



## **AIRPORT COMMITTEE MEETING AGENDA**

### **September 16, 2020 - 4:00 PM**

### **Virtual Webex**

---

1. **Call to Order**
2. **Agenda Amendments**
3. **Approval of Minutes**
  - A November 13, 2019
4. **Citizens to be Heard**
5. **Project Updates**
6. **Aeronautical Zoning Discussion**
7. **Election of 2020 Officers**
8. **Fly In Updates/Cancellation**
9. **Moorhead Aviation Reports and Fuel Report**
10. **Adjournment**
11. **VIRTUAL MEETING PARTICIPATION** - The Airport Committee meeting will be held using virtual meeting and conference-calling technology. The meeting will be live-streamed to the [City's Homepage](#). To Participate and/or make a public comment about these items: **During the meeting** - Call the Public Comment Line at 218.299.5001; you may request to be bridged onto the audio conference. **Before the meeting** - Written comments to Airport Committee, PO Box 779, Moorhead, MN 56561-0779 or [Kristie.Leshovsky@cityofmoorhead.com](mailto:Kristie.Leshovsky@cityofmoorhead.com) or call staff at 218.299.5332.





**CITY OF MOORHEAD - AIRPORT COMMITTEE**  
**MEETING MINUTES – NOVEMBER 13, 2019 AT 4:00 PM**  
**MOORHEAD MUNICIPAL AIRPORT**

Pursuant to due call and notice thereof, a regular meeting of the Airport Committee was held at Moorhead Municipal Airport on November 13, 2019 at 4:00 PM.

Attendance of the members:

|                              |                    |                             |
|------------------------------|--------------------|-----------------------------|
| Board Member – Ward 1:       | Gerald Allen       | Present                     |
| Board Member – Ward 2:       | Mike Koenig        | Present                     |
| Board Member – Ward 3:       | Bill Forbes        | Present                     |
| Board Member – Ward 4:       | Ryan Larson        | Present                     |
| Board Member – At-Large:     | K. Walter Vollmers | Present                     |
| Board Member – At-Large:     | Wayne Lougheed     | Present                     |
| Board Member – City Council: | Sara Watson Curry  | Present, arrived at 4:07 pm |

**1. Call to Order**

Chair Wayne Lougheed called the meeting to order. New members, Gerald Allen and Sara Watson Curry were welcomed. Everyone introduced themselves.

**2. Agenda Amendments – None.**

**3. Approval of Minutes – July 10, 2019**

**Motion to approve made by Walter Vollmers and seconded by Ryan Anderson.**

Motion Passed: For: 6; Against: 0; Abstain: 0; Absent: 1

**4. Citizens to be Heard**

Ryan Paulson with Moorhead Aviation Services requested the two construction projects scheduled for 2020 (apron repairs and runway pavement project) be coordinated to occur simultaneously to minimize impacts to airport operations. It was noted that all efforts will be made to accommodate that request.

**5. Project Updates**

Kristie Leshovsky and Jeff Klein, Mead and Hunt, provided an update on the apron project. They noted that there were pavement deficiencies and repair options are under review by FAA. An update will be provided to the Committee once guidance is received from FAA. It was also noted that repairs to the tie-downs are needed.

Kristie Leshovsky and Jeff Klein also provided an update on the 2020 Runway pavement and lighting project that is now under grant for \$1.66 million. Construction will close the runway from June 1 to July 2, 2020. Kristie Leshovsky noted that Moorhead Airport extends a 'Thank you' to Houston County Airport for their partnership and cooperation in allowing Moorhead to delay repayment of entitlement funds. This partnership was essential for Moorhead to complete these comprehensive airport pavement upgrades.



**CITY OF MOORHEAD - AIRPORT COMMITTEE**  
**MEETING MINUTES – NOVEMBER 13, 2019 AT 4:00 PM**  
**MOORHEAD MUNICIPAL AIRPORT**

**6. Capital Improvement Plan**

Kristie Leshovsky introduced the proposed 2020 Capital Improvement Plan (CIP) which includes an outline of future improvement projects scheduled in the future and budget costs for implementation. This is a guiding document that may be changed, it gives FAA and MnDOT Aeronautics a rough idea of future projects. The Committee discussed the plan and timing.

