Crystal Airport
Federal Environmental Assessment (EA)/State Environmental Assessment Worksheet (EAW)

March 5, 2019 – Airport Community Panel Meeting #2
Environmental Impacts Overview
Presentation Outline

• October 30, 2018 Public Meeting Recap
• Environmental Effects Overview
• Next Steps: Draft EA/EAW publication and public comment period timeline
Timeline

For more detail, see the Stakeholder Engagement Plan on the project website. Schedule is subject to change. Any significant schedule updates will be published on the project website and distributed to e-news subscribers, as appropriate.
Public Meeting Recap: October 30, 2018

• Objective: Provide information and give community members an opportunity to ask questions about proposed improvements

• Agenda:
  • Open house with project boards and one-on-one engagement
  • Presentation
  • Session Q & A

• 17 community members attended

• Topics of questions from attendees
  • Tree removal, including Edgewood Park and wildlife habitat
  • Location of runway ends after the runway shift
  • Whether the airport is likely to expand in the future
  • Drainage at 61st and Douglas Drive
Method for Determining Environmental Effects

- Preferred Alternative compared against No Action Alternative to determine effects for each environmental category

- No Action Alternative represents what would occur if MAC were to maintain the existing airfield configuration and runway lengths
Environmental Analysis and Cumulative Impacts

- Air quality modeling
- Aircraft noise modeling
- DOT Section 4(f) resource review
- Vegetation management strategies
- Hazardous materials inventory
- Historic/architectural and archeological resource assessment

- Land use compatibility and zoning assessment
- Socioeconomics and environmental justice analysis
- Wetland delineation
- Other NEPA categories
- Cumulative Impacts – consideration of projects that are connected, cumulative and similar (common timing and geography)
Air Quality

- Emissions evaluated with reference to National Ambient Air Quality Standards (NAAQS) and Clean Air Act requirements
  - NAAQS pollutants include CO, NOx, SOx, O3, Pb, and particulate matter
  - Other pollutants identified in charts at right are provided by the FAA model for informational purposes

- Operational emissions
  - 2025 “with project” emissions comparable to 2017 baseline emissions
  - Will not exceed FAA Air Quality Handbook *de-minimis* thresholds for NAAQS pollutants
  - Considers taxi out, takeoff, climb out, approach, landing, and taxi in operations

- Construction emissions
  - Will not exceed FAA Air Quality Handbook *de-minimis* thresholds for NAAQS pollutants
  - Considers all construction activities

*De-minimis thresholds are the minimum thresholds (in tons) for which a Clean Air Act conformity determination must be performed, for various criteria pollutants in various areas. In Hennepin County, these pollutants are CO and SOx.*
Noise Model

- Off-Airport residential parcels in 65 decibel day night average sound level (DNL) noise contour are projected to reduce from eleven to four with the Preferred Alternative.
Department of Transportation
Section 4(f)

• 4(f) protects public parks and wildlife areas from impacts of transportation projects
  – Projects must examine all feasible alternatives and include all possible planning to minimize harm to 4(f) lands
  – If the project would not adversely affect the activities or features qualifying a park for Section 4(f), the FAA may make a *de minimis* determination about the use of the property

• Edgewood Park
  – Several trees will penetrate the Threshold Siting Surface for Runway 14 in both no action and preferred alternatives, requiring removal
  – Trees are projected to penetrate the TSS sooner under the preferred alternative
  – All of the park’s approximately 30 trees requiring removal are cottonwoods
  – FAA issued initial *de minimis* determination
Renderings of the southwest corner of Edgewood Park showing trees before and after the proposed removal.
Other Tree Removal

- Approximately 50 additional trees are outside Edgewood Park in the approaches to Runway 14L in Brooklyn Park, Runway 24R in Brooklyn Center, and Runways 6L and 32R in Crystal.

- Most of these trees are located on private residential lots and the rest are located in public rights-of-way.

- Based on arborist observations, most of these trees are silver maples, but other species include green ash, Siberian elm, white poplar, blue spruce, and honey locust.

- Homeowners can expect to hear from the MAC in early to mid-2020.
Hazardous Materials & Solid Waste

- Known hazardous materials sites on or adjacent to Airport property were identified and evaluated with reference to various federal and state legislative requirements.
- None of the sites will be affected by the project.
Historic and Archeological Resources

• Cultural resources (above and below ground) were evaluated with reference to the National Historic Preservation Act (NHPA) requirements

• FAA made determination of No Historic Properties Affected and State Historic Preservation Office (SHPO) concurred

• Architectural history
  • Historians conducted a Phase II Historic and Architectural property inventory for on-airport resources.
  • Airport facilities were evaluated as potential examples of post-World War II general aviation architecture, but did not have significant design for this period. Post '70s buildings are located throughout, and many buildings built during the period of study were altered from their historic appearance.

• Archaeology
  • The Airport is in a developed area, and soils have previously been disturbed.
  • No archeological materials were discovered during a Phase I archeological survey.
Proposed action shifts Runway 14L/32R northwest approximately 115 feet and decommissions Runway 14R/32L.

