast pad pavement for aircraft access. The alternative would result in a 4,267-foot published runway length, which is longer than the recommended runway length. The alternative may attract aircraft types larger than the targeted design aircraft family, specifically those with a maximum certificated takeoff weight greater than 12,500 pounds. Regular use by larger aircraft would change the role of MIC, which MAC is not seeking to do because of the proximity to Flying Cloud and Anoka County-Blaine Airport, which are both equipped to handle larger aircraft. Therefore, this alternative was removed from further consideration because it does not better align airfield infrastructure to match existing and forecasted activity levels.

FAA Advisory Circular 150/5325-4B recommends a primary runway length of 3,900 feet for the 100 percent of fleet subcategory of small propeller-driven aircraft weighing less than 12,500 pounds and with fewer than 10 passenger seats. If Primary Runway Alternative B were scaled back to a 3,900-foot published runway length, it would reduce the likelihood of attracting aircraft types larger than the targeted design aircraft. However, based on the runway length assessment and input received at community and stakeholder meetings, the Airport sponsor determined that a runway length slightly shorter than the FAA recommended 3,900 feet would accommodate user needs in most scenarios and provide a substantial safety and operational improvement over the current primary runway length. Disadvantages associated with a 3,900-foot primary runway length at MIC include increased capital costs to install and maintain additional airfield infrastructure, increased noise contour and light exposure footprints by moving the start of takeoff closer to residential areas, expanded state safety zone footprints, and increased perception from the community that improvements are designed to attract larger aircraft. For these reasons, a 3,900-foot primary runway length was removed from further consideration.

Turf Runway Alternative B: Designated Turf Area Adjacent to Paved Runway

Turf Runway Alternative B in the 2035 LTCP considered decommissioning Runway 06R/24L (turf) and allowing aircraft to land in a designated turf area adjacent to a paved runway, within that runway's operational environment, at the pilot's own risk. This alternative was removed from further consideration by this EA/EAW because it does not comply with current FAA airport design standards intended to promote the safety of aircraft operations, and therefore does not enhance safety at MIC.

Taxiway System Alternative A

Taxiway System Alternative A considered:

- Converting Taxiway E into an apron edge taxilane between Taxiways A and E1.
- Removing the section of Taxiway E that crosses Runways 06L/24R and 06R/24L between Taxiway A and Taxiway B, to eliminate two runway crossings where runway incursions may occur.
- Removing the section of Taxiway E3 between Runway 14/32 and the future parallel taxiway, to eliminate direct apron-to-runway access.
- Removing the section of Taxiway E2 between Taxiway E and the future parallel taxiway, to eliminate direct apron-to-runway access.
- Extending Taxiway B between Taxiway E and the future parallel taxiway (existing Runway 14R/32L).

This alternative was folded into Taxiway System Alternative A1 below.

IV. Proposed Action (Chapter 3 of the FEA)

Turf Runway Alternative A: Retain Runway 06R/24L (turf) & Reduce Length to 1,669 ft. Because it would simplify airfield geometry and meet the runway length needs of existing users, Turf Runway Alternative A is the preferred turf runway alternative. Turf Runway Alternative A considered preserving turf operations by maintaining turf crosswind Runway 06R/24L. The runway length would be reduced to 1,669 feet so that Taxiways D and F would no longer conflict with the runway safety area (RSA), runway object free area (ROFA), runway object free zone (ROFZ), or approach surface. This would enhance safety and reduce areas with the greatest potential for pilot confusion. Based on discussion with based tailwheel-type aircraft operators during the recent 2035 LTCP process and an analysis of the needs of these types of aircraft based at MIC, this reduced length meets existing user needs. Under this alternative, the threshold for Runway 06R/24L would be accessed via the proposed parallel taxiway (decommissioned Runway 14R/32L).

This alternative would include converting the existing “mandatory” runway hold short locations at crossing Taxiways D and F to “holding positions for runway approach area” locations (“approach holds”). This is appropriate, as these crossing taxiways will no longer penetrate the RSA, ROFA, or ROFZ. The primary operational benefit of employing “approach holds” is that air traffic control tower (ATCT) controllers will only have to hold an aircraft short of the turf runway at crossing Taxiways D and F when there is an arrival or departure operation on the turf runway. When no operations are occurring on the turf runway, aircraft are not required to hold short of the runway. When a hold is needed, the appropriate hold short lines and signs will be in place. This is intended to reduce air traffic controller workload, the potential for pilot/vehicle operator

confusion, and incursions associated with runway hold short instructions at hot spots 4 and 5 should these be eliminated by the FAA Runway Safety Action Team (RSAT). The existing hold line locations will remain in place because an aircraft holding at this location would not penetrate the Type 1 threshold siting surface (TSS). A Form 5010 note and permanent Notice to Airmen (NOTAM) would be published stating that the turf runway is closed to operations when the ATCT is closed.

Under this alternative, the distance between the edges of turf Runway 06R/24L and adjacent paved crosswind Runway 06L/24R will remain less than 200 feet. Aircraft cannot use one runway when the other runway is in use in the same direction. However, runway operations will continue to be controlled during ATCT hours, mitigating the risk of both runways being used at the same time.

Primary Runway Alternative C: Convert Portions of Existing Runway 14/32 Blast Pads to Runway, and Shift Runway Approximately 115 feet to the Northwest.

This alternative considers turning only a portion of each blast pad into useable runway, which would result in a published runway length and ASDA of 3,750 feet. The extended runway would be nearly 500 feet longer than the existing runway and would align with the recommended runway length. Because of the constrained nature of the Airport, this alternative uses declared distances and displaced thresholds, which means not all the published pavement would be available for landing and takeoff movements in each direction. Ideally, the entire runway length would be available to accommodate all takeoff and landing distance categories. However, for the designated critical design aircraft, ASDA typically emerges as the most critical (longest) length requirement to consider. Thus, the preferred alternative should seek to maximize ASDA. In addition to the increased ASDA, all aircraft users would benefit from having a total of approximately 3,500 feet of useable runway pavement available for takeoff and landing movements, or more than 200 additional feet. With the increase in published runway length (from 3,267 feet to 3,750 feet), the number of additional aircraft operations above the 2017 base case is estimated to be approximately 314 annually by 2035, translating to approximately six additional takeoffs and landings per week. The majority of additional operations are expected to be from turboprop aircraft.