**Motion to approve the 2020 Capital Improvement Plan made by Sara Watson Curry and seconded by Bill Forbes.**

Motion Passed: For: 7; Against: 0; Abstain: 0; Absent: 0

**7. 2019 Fly In Recap**

Wayne Lougheed provided an update on the 2019 Fly In. He extended a Thank You to all who volunteered to make the event a success. He noted there was a great turnout despite the weather. He noted that he and a family member had passed out flyers at the Greater Moorhead Days parade, but would like to display a float in the 2020 parade and welcomed ideas from the committee.

The 2020 Fly In is scheduled for September 12, 2020.

**8. 2020 Meeting Calendar**

Kristie Leshovsky outlined the proposed 2020 Airport Committee regular meeting schedule. She noted that if there is a conflict, meetings may be rescheduled with adequate notice. Special Meetings may be called if there is time sensitive business that is needed for certain issues.

**9. Moorhead Aviation Reports and Fuel Report**

Ryan Paulson stated that fuel sales were down due to construction. He also noted that Moorhead Aviation Services currently has three employees and will be soon adding a new employee from California.

**10. Adjournment – 4:40 PM**

**Motion to adjourn made by Walter Vollmers and seconded by Mike Koenig.**

Motion Passed: For: 7; Against: 0; Abstain: 0; Absent: 0



**To:** Moorhead Airport Committee  
**Subject:** Pavement Project Updates  
**Date:** August 19, 2020  
**Prepared By:** Kristie Leshovsky

# AIRPORT COMMITTEE REPORT

## APRON PROJECT UPDATES

### 2019 Pavement Project- Apron

The project experienced a number of delays, primarily relating to ensuring the final product met the project specifications. At this time, the contractor, city and city’s engineer (Mead and Hunt) are working on final details relating to project payment and close out.

## RUNWAY PAVEMENT AND LIGHTING PROJECT

### 2020 Runway Pavement and Lighting Project

The U.S. FAA (\$1,662,228), MnDOT Office of Aeronautics (\$92,346) and City of Moorhead (\$92,346) funded the 2020 Runway Pavement Rehabilitation and Lighting Upgrade projects and the project was substantially completed in early July. This was part of a comprehensive pavement rehabilitation program at the airport, which includes the t-hangar area (2018), apron (2019), runway (2020) and taxiway (anticipated 2020 or 2021).

### Taxiway Project

The taxiway pavement rehabilitation project contract was awarded to Sellin Brothers, Inc. (who also completed the runway project) by the City Council on June 8, 2020. The bids came in as follows:

- Engineers Estimate: \$793,855.50
- **Sellin Brothers, Inc.:** **\$739,344.75**
- Northern Improvement Co.: \$757,082.50
- Central Specialties, Inc.: \$826,176.50

## DISADVANTAGED BUSINESS ENTERPRISE GOAL

Because of timing requirements in complete the policy and goal, the Disadvantaged Business Enterprise comment period, Council review and approval and submittal to the FAA occurred primarily during the second quarter of 2020. The 2020-2022 goal is 3.15% and the full document is available here:

<http://www.ci.moorhead.mn.us/departments/planning-and-neighborhood-services/airport>



**To:** Moorhead Airport Committee  
**Subject:** Aeronautical Zoning Update  
**Date:** March 18, 2020  
**Prepared By:** Kristie Leshovsky

## AIRPORT COMMITTEE REPORT

### AERONAUTICAL ZONING

#### **Moorhead Airport Zoning History:**

- The current Airport Zoning Ordinance was recorded in 1996.
- In the early 2000's, an Airport Layout Plan (ALP) revision was proposed to include a proposed new cross wind runway and primary runway extension to 5,000 feet (current runway is 4,300 feet).
- The ALP was under review for many years. MnDOT recommended that a zoning change be complete that would comply with the proposed ALP.
- In 2007, a revised zoning ordinance that was compatible with the proposed revised ALP was drafted and an Airport Zoning Board was established.
- As required by State Statute, a Public Hearing on the proposed ordinance was held in January 2008.
  - o At the Hearing, a property owner expressed concern regarding Zone A (ie: no-build zone) and noted that compensation should be provided for that area. Following the Hearing, an attorney also contacted the City to inquire about compensation for another area.
  - o The Ordinance was put on hold as there were no funds to provide easement compensation.
- In 2010, the Airport Layout Plan (ALP) was revised to include a proposed new cross wind runway and runway extension to 4,850 feet (MnDOT and FAA would not permit the ALP to show a 5,000 foot runway because of safety zone obstructions).

