

**TO: Bismarck-Mandan Metropolitan Planning Organization
Technical Advisory Committee**

FROM: Rachel Lukaszewski, MPO Executive Director

DATE: March 13, 2023

RE: TAC Meeting

There will be a meeting of the Bismarck-Mandan MPO Technical Advisory Committee on **Monday, March 20, 2023, at 10:00 AM.** The meeting will be held in the Tom Baker Meeting Room of the City/County Building at 221 N 5th Street, Bismarck, ND. The agenda is outlined below.

The City of Bismarck and TAC members are encouraging citizens to provide their comments for public hearing items on the Bismarck-Mandan Metropolitan Planning Organization TAC agenda via email to mpo@bismarcknd.gov. Please include which item number your comment references. It will be sent to the members, as well as placed with the minutes. To ensure your comments are received prior to the meeting, please submit them by 5:00 pm 1 business day prior to the meeting. If you would like to participate via video or audio link for a 3-5 minute comment on a regular agenda public hearing item, please provide your name, agenda item and e-mail address to the above e-mail at least 3 days before the meeting.

Many of the 14 (fourteen) TAC members will attend this meeting in-person but have the option to request a ZOOM invite for remote participation. **Individuals wishing to participate via ZOOM should email contact information to mpo@bismarcknd.gov at least 3 days in advance of the meeting to receive a meeting invite tailored uniquely to them.**

As always, live meeting coverage is available on Government Access Channels 2 & 602HD, Radio Access at 102.5 FM Radio, or stream FreeTv.org and RadioAccess.org. Agenda items can be found online at MPO Technical Advisory Committee.

AGENDA

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Next scheduled TAC meeting is on 4/17/2023. Please call 701-355-1852 with questions. Any individual requiring special accommodations to allow access or participation at the meeting is asked to notify ADA Coordinator, Bismarck-Mandan MPO, PO Box 5503, Bismarck, ND 58506-5503 or complete and submit the Request for Reasonable Accommodations form at <http://www.bismarcknd.gov/DocumentCenter/View/23201> at least five (5) days prior to the meeting.

PROJECTS UPDATE

<u>Project</u>	<u>% Complete</u>	<u>Contracted Completion Date</u>
East Main Avenue Corridor Study	90	06/30/2023
Sunset Drive Corridor Study	89	08/31/2023
Arrive 2050 Forecast/Arrive 2050	13	03/31/2025
2022 Transit Development Plan	50	12/31/2023

Common MPO Acronyms

ATAC: Advanced Traffic Analysis Center	NDDOT: North Dakota Department of Transportation
CPG: Consolidated Planning Grant	RSP: Regionally Significant Project
FHWA: Federal Highway Administration	TDM: Travel Demand Model
FTA: Federal Transit Administration	TIP: Transportation Improvement Plan
MTP: Metropolitan Transportation Plan	UPWP: Unified Planning Work Program

A full list of common MPO acronyms may be accessed online
<https://www.bismarcknd.gov/DocumentCenter/View/37890/MPO-acronyms>



BIS-MAN MPO TECHNICAL ADVISORY COMMITTEE SPECIAL MEETING MINUTES

Tuesday, February 14, 2023
2:00 PM – 3:00 PM

City/ County Building
Blackstead Conference Room – 2nd Floor
221 N Fifth Street
Bismarck, ND 58506

Attendees: TAC Members Dan Schriock, Nick Nustad, Gabe Schell, Rachel Lukaszewski, Andrew Stromme, Justin Froseth, Wayne Zacher, and Dean Schloss. Other Attendees were Mark Berg, Jarek Wigness, Stephen Larson and Kim Riepl.

MPO TAC Members met as noted above to discuss potential uses of the Urban Roads Program FY 2027 Grant Funds. A quorum was present, and a consensus was reached. It was recommended that FY 2027 funding be used to apply for additional funding for three projects (estimated \$4 million to Burleigh County's 66th Street Overpass project, estimated \$4 million to Mandan's 8th Ave NW & 27th St NW project, and estimated \$2.3 million to Bismarck's South Washington St Reconstruction project). Some of this funding may be applied to earlier fiscal years since FY 2027 includes funds from FY 2025 and 2026. TAC and Policy Board will be presented the officially recommended Urban Roads projects for consideration.

Respectfully Submitted,

Stephen Larson
Recording Secretary

APPROVED:

Rachel Lukaszewski, Chair

**BISMARCK-MANDAN METROPOLITAN PLANNING ORGANIZATION
TECHNICAL ADVISORY COMMITTEE
FEBRUARY 21, 2023**

The Bismarck-Mandan Metropolitan Planning Organization (MPO) Technical Advisory Committee (TAC) met on February 21, 2023, at 10:00 a.m. in the Tom Baker Meeting Room, City/County Building, 221 N 5th Street, Bismarck, ND. Rachel Lukaszewski presided.

Members present or participating via Zoom were Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness for Justin Froseth, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Rachel Lukaszewski. Members absent were Ben Ehreth, John Saiki, Dean Schloss, and Natalie Pierce. Member Justin Froseth was present for parts of the meeting but passed his voting power to Jarek Wigness. The Freight Industry Representative membership formerly held by Chuck Peterson is currently vacant.

Others present or participating via Zoom were Stephen Larson and Kim Riepl, Bismarck-Mandan MPO; Mark Berg, City of Bismarck Engineering; Kristen Sperry, Federal Highway Administration (FHWA); Scott Harmstead, Luke Champa and Bill Troe, SRF Consulting; and Adam McGill, KLJ.

MINUTES

Chair Lukaszewski called for consideration of the minutes from January 17, 2023.

MOTION: Mr. Schell made a motion to approve the January 17, 2023 minutes as presented. Mr. Stromme seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the minutes of the January 17, 2023 meeting were approved.

2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM AMENDMENTS

Mr. Larson presented. He explained this month the MPO processed three amendments to the 2023-2026 TIP. The amendments were advertised for the required 15-day comment period, and no public comments were received. Mr. Larson gave a brief overview of the amendments.

The first amendment removes a chip seal coat project on Highway 1806 in Mandan (from south of Fort Lincoln to south of 19th Street SE) from the TIP. This removal is due to notice from the North Dakota Department of Transportation (NDDOT) that the project is now being funded entirely with state funds, and state funds do not need to be shown in the TIP. The second amendment adds a new project to the TIP for calibration work at the Apple Creek Weigh-in-Motion sites, both east-and westbound, on I-94 at about mile marker 165. Finally, the third amendment moves a reconstruction project on 8th Avenue NW in Mandan (from Old Red Trail to 24th Street NW) from funding year 2022 to 2023. This change is not significant enough to require an amendment, but Mr. Larson noted he incorrectly advertised it as an amendment.

