

**REQUEST FOR PROPOSALS  
FOR  
ENGINEERING TRANSPORTATION PLANNING SERVICES**

The Bismarck-Mandan Metropolitan Planning Organization (MPO) is requesting proposals from qualified consultants for the following project:

2020 Pavement Conditions and Analysis Report

Qualifications based selection criteria will be used to analyze technical proposals and interviews from responding consultants. The MPO reserves the right to reject any or all proposals. **This project has a not to exceed budget of \$82,000.**

Interested firms should contact, Rachel Drewlow Transportation Planner, at the Bismarck-Mandan MPO, 221 N 5<sup>th</sup> Street P.O. Box 5503, Bismarck ND 58506. Contact can also be made via phone 701.355.1852 or by email: rdrewlow@bismarcknd.gov

**All proposals received by 5:00 PM (CST) on April 9, 2020 will be given consideration for an interview.** The Bismarck-Mandan MPO reserves the right to limit the interviews to a maximum of five (5) firms whose proposals most clearly meet the RFP requirements. Firms will be notified in writing or by phone of shortlist results. Successful candidates will receive date, time and location information for the interviews.

It is the responsibility of the consultant to ensure all required elements of the proposal are submitted. Proposals missing required elements will be rejected and consultants will be denied interviews.

Minority, women-owned, and disadvantaged business enterprises are encouraged to participate. Respondents must submit six (6) physical copies of the proposal and one (1) electronic copy of the proposal. The full length of the proposal shall be no more than eight (8) pages, but preferably printed as double sided. Appendix material may be supplied in addition to the eight (8) pages of the body. Submittals must be received no later than 5:00 PM (CST) April 9 and may be shipped or hand delivered to:

Rachel Drewlow  
Bismarck-Mandan MPO  
221 N 5<sup>th</sup> Street  
P.O. Box 5503  
Bismarck, ND 58506-5503

Once submitted, the proposals become the property of the MPO. Proprietary information must be clearly noted in the proposal, or it will be subject to open records laws.

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Figure 1: Bismarck-Mandan MPO Urban Functional Class System

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## I. PURPOSE OF THE REQUEST

The purpose of this Request for Proposals (RFP) is to provide interested firms with information about professional services desired by the Bismarck-Mandan Metropolitan Planning Organization (MPO) for the following project:

### 2020 Pavement Conditions and Analysis Report

The MPO is requesting services to evaluate pavement condition on all functionally classified collector and arterial roadways within the Bismarck-Mandan MPO. This is approximately 210-225 centerline miles. Consultants will provide data collection, assess pavement in both PCI and IRI formats, update the jurisdictions' data programs as necessary, and provide additional analysis as requested. Data will be used by the MPO to monitor their federal performance target for pavement condition and help select preventive maintenance and/or reconstruction projects for the region. To elaborate upon the selection process, data will inform the next Metropolitan Transportation Plan update and constrained list of projects and be used, as needed, during project prioritization of the annual TIP solicitation. Also, data will help the jurisdictions to execute the rehabilitation/reconstruction of functionally classified roadways. This study will be in cooperation with the cities of Bismarck, Mandan, and Lincoln, the counties of Burleigh and Morton, the North Dakota Department of Transportation (NDDOT), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA).

## II. GENERAL INSTRUCTIONS

<p><b>A. Any questions or comments should be submitted to:</b></p> <p>Rachel Drewlow, Transportation Planner 701.355.1852 rdrewlow@bismarcknd.gov</p>
<p><b>B. Proposals shall be mailed to:</b></p> <p>Bismarck-Mandan MPO City/County Office Building 221 N 5<sup>th</sup> Street P.O. Box 5503 Bismarck, ND 58506-5503</p>
<p><b>C. All Proposals must be clearly identified and marked as follows:</b></p> <p>Proposal for: 2020 Pavement Conditions and Analysis Report Bismarck-Mandan MPO Firm's Name</p>
<p><b>D.</b> The MPO will consider proposals received up to <b>5:00 PM Central Time April 9, 2020</b>. Six (6) copies of the written proposal and one (1) electronic copy must be received by the deadline. Electronic copies may be sent via flash drive or emailed to rdrewlow@bismarcknd.gov. Proposals received after the deadline will not be considered for an interview. The MPO reserves the right to reject any or all proposals.</p>
<p><b>E. Selection Committee:</b> The Selection Committee will consist of a six(6) person panel; five (5) voters and one (1) moderator. Committee members represent the following entities: MPO, City of Bismarck, City of Mandan, Burleigh County, and Morton County. The MPO project manager will moderate the interviews and provide a tie-breaking vote if neither top ranked consultant has a ND-DBE on their team.</p>
<p><b>F. Invitation for Interview:</b> Based on the strength of the written proposals, three (3) to five (5) consultants will be selected for interviews. Consultants who are awarded an interview will be notified by phone. Consultants not selected for an interview will be notified in writing or by phone.</p>