#### **New MN Zoning Rules:**

In August, 2019, an amended statute governing airport zoning went into effect in Minnesota. A summary of the Statute changes is attached. After meeting with staff from MnDOT Aeronautics, it was noted that the Moorhead Airport Zoning Ordinance must be updated because it is currently inconsistent with the ALP.

The cross wind runway and proposed runway extension both include new Zone A (no build) and Zone B (limited building) aeronautical zoning areas. The cross wind runway would also require land acquisition. As it relates to these proposed aeronautical zoning areas, the City Attorney has noted the following:

- Under the takings provisions of the MN Constitution, the standard courts use for determining whether airport zoning ordinances result in compensation to the landowner is whether his/her "property has suffered a substantial and measureable decline in market value as a result of the regulations."

- The analysis provided by the courts is two steps: (i) determining if there has been a decline in market value, which is a factual question, and (ii) whether that decline is substantial and measureable, which is a legal question.
  - o To determine whether there has been a decline in market value, appraisals on the property are conducted.
  - o Any compensation will depend upon the difference in the appraised value of the property from pre-ordinance to post-ordinance and applying the above standard. The City will need to hire an appraiser and have the appraiser perform an analysis of value before and after the ordinance.

An appraisal has not been ordered. In working with the City real estate and planning staff, a preliminary potential zoning compensation estimate was attempted based on current mapped aeronautical zoning areas and available sales information. **Please note that this is an estimate and future appraisals and negotiations could differ greatly from the estimates.**

- Runway Extension:
  - o Estimated potential zoning compensation: \$120,000
- Cross Wind Runway:
  - o Estimated potential zoning compensation: \$212,000
  - o Property acquisition would also be required for this project. This estimated potential cost is \$382,000.

**NOTE: these are working estimates that are subject to change and were not determined by a formal appraisal.**

## FUNDING OPTIONS

There is no state or federal grant funds to assist with zoning easement acquisitions. MnDOT will only participate in land acquisitions if the property is shown on an approved ALP and funds are available. Land acquisitions would include the project area and property in the identified Clear Zone.

## SUGGESTED ACTION

Discuss whether the Airport Committee believes the cross wind runway and runway extension should remain on the ALP (or consider removal).

## ATTACHMENTS

MnDOT Zoning Information  
 Moorhead Airport Capital Improvement Plan  
 Runway Extension Analysis

# Summary of Zoning Statute Changes (HF6/SF5 Chapter 3 – 2019, First Special Session)

to Minnesota's Airport Safety Zoning Laws (MN Chapters 360, 394 & 462)

## Integration of airport zoning with local planning and zoning

### Before August 1st

No reference to airport safety zoning currently exists in municipal or county planning and zoning laws (MS 394 & 462), which has caused MN Supreme Court to view airport zoning different from other, more routine types of zoning

### Effective August 1st

Comprehensive plans required to consider the location and dimensions of airport safety zones

Encourages uses in airport safety zones that are compatible with the airport

Airport safety zones required on maps depicting official controls at next update

## Flexibility to enact airport zoning

### Before August 1st

The Joint Airport Zoning Board (JAZB) adopts airport zoning regulations that conform to the standards prescribed by the commissioner

Funding must be withheld if zoning effort is not initiated

Loosely defined social and economic cost arguments required in lieu of the Commissioner's Standard

### Effective August 1st

Expands authority of Joint Airport Zoning Board (JAZB) allowing for creation and adoption of a Custom standard

Safety projects to maintain existing infrastructure are eligible for funding regardless of zoning effort

For custom zoning, specific criteria must be evaluated by the JAZB and resulting ordinance must provide a reasonable level of safety

Replace social and economic cost argument provision with criteria for Custom Airport Zoning Standards

## Alignment with municipal and county process requirements

### Before August 1st

Requires a minimum of two public hearings

No timeline for MnDOT review

### Effective August 1st

One public hearing required unless changes are made after the initial public hearing

Notice of hearing posted on the municipality, county or JAZB's website.

Notice of hearing published at least 3 times between 15 and 5 days in two newspapers. Only one newspaper required if no second newspaper of wide circulation exists.

Mailed notice to affected parties must be given 10 days before each hearing.