Mr. Schell indicated the Weigh-in-Motion sites amendment is a very small project, and he wondered if there is a certain dollar amount a project needs to meet to be considered an amendment. Mr. Larson explained any project that is removed, or new project that is added, to

the TIP in-year is considered an amendment regardless of dollar value. The Weigh-in-Motion sites project is being added due to the addition of a location within the MPO area.

Public Hearing: Chair Lukaszewski opened the public hearing for comments on the proposed amendments. Hearing and seeing no comments, Chair Lukaszewski closed the public hearing.

MOTION: Mr. Stromme made a motion to recommend approval of the 2023-2026 TIP Amendments as presented. Ms. Hughes seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the motion was approved.

URBAN GRANTS PROGRAM SCORING CRITERIA

Ms. Riepl presented on this item. She explained the criteria currently used for scoring Urban Grants Program projects was approved by TAC and Policy Board in 2019. Project scoring is followed to help the MPO meet the federal requirement for performance-based planning. In 2019, goals and objectives from the MPO's Metropolitan Transportation Plan (MTP) were selected to score the various federally funded grant programs the MPO solicits on a regular basis (such as Urban Regional, Urban Roads, and so on). At that time, the Urban Grants Program was new, and it was not certain how long the program would last. Therefore, the same MTP goals used to score the Urban Regional Program were approved for the Urban Grants Program, with the understanding that the scoring would be revisited. Now that several years have passed, the MPO believes the Urban Grants Program goals do not align well with the existing scoring criteria, and so a different set of MTP goals and objectives are being presented for scoring Urban Grants Program projects. Exhibit E shows how the new scoring objectives relate to the objectives NDDOT has established for the program and shows how many points will be assigned to each objective a project achieves during the new scoring process. The MPO is requesting TAC recommend approval of the new scoring criteria and allow it to be applied to the 2025-2026 Urban Grants Program projects that will be presented next on the agenda.

Mr. Schell believes the new scoring criteria more effectively aligns with the intentions of the Urban Grants Program. He indicated he is concerned that some projects may only meet some of the goals and might be scored lower even though they may be good projects which meet the intent of the Urban Grants Program. He asked if scoring the projects is a necessary exercise.

Ms. Riepl said the points assigned to each project do not constitute a ranking. All they are intended to do is demonstrate the MPO is following a performance-based planning process, and that the projects being considered support the goals and objectives of the MTP. Even if a project only meets one MTP objective, it can still be considered to support the MTP.

Mr. Schell expressed concern that the scores could easily influence how a project is perceived and ranked. He would prefer to move away from points, and perhaps instead focus on how many MTP goals a project meets, since he thinks that would be less likely to be misconstrued as a ranking.

Ms. Riepl said if TAC prefers the MPO going forward could omit the scores from the project summary sheet, and instead summarize the projects by the MTP goals and objectives they meet. Ms. Lukaszewski added the MTP goals were instituted to follow federal guidelines. The points and the weights assigned to the points and MTP goals were developed through public input and feedback from the local jurisdictions when the last MTP was produced. The next MTP may yield different priorities, but right now it is helpful to be able to show the federal

government that projects are being selected and scored in an informed way, and to show that the MPO is responsive to the public and stakeholder feedback received during the last MTP update. Changes TAC members would like to make to the MTP goals and objectives should be kept in mind as the MTP update proceeds over the next couple of years.

There was additional discussion between TAC members, and an understanding was reached that MPO staff will de-emphasize the scores attached to Urban Grants Program projects going forward. The MTP goals and objectives will be emphasized when the projects are summarized. The scoring system will otherwise be maintained to help satisfy federal guidelines.

MOTION: Mr. Schell made a motion to recommend approval of the Urban Grants Program projects scoring criteria as presented, with the addition of a request to MPO staff to de-emphasize the project scores going forward. Mr. Stromme seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the motion was approved.

2025-2026 URBAN GRANTS PROGRAM APPLICATIONS

Ms. Riepl presented a summary sheet for the 2025-2026 Urban Grants Program Applications to the board, based on the new scoring criteria that was just approved. The MPO received two applications, one from the City of Bismarck and one from the City of Mandan, for NDDOT's 2025-2026 Urban Grants Program solicitation. NDDOT's deadline for application submittal is March 17. Ms. Riepl gave an overview of the applications.

The Mandan application is for Phase I and Phase II of their downtown reconstruction projects. Each phase is a standalone project that does not depend on funding for the other phases of the overall projects. The application is for the reconstruction of segments of 1st Street NW and connecting avenues in downtown Mandan. There will be pedestrian and beautification elements included and consideration given to reverse angle parking and a potential roundabout if warranted in the design phase. The combined cost for Phases I and II is estimated to be \$8,963,927, with a federal request of \$5,226,783. The City of Bismarck application is for pavement rehabilitation on several segments of Front Avenue, 5th Street, and 3rd Street. Mill and overlay, pedestrian elements, and related improvements would be pursued in this project. The total cost is estimated to be \$3,056,000, and the federal request is \$1,850,000. Both the Mandan and Bismarck applications received the same score, 16.4, and met the same eight MTP goals and objectives. Ms. Riepl noted the project scores can be removed from the summary sheet before presenting to Policy Board, per TAC's recommendation. TAC can recommend approval of the projects to be forwarded to NDDOT for consideration with or without prioritization.

MOTION: Mr. Schell made a motion to recommend approval of the 2025-2026 Urban Grants Projects as presented, without prioritization. Ms. Hughes seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the motion was approved.

REVISED STATE FISCAL YEAR 2024 5310 GRANT APPLICATION

Mr. Larson presented. He explained Section 5310 is the Enhanced Mobility of Seniors and Individuals with Disabilities Program, administered by NDDOT. Bis-Man Transit was

approved to apply for the SFY 2024 5310 Program in December by its board, Policy Board and the Bismarck City Commission. Recently however, NDDOT notified Bis-Man Transit of the opportunity to apply for additional unmatched operating funds under this grant program. If awarded, these funds would cover a portion of Transit's early morning demand response service expenses. Transit is requesting approval to submit a revised application to NDDOT that will include a request for \$20,000 in federal funds for their early morning demand response service, with no local share required should these funds be awarded. The eight other projects previously applied for will remain entirely unchanged. The Transit Board approved this revised application, and the Bismarck City Commission approved it at their February 14 meeting.