**G. Interviews:**

The MPO will conduct web-based interviews on May 6-8, 2020. Each consultant is responsible for providing a meeting platform and invitation link. Consultants will be evaluated on both the written proposal and interviews. Consultants will be given forty-five (45) minutes to present their proposals and entertain questions. The consultants will be responsible for managing their interview and allowing time for questions. There will be fifteen (15) minute breaks between interviews.

For more information on selection criteria see Section V: Evaluation Criteria and Interview Process.

**H. Disadvantaged Business Enterprise:**

In the event of a tie for top consultant, positive consideration will be given to proposals which employ a Disadvantaged Business Enterprise (DBE) company. The DBE company must be certified with the North Dakota Department of Transportation (NDDOT). The DBE may be the Prime or Sub-Consulting company and should be identified in the proposal. (Should there be a tie and neither consultant has an ND-DBE, the moderator's score will be used to select the top ranked consultant.)

**I. Selection and Approvals:**

Consultants will be notified of the selection results by phone and formal letter. Approval of the top ranked consultant will be requested of the MPO's Technical Advisory Committee (TAC) and Policy Board.

**J. Contract Negotiations:**

Contract negotiations will begin immediately after Policy Board approval. First, the MPO requires consultants to develop the study's contract. Secondly, the draft contract is reviewed by MPO Staff, local and federal partners, and legal counsel(s). Contract review can take 4-5 weeks and may require iterative revisions. After negotiations, the MPO intends to execute the contract upon staff authority.

Final negotiations will also require submission of:

- 1) Prime Consultant scope of work and fee schedule **not exceeding \$82,000**
- 2) Prime Consultant Certificate of Liability Insurance
- 3) Scope of work and fee schedule for ALL Sub-consultants
- 4) Prime Consultant Indirect Cost Form (blank form will be provided by MPO)
- 5) SFN 60233: Prime Consultant Request to Sublet Form (blank form will be provided by MPO)

### III. CONTENT OF PROPOSALS

**Length:**

The proposal shall be no more than eight (8) pages, numbered, and preferably double sided. (The reverse page side would be page 2.) The cover page, table of contents, and appendix material will not count toward the eight (8) page limit.

**Proposal:**

The consultant's written proposal shall address the following major sections:

1. Description of firm
2. Organizational chart showing project team and general activities
3. Table of key individuals' time-available for project/study
4. Understanding of project and proposed work approach
5. Brief examples of past, pertinent work projects

**Appendix:**

The proposal appendix must include the following items unless noted as 'optional'. The following items will not count toward the eight (8) page limit and may take as many pages as needed.

- Proposed Project Schedule: Proposed schedules may begin as soon as July 1, 2020 and should detail all activities necessary to complete the study. Activities may include but are not limited to:
  - Reconnaissance activities
  - Pavement Condition Collection
  - Steering Committee Meetings

- Documents/Tech Memos for Study Milestones
- Monthly Updates (via telephone or in person) to MPO TAC and Policy Boards
- Draft Report Development and review by MPO and Steering Committee (requires 2-3 weeks)
- Draft Report Review by NDDOT, FHWA, and FTA (requires up to 1 month)
- Technical Staff presentations or Final Presentation to the commissions of each partner jurisdiction
- Final Presentation to the MPO TAC and MPO Policy Board
- Quality Control/Quality Assurance (QC/QA) program: Detail the program that will be used on the project. This (QC/QA) program must identify the team members, their responsibilities, and stages of development at which each is to be responsible.
- Required Qualification Based Selection (QBS) Documents:
  - Signed Proposed Sub-Consultant Request Form (Appendix A)
  - Signed Consultant Self Certification of Government-Wide Debarment and Suspension (Nonprocurement) Form (Appendix B)
- Resumes or list of Personnel: Detail who will be assigned to work on the project (including titles, education, and/or work experience).

**Open Records Disclosure:**

After the selection process, the contents of all proposals will be subject to Open Records Regulations and may be open to inspection by interested parties. Any information that the proposing firm(s) believe to be a trade secret or proprietary information must be clearly identified in the proposal. Any information identified as such may be exempt from disclosure.