### Airport's role

**Before August 1st**

The importance of airports to the general public is not explicitly stated

**Effective August 1st**

The maintenance and operation of airports is deemed an essential public service

### Clarification of "planning" project eligibility

**Before August 1st**

Planning is not specifically identified as allowable for funding with State Airport Fund dollars

**Effective August 1st**

Insertion of "planning" as eligible for funding (allowing for potential funding of Custom ordinances and related analysis)

### Existing land uses

**Before August 1st**

Established Residential Neighborhoods designation exempts existing neighborhoods built before January 1, 1978 from airport zoning restrictions

**Effective August 1st**

The term "Existing Land Use" replaces Established Residential Neighborhood allowing for broader exemptions from Commissioner's Standard zoning restrictions

Future rulemaking envisioned to define "Existing Land Use"

### Federal no hazard determination

**Before August 1st**

Variance must be obtained for object to penetrate height restrictions

**Effective August 1st**

Custom zoning allows the flexibility to approve obstruction without variance, if FAA analyzes proposed construction, alteration, or growth and deems it non-hazardous

### Boundary limitations

**Before August 1st**

The municipality may regulate via land use zoning only up to two miles from the airport boundary under approach zones, and up to 1 and ½ miles elsewhere

**Effective August 1st**

Conflicting boundary limitations on zoning removed and left to the JAZB to determine limitations, if any

### Circumstances of updating zoning

**Before August 1st**

Loosely defined statutory guidance on when a zoning update is required

**Effective August 1st**

Clarification of when zoning must be updated, stating that changes to runway lengths or configurations are the trigger or if existing zoning was noncompliant

# Capital Improvement Program Report

Minnesota Department of Transportation - Aviation Division

Moorhead Municipal Airport

Report Filter - Types: All, Statuses: All

| Year | Project Name | Status | FAA | State | Local | Total |
|------|--------------|--------|-----|-------|-------|-------|
|------|--------------|--------|-----|-------|-------|-------|

## All Projects

| 2019 |   |           |                       |                    |                    |                       |
|------|---|-----------|-----------------------|--------------------|--------------------|-----------------------|
|      | Apron Pavement Upgrades: Construction (FFY 2018)          | CIP       | 868,798.00            | 48,266.00          | 48,266.00          | \$965,330.00          |
|      | Apron Pavement Upgrades: Construction Services (FFY 2018) | CIP       | 121,320.00            | 6,740.00           | 6,740.00           | \$134,800.00          |
|      | Apron Pavement Upgrades: Design & Bid (FFY 2018)          | CIP       | 174,240.00            | 0.00               | 19,360.00          | \$193,600.00          |
|      | Taxiway & Runway Pavement Upgrades: Design (FFY 2018)     | CIP       | 187,002.00            | 10,389.00          | 10,389.00          | \$207,780.00          |
|      |   | SubTotal: | <b>\$1,351,360.00</b> | <b>\$65,395.00</b> | <b>\$84,755.00</b> | <b>\$1,501,510.00</b> |

| 2020 |   |           |                       |                    |                    |                       |
|------|---|-----------|-----------------------|--------------------|--------------------|-----------------------|
|      | Runway Lighting Upgrades (FFY 2019)               | CIP       | 26,550.00             | 1,475.00           | 1,475.00           | \$29,500.00           |
|      | Runway Pavement Constuction (FFY 2019)            | CIP       | 1,509,813.00          | 83,878.50          | 83,878.50          | \$1,677,570.00        |
|      | Runway Pavement: Construction Services (FFY 2019) | CIP       | 125,865.00            | 6,992.50           | 6,992.50           | \$139,850.00          |
|      |   | SubTotal: | <b>\$1,662,228.00</b> | <b>\$92,346.00</b> | <b>\$92,346.00</b> | <b>\$1,846,920.00</b> |

| 2021 |  |           |                     |                    |                    |                     |
|------|--|-----------|---------------------|--------------------|--------------------|---------------------|
|      | Taxiway Pavement Upgrades: Construction & Services (FFY2020) | CIP       | 765,000.00          | 42,500.00          | 42,500.00          | \$850,000.00        |
|      |  | SubTotal: | <b>\$765,000.00</b> | <b>\$42,500.00</b> | <b>\$42,500.00</b> | <b>\$850,000.00</b> |

| 2022 |  |           |                     |               |               |                     |
|------|--|-----------|---------------------|---------------|---------------|---------------------|
|      | AIP \$150,000 Payback to Houston County (FFY 2021) | CIP       | 150,000.00          | 0.00          | 0.00          | \$150,000.00        |
|      |  | SubTotal: | <b>\$150,000.00</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$150,000.00</b> |