MOTION: Mr. Stromme made a motion to recommend approval of the revised SFY 2024 5310 Grant Application as presented. Mr. Nustad seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the motion was approved.

2023 ORTHO-CONTOUR PROJECT

Ms. Lukaszewski presented. The Ortho-Contour project is a flyover of the land area the MPO covers, taking an aerial picture of the land and collecting the topography of the land. The selection committee recently interviewed two consultants for the project, Ayres and 95 West Aerial Mapping. It was a close vote, but the selection committee selected 95 West as the preferred consultant for the project. MPO staff is requesting TAC recommend approval of 95 West, which will allow the MPO to begin and execute contract negotiations for the project. Ms. Lukaszewski also shared the Qualifications Based Selection (QBS) Letter, which is the letter the MPO sends to NDDOT to certify the correct processes were followed in selecting a consultant. The QBS Letter does not need to be approved, but it is signed by the Policy Board Chair.

MOTION: Mr. Wigness made a motion to recommend approval of 95 West as the 2023 Ortho-Contour Project consultant, as presented. Mr. Stromme seconded the motion and with Dan Schriock, Deidre Hughes, Gabe Schell, Andrew Stromme, Jarek Wigness, Nick Nustad, Mitch Flanagan, Wayne Zacher, and Chair Lukaszewski voting in favor, the motion was approved.

EAST MAIN AVENUE CORRIDOR STUDY

Mr. Harmstead provided a study update for SRF. SRF is getting close to completing the study. The final study review committee meeting is scheduled for the end of February, where the study report will be presented. On March 6, the final public meeting will be held in the First-Floor Conference Room at the City/County Office Building in Bismarck. SRF created a survey for attendees of the last set of public meetings late last year, and the survey was posted online for some time after that. Over one hundred survey responses were collected, but SRF noticed that most of the responses were from individuals who were driving the corridor. To collect responses from individuals who might not have the option of driving the corridor, SRF contacted several social services organizations adjacent to the corridor, and got over sixty additional surveys completed through those contacts.

In total, one hundred and seventy-eight surveys were completed, and Mr. Harmstead indicated this is a positive for this kind of study. About eighty percent of the respondents live in

Bismarck, and about seventy percent touch the corridor daily or several times weekly. The primary uses for the corridor based on the responses are shopping/errands and work-related commuting. Mr. Harmstead noted the corridor is used by individuals to get to social services, but the survey did not have that as an option this time around. The survey broke the corridor into three segments, one from 7th Street to 12th Street, one from 12th Street to Airport Road, and one from Airport Road to 26th Street. Respondents prioritized vehicular mobility and safety throughout the corridor, and pedestrian access was another high priority, particularly on the western side of the corridor. The 7th through 12th Street segment had more emphasis on redevelopment, corridor image, and on-street parking than the other segments. Freight and property access was noted more on the eastern section of the corridor.

SUNSET DRIVE CORRIDOR STUDY

Mr. McGill provided a study update for KLJ. KLJ held the fourth steering committee meeting February 2, where the concepts KLJ will present at the final public input meeting were discussed. The final public input meeting will be held at 5 p.m. on March 9 at Mandan High School, and KLJ is pursuing multiple advertising methods to promote the meeting. The future conditions and alternatives analysis are complete, and KLJ is working on the draft final report.

ARRIVE 2050 FORECAST/ARRIVE 2050 & 2050 FORECAST GROWTH SCENARIOS

Mr. Champa provided a study update for SRF. HDR is the primary consultant for the study, but SRF is leading the work on the Arrive 2050 Forecast portion of the project. Mr. Champa went through a presentation detailing SRF's work on the Arrive 2050 Forecast and made the board aware of the preferred population growth scenarios being considered for the MPO area. The Arrive 2050 Forecast projects population, households, and employment for incorporation into the Travel Demand Model (TDM). The TDM predicts traffic and is used to inform the MTP development (Arrive 2050). SRF has incorporated data, prior studies, and focus group meetings with local stakeholders to inform their projections and develop growth scenarios through the year 2050. Based on the feedback received, the MPO region is expecting stable, steady growth over the next twenty-five years. This type of projection needs to be revised regularly, since it is less accurate over time, and that is why the TDM and MTP are both updated every five years.

Mr. Champa referred to the low, medium, and high growth scenarios for the MPO area, and for each of the jurisdictions within the MPO area (Burleigh County, Morton County, Lincoln, Mandan, and Bismarck). Slightly higher rates are expected for Morton County and Mandan, versus Bismarck and Burleigh County. Lincoln has the highest growth percentages projected due to a lower population base. The low growth scenario for the MPO area overall is 0.9%, the medium is 1.1%, and the high is 1.4%. The steering committee for the Arrive 2050 Forecast recommends the medium growth scenario as the preferred scenario. The growth scenarios will be brought back to TAC and Policy Board in March for selection of a preferred growth scenario, which will then be incorporated into the TDM. SRF also will hold workshops for local jurisdictions to identify growth areas and assigned future households and jobs.

2022 TRANSIT DEVELOPMENT PLAN (TDP)

Mr. Troe provided a study update for SRF. SRF is currently focusing on two areas: Bis-Man Transit funding and Transit's organizational structure. Transit has received additional federal dollars through COVID related funding, but this funding is coming to an end. Apart from

this additional funding, Transit's operational costs typically exceed revenue, and so this TDP is closely examining the different services Transit provides and ways to correct the funding shortfall. Mr. Troe referred to Exhibit I and the third TDP newsletter. The newsletter breaks down the annual costs of Transit's paratransit services, versus the costs of the additional after-hours services Transit provides outside of their regular paratransit hours. There may be opportunities to suggest additional local funding be provided for the after-hours service Transit is providing, since this service is outside of what is federally required and reducing service has not received local support in the past.

SRF is also looking at ways Transit's organizational structure could be adjusted. Options include bringing more responsibility for Transit into a City Department, whether a new or existing Department, or developing a Transit Authority to manage service in the region. The current contractor relationship, where Bis-Man Transit hires a contractor to operate the transit service, appears to be preferred regardless of what other organizational options are pursued.

OTHER BUSINESS

Recreational Trails Program (RTP) Solicitation Update

Ms. Riepl said she was notified by North Dakota Parks and Recreation (NDPRD) of their impending solicitation for next Fiscal Year's RTP. The solicitation will open on April 3 and close April 28. Local jurisdictions need MPO review and approval of their applications, which can occur after submittal to NDPRD. More information will be provided to TAC and Policy Board as it becomes available.