The alternative also proposes shifting Runway 14/32 by 115 feet to the northwest along the runway centerline. Shifting the runway northwest would place the RPZs fully within MAC-owned property, which would better conform to FAA standards regarding RPZ land use. This alternative meets the project goals and objectives, and better conforms to FAA design standards when compared to other alternatives.

Because the Runway 14 landing threshold would be relocated by this alternative, it would require a revision to the Runway 14 instrument approach procedures. This alternative also includes replacing the Runway 32 visual approach slope indicator

(VASI) with a precision approach path indicator (PAPI); relocating the runway end identifier lights (REIL) to correspond with the relocated runway ends; and adjusting and extending the medium intensity runway and taxiway edge lighting (MIRL/MITL) systems to correspond with the proposed runway length.

The alternative proposes changing the designation of Runway 14/32 to Utility. The projected fleet mix for 2025 anticipates fewer than 10 annual operations by aircraft with maximum certified takeoff weights of more than 12,500 pounds. Changing the existing and planned runway designations would reflect the needs of the Airport's users. It would also reduce the size of the RPZs prescribed by FAA AC 150/5300-13A, because the runway would be designed for small aircraft exclusively. Decommissioning Runway 14R/32L and shortening Runway 06R/24L would reduce incompatible land use, but it would not improve RPZ compatibility off the remaining runway ends. Changing the existing and planned designation for Runway 14/32 to Utility and designing the runway for small aircraft exclusively would further reduce the number of residential parcels within the RPZ.

Taxiway System Alternative A1

Based on input received from ATCT and Airport Operations staff, additional taxiway system alterations were considered to make the airfield more efficient and further simplify geometry. Taxiway System Alternative A1 includes the concepts proposed by Taxiway System Alternative A, as well as:

- Removing Taxiways E2 and E3 between Taxiway E and the future parallel taxiway to eliminate direct apron-to-runway access and replacing them with a single new connector located between the removed taxiway sections. Unlike Taxiway System Alternative A, Taxiway E3 between Runway 14/32 and the future parallel taxiway would be retained to improve the efficiency of aircraft exiting the runway after landing.
- Removing existing runway end connectors for Runway 14/32 (Taxiways E1 and E4), and replacing with connectors to the full parallel taxiway at the new runway ends.
- Offsetting the Taxiway B extension between Taxiway E and the future parallel taxiway by approximately 100 feet northwest to provide additional distance before the Runway 06L/24R hold short position.
- Adding new engine-run up pads on either end of Runway 14/32 on its northeast side.

This alternative enhances safety by simplifying the runway and taxiway layout, while eliminating unnecessary runway crossings and direct apron-to-runway taxiway connections. It also conforms to FAA guidelines regarding taxiway design and considers input from ATCT and Airport Operations staff.

FBO Apron Expansion. Expanding the FBO apron to improve circulation and increase the number of aircraft tie-downs is also proposed. A location west of the existing apron along the air operations area (AOA) perimeter fence and outside the future Runway 06L/24R RPZ is proposed. This location adds seven tie-down spaces and removes three previous spaces where existing tie-down spaces would be converted to taxilane. This would result in ten available tie-down spaces. This net gain in spaces would improve operational capabilities and better align available aircraft parking with existing and forecasted demand. This would also meet the project objective to increase aircraft parking apron capacity by addressing the occasional shortage of tie-down space for transient aircraft and improving the flow of aircraft traffic to and from the FBO apron.

On Airport Service Roads. Additional on-Airport service roads around runway ends are needed so that vehicles, including fuel trucks, do not have to cross active runways to reach hangar areas. Airport service roads are contemplated in three places including: around both the north and south ends of Runway 14/32, and around the west ends of Runways 06R/24L and 06L/24R. This would lower the potential for runway incursions by reducing the number of runway crossings by ground vehicles, thereby enhancing safety and improving ground vehicle circulation at the Airport.

Land Use for Non-Aeronautical Development. MIC has several areas that are not used for aeronautical purposes or planned for Airport use in the long-term. Undeveloped areas along 63rd Avenue North and near Bass Lake Road are appropriate parcels for non-aeronautical development.

The proposed non-aeronautical development is complementary to aligning the airfield infrastructure to match expected activity levels, as portions of Airport property are not planned for Airport use in the future. The parcels on the north side of the Airport along 63rd Avenue North are the most feasible for non- aeronautical development at this time. This area is currently undeveloped, which means that existing facilities would not need to be relocated prior to development. The northeast corner is unsuitable for Airport development due to a wetland complex surrounding Twin Creek that isolates it from the rest of the property. The proposed non-aeronautical use would be limited to the area west of this wetland complex on both sides of the 63rd Avenue North entrance road. Existing mixed-use commercial and residential areas across 63rd Avenue North would be compatible with non-aeronautical development on Airport property. The proposed non-aeronautical use area is in a City of Brooklyn Park Public Institution special zoning district. Rezoning of the property may be necessary for future tenants to obtain building permits from the City.

Summary of the Proposed Action

A succinct summary of the proposed action consists of the following components:

- Decommission Runway 14R/32L and convert it to a full parallel taxiway for primary Runway 14/32, extended to the new runway ends.
- Convert portions of primary Runway 14/32 blast pads to usable runway for a total published length of 3,750 feet with declared distances and change the runway designation to Utility.
- Shift primary Runway 14/32 approximately 115 feet to the northwest along its centerline.
- Reduce the length of existing Runway 06R/24L (turf) to 1,669 feet to clear Taxiways D and F from its RSAs.
- Revise the existing Runway 14 instrument approach procedure and establish a non-precision GPS-based instrument approach procedure (LNAV) to the Runway 32 end.
- Replace the Runway 32 VASI with a PAPI.
- Relocate the REIL systems to correspond with relocated thresholds on both ends of Runway 14/32.
- Adjust and extend the MIRL and MITL systems to correspond with the proposed primary runway length.
- Convert Taxiway E into an apron edge taxilane between Taxiways A and E1.
- Remove the section of Taxiway E that crosses Runways 06L/24R and 06R/24L between Taxiway A and Taxiway B.
- Remove Taxiways E2 and E3 between Taxiway E and the future parallel taxiway and replace them with a single new connector located between the removed taxiway sections.
- Add a connector taxiway between Taxiway E and the future parallel taxiway offset from existing Taxiway B by approximately 100 feet to the northwest.
- Remove existing runway end connector Taxiways E1 and E4 and replace with connectors from the future parallel taxiway to the new Runway 14/32 ends.
- Add new engine-run up pads on either end of Runway 14/32 on its northeast side.
- Construct on-Airport perimeter roads around runway ends on the north, west, and south sides of the airfield to allow ground vehicles to circulate without crossing runways.
- Expand the FBO apron to increase available tie-down spaces for aircraft and remove tie-downs from the Runway 06R RPZ.
- Release certain Airport property for non-aeronautical use along 63rd Avenue North, in the area west of the Twin Creek wetland complex and on both sides of the 63rd Avenue North entrance road.