| 2024 |  |           |                     |                     |                     |                     |
|------|--|-----------|---------------------|---------------------|---------------------|---------------------|
|      | Parking Lot Pavement Maintenance and Addition (FFY 2023) | CIP       | 360,000.00          | 20,000.00           | 20,000.00           | \$400,000.00        |
|      | Zoning - Zone A/B Easements and Acquisitions (FFY 2023)  | CIP       | 0.00                | 400,000.00          | 100,000.00          | \$500,000.00        |
|      |  | SubTotal: | <b>\$360,000.00</b> | <b>\$420,000.00</b> | <b>\$120,000.00</b> | <b>\$900,000.00</b> |

| 2027 |   |           |                     |                    |                    |                     |
|------|---|-----------|---------------------|--------------------|--------------------|---------------------|
|      | Taxilane and vehicle access road to hangars(FFY 2026) | CIP       | 450,000.00          | 25,000.00          | 25,000.00          | \$500,000.00        |
|      |   | SubTotal: | <b>\$450,000.00</b> | <b>\$25,000.00</b> | <b>\$25,000.00</b> | <b>\$500,000.00</b> |

| Year                | Project Name                             | Status    | FAA                   | State                 | Local               | Total                 |
|---------------------|--|-----------|-----------------------|-----------------------|---------------------|-----------------------|
| <b>2030</b>         |  |           |                       |                       |                     |                       |
|                     | T Hangar Expansion (FFY 2029)            | CIP       | 450,000.00            | 25,000.00             | 25,000.00           | \$500,000.00          |
|                     |  | SubTotal: | <b>\$450,000.00</b>   | <b>\$25,000.00</b>    | <b>\$25,000.00</b>  | <b>\$500,000.00</b>   |
| <b>2033</b>         |  |           |                       |                       |                     |                       |
|                     | Entrance Road Reconstruction (FFY 2032)  | CIP       | 540,000.00            | 30,000.00             | 30,000.00           | \$600,000.00          |
|                     | Fuel System Relocation (FFY 2032)        | CIP       | 0.00                  | 70,000.00             | 30,000.00           | \$100,000.00          |
|                     |  | SubTotal: | <b>\$540,000.00</b>   | <b>\$100,000.00</b>   | <b>\$60,000.00</b>  | <b>\$700,000.00</b>   |
| <b>2034</b>         |  |           |                       |                       |                     |                       |
|                     | Pavement Maintenance (FFY 2033)          | CIP       | 135,000.00            | 7,500.00              | 7,500.00            | \$150,000.00          |
|                     |  | SubTotal: | <b>\$135,000.00</b>   | <b>\$7,500.00</b>     | <b>\$7,500.00</b>   | <b>\$150,000.00</b>   |
| <b>2037</b>         |  |           |                       |                       |                     |                       |
|                     | Vehicle Access and Taxilane (FFY 2036)   | CIP       | 675,000.00            | 37,500.00             | 37,500.00           | \$750,000.00          |
|                     |  | SubTotal: | <b>\$675,000.00</b>   | <b>\$37,500.00</b>    | <b>\$37,500.00</b>  | <b>\$750,000.00</b>   |
| <b>2040</b>         |  |           |                       |                       |                     |                       |
|                     | Commercial Taxilane Extension (FFY 2039) | CIP       | 252,000.00            | 270,000.00            | 78,000.00           | \$600,000.00          |
|                     |  | SubTotal: | <b>\$252,000.00</b>   | <b>\$270,000.00</b>   | <b>\$78,000.00</b>  | <b>\$600,000.00</b>   |
| <b>2041</b>         |  |           |                       |                       |                     |                       |
|                     | Pavement Maintenance (FFY2040)           | CIP       | 135,000.00            | 7,500.00              | 7,500.00            | \$150,000.00          |
|                     |  | SubTotal: | <b>\$135,000.00</b>   | <b>\$7,500.00</b>     | <b>\$7,500.00</b>   | <b>\$150,000.00</b>   |
| <b>2043</b>         |  |           |                       |                       |                     |                       |
|                     | Airport Master Plan (FFY 2042)           | CIP       | 315,000.00            | 17,500.00             | 17,500.00           | \$350,000.00          |
|                     |  | SubTotal: | <b>\$315,000.00</b>   | <b>\$17,500.00</b>    | <b>\$17,500.00</b>  | <b>\$350,000.00</b>   |
| <b>All Projects</b> |  |           | <b>\$7,240,588.00</b> | <b>\$1,110,241.00</b> | <b>\$597,601.00</b> | <b>\$8,948,430.00</b> |