**IV: CONTRACT CLAUSES AND OTHER REQUIREMENTS**

**Federal and State Contract Clauses:**

Consultants should be prepared to abide by the necessary State and Federal clauses. These should be included verbatim and unaltered in a potential contract. The clauses can be reviewed in Appendix C: Federal, State and Local Clauses.

**MPO Contract Clauses:**

Consultants should include the following italicized sections unaltered in a potential contract.

*The MPO reserves the right to hold ten percent (10%) of the total contracted invoiced amounts until the MPO has received all of the following to its satisfaction:*

- *Contracted deliverables as described in the RFP and final contract;*
- *Completed tasks as described in the RFP and final contract; and*
- *Satisfactory final product project and/or study*

*If the MPO determines that the progress of the study is not acceptable as measured through the consultant supplied project schedule, which will be an attachment to the signed and approved contract, the MPO reserves the right to terminate the contract with the consultant with a 45-day written notice.*

*The MPO desires continuity of consultant staff throughout the project from the firm chosen. If the consultant replaces key staff and the MPO is dissatisfied with replacement staff, the firm chosen will have 30 days from written notice from the MPO to supply replacement key staff acceptable to the MPO. If the firm chosen fails to supply acceptable replacement staff within the 30-day period, the MPO may cancel the contract.*

Ownership of Work Product: *All work products and copyrights of the contract, which result from the contract, are the exclusive property of NDDOT, with an unlimited license for use by the federal government and its assignees without charge.*

**General Information:**

The Bismarck-Mandan MPO reserves the right to enter into a supplementary agreement to have the selected firm perform any additional work not currently assigned. Additional work will need prior approval from the MPO and NDDOT.

Jurisdictions may elect to evaluate local roadways. Data collection may occur concurrently with the MPO effort, but the

local road effort should be contracted with the jurisdiction directly.

If the contract is terminated prior to completion of the final report, all work completed, shall become the property of the NDDOT, as per the 'Ownership of Work Product' Clause. The final report will be submitted using the following formats and standards, if applicable:

- MS Word/ MS Excel
- Adobe Acrobat (Standard or Compatible)
- NDDOT Data Collection Codes and Procedures
- NDDOT and/or City, as applicable, Drafting Standards
- NDDOT Design Manual
- Chapter 19 NDDOT Survey and Photogrammetry Manual

**GIS Data Requirements:**

Acceptable data formats include ESRI shapefile and file geodatabase. The following is the required projection.

<b>Coordinate System</b>	• State Plane
<b>Horizontal Datum</b>	• NAD 1983 (2011 adjusted)
<b>Vertical Datum</b>	• NGVD88
<b>Zone</b>	• ND South (3302)
<b>Units</b>	• International Feet

Metadata must be FGDC compliant and delivered in .txt format. It is recommended to utilize ArcCatalog to generate the .txt file. The following are required parameters:

- Identification – General
  1. Keywords
  2. Abstract
  3. Purpose
  4. Supplemental information
  5. Native dataset format
- Identification – Status
  1. Progress
  2. Update Frequency
- Identification – Time Period
  1. Current-ness reference
  2. Range of dates: beginning date/end date
- Identification – Citation
  1. Citation title
  2. Originator
  3. Publication date
- Metadata Reference
  1. Metadata date
  2. Contact – who completed the document
  3. Organization
  4. Address
  5. City, State, Zipcode
  6. Telephone
  7. E-Mail
- Data Quality
  1. Attribute accuracy
  2. Positional accuracy – horizontal/vertical
  3. Source information
  4. Process step
- Entity Attribute
  1. Entity Type
  2. Attribute

**V. EVALUATION CRITERIA AND INTERVIEW PROCESS**

The selection process will be completed in accordance with Bismarck-Mandan MPO policies. Written proposals shall address the firm's ability to perform the necessary services in the allotted time with qualified personnel. Selection will be based on the following criteria:

1. Recent, current, and projected workloads of the person and/or firm(s)
2. Ability of professional personnel (staff experience and technical capabilities)
3. Related experience on similar projects
4. Willingness to meet time and budget requirements
5. Project understanding, issues and approach
6. Past Performance

Consultant selection will be based on written proposals along with web-based interviews. All firms not selected will be notified by phone and in writing.

In the event of equally ranked consultants, additional positive consideration will be given to proposals which employ a Disadvantaged Business Enterprise (DBE) company. See Section II: General Instructions for more information.

A final scope of work and price will be negotiated with the successful firm. An agreement will be executed with a single firm. If unable to arrive at an agreement with the top ranked firm, the MPO retains the right to move on to negotiations with the second (then third, etc.) ranked firm. Minor portions of work will be permitted by sub-consultant(s) contracted through the prime consultant.