V. Environmental Impact Categories of the Proposed Action (Chapter 4 FEA)

Environmental impact categories identified in FAA Orders 1050.1F and 5050.4B were evaluated in the FEA. The proposed action is consistent with community planning per paragraph 6.3b(2) of Order 1050.1F. Given the location and nature of the Proposed Action, impacts to the following environmental resources and impact categories do not occur:

- Coastal Resources
- Farmlands

The FEA discusses the environmental consequences of the Proposed Action, which are described in the following impact categories:

Air Quality:

The MAC developed an aviation operational emissions inventory using the FAA Aviation Environmental Design Tool (AEDT) model. Emissions were modeled for the scenarios analyzed for aircraft noise. The study area for emissions is on Airport property. Emissions were calculated for the 2017 baseline (existing conditions) and 2025 forecast (preferred alternative and no- action alternative) scenarios. The year 2025 was chosen for analysis because it is expected to be five years after project implementation. The no-action alternative (2025) scenario was modeled using 39,025 aircraft operations, and the preferred alternative (2025) scenario was modeled using 39,258 aircraft operations. The 2025 operations projections were developed based on the 2035 LTCP forecasts. The AEDT model estimates an overall increase in pollutant emissions between the 2017 baseline and 2025 forecast scenarios. The increase is caused by the increased aircraft operations anticipated by both the 2025 no-action and preferred alternative forecast. Although there are slight operational emissions increases in 2025 under both the no-action and preferred alternatives, changes in emissions are below the *de minimis* thresholds for maintenance areas.

The Airport Construction Emissions Inventory Tool (ACEIT) was used to model construction activities for the preferred alternative. Total emissions associated with construction are not expected to exceed the *de minimis* thresholds listed in the FAA's Aviation Emissions and Air Quality Handbook. Construction emissions will be offset through use of voluntary best management practices (BMPs) such as engine idling restrictions and maintenance requirements, and other control strategies identified in the *U.S. Environmental Protection Agency Diesel Emissions Restriction Checklist.*

The proposed perimeter roads will not create additional traffic because they will accommodate existing traffic that currently crosses the airfield. The travel distance across the airfield will be longer using the new service roads, but idling time where vehicles currently must hold short of runways and taxiways will be reduced. For these reasons, significant increases in vehicle emissions are not expected with the preferred alternative. Based on these factors, significant air quality impacts are not anticipated for the preferred alternative or no-action alternative.

Biological Resources (including Fish, Wildlife and Plants):
Biological resources potentially affected by the preferred alternative are related to vegetation management and listed species.

The Northern Long Eared Bat (NLEB) is federally listed as threatened and has potential habitat within the project area. The USFWS concurred with a may affect, not likely to adversely affect determination on March 15, 2019 by utilizing recommended avoidance and minimization measures.

The Rusty Patched Bumble Bee (RPBB) is federally listed as endangered in the project area. The USFWS concurred with a no effect determination for this species on March 15, 2019.

Seven bird species protected by the Migratory Bird Treaty Act (MBTA) can be found near the Airport that have nesting seasons that fall between May and October. These species include the black-billed cuckoo, the eastern whip-poor-will, the golden-winged warbler, the least bittern, the red-headed woodpecker, the willow flycatcher, and the wood thrush. These species have been documented by USFWS survey sources during these months within approximately six miles of the Airport within the past ten years. The breeding season for the bald eagle extends from December to August; however, eagles typically nest near bodies of water and away from developed areas. The other listed birds nest elsewhere in their range or have not been observed in the project area during nesting season. Many of the birds are typically found in densely wooded or wetland habitats, and while they are not likely to be affected by the proposed project where ground disturbances will primarily be limited to regularly mowed airfield areas, off-Airport tree removal has the potential to disturb some wooded wetland habitat.

The proposed action will require the removal of trees on Airport property to accommodate future non- aeronautical development along 63rd Avenue North, as well as removal or trimming of several off-Airport trees to clear the applicable runway approach TSS. An obstruction analysis conducted for the recent Airport Layout Plan (ALP) update identified several trees in the approach and departure areas. The MAC proposes to remove or trim any on- or off-Airport trees currently penetrating the applicable approach TSS prescribed by FAA AC 150/5300-13A, *Airport Design*, Draft Change 2, as well as any additional trees that should be removed or trimmed to provide a clear approach TSS for a reasonable period beyond project implementation. The timeframe analyzed in the EA/EAW document is eight years, which includes time for the environmental review and design phases and provides a forecast for approximately five years from project implementation. The MAC also proposes to remove or trim any on-Airport trees that penetrate the departure surface defined by FAA Order 8260.3D, *U.S. Standard for Terminal Instrument Procedures* (TERPS). Off-Airport trees penetrating the departure surface will remain, as these trees may be avoided through use of notes

published in instrument departure procedures. The MAC will continue to monitor tree growth and request that FAA publish obstacle notes in the flight procedures, as needed.

A Tree Mitigation and Growth Analysis report completed in May 2018 compared tree heights from 2013 Airports Geographic Information System (AGIS) data to a December 2017 spot survey, and incorporated growth rates observed by a certified arborist in May 2018. This study established appropriate growth rates to determine if trees are likely to penetrate the approach TSS within five years of project implementation. The study also considered the growth rate of 2.5 feet per year suggested by the FAA in Engineering Brief 91, *Management of Vegetation in the Airport Environment.*

Some trees near the Airport will require removal under the no-action alternative. Monitoring tree heights and removing or trimming potential obstructions is an ongoing maintenance measure. An obstruction analysis conducted in 2018 identified approximately eight existing off-Airport points currently penetrating the approach TSS for Runways 14L/32R and 6L/24R. The obstruction analysis identified several additional areas with trees forecasted to penetrate the TSS within five years of project implementation. The areas include up to 38 trees found on private properties and up to three trees in public rights-of-way in the approaches to Runways 14L/32R and 6L/24R. While some of these trees will need to be trimmed or removed for the no-action alternative, there is an increase in the number of projected tree obstructions with the preferred alternative. The projected removals also include approximately 32 trees within a city park in the Runway 14 approach.