No significant changes to flight traffic patterns or land use impacts.
Zoning

- Number of residences within Safety Zones A and B projected to decrease with the preferred alternative
- The MAC will convene a Joint Airport Zoning Board (JAZB) consistent with Minnesota Statutes
Socioeconomics

- The action will not significantly influence economic activity or cause any relocation or disruption of the community.
- Proposed non-aeronautical development on the north side of the Airport may result in some new economic activity, and generate some traffic in the area, but will not be significant in this developed urban area.
Environmental Justice

Definition: the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to environmental laws and policies

• Environmental justice populations are present near the Airport
• The proposed project does not disproportionately affect these residents.
Wetlands

• Wetlands evaluated with respect to federal Clean Water Act and state Wetland Conservation Act requirements

• Estimated wetland impacts of less than 1,000 square feet

• Disturbance likely below *de minimis* threshold; does not require replacement plan
Surface Water and Stormwater

- Changing and adding pavement at the Airport affects stormwater runoff and drainage
- Net increase of 1.2 acres of impervious surface
- Runoff to surrounding neighborhoods will not be affected
Other NEPA Categories

• Climate
  • Potential for preferred alternative to affect future climate conditions is limited

• Coastal Resources
  • No resources present

• Natural Resources and Energy Supply
  • Demand for natural resources and energy will not exceed available supplies

• Farmland
  • No resources present

• Protected Species
  • Endangered rusty-patched bumble bees and threatened northern long-eared bats are found in Hennepin County, but not on or near the airport

• Children’s Environmental Health and Safety
  • No disproportionate impacts are expected
<table>
<thead>
<tr>
<th>Environmental Impact Category</th>
<th>Impacts: No-Action Alternative</th>
<th>Impacts: Preferred Alternative</th>
<th>Required Permitting/Mitigation &amp; Associated Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality</td>
<td>None</td>
<td>Minimal impacts during construction</td>
<td>Implement EPA-recommended best management practices (BMPs) and control strategies during construction.</td>
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| Biological Resources (including fish, wildlife, and plants) | Tree removal (ongoing maintenance) | Tree removal                  | • Tree removal to occur during NLEB dormant season (October 1 – April 30).  
• Implement April 2015 USFWS/USDOT NLEB avoidance and minimization measures.  
• Tree removal to occur outside of migratory bird nesting season (May – October). |
| Climate                                               | None                           | None                           | None                                               |
| Coastal Resources                                     | None                           | None                           | None                                               |
| DOT Section 4(f) Lands                                | Tree removal in Edgewood Park  | Tree removal in Edgewood Park  | FAA determination and City of Brooklyn Park Concurrence  
• Tree removal BMPs.  
• Tree replacement and/or compensation. |
| Farmlands                                             | None                           | None                           | Dispose of construction materials and solid waste in accordance with state and local laws. |
| Hazardous Materials, Solid Waste, and Pollution Prevention | None                           | None                           | None                                               |
| Historic/Anciential & Archeological Resources         | None                           | None                           | None                                               |
| Land Use                                               | Residential parcels in R1Z and state Safety Zones | Residential parcels in R1Z and state Safety Zones | Convene Joint Airport Zoning Board (JAZB) to revise the existing Airport Zoning Ordinance. |
| Ground Transportation                                 | R1Z conflicts                  | None                           | None                                               |
| Non-Aeronautical                                      | None                           | Change from airport zoning in non-aeronautical development area | Change to City of Brooklyn Park land use zoning. |
| Natural Resources and Energy Supply                    | None                           | Minor increase in energy demand | None                                               |
| Noise and Compatible Land Use                         | Total of 11 residential parcels exposed to 85 DNL noise contour | Residential exposure to 85 DNL noise contour reduced to 4 parcels | Conduct noise level reduction testing of homes within the 65 DNL noise contour.  
• Update voluntary noise abatement plan.  
• Hold educational briefings with pilots. |
| Socioeconomics, Environmental Justice, and Children’s Health & Safety | None                           | None                           | None                                               |
| Visual Effects (including light emissions)             | None                           | Extended airfoil light systems | Energy efficient light emitting diode (LED) light fixtures and visual screening methods to be considered during project design. |
| Water Resources                                        | Surface Water & Stormwater     | 1.2 acres increased impervious area | Construction Stormwater Pollution Prevention Plan.  
• Onsite Best Management Practices.  
• NPDES Multi Sector General permit.  
• SCWMC permit. |
|                                                       | Floodplains                    | None                           | None                                               |
|                                                       | Groundwater                    | None                           | MDNR appropriation permit (if necessary).          |
|                                                       | Wetlands                       | Minimal direct wetland impact (less than 1,000 square feet) | Compliance with Minnesota Wetland Conservation Act.  
• MPCA CWA Section 401 Water Quality Certification. |
|                                                       | Wastewater                     | None                           | None                                               |
| Cumulative Impacts                                     | No substantial impacts         | No substantial impacts         | None                                               |
Next Steps

• Publish Draft EA/EAW for public review and comment
• Public Hearing