Long Distance Rail Study

Ms. Riepl said there is a study being conducted by the Federal Railroad Administration (FRA). FRA is studying Amtrak's long-distance rail daily service around the country, and the study will evaluate providing additional long-distance routes or reinstating routes that previously existed. The line that formerly ran through Bismarck was removed many years ago, but there has been momentum recently to revive it. Ms. Riepl and Ms. Lukaszewski have been attending stakeholder meetings for the study, which is scheduled to be completed this fall. FRA will be posting items for feedback on their website and will be requesting feedback before March 17. Mr. Stromme asked Ms. Riepl to email TAC when FRA provides additional information.

ADJOURNMENT

There being no further business, the meeting was adjourned at 11:32 a.m., with the next scheduled meeting to take place on March 20, 2023, at 10:00 a.m. in the Tom Baker Meeting Room in the City/County Building, 221 N 5th St, Bismarck.

Respectfully Submitted,

Stephen Larson
Recording Secretary

APPROVED:

Rachel Lukaszewski, Chair

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March 20-21st, 2023Re: **Urban Roads Program**

Two applications have been submitted; one(1) from the City of Bismarck and one(1) from the City of Mandan. The MPO and its member jurisdictions met with representatives from NDDOT to discuss the FY27 Urban Roads Program and available funding for the BMMPO area for FY27. Based on the discussion and the consensus reached, staff recommends approval of Mandan's 27th Street & 8th Ave reconstruction project as the #1 Ranked project to be promoted as the highest priority project for FY27. Staff further recommends approval of the Bismarck project as a second-ranked priority, pending availability of additional Federal funding.

MTP Rank	Jurisdiction	Type	Location & Project Description	Total Cost / Federal Cost	MTP Consistent
1	Mandan	Reconstruction	8th Ave NW (24th St to 27th St) & 27th Street NW (8th Ave to ND Hwy 1806): Asphalt reconstruction to include shared left turn lane, some storm sewer replacement, street lighting and multi-use trail on south side of 8th. 2,800LF	6,000,000/ \$4,046,500	Yes
2	Bismarck	Reconstruction	Yegen Rd – Hagen Av to ND Hwy 1804 (8,850 LF) / 12th St – Santa Fe to Burleigh Av (4,500 LF) / Burleigh Av – Tavis Rd to Washington St. (5,330 LF): Mill & Overlay. (Total length 19,680 LF = 3.73 miles)	\$1,960,000/ \$1,568,000	Yes

//KLR Mar 2023

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PROJECT SCOPING WORKSHEET

DATE: March 7, 2023

PRIORITY# 2027-01

City: Mandan

Street: 8th Ave. NW (24th Street to 27th Street) and 27th Street NW (8th Avenue to 1806)

County: Length: 2,800 feet

Proposed Improvement: Road reconstruction

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
0	1,000,000	0	0	5,000,000	0	0	6,000,000

Present Road: Surface Width? 22'
 Surface Type? Asphalt

On Street Parking Allowed? N/A Present: (No) One Side Both Sides Angle Parallel
 Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements			
ADT Present: 1,690	Yr: 2022	Travel Way Width:	12'/lane
ADT Design: 5,720 (5%)	Design Yr. 2047	No. of Lanes:	3
Design Speed: 25 mph			
Maximum Curve: N/A		Roadway Width	40'
Maximum Grade: approx. 4%			

Right of Way	
Will Additional ROW or easement be acquired? Not expected	ROW acquisition by: City DOT
Has any ROW easements been acquired since 7-1-72: Assume so with original plat.	ROW condemnation by: City DOT
Est. No. of occupied family dwelling to be displaced? None	
Est. No. business to be displaced? None	

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Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): No

Will there be any impacts to 4(f) or 6(f) properties: No

Airports: N/A

Public Hearings: Two already held as part of original project scope. Expect more as we move forward in planning for this project.

Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex

Transportation Enhancements: Reconstructed Urban Road

Intermodal: N/A

Pedestrian Needs: Multi-use path planned on east side of 8th and south side of 27th.

Railroads Crossings						
RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
N/A						

Purpose and Need Statement For Regional Projects

For regional projects the cities, *in cooperation with NDDOT district offices*, will be asked to submit a Purpose and Need Statement for each regional project proposed.

The Purpose and Need Statement should be approximately two pages in length which address the following issues:

1. When was the current street section built. Has there been any additional maintenance to the street section.

Late 70s. Many patches in recent years to keep drivable.
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes.

One driving lane in each direction, no turning lanes.
3. What is the condition of the pavement section.

The pavement is asphalt pavement. It is in very bad condition. It is nearly undrivable and would be without annual patching.
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous

patching or rutting.

Yes, all of these categories of deterioration are evident.

- B. If the pavement section is concrete, is there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

N/A

4. How are the existing geometrics of the roadway?

Poor. For 8th Avenue, it was decided when originally constructed to build half an urban road. There is curb and gutter and sidewalk on the west side that are both in poor shape. The east side ends at the crown as the plan was apparently to complete the east side as urban too, sometime in the future. That never materialized. For 27th Street, the geometry is a full, but relatively narrow, rural road section.

5. Are there any access points to adjoining properties that present a special concern?

There are many residential driveways that will need to be considered during construction.

6. Are there any existing sidewalks or shared use path in place?

8th Avenue exists with a sidewalk on the west side. 27th Street exists with a multi-use trail on the south side.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

Minimal storm sewer exists. More storm sewer is planned with this project.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

Yes. We plan to replace the existing watermain between 24th Street and 27th Street.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

There are yard lights consistently in the yards on the west side of 8th Avenue. There is no street lighting along 27th Street. We would plan to install all new with this project.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

No traffic signals exist nor are anticipated. No particularly high accident rate intersections. A shared left turn lane is planned for the corridor.

Remarks:

Approved for submission at the March 7th, 2023 Mandan City Commission meeting.

City Engineer: Justin Fozzetta

Date: 3-7-2023

District Engineer: N/A

Date: _____

Note: Please attach a map showing location and extent of the project.