Along with regular growth, the increase in tree penetrations is partially because of the shift of the TSS aligned with the 115-foot shift of Runway 14L/32R to the northwest, which introduces lower elevation limits for trees off the Runway 14L end. However, the preferred alternative also reduces the total area of the TSS that must be kept clear due to the closure of Runway 14R/32L. Any removals will be carefully targeted to individual trees and will not involve clear-cutting stands of trees. Identification of specific trees to be removed or trimmed will be determined during the detailed project design phase.

Although targeted tree removal is expected to occur off-Airport, such removal is not expected to result in adverse impacts to special status species, or loss, degradation, or fragmentation of native species' habitats. Off-Airport tree removal will not target stands or large groupings of trees that would significantly disrupt habitats. In addition, the environment around the off-Airport tree removals is already fully urbanized and developed.

Current vegetation management practices at the Airport include mowing the areas within the perimeter fence on a regular basis. Areas disturbed during construction will be seeded with a variety of turf grasses. Vegetation management post-construction will

continue with regular mowing, which serves to minimize wildlife hazards while also minimizing the introduction and establishment of invasive species. Introduction and spread of invasive species at the Airport will also be minimized prior to, during, and after construction of the proposed project through a variety of BMPs.

Based on the information above, there are no significant impacts to biological resources associated with the proposed action or no action alternative.

Climate:

The proposed action will result in temporary increases in direct on-site CO2*e* emissions attributable to construction equipment. Total construction CO2*e* emissions are estimated at 2,483 tons over a two-year period. On-site operational CO2*e* emissions attributable to aircraft operations are expected to increase by 44.64 tons per year from 698.38 tons in 2017 to 743.02 tons in 2025 under the no-action alternative, and by 59.42 tons to 757.80 tons per year in 2025 under the preferred alternative. The potential for the preferred alternative to affect future climate conditions is very limited when considering the amount of CO2*e* emissions attributable to other sources in Minnesota and throughout the United States.

Considering these factors, neither the no-action nor proposed action will have a significant impact on climate change.

Department of Transportation Act, Section 4(f)

The no-action alternative will involve tree removal or trimming in areas surrounding the Airport, including Edgewood Park. Several cottonwood trees are projected to become obstructions to the TSS because of the faster than average growth rate and taller than average maximum heights of this species.

One element of the proposed project at MIC is shifting primary Runway 14/32 northwest by 115 feet. Trees in Edgewood Park are expected to penetrate the proposed Runway 14 approach TSS sooner in the preferred alternative scenario than in the no-action alternative. Several trees within the park will need to be removed for the preferred alternative; however, the same trees are likely to penetrate the existing TSS at a later date under the no-action alternative. The clearance of the proposed TSS above the ground in the park varies from approximately 82 feet closest to 63rd Avenue North, to approximately 115 feet on the northwest side. The existing TSS is approximately six feet higher than the proposed TSS because the origin of the TSS will shift to the northwest approximately 115 feet with the Runway 14 landing threshold.

The proposed project is also expected to require revisions to the Airport's zoning ordinance. Based on the forecast safety zones associated with the proposed project, the entirety of Edgewood Park will be within Safety Zone A following project completion,

whereas only the portion of the park south of the playground is currently in Safety Zone A. The park is projected to remain outside of the 65 DNL and 60 DNL noise contours.

A certified arborist from Mead & Hunt, Inc. assessed the species, health, and maturity of trees in Edgewood Park during a field survey on October 3, 2018. The proposed action will require removal of approximately 32 trees in the southern portion of Edgewood Park, as these trees are expected to become penetrations to the approach TSS for the proposed relocated Runway 14 end. None of these trees currently penetrate the proposed Runway 14 approach TSS, but they all currently reach a height less than 10 feet below the TSS. All trees proposed for removal are cottonwoods, which is the only tree species that is expected to cause ongoing approach issues in the park given their taller than average mature height and their distance approximately 2,000 feet from the proposed Runway 14 end. Most of these trees are between 80 and 90 feet tall, with a diameter between 15 and 30 inches. Larger cottonwoods proposed for removal are located further north and west and range from 85 feet tall to a maximum of 97 feet tall, with a diameter between 25 and 50 inches. The shorter cottonwoods proposed for removal are in upland areas with a ground surface elevation of approximately 869 to 870 feet above mean sea level (MSL). The taller cottonwoods are in lower areas between 865 and 868 feet MSL near the wetland area at the center of the wooded portion of the park.

Approximately 70 additional cottonwood trees were identified that currently reach a height between 10 and 20 feet below the TSS. These trees range in height from 83 to 95 feet tall. If in the future these trees were to grow to the average mature height of 100 feet, none of them will penetrate the proposed TSS given their current distance below the surface. Therefore, the potential future obstruction status of these trees is uncertain, and the MAC proposes to monitor the height of these trees following project implementation rather than remove them as part of the proposed action.

Section 4(f) Finding:

Section 4(f) of the U.S. Department of Transportation Act (DOT Act) of 1966 (49 U.S.C. 303) states that FAA cannot approve the use of land from publicly owned parks, recreational areas, wildlife, and waterfowl refuges or public and private historic sites unless the following conditions apply: (1) there is no feasible and prudent alternative to the use of the property; and (2) the action includes all possible planning to minimize harm to the property resulting from use.

Evaluation of the project has determined that the trees in the City of Brooklyn Park's, Edgewood Park is a Section 4(f) resource that would be impacted by all project build alternatives, and the project has unavoidable impacts to the Section 4(f) resource.

The City of Brooklyn Park has agreed to the proposed action contingent that the Airport provide mitigation in the form of planting lower growing tree species in the park. The preliminary Section 4(f) de minimis finding was placed out for public comment during the draft EA public comment period from April 22, 2019-June 10, 2019. No comments were received on the de minimis finding or Edgewood Park tree impacts.