# Overview of Process to Extend Runway 12/30

**Moorhead Municipal Airport,  
Moorhead, Minnesota**

Report prepared by



June 5, 2014

## Table of Contents

|  | Page |
|--|------|
| 1. Introduction .....                          | 1    |
| 2. Planning Study .....                        | 1    |
| 3. Environmental Process .....                 | 1    |
| 4. Land Acquisition .....                      | 2    |
| 5. Airport Rezoning .....                      | 2    |
| 6. Engineering, Design, and Construction ..... | 2    |
| 7. Extension to 5,000 Feet or Greater .....    | 2    |
| 8. Order of Magnitude Costs and Timeline ..... | 3    |

## **1. Introduction**

The Moorhead Airport has been approached to consider an extension of its Runway 12/30 from 4,300 feet to 4,850 feet as shown on the current, approved Airport Layout Plan. This document is intended to identify the steps that would be required to pursue an extension from 4,300 feet to 4,850 feet at the Airport.

## **2. Planning Study**

Initially a planning study would need to be completed to determine the justified runway length using Federal Aviation Administration (FAA) criteria. FAA will only participate in funding a project that meets its criteria. This effort would likely include gathering user surveys, operations data, and future projections to document the need for more runway length at the Airport.

The planning study would also identify other improvements that would be required as part of the extension, including what is needed to achieve compliance with state and federal design standards. For example, County Road 11 currently traverses Runway 30's Runway Protection Zone (RPZ), which conflicts with FAA guidance on RPZs. The planning study would need to develop and evaluate alternatives to bring Runway 30's RPZ into compliance, which could include a runway shift, road closure, realignment, or tunnel. If no feasible alternative is identified to remove the road from the RPZ, an RPZ analysis would need to be completed documenting alternatives, which then must be reviewed and approved by FAA headquarters before the project could move forward.

Assuming an alternative is developed which meets design standards, the ALP would need to be updated to reflect the proposed project.

## **3. Environmental Process**

The next major step would be the environmental process, assuming that there is justification for the runway extension that meets federal and state criteria, and a feasible alternative is identified. A federal Environmental Assessment would need to be completed as part of the National Environmental Policy Act (NEPA). This is typically a 12-24 month process leading up to design and construction, but may take longer, depending upon the environmental impacts identified. With the desired extension, the major likely impacts include water quality associated with modifications to the County Ditch (which is anticipated to be enclosed), property acquisition, and agricultural impacts. Additionally, if the preferred alternative includes modification to County Road 11, there would be socioeconomic impacts that would need to be evaluated. The NEPA process includes a public review process.

Only if the NEPA process results in the FAA issuing a Finding of No Significant Impact (FONSI) can the project move forward, once funding is secured. FAA typically participates at 90 percent, with state and local each matching at 5 percent.

## **4. Land Acquisition**

The FAA requires (or recommends) the purchase of the runway protection zones in fee which allows the Airport to have control over land uses within this area. To extend the runway to 4,850', this land acquisition is estimated to be around 30 acres. Since much of the land surrounding the airport is prime agricultural soils, it is expected to sell at a premium rate into the foreseeable future. Typically with a project requiring land acquisition, it is one of the first elements undertaken, as it can be time-consuming and acquisition is required before construction can begin. It often occurs concurrently with design.

## **5. Airport Rezoning**

While extending Runway 12/30 to the northwest, the Airport is required by the State to update the Airport's zoning. This process typically can be accomplished in a year's time, but much of the timeframe and cost is determined by the City's involvement. City resources, such as legal, planning, and zoning, can be used to reduce costs. The State has recently required increased documentation, meetings, and public involvement when updating these documents, and at times it can become somewhat of a lengthy process. The State is in the process of recommending revised review processes and standards for Airport zoning in Minnesota, so it is difficult to predict at this time what processes and standards will be required when the zoning process begins. It often occurs concurrently with design.

## **6. Engineering, Design, and Construction**

Construction plans and specifications will need to be developed, permits obtained, and project bid.