URBAN REGIONAL & URBAN ROADS PROJECT SCOPING WORKSHEET

DATE: 3/10/23

PRIORITY# _____

Regional: Y/N N Urban Roads: Y/N YCity: BismarckStreet: S 12th St – Santa Fe to Burleigh Av, Yegen Rd –
Hagen Av to ND 1804, & Burleigh Av – Tavis Rd to
Washington StCounty: BurleighLength: 12th St – 4,500LF Yegen Rd – 9,850 LF, -
Burleigh Av – 5330 LF = 19,680 LF/3.73
milesProposed Improvement: Mill 1" and Overlay 2", costs below include federal (\$1,568,000) and
local match (\$392,000)

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non- Participating	Total
0	0	0	0	1,960	0	0	1,960

Present Road: Surface Width? 24'(all)Surface Type? Asphalt (all)On Street Parking Allowed? No (all) Present: (No) One Side Both Sides Angle Parallel
Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements	
ADT Present: <u>12th St – 3035, Yegen Rd – 3820, Burleigh Av - 3820</u> Yr: <u>2022</u>	
Travel Way Width : <u>24'</u>	
ADT Design: _____ Design year _____	No. of Lanes: _____ Two _____
Design Speed: _____ 55 _____	Roadway Width: _____ 24' _____
Maximum Curve: _____	Min. R/W Width: _____
Maximum Grade: _____	

Right of Way

Will Additional ROW or easement be acquired? No ROW acquisition by: City DOT
 Has any ROW easements been acquired since 7-1-72: No ROW Condemnation by: City DOT
 Est. No. of occupied family dwelling to be displaced? 0
 Est. No. business to be displaced? None

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources):
None

Will there be any impacts to 4(f) or 6(f) properties:

No

Airports: No Public Hearings:

No

Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex

Transportation Enhancements: None

Intermodal: None

Pedestrian Needs: None - Rural

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection

Purpose and Need Statement:

It is estimated that by 2027 these sections of roadway (12th St, Yegen Rd, & Burleigh Av) will need to have mill and overlay to maintain the structural integrity of the pavement before it falls into a state of disrepair.

Existing Conditions:

- When was the current street section built? Has there been any additional maintenance to the street section?
Varies
- How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?
These roadway sections consist of a 2-lane roadway section with little or no shoulder.

3. What is the condition of the pavement section?
- A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting?
 - B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.
- 2021 PCI scores – 12th Street 68.94, Yegen Road (North to South) 50.94, 72.94, 73.94, S. Burleigh Avenue (East to West) 63.94, 73.94, 74.94
-
4. Any existing geometric concerns?
- None
-
5. Are there any access points to adjoining properties that present a special concern?
- None
-
6. Are there any existing sidewalks or shared use path in place?
- No
-
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
- Rural Ditch section roadway
-
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
- NA
-
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
- NA
-
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
- NA
-

Remarks:

The request for this project is based on the pavement condition. According to the City of Bismarck's Pavement Management System score for these sections of roadway. These sections of roadway should be milled and overlaid by 2027 when the PCI value is predicted to be 59. This would be the ideal time to mill and overlay the roadway before it falls into a state of disrepair and needing to be reconstructed. The City of Bismarck has identified a roadway with a PCI value of 55 and lower to be reconstructed.

Traffic operations and capacity of this corridor is adequately met by the current geometrics. No additional turning lanes are needed, and traffic control devices are sufficient to meet traffic needs.

Existing city underground infrastructure is adequate and does not require any upgrading. The intersection of Washington Street and Burleigh Avenue is the only lighting on any of these sections of roadway and will be addressed with the S Washington Street reconstruction project (AC-NHU-1-981(137)).

City Engineer: 

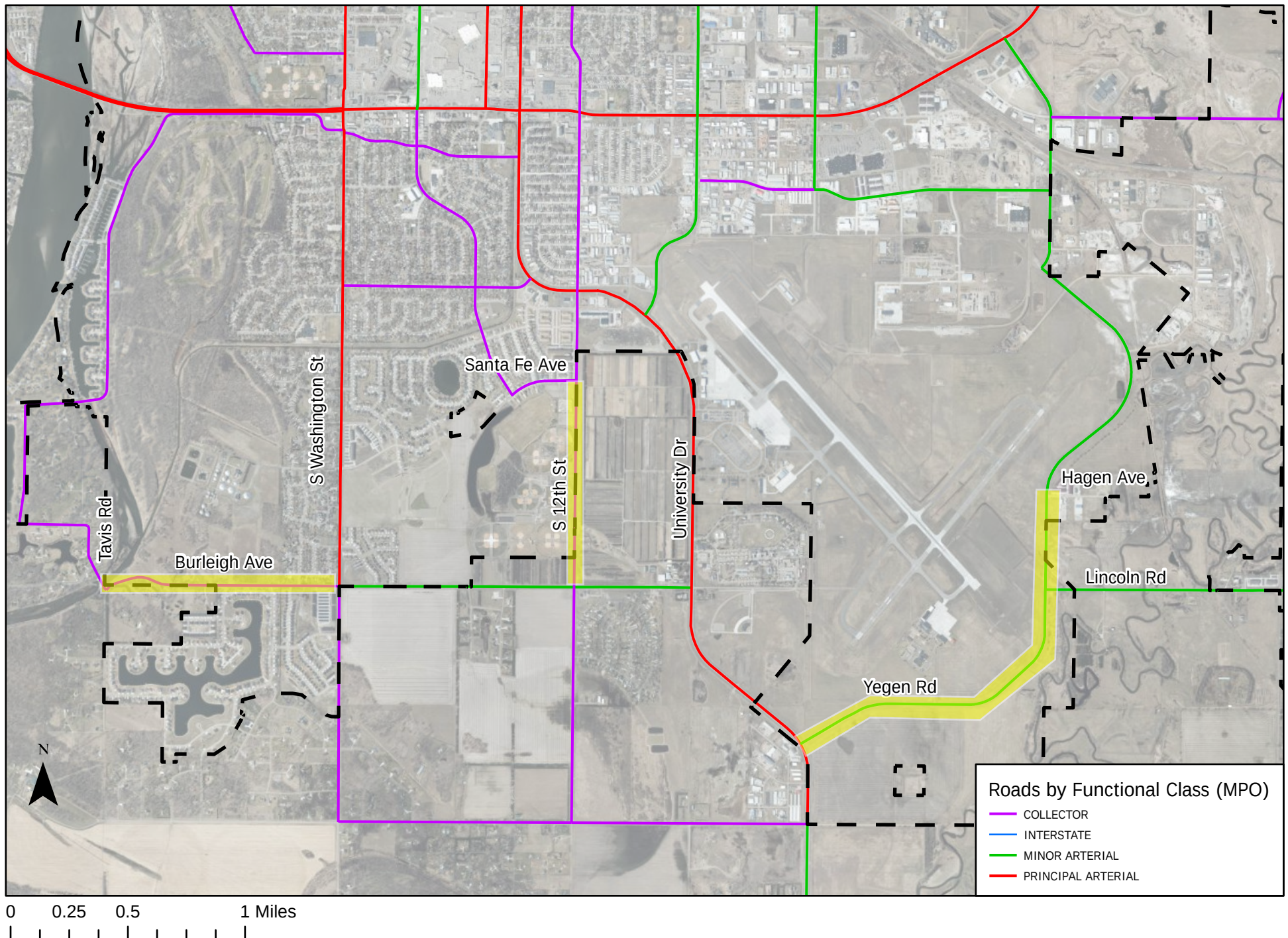
Date: 3/10/23

District Engineer: N/A

Date: _____

Note: Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.