For the reasons stated above, the FAA found that this impact is considered de minimis and has received concurrence on this Section 4(f) finding from the City of Brooklyn Park and the Department of Interior. More information can be obtained on this Section 4(f) finding in Chapter 4 of the FEA and Appendix D.

Hazardous Materials, Solid Waste, and Pollution Prevention:
Thunderbird Aviation fueling facilities are located next to the proposed apron expansion. Design and construction of the apron expansion will carefully consider its location to avoid any potential disturbance to these facilities. Other tank sites on Airport property will not be disturbed by the proposed action.

There is an active fuel leak documented by the MPCA (Site 109122) as affecting groundwater directly across 63rd Avenue North from the proposed non-aeronautical development area. Flow of the surface water in this area enters airport property via Twin Creek to the east of the proposed non-aeronautical development area. The depth to the water table in this area is less than 10 feet below the ground surface, which means that water table aquifers are likely to be sensitive to ground-level contaminants. According to the Geologic Atlas of Hennepin County, quaternary groundwater in this area flows generally to the east, and any contamination originating north of 63rd Avenue most likely flows away from the proposed development area. If soil contamination is discovered during construction, construction activities will be immediately discontinued until remediation occurs.

The proposed action will not generate hazardous waste. The proposed action will produce construction debris such as dirt, concrete, and asphalt. Construction materials and other solid waste will be disposed of at a commercial landfill capable of handling disposal as required by Minnesota rules. Local disposal facilities are expected to have capacity to accept solid waste volumes that will be produced by construction and operation of the proposed action. Recycling of asphalt and fill material will be considered during project design, as practicable.

Based on the information above, there are no hazardous materials or solid waste impacts expected for either the preferred alternative or the no-action alternative.

Historical, Architectural, Archeological and Cultural Resources:
There are no impacts to historical/architectural or archeological resources associated with either the no-action or preferred alternative. The FAA determined that a Section

106 finding of *No Historic Properties Affected* was applicable for the proposed action and submitted this finding to the Minnesota State Historic Preservation Office (SHPO) in a letter dated May 17, 2018. The SHPO concurred with the FAA finding that there are no architectural or historic properties eligible for NRHP in the project area in a letter dated June 18, 2018. In a letter to the SHPO dated June 21, 2018, the FAA reaffirmed their finding of *No Historic Properties Affected* based upon a finding of the Phase I archeological survey. The SHPO concurred with the FAA finding in a letter dated July 24, 2018.

Land Use:

The proposed action will result in changes in incompatible uses in the RPZs off Airport property. Shifting Runway 14/32 approximately 115 feet to the northwest and designating it as a utility runway will result in relocating the Runway 32 RPZ entirely onto Airport property. The proposed Runway 14 RPZ will contain approximately 280 feet of Douglas Drive, but no residential parcels. Decommissioning Runway 14R/32L and converting it to a parallel taxiway will eliminate its RPZs. In addition, Runway 6R/24L will be shortened as part of the proposed action, which will result in the elimination of its RPZ conflicts with Bottineau Boulevard and Lakeland Avenue. However, the timing of the proposed project will result in the RPZ temporarily including a portion of the existing apron containing three aircraft tie-downs until the apron is expanded and aircraft parking is relocated outside of the RPZ. The proposed project will remove three residential parcels from the RPZs and reduce the length of public roadways within these zones.

The MAC submitted an RPZ Alternatives Analysis to the FAA addressing the portion of Douglas Drive North in the Runway 14 RPZ and the aircraft tie-downs on the apron in the Runway 6R RPZ. In a letter dated May 8, 2018, the FAA concurred with the findings and approved these uses in the ultimate RPZs. This concurrence is subject to the MAC working with the City of Brooklyn Park to consider installation of “Low Flying Aircraft/No Parking” signage on Douglas Drive North where it is located within the RPZ.

The proposed action will also result in changes to the number of private properties that fall within the forecast Joint Airport Zoning Board (JAZB) safety zones. Existing zoning is based upon the current location of the runways. The MAC will convene a JAZB comprised of representatives from local jurisdictions affected by the proposed zoning changes. There are currently many privately-owned parcels within these zones, most of which are exempt from JAZB zoning because they are in Established Residential Neighborhoods. The extent of the off-Airport safety zones will be reduced due to decommissioning Runway 14R/32L and shortening 06R/24L, as well as re-categorizing all runways as utility runways, which will result in narrower future zones. However, due to the lengthened and shifted Runway 14L/32R, the zones will include new parcels to the northwest and southeast of the existing zones. The JAZB zoning process will consider public input and may result in a zoning ordinance recommendation to the

MnDOT Office of Aeronautics that deviates from the state's model zoning ordinance and from the forecast safety zones.

There are expected to be fewer privately-owned parcels within the safety zones with the preferred alternative than under the existing ordinance. Under the no-action alternative, approximately 125 privately-owned parcels are in or partially within Safety Zone A and 277 are in or partially within Safety Zone B. Under the preferred alternative, the number of privately-owned parcels within or partially within these zones is expected to be reduced to approximately 143 within forecast Safety Zone A and 204 within forecast Safety Zone B.

The proposed action includes the development of an area on the north side of Airport property for non- aeronautical use. This may require rezoning, a variance, or a conditional use permit from the City of Brooklyn Park to allow non-airport or non-public institutional uses in this area.

The preferred alternative is not expected to generate significant additional vehicle traffic when compared to the no-action alternative. The proposed non-aeronautical development on the north side of the Airport will likely contribute minor additional traffic generation.

Land use impacts associated with the proposed action will not be significant based upon the factors described above. The preferred alternative reduces incompatible uses within the RPZs and JAZB safety zones when compared to the no-action alternative.

Natural Resources and Energy Supply:
The preferred alternative will increase the number runway and taxiway light fixtures from 210 to approximately 285 given the reconfiguration of the runways and taxiways. If the added light units are incandescent, the annual electricity requirements of airfield lighting systems are expected to increase approximately 35 percent to 150,000 kWh per year. However, energy-efficient light-emitting diode (LED) fixtures were recently approved by FAA for all existing and planned airfield lighting systems considered by the preferred alternative. If LED fixtures were installed instead of incandescent fixtures for all airfield lighting systems, the annual electricity needs are expected to decrease approximately 70 percent to 40,000 kWh per year. This difference in electricity consumption will inform consideration of light systems at the time of project design.