**Schedule for Contract Development and Final Study Deadline:**

RFP Submittal Deadline	April 9, 2020
Notification for Interviews	April 22-24, 2020
Interviews and Notification of Ranking	May 6-8, 2020
Approval and Notice to Proceed	May 19, 2020
Formal Notification of Firms	May 20-22, 2020
Negotiation of Work Fee and Scope of Work	May – June 2020
Final Project Report & Presentations	No later than December 31, 2020

**VI. REGIONAL CONTEXT AND EXISTING CONDITIONS**

**Local Conditions:**

The Bismarck-Mandan MPO consists of the cities of Mandan, Bismarck, and Lincoln, and the metropolitan portions of Burleigh and Morton County. The climate for the Bismarck-Mandan MPO area is quite varied, consisting of summers where temperatures can reach over 100° F and winters where they can fall to -30° F or lower. The average temperature in January is 14° F and in July it is 72° F. The average annual precipitation is variable with an average of 17.8 inches. An average of 50 inches of snow falls per year typically between October and April. In an average year the frost depth averages about 4.5 feet and the ground remains frozen from approximately December 1 through May 1. The streets are typically cleaned of residual deicing solutions, sand and/or salt in mid-May.

**Past Pavement Collections:**

The last MPO collection of pavement condition occurred in 2012 and evaluated roadways in Bismarck and Mandan. Since that time, the city of Bismarck directed a collection in 2016. The City of Bismarck currently utilizes MicroPAVER® 7 software for their pavement management system. The City of Mandan has had MicroPAVER® in the past and may be interested in purchasing a renewal. Burleigh County, Morton County, and the City of Lincoln currently do not use a computerized pavement management system and do not plan to purchase MicroPAVER® software.

**VII. OBJECTIVE**

This project will include data collection for the MPO’s entire urban functionally classified network. The network consists of approximately 210-225 miles of collector and arterial roadway. The road network should include both directions of travel on all roadways. Approximately one-third of area of each direction of roadway shall be collected at a time. The data shall be collected in accordance with ASTM D6433-09 and be compatible with MicroPAVER® software. The data shall be compatible with the existing jurisdictional GIS systems. Additional analysis will be requested to identify jurisdictional-specific repair programs, which will include timing of repair and cost.

**VIII: STUDY AREA**

The study area includes all arterial and collector roadways on the MPO’s urban functionally classified system. See Figure 1 for map.

NOTE: Local roads may be added as part of a three-way contract with the City of Bismarck. Collection of local road conditions is not eligible for the MPO's federal funding, so the City has allocated a not to exceed budget of \$45,000 for this portion of the project. The City anticipates surveying approximately 130 centerline miles of local roadway, or less depending on cost per mile. The City is expected to cost share on the project's mobilization fee at a rate matching the percentage of local roads in the total project. Any fee or expense resulting from the local road collection should be directly invoiced to the City of Bismarck.

## IX. SCOPE OF WORK

The firm selected shall provide professional services for pavement evaluation which may include, but not be limited to:

1. Project initiation, including:
  - a. Development of a steering committee (with assistance from MPO staff). Steering committee should include jurisdictional staff, MPO staff, and possible state and federal oversight.
  - b. Kick off meeting with the steering committee.
  - c. Coordination with existing geospatial and pavement management systems.
2. Project management
  - a. Activities required to manage the project including staff, equipment, and documentation.
  - b. Lead Steering Committee meetings at appropriate times throughout the project.
  - c. Preparation of progress reports, documenting travel and expense receipts, and preparing and submitting invoices in a timely manner.
  - d. Monthly progress reports to the MPO, the Technical Advisory Committee, and to the Policy Board.
3. Geo-referenced digital pavement data collection, including high resolution downward facing line-scan images and high resolution forward and side facing images at 25 foot intervals.
4. Pavement evaluation including International Roughness Index (IRI) and Pavement Condition Index (PCI).
5. Pavement management software database creation and/or updates, as required, and image viewer software installation and database creation.
6. Linkage of pavement evaluation data and digital images to existing Bismarck, Burleigh County, and Morton County respective GIS systems.
7. Database import into MicroPAVER® pavement management software, possible update of software license (paid at jurisdictional expense), and possible staff training in MicroPAVER®.
8. Analysis of pavement condition scores and development of condition reports. Depending on the need of the jurisdiction, analysis and reports may include:
  - a. Condition report noting pavement scores as a PDF, GIS-shapefile, or similar format. Consultant should provide an ordered list of roadways to improve over the next 5-10 years. List should be based on pavement score and an assumed, generic cost estimate.
  - b. Conditions report noting pavement scores AND additional analysis on longevity of the roadways. Consultant should prioritize roadway improvements for next 5-10 years. This would note which roadway/sections to improve, the year of improvement, and the type of improvement (mill and overlay vs. reconstruction). This would use jurisdiction-specific costs estimates and be constrained by a jurisdiction-specified budget and/or condition target.
9. Provide final presentations. Depending on the need of the jurisdiction, final presentation may include:
  - a. Staff-level technical update robust enough for the city/county staff to address their boards about the report. This is to be given in person or by web-based video conference.
  - b. Commission presentation where the consultant presents by phone or in-person. Possible action item.
  - c. In-person presentations to the MPO TAC and Policy Board for their review and possible approval.
10. Collection, analysis, and reporting of local road conditions for the City of Bismarck (See 'Section VIII: Study Area' for more information.)