Proposed Urban Roads Pavement Rehab Projects




Yegen Road 9,580 LF of 1" Mill / 2" Overlay

(Hagen Ave. to University Dr.)

202-4.1	Unclassified Excavation	CY	200.00	\$20.00	\$4,000.00
302-4.3	Blended Base	Ton	300.00	\$35.00	\$10,500.00
401-6.23	AC Superpave (FAA43)	Ton	3,300.00	\$103.00	\$339,900.00
401-6.33	AC Patch (FAA43)	Ton	350.00	\$145.00	\$50,750.00
402-4.2	Bituminous Tack Coat	Gal	2,980.00	\$2.80	\$8,344.00
403-4.1	Bituminous Seal Coat	SY	29,805.00	\$3.50	\$104,317.50
404-4.1	Milling Pavement Surface	Ton	2,325.00	\$26.00	\$60,450.00
405-8.2	Rubberized Asphalt Sealant	LF	28,740.00	\$0.70	\$20,118.00
SP-	4" Epoxy Pvmt Mrkng	LF	22,000.00	\$2.00	\$44,000.00
SP-	8" Epoxy Pvmt Mrkng	LF	280.00	\$4.00	\$1,120.00
SP-	24" Epoxy Pvmt Mrkng	LF	25.00	\$12.00	\$300.00
SP-	MSG Epoxy Pvmt Mrkng	SF	96.00	\$12.00	\$1,152.00
1211-4.1	Traffic Control	EA	1.00	\$15,000.00	\$15,000.00
SP-	Fog Seal	GAL	1,916.00	\$0.65	\$1,245.40

\$661,196.90
Work by others

Signs	LS	1.00	2,550.00	\$2,550.00
Soil Analysis / Geotech	LS	1.00	2,960.00	\$2,960.00

\$5,510.00

Projected Estimate Total	\$666,707
Inflation	10.00%
2027 Construction Cost	\$976,126


S. 12th Street 4,500 LF of 1" Mill / 2" Overlay
(Santa Fe Ave. to Burleigh Ave.)

202-4.1	Unclassified Excavation	CY	50.00	\$20.00	\$1,000.00
302-4.3	Blended Base	Ton	50.00	\$35.00	\$1,750.00
401-6.23	AC Superpave (FAA43)	Ton	1,700.00	\$103.00	\$175,100.00
401-6.33	AC Patch (FAA43)	Ton	100.00	\$145.00	\$14,500.00
402-4.2	Bituminous Tack Coat	Gal	1,500.00	\$2.80	\$4,200.00
403-4.1	Bituminous Seal Coat	SY	15,000.00	\$3.50	\$52,500.00
404-4.1	Milling Pavement Surface	Ton	720.00	\$26.00	\$18,720.00
405-8.2	Rubberized Asphalt Sealant	LF	1,500.00	\$0.70	\$1,050.00
SP-	4" Epoxy Pvmr Mrkng	LF	12,000.00	\$2.00	\$24,000.00
SP-	24" Epoxy Pvmr Mrkng	LF	15.00	\$12.00	\$180.00
1211-4.1	Traffic Control	EA	1.00	\$12,000.00	\$12,000.00
SP-	Fog Seal	GAL	1,760.00	\$0.65	\$1,144.00
					\$306,144.00

Work by others

Signs	LS	1.00	2,550.00	\$2,550.00
Soil Analysis / Geotech	LS	1.00	2,960.00	\$2,960.00
				\$5,510.00

Projected Estimate Total	\$311,654
Inflation	10.00%
2027 Construction Cost	\$456,293



Burleigh Ave. 5,330 LF of 1" Mill / 2" Overlay

(Tavis Rd. to S. Washington St.)

202-4.1	Unclassified Excavation	CY	50.00	\$20.00	\$1,000.00
302-4.3	Blended Base	Ton	50.00	\$35.00	\$1,750.00
401-6.23	AC Superpave (FAA43)	Ton	2,015.00	\$103.00	\$207,545.00
401-6.33	AC Patch (FAA43)	Ton	100.00	\$145.00	\$14,500.00
402-4.2	Bituminous Tack Coat	Gal	1,780.00	\$2.80	\$4,984.00
403-4.1	Bituminous Seal Coat	SY	17,770.00	\$3.50	\$62,195.00
404-4.1	Milling Pavement Surface	Ton	860.00	\$26.00	\$22,360.00
405-8.2	Rubberized Asphalt Sealant	LF	1,780.00	\$0.70	\$1,246.00
SP-	4" Epoxy Pvmt Mrkng	LF	14,000.00	\$2.00	\$28,000.00
SP-	24" Epoxy Pvmt Mrkng	LF	15.00	\$12.00	\$180.00
1211-4.1	Traffic Control	EA	1.00	\$10,000.00	\$10,000.00
SP-	Fog Seal	GAL	1,760.00	\$0.65	\$1,144.00
					\$354,904.00

Work by others

Signs	LS	1.00	2,550.00	\$2,550.00
Soil Analysis / Geotech	LS	1.00	2,960.00	\$2,960.00
				\$5,510.00

Projected Estimate Total	\$360,414
Inflation	10.00%
2027 Construction Cost	\$527,682

TAC and Policy Board Handout

March 20-21st, 2023Re: **Urban Regional Program**

Total of five (5) projects were submitted: two (2) from the City of Mandan and three (3) from City of Bismarck. The projects were scored by MPO staff against MPT Objectives. Points will be provided to the Prioritization Committee for information during their prioritization process which will take place March 15, 2023. The rankings of the Prioritization Team will be provided at the Board meetings. The TAC and Policy Board can accept, change or deny the prioritization of the Urban Regional Program.