Consumption of energy and natural resources during the construction phase of the proposed action will consist mainly of construction machinery fuel and construction materials. This consumption will not exceed locally available supplies, and some construction materials may be recyclable. Efforts will be made during design to identify opportunities for recycling pavements and underlying base material. Estimated quantities of required construction materials include 11,720 tons of bituminous pavement, 9,610 cubic yards of crushed aggregate base course, 3,050 gallons of

bituminous tack coat, and 6,540 linear feet of preassembled silt fence. Other required materials include topsoil, seeding mixtures, fertilizer, soil stabilizer, light fixtures, airfield signs, and painted/reflective pavement markings.

Significant increases in aircraft operations are not expected as a result of the preferred alternative, as the 2035 LTCP operations forecasts between the base case scenario (no-action alternative) and the extended runway scenario (preferred alternative) differ by less than 350 operations in the 20-year planning period.

Operation and maintenance of the proposed improvements are expected to require minor increases in energy demand. No significant increases in aircraft or ground vehicle fuel usage are expected under the preferred alternative. In addition, the minor increases in utility demand for airfield lighting and maintenance equipment under the preferred alternative are not expected to have a negative impact on local energy or natural resource supplies.

Noise and Compatible Land Use:
The preferred alternative future with project conditions year of 2025 was chosen for analysis because it is expected to be five years after project implementation. The No Action (2025) scenario shows the 65 DNL contour still mostly contained on Airport property, except for 12 residential parcels on the south side of the Airport. This scenario affects one more parcel than the Baseline scenario. The 70 and 75 DNL contours are contained on the Airport property.

The Preferred Alternative (2025) scenario shows a reduction in off-Airport noise impacts because of closing Runway 14R/32L. Residential parcels in or partially within the 65 DNL contour are projected to be reduced from an existing condition of eleven to four. The 65 DNL and greater contours are otherwise all contained on Airport property. There are no areas within the 65 DNL contour that will experience an increase of 1.5 dB DNL or more; therefore, there will be no significant noise impacts for the preferred alternative. The 70 and 75 DNL contours are contained on the Airport property.

The FAA requires that structures potentially eligible for sound insulation (within the 65 dB DNL noise contour) be evaluated to determine whether the interior noise levels are high enough to warrant sound insulation. Following the completion of the EA, the MAC will test the four residences located in the 65 DNL contours around MIC in accordance with American Society of the International Association for Testing and Materials standards using a methodology agreed upon by the FAA, MAC, and City of Crystal.

Construction equipment noise would be temporary and would be minimized and mitigated through implementation of appropriate recommended FAA construction practices. The MAC will also include contract provisions requiring construction noise mitigation. As a result, there will be no significant construction noise impacts for the no-action or preferred alternatives.

Socioeconomics, Environmental Justice, & Children's Environmental Health & Safety:

The FAA has not established a significance threshold for socioeconomics, but there are factors to consider when analyzing the context and magnitude of potential impacts. The proposed action is not expected to significantly influence economic activity in the area, nor will it cause any relocation or disruption of the established community. Proposed non-aeronautical development on the north side of the property will increase the City of Brooklyn Park tax base, result in some new economic activity, and generate some traffic in the area. However, these impacts are not significant within the context of the activity already occurring in this fully developed urban area.

For environmental justice, disproportionately high and adverse effect means that the effect is predominantly experienced by a minority or low-income population, or that the impacts on these populations are more severe or greater in magnitude than those suffered by non-minority or non-low-income populations.

In most cases, the significance of environmental justice impacts is dependent on the significance of impacts in other environmental categories that primarily affect environmental justice populations. These categories can include noise, air and water quality, and Section 4(f) impacts, among others.

Expected socioeconomic conditions under both the no-action and preferred alternatives are comparable to baseline conditions. Resource categories do not have off-Airport impacts in most cases. Off-Airport residential parcels affected by noise are not located in areas with high proportions of minority or low-income populations.

Up to 49 trees located on private properties and public rights-of-way, and up to 32 trees within Edgewood Park, will need to be trimmed or removed for the preferred alternative. The 32 trees within Edgewood Park are in the Runway 14 approach and within a census block group with 76 percent minorities. Because removal of these trees will not substantially change the wooded character of the park and the MAC will replace them with other shorter and more suitable species for the park environment, tree removal in the park will not have a disproportionately high and adverse impact to environmental justice populations.

Of the 49 trees located on private properties and public rights-of-way, twenty-three are in the Runway 14 approach and within a census block group with 76 percent minorities. Four trees are in the Runway 32 approach and within a census block group with 50 percent minorities. Four trees are in the Runway 6L approach and within a census block group with 34 percent minorities, and eighteen trees are in the Runway 24R approach and within a census block group with 68 percent minorities.

Because tree removal on private properties will be carefully targeted to individual trees, the MAC will compensate homeowners for tree removal on private properties, and

suitable low-growing species will be planted in their place, tree removal on these properties will not have a disproportionately high and adverse impact to environmental justice populations. No significant off-Airport impacts associated with the preferred alternative affect environmental justice populations.

For children's health and safety, expected socioeconomic conditions under both the no-action and preferred alternatives are comparable to baseline conditions, and most resource categories do not have off-Airport impacts. Off-Airport parcels affected by noise do not include schools or playgrounds, or facilities that would otherwise be primarily accessed by children.

Under the preferred alternative, there are no significant impacts to air quality or water resources that may influence the health of the surrounding population, including children. There are no disproportionate safety risks associated with the project, which will occur entirely on fenced Airport property. While there is a larger than average proportion of children near the ultimate Runway 14 end, impacts in other resource categories in this area are not significant. No disproportionate health or safety risks to children are expected. Socioeconomic, environmental justice, and children's environmental health impacts will not be significant.

Visual Effects:

The proposed action will result in changes to airfield lighting due to the relocation and extension of Runway 14L/32R and the associated parallel taxiway. The proposed action will extend existing MIRL systems along the edges of the relocated and extended runway pavement. New taxiway edge lighting will be installed on the parallel taxiway and associated connections to the primary runway. The proposed action will shift the REILs along with the Runway 14L/32R extension; however, the REILs will be located adjacent to the displaced thresholds and therefore will be near their existing locations. The VASI on Runway 32R end will be replaced with a PAPI.