## X. PROJECT COMPLETION

### A. Development and Review of Draft Report:

A draft report shall be produced after all recommendations have been developed and approved by the Steering Committee(s). Electronic and/ or paper copies of the draft report shall be provided for the Steering Committee(s), the MPO project manager, NDDOT, FHWA and FTA for their review and comment. All comments from the MPO, NDDOT, FHWA, and FTA shall be addressed to the respective entity's satisfaction prior to development of the final draft and final presentations.

### B. Final Presentations:

The draft report shall be advertised and made available to the public for a minimum of fifteen (15) days before the final presentations.

The consultant will be requested to provide a technical presentation to the staff of the five jurisdictions. This is to be given in person or by a web-based video-conference. Additionally, they shall make a presentation to the Bismarck Board of City Commissioners, the Mandan Board of City Commissioners, the Lincoln City Council, the MPO Technical Advisory Committee and the MPO Policy Board for review and acceptance/approval of the final draft report. Presentations to the jurisdictional governing bodies may be given by phone or in person. Presentation to the TAC and Policy Board shall be given in person. Approval of the final draft report by the MPO Policy Board, and subsequent distribution of study deliverables, will mark the completion of the study.

### C. Final Deliverables:

The final report shall be produced after all comments on the draft report are addressed, final presentations are complete, and the report has been approved by the MPO TAC and Policy Board. A minimum of three (3) paper copies shall be provided of the Bismarck/Burleigh County Report and a minimum of three (3) paper copies shall be provided of the Mandan/ Morton County Report. A pdf-based copy of each report and all appendices shall also be provided. All products are to be delivered to the MPO project manager for dissemination.

## XI: INFORMATION AVAILABLE TO THE CONSULTANT:

The following resources/data/information is available for the study from the Bismarck-Mandan MPO and its partners:

### Available for Download:

1. [Travel Demand Model Review and Socio-Economic Projections Final Report](#) – 2018
2. [MPO 2020-2023 Transportation Improvement Plan](#)
3. [Arrive 2045 \(2020-2045 MTP\)](#) – 2020
4. [Envision 2040 \(2015-2040 LRTP\)](#) – 2015
5. [NDDOT Traffic Operations Manual](#) – 2018
6. [FHWA Traffic Signal Timing Manual](#) – 2008
7. Manual on Uniform Traffic Control Devices for Streets and Highways ([2009 Ed. with Revision # 1 and 2](#)) – 2012

### Available by Direct Request:

1. GIS geodatabase information;
  - a. MPO-wide Centerline Files
  - b. MPO-wide Urban Functionally Classified Roadways
  - c. Land base/Infrastructure data from member jurisdictions
  - d. MPO-wide Colored Digital Orthophotography – 5-inch resolution – 2016
  - e. MPO-wide Digital Elevation Data – 1-foot contours – 2016
2. Bismarck State of the Streets Report including MicroPAVER Technical Documentation (November 2012)
3. Street records including pavement section and width, date paved, and miscellaneous additional design information;
4. Bismarck, Burleigh County, and Mandan street and roadway maintenance project records;
5. Location specific soil information, where available, including geotechnical studies for specific areas.

**Figure 1: MPO Urban Functionally Classified System**

**Appendix A: Proposed Sub-Consultant Request Form**

**Appendix B: Consultant Self Certification of Government-Wide Debarment and Suspension (Nonprocurement)  
Form**

**Appendix C: Federal, State and Local Clauses**

## **Federal Clauses**

## **State and Local Clauses**