Committee Rank	Jurisdiction	Type	Location: Project	Total Cost / Federal	MTP Objectives Scoring	Consistent with MTP? (Generally; Projected – Yr Range; Constrained – Yr Range)
TBD	Mandan	Maintenance	6th Ave SE Railroad Underpass: Road/ underpass reconstruction, first priority for city (900 ft)	6,000,000 / 4,800,000	11.948/ 18.698	Yes - Generally
TBD	Mandan	Maintenance	1806 South (N Woodland Dr. to 19th St SE): Mill and overlay, second priority for city (6,000 feet)	1,050,000 / 840,000	11.948/ 18.698	Yes - Generally
TBD	Bismarck	Reconstruction/ Widening/ Other	Environmental Documents and Widening of State Street/ US 83 (Calgary Ave to 57th Ave): Prepare env. documents and reconstruct to 6-lanes/urban section with median. Possible to increase capacity with widening and not urbanization at lesser cost. Current estimate includes full reconstruction (8000 ft/ 1.5 miles)	22,200,000/ 17,760,000	14.198/18.698	Yes - Generally
TBD	Bismarck	Other	Sign Replacement: Replace all non-compliant highway signs on the regional highway system throughout city of Bismarck (US 83, ND 810, ND 1804, Main Ave/ I-94 Bus)	250,000 / 200,000	11.948/18.698	Yes - Generally
TBD	Bismarck	Other	7th St and 9th St BNSF RR Underpasses: Request is for preliminary engineering to evaluate possible cost-effective solutions to remedy current deficiencies. One million dollars is included in cost estimate for construction costs (.3 miles)	1,300,000/ 1,040,000	10.748/18.698	Yes - Generally

//KLR MAR 2023

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PROJECT SCOPING WORKSHEET

DATE: August 11, 2022
 PRIORITY# 2027-01
 City: Mandan Street: 6th Avenue SE Railroad Underpass
 County: Length: 900 feet
 Proposed Improvement: Road reconstruction

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
0	1,000	0	0	5,000	0	0	6,000

Present Road: Surface Width? 65'
 Surface Type? Concrete

On Street Parking Allowed? N/A Present: (No) One Side Both Sides Angle Parallel
 Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements			
ADT Present:	Yr: 2019	Travel Way Width:	12'/lane
11,560			
ADT Design:	Design Yr.	No. of Lanes:	5
24,204 (3%)	2047		
Design Speed: 25			
mph			
Maximum Curve:		Roadway Width	65
N/A			
Maximum Grade:			
approx. 10%			

Right of Way	
Will Additional ROW or easement be acquired?	ROW acquisition by: City DOT
Possibly	
Has any ROW easements been acquired since 7-1-72:	ROW condemnation City DOT
Assume so.	by:
Est. No. of occupied family dwelling to be displaced?	
None	
Est. No. business to be displaced?	
None	

Impacts	
Will there be any additional Impacts (Cultural and Environmental Resources):	Not Expected
Will there be any impacts to 4(f) or 6(f) properties:	Not Expected
Airports: N/A	Public Hearings: Expected
Environmental Classification (Cat-Ex, EA, EIS):	Cat-Ex

Transportation Enhancements:	Reconstructed roadway under railroad underpass
Intermodal:	N/A
Pedestrian Needs:	Reconstructed pedestrian facilities under railroad underpass.

Railroads Crossings						
RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	1	Underpass Crossing	Many	Urban	Grade separated (R.R. Bridge)	Grade separated (R.R. Bridge)

Purpose and Need Statement For Regional Projects

For regional projects the cities, *in cooperation with NDDOT district offices*, will be asked to submit a Purpose and Need Statement for each regional project proposed.

The Purpose and Need Statement should be approximately two pages in length which address the following issues:

1. When was the current street section built. Has there been any additional maintenance to the street section.

1980s. There is currently (2022) a concrete pavement repair project to superficially address. This project would address drainage and structure in addition.
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes.

Five lanes. Southbound is two driving lanes. Northbound becomes two turning lanes and a through driving lane.
3. What is the condition of the pavement section.

Fair to poor.
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting.
 - B. If the pavement section is concrete, is there any broken slabs,

faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

4. How are the existing geometrics of the roadway?

Adequate.

5. Are there any access points to adjoining properties that present a special concern?

No

6. Are there any existing sidewalks or shared use path in place?

Yes. Pedestrian facilities on both sides.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

The existing storm and water conveyance system is poor. This is the primary reason for the project, poor water and groundwater conveyance has left this segment of road full of water and ice in the winter and accelerated deterioration.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

Not anticipated with this project.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

The city uses LEDs. There may be a need to replace some.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

Traffic signals exist just north of the underpass. Expected that traffic capacity will be analyzed during design.

Remarks:

Approved at the August 16, 2022 Mandan City Commission meeting.

City Engineer: Justin Forest

Date: October 14, 2022

District Engineer: Lay Lang

Date: 10/17/22

Note: Please attach a map showing location and extent of the project.



PROJECT SCOPING WORKSHEET

DATE: September 14, 2022
 PRIORITY# 2027-02
 City: Mandan Street: 1806 South from N Woodland Dr. to 19th St SE
 County: Morton Length: 6,000 feet
 Proposed Improvement: Mill and overlay of road.

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
0	0	0	0	875	0	175	1,050

Present Road: Surface Width? 40'
 Surface Type? Asphalt

On Street Parking Allowed? Present: (No) One Side Both Sides Angle Parallel
 Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements			
ADT Present: 10,910 (2019)	Yr.: 2023	Travel Way Width:	12'/lane
ADT Design: 19,131 (at 3% annual growth)	Design Yr.: 2038	No. of Lanes:	2
Design Speed: 40 mph			
Maximum Curve: N/A		Roadway Width:	40'
Maximum Grade: approx. 10%			

Right of Way	
Will Additional ROW or easement be acquired? No	ROW acquisition by: City DOT
Has any ROW easements been acquired since 7-1-72: Undetermined.	ROW condemnation by: City DOT
Est. No. of occupied family dwelling to be displaced? None	
Est. No. business to be displaced? None	

Impacts	
Will there be any additional Impacts (Cultural and Environmental Resources):	Not Expected
Will there be any impacts to 4(f) or 6(f) properties:	Not Expected
Airports: N/A	Public Hearings: Expected
Environmental Classification (Cat-Ex, EA, EIS):	Cat-Ex
Transportation Enhancements:	Reconstructed roadway
Intermodal:	N/A
Pedestrian Needs:	None.

Railroads Crossings						
RR Name	No. Xing s	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
N/A						

Purpose and Need Statement for Regional Projects

For regional projects the cities, *in cooperation with NDDOT district offices*, will be asked to submit a Purpose and Need Statement for each regional project proposed.