The new distance from the Runway 14L end to the property boundary will be approximately 1,100 feet, compared to a current distance of approximately 1,400 feet. The neighboring use of the property is residential, and most residences have little visual screening. When the tower is closed, the MIRL, PAPI/VASI, and REIL can be remotely activated by pilots via radio, so these systems need only be in full effect when in use by approaching and departing aircraft, which only occurs during low visibility conditions or at night. The LTCP operations forecast and noise analysis estimated approximately five percent of operations occurred at night in the base year 2017, or fewer than 10 operations per night. Options for improving visual screening include constructing berms along the property boundary near the affected properties or using solid fencing in some areas. Methods for visual screening will be considered during project design for the residential properties near the new runway end points.

New airport lighting systems will be similar in type and location to the existing airport lighting systems and will only be in full effect when in use by approaching and departing aircraft. Based on the information above, there are no significant visual effects associated with the preferred alternative or no-action alternative.

Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers):

The proposed action will add approximately 274,070 square feet (6.3 acres) of impervious surface associated with the runway, taxiways, run-up pads, perimeter roads, and aircraft parking apron. However, approximately 219,850 square feet (5.1 acres) of existing impervious surface will also be removed, for a net increase of approximately 54,220 square feet (1.2 acres) of impervious surface as compared with the no-action alternative (approximately 73.3 acres of total impervious surfaces under the no-action alternative as opposed to approximately 74.5 acres of total impervious surfaces under the preferred alternative).

MAC's contractor will implement BMPs for stormwater management and sediment control during construction. A SWPPP will specify the temporary and permanent erosion control measures, in compliance with local, state, and federal regulations. Construction activities will be designed in a manner that minimizes overall soil disturbance. Sediment control measures will be installed on all down gradient land disturbing activities before beginning construction. Construction practices will take necessary precautions to address stormwater runoff with fuels, oils, bitumen, chemicals, or other harmful materials, and to reduce air pollution from particulate and gaseous matter. A variety of erosion prevention and sediment control practices may be necessary in order to stabilize slopes and drainage ways, protect inlets to the stormwater conveyance system, limit gully formation, and capture sediment. Several practices can be used as temporary erosion control and sediment control, and to meet MS4 requirements. Temporary sediment control practices may include use of vegetated buffers, silt fences, inlet protection, temporary sediment basins, fiber logs, or erosion control blankets, as appropriate.

The Airport's current SWPPP will be revised to reflect the changes in impervious surface on the airfield and any associated new mitigation practices. To comply with NPDES stormwater permit requirements, the Airport will create a separate construction SWPPP that describes the best management practices to be used during construction to control stormwater runoff. Review by the Shingle Creek Watershed Management Commission (SCWMC) will be required because the project area is larger than five acres. Design will meet SCWMC requirements to mitigate for surface water impacts and to comply with local and state regulations.

For floodplains, the FIRM panels do not indicate any potential flood hazard zones near any proposed airfield improvements. The northeastern corner of the Airport includes a Zone A SFHA; however, this zone is outside the proposed non-aeronautical use area as defined in Chapter 3. Therefore, there are no impacts to floodplains associated with the no-action or preferred alternatives.

Although there are areas on Airport property where water-table aquifers are sensitive to surface contaminants, the lack of wellhead protection areas indicates that these are not a public drinking water supply source. The proposed action is not expected to result in contaminants infiltrating groundwater. Therefore, there are no impacts to groundwater associated with the no-action or preferred alternatives.

Two components of the preferred alternative potentially affect delineated wetlands: (1) the non- aeronautical development area; and (2) the southern perimeter road segment. The non-aeronautical development area contains three small wetlands. Two are located on the east side of the development area, and the other is located west of the Airport access road. The MAC will require developers of this site to comply with any wetland rules and buffer requirements set by the SCWMC and Army Corps of Engineers.

The proposed perimeter road segment on the south side of the Airport will pass between the delineated boundaries of two small wetlands, Wetlands 1 and 2. The delineated wetlands are each approximately 0.03 acres in size. Preliminary estimates of grading limits for the proposed perimeter road segment indicate that fill activities will be required in both wetlands. Because of this impact, additional wetland survey efforts were conducted to determine if a perimeter road alignment exists that would avoid all wetland boundaries and meet FAA offset and safety requirements. The location and size of Wetlands 6 and 7 ruled out options along the western perimeter fence and closer to the south end of the runway because of larger potential fill impacts, noise impacts to residential areas to the west, and proximity to runway safety areas.

Preliminary estimates of the required fill within Wetlands 1 and 2 indicate that the total fill area is likely to be less than 1,000 square feet. According to Minnesota Statute § 103G.2241, Subd. 9(d)(2), if less than 1,000 square feet of Type 1 wetlands are drained or filled in this location (i.e. outside the shoreland wetland protection zone in a less than 50 percent area within the 11-county metropolitan area), a replacement plan is not required. Because the disturbance to the wetlands for the preferred alternative is likely below this *de minimis* threshold, impacts will be minimal, and replacement of these wetlands is not expected to be required. If during detailed design it is determined that more than 1,000 square feet of wetlands will be affected, a replacement plan will be developed and implemented.

In terms of compliance with Section 404 of the Clean Water Act and based on conversations with USACE, the wetland impact is expected to be authorized under the

USACE St. Paul District Transportation Regional General Permit (RGP) as a Category 2 regulated activity. Because the estimated wetland impact is less than 0.1 acre, a Pre-Construction Notification (PCN) to the USACE and compensatory mitigation are not required. Projects that meet the terms and conditions of the Transportation RGP and do not require submittal of a PCN may commence work after the project proponent has carefully confirmed that the activity will be conducted in compliance with all applicable terms and conditions of the RGP.

Proposed non-aeronautical development may generate additional wastewater in the City of Brooklyn Park, but the impacts will not be significant in the context of the municipal wastewater load. None of the aeronautical improvements contemplated by the preferred alternative will contribute to wastewater originating from the Airport.

Based on the information above and the established FAA thresholds of significance under NEPA, there are no significant impacts to water resources associated with the proposed project or no action alternative.