Relocating the runway end requires that the PAPIs and REILs be moved on that end of the landing surface and a flight check performed by FAA. This is usually done as part of the construction process (in a single season). Costs vary in direct relation to length of move and price of materials. Relocating or enclosing the County ditch will require special permits and likely mitigation.

The runway and associated parallel taxiway extension portion are the largest portion of the costs associated with the project. Current prices of construction place the cost of the extension at approximately \$200 per square yard of finished pavement, but this number can be expected to rise to approximately \$250 per square yard by the time the extension would be built. This includes many of the associated costs including engineering, dirt work, utilities, electrical, seeding, inspection, testing, etc. Based on a 550-foot extension, the estimated square yardage used for this example is over 5,000 yards of taxiway surface and 5,500 yards of runway surface.

## **7. Extension to 5,000 Feet or Greater**

If the Airport decides to pursue the extension past 4,999', MnDOT Aeronautics requires a Precision Approach. This requirement translates to a significantly longer project timeline and additional cost for the Airport. Some of the additional items are:

- Additional Land Acquisition – estimated at nearly 75 acres
- Airport Layout Plan Update and associated rezoning
- Required runway widening to 100' – over 13,500 yards additional pavement
- Precision Approach Lighting (MALS-R or similar)
- Relocation of most runway lights and signs
- State MN Environmental Impact Statement (mandatory for runways 5000' or greater)
- Buildings relocated out of the primary surface
- New parallel taxiway at the required 300 foot separation from runway, the current separation is 240 feet

## **8. Order of Magnitude Costs and Timeline**

Based on the above, the estimated timelines for an extension less than 5000 feet (assuming funding would be available at time of Environmental process completion) is a minimum of five years with an order of magnitude cost ranging from \$2,300,000 to \$3,500,000 (2014 \$).



**To:** Moorhead Airport Committee  
**Subject:** Election of Officers  
**Date:** March 18, 2020  
**Prepared By:** Kristie Leshovsky

## AIRPORT COMMITTEE UPDATES

### NEW AIRPORT COMMITTEE MEMBER

**Welcome Steve Lindaas** as the City Council Airport Committee appointment!

### 2020 CHAIR AND VICE CHAIR

2019 Officers:

- Wayne Lougheed: Chair
- Bill Forbes: Vice Chair

**Requested Action:** Appointment of 2020 Chair and Vice Chair

### Moorhead Municipal Airport Fuel Sales

|              | 100 LL (Gallons) | Jet A (Gallons) |
|--------------|------------------|-----------------|
| 2007         | 37,566.4         | 2,404.1         |
| 2008         | 29,484.0         | 4,494.6         |
| 2009         | 25,475.1         | 2,840.3         |
| 2010         | 22,484.1         | 2,866.4         |
| 2011         | 21,853.5         | 5,190.2         |
| 2012         | 28,615.7         | 17,890.2        |
| 2013         | 23,810.0         | 11,843.2        |
| 2014         | 17,727.3         | 3,048.3         |
| 2015         | 19,219.2         | 7,337.0         |
| 2016         | 21,003.9         | 11,115.8        |
| 2017         | 20,460.0         | 6,540.7         |
| 2018         | 23,344.6         | 9,813.7         |
| <b>2019</b>  |                  |                 |
| January      | 706.3            | 335.3           |
| February     | 639.0            | 405.0           |
| March        | 1,762.9          | 964.2           |
| April        | 2,359.4          | 1,587.6         |
| May          | 1,685.8          | 783.2           |
| June         | 204.9            | 0.0             |
| July         | 1,858.3          | 546.0           |
| August       | 2,924.5          | 916.4           |
| September    | 2,606.8          | 577.2           |
| October      | 1,919.9          | 1,071.1         |
| November     | 1,681.2          | 639.7           |
| December     | 1,396.0          | 555.2           |
| <b>Total</b> | <b>19,745.0</b>  | <b>8,380.9</b>  |
| <b>2020</b>  |                  |                 |
| January      | 476.1            | 337.2           |
| February     | 1,383.1          | 351.3           |
| March        | 1,753.0          | 215.9           |
| April        | 1,995.7          | 577.0           |
| May          | 2,230.2          | 1,119.3         |
| June         | 189.4            | 0.0             |
| July         | 515.5            | 0.0             |
| August       |                  |                 |
| September    |                  |                 |
| October      |                  |                 |
| November     |                  |                 |
| December     |                  |                 |
| <b>Total</b> | <b>8,543.0</b>   | <b>2,600.7</b>  |