Cumulative Impacts and Cumulative Potential Effects:
Recent and planned actions, when combined with the proposed action at MIC, do not have significant cumulative effects on environmental impact categories in the vicinity of MIC. Many of the past and planned projects near the Airport are related to transportation along the Bottineau Boulevard corridor and could in combination have an impact on the land use adjacent to the Airport. However, the proposed action does not contribute to these impacts.

Impacts of the proposed action when considered with past or future actions do not constitute a significant impact that cannot be mitigated. All future actions will be subject to avoidance and minimization studies and will undergo agency permitting as required. Every effort will be made to avoid or minimize impacts where feasible. No significant cumulative impacts or cumulative potential effects are associated with the proposed action or no action alternative.

VI. Environmental Mitigation and Commitments

MIC has committed to the following required mitigation measures as part of the Proposed Action:

- The Airport will obtain any necessary permits prior to beginning construction.
- The Airport will protect wetlands and waters of the U.S. not directly impacted by the Proposed Action during construction.
- Use of BMPs to avoid additional unnecessary and/or unauthorized impacts to surface waters, aquatic resources, and air quality. Construction will comply with the FAA AC 150/5370-2 (Operational Safety on Airports during construction) and AC 150/5370-10 (Standards for Specifying Construction of Airports).

- The MAC will convene a JAZB to revise the existing Airport Zoning ordinance.
- MAC will work with the City of Brooklyn Park for zoning of the non-aeronautical development area.
- Following the completion of the EA/EAW, the MAC will test the four residences located in the 65 DNL contours around MIC in accordance with ASTM standards using a methodology agreed upon by the FAA, MAC, and City of Crystal.

  Updates to the voluntary noise abatement plan will be undertaken and there will also be educational briefings with pilots regarding noise.
- All phases of construction would be performed in accordance with FAA AC 150/5370-10B, Standards for Specifying Construction of Airports.
- In the event that human remains or cultural resources are discovered during construction, all work will cease until MIC notifies the SHPO, local authorities, and the FAA Dakota Minnesota Airports District Office. MIC shall protect the area with carefully placed tarps or construction back fill until cultural resource concerns have been appropriately addressed, and MIC will take action to comply with the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, and the Archeological Resources Protection Act.
- During construction, in the event that previously unknown contaminants are discovered or if a reportable spill occurs, work shall cease until the Airport notifies appropriate local, state, and Federal agencies.
- If endangered species are sighted during construction, work shall cease in the immediate area of the endangered species and all sightings shall be reported to the USFWS, MNDNR and the FAA.
- To avoid impacts to the NLEB, tree removal will occur between October 1 and April 30. If project impacts to listed species change beyond what is identified in the EA, the Airport will have to inform the FAA Dakota-Minnesota Airport District Office (ADO). The ADO will then reinitiate consultation with the USFWS.

  Tree removal will be limited to that specified in project plans. Tree removal limits will be clearly indicated in the field by bright orange flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits. Tree clearing limitations will be discussed with contractors at the pre-construction meeting to ensure that they understand clearing limits and how they are marked in the field.
- Prior to any construction activity during the nesting season, an MBTA nesting bird survey will be completed. Tree removal will occur outside of nesting months for birds observed in the area during their nesting season.

- During final design, a tree plan will be developed between the Airport and City of Brooklyn Park to identify appropriate lower growing tree species in replacement for the cottonwood trees removed from Edgewood Park.
- Tree removal on private properties will be carefully targeted to individual trees. The MAC will compensate homeowners for tree removal on private properties, and suitable low-growing species will be planted in their place.

VII. Public and Agency Coordination

Public involvement is a vital component of the NEPA process. Public and agency coordination was conducted throughout the NEPA process (Appendix L of the FEA).

The Draft EA/EAW and preliminary Section 4(f) finding was released for agency and public review from April 22, 2019-June 10, 2019. The MAC held a Public Hearing on May 29, 2019. Agency and public comments received during the comment period were considered in the development of the FEA. Responses to all verbal and written comments are provided in Appendix M of the FEA.

VIII. Agency Findings

The FAA conducted an independent review of the factual assumptions contained in the EA and determined the adequacy of the EA and takes responsibility for the document's scope and content. Individuals from the FAA have devoted substantial attention to the EA in order to ensure compliance with NEPA and other environmental requirements. Accordingly, I find that the independent and objective evaluation called for by the CEQ has been provided. The FAA has given this proposal the independent and objective evaluation required by CEQ (40 CFR 1506.5).

After careful and thorough consideration of the facts contained herein, I find that the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of NEPA and other applicable environmental requirements. The proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring consultation pursuant to section 102(2)(c) of NEPA.

Therefore, under the authority delegated to me by the Administrator of the FAA, I find that the proposed airport improvement projects described in the Proposed Action and evaluated in the EA and addressed in this FONSI/ROD are reasonably supported and approved. I direct that action be taken to carry out the following agency actions:

- Unconditional approval of the Airport Layout Plan for the development listed above in the Proposed Action.
- Issue final airspace determinations for the development listed above.
- Determine eligibility for Federal grant-in-aid funds for eligible items.

- Finalize determination of potential airspace obstructions to navigable airspace per an aeronautical study outlined under 14CFR Part 77.
- Assist airport sponsor in the modification and/or relocation of FAA Air Traffic Control facilities impacted as a result of this project.

Having met all relevant requirements for environmental considerations and consultation, the proposed action is authorized to be taken when other requirements have been met. These decisions are taken pursuant to 49 USC § 40101, et seq. The FAA findings regarding the proposed airport improvements and any necessary funding, for the Crystal Airport, constitute an order of the Administrator, which is subject to review by the courts of Appeal of the United States, in accordance with the provisions of Section 1006 of the Federal Aviation Act of 1958, as amended, 49 USC § 46110.

Finally, having based upon the administrative review of this project, I certify, as prescribed by 49 USC § 44502(b) that implementation of the Proposed Action is reasonably necessary for use in air commerce.

APPROVED: X

DISAPPROVED: _____

Rebecca MacPherson
Regional Administrator
FAA Great Lakes Region

DATE: July 31, 2019

Right of Appeal

This FONSI/ROD presents the Federal Aviation Administration's final decision and approvals for the actions identified, including those taken under provisions of 49 USC Subtitle VII, Parts A and B. This decision constitutes a final order of the Administrator subject to review by the Courts of Appeals of the United States in accordance with the provisions of Section 1006 of the Federal Aviation Act of 1958, as amended, 49 USC § 46110.