The Purpose and Need Statement should be approximately two pages in length which address the following issues:

1. When was the current street section built. Has there been any additional maintenance to the street section.

Paved in 1958. Patching in 1989 and 1992. In 1997, a reconstruct from Heart River Bridge to south of 19th Street. There is currently (2022) a concrete pavement repair project on 1806 South that doesn't include repairing asphalt pavement in the project location.
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes.

Two Lanes. One lane each Southbound and Northbound.
3. What is the condition of the pavement section.

North of Heart River Bridge the pavement is in fair to poor condition with many transverse and longitudinal cracks and patches. South of Heart River Bridge, pavement is fair with many transverse and longitudinal cracks and some rutting.
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting.
 - B. If the pavement section is concrete, is there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.
4. How are the existing geometrics of the roadway?

Adequate.
5. Are there any access points to adjoining properties that present a special concern?

No

6. Are there any existing sidewalks or shared use path in place?

Yes. Pedestrian facilities on west side.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

The existing storm and water conveyance system is fair.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

Not anticipated with this project.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

The city uses LEDs. Streetlights will not be replaced for this section of repairs.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

There are no traffic signals within the scope of this repair.

Remarks:

Approved at the September 20, 2022 Mandan City Commission meeting.

City Engineer: Justin Forest

Date: October 14, 2022

District Engineer: Lay G. Gant

Date: 10/17/22

Note: Please attach a map showing location and extent of the project.

1806 South to 19th St SE



PROJECT SCOPING WORKSHEET

DATE: August 11, 2022
 PRIORITY# 2027-01
 City: Mandan Street: 6th Avenue SE Railroad Underpass
 County: Length: 900 feet
 Proposed Improvement: Road reconstruction

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
	1,000			5,000			6,000

Present Road: Surface Width? 65'
 Surface Type? Concrete

On Street Parking Allowed? N/A Present: (No) One Side Both Sides Angle Parallel
 Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements			
ADT Present:	Yr: 2019	Travel Way Width:	12'/lane
11,560			
ADT Design:	Design Yr.	No. of Lanes:	5
24,204 (3%)	2047		
Design Speed: 25			
mph			
Maximum Curve:		Roadway Width	65
N/A			
Maximum Grade:			
approx. 10%			

Right of Way	
Will Additional ROW or easement be acquired?	ROW acquisition by: City DOT
Possibly	
Has any ROW easements been acquired since 7-1-72:	ROW condemnation City DOT
Assume so.	by:
Est. No. of occupied family dwelling to be displaced?	
None	
Est. No. business to be displaced?	
None	

Impacts	
Will there be any additional Impacts (Cultural and Environmental Resources):	Not Expected
Will there be any impacts to 4(f) or 6(f) properties:	Not Expected
Airports: N/A	Public Hearings: Expected
Environmental Classification (Cat-Ex, EA, EIS):	Cat-Ex

Transportation Enhancements:	Reconstructed roadway under railroad underpass
Intermodal:	N/A
Pedestrian Needs:	Reconstructed pedestrian facilities under railroad underpass.

Railroads Crossings						
RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	1	Underpass Crossing	Many	Urban	Grade separated (R.R. Bridge)	Grade separated (R.R. Bridge)

Purpose and Need Statement For Regional Projects

For regional projects the cities, *in cooperation with NDDOT district offices*, will be asked to submit a Purpose and Need Statement for each regional project proposed.

The Purpose and Need Statement should be approximately two pages in length which address the following issues:

1. When was the current street section built. Has there been any additional maintenance to the street section.

1980s. There is currently (2022) a concrete pavement repair project to superficially address. This project would address drainage and structure in addition.
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes.

Five lanes. Southbound is two driving lanes. Northbound becomes two turning lanes and a through driving lane.
3. What is the condition of the pavement section.

Fair to poor.
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting.
 - B. If the pavement section is concrete, is there any broken slabs,

faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

4. How are the existing geometrics of the roadway?

Adequate.

5. Are there any access points to adjoining properties that present a special concern?

No

6. Are there any existing sidewalks or shared use path in place?

Yes. Pedestrian facilities on both sides.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

The existing storm and water conveyance system is poor. This is the primary reason for the project, poor water and groundwater conveyance has left this segment of road full of water and ice in the winter and accelerated deterioration.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

Not anticipated with this project.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

The city uses LEDs. There may be a need to replace some.

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

Traffic signals exist just north of the underpass. Expected that traffic capacity will be analyzed during design.

Remarks:

Approved at the August 16, 2022 Mandan City Commission meeting.

City Engineer: Justin Forest

Date: October 14, 2022

District Engineer: Lay Lang

Date: 10/17/22

Note: Please attach a map showing location and extent of the project.



URBAN REGIONAL & URBAN ROADS PROJECT SCOPING WORKSHEET

DATE: _____

PRIORITY# _____

Regional: **Yes** Urban Roads: **No**City: Bismarck Street: State St/US83 – Calgary Ave to 57th AveCounty: Burleigh Length: 8,000'/1.50 Miles

Proposed Improvement: Prepare environmental documentation for the potential future reconstruction and widening to 6-lane section with median. Alternatives could include full reconstruction/urbanization similar to State Street south of Calgary Ave or capacity improvements without urbanization/reconstruction of the roadway through widening of shoulders and conversion of right turn lanes to through/right lanes. Full reconstruction of the 1.5 mile corridor costs are included in the estimate. Cost of the project if widening only would be significantly less.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
2,400	1,800	0	0	18,000	0	0	22,200

Present Road: Surface Width? 40' with Divide Median Surface Type? Asphalt

On Street Parking Allowed? No Present: **(No)** One Side Both Sides Angle Parallel
 Proposed: **(No)** One Side Both Sides Angle Parallel

Proposed Improvements	
ADT Present: <u>25,000</u> Yr: <u>2019</u>	Travel Way Width : <u>60'</u>
ADT Design: <u>46,500</u> Design year <u>2040</u>	No. of Lanes: <u>5-Lanes</u>
Design Speed: <u>40 MPH</u>	Roadway Width: <u>40'</u>
Maximum Curve: _____	Min. R/W Width: <u>200'</u>
Maximum Grade: _____	

Right of Way

Will Additional ROW or easement be acquired? No ROW acquisition by: City DOT
 Has any ROW easements been acquired since 7-1-72: Yes ROW Condemnation by: City DOT
 Est. No. of occupied family dwelling to be displaced? No
 Est. No. business to be displaced? No

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): No

Will there be any impacts to 4(f) or 6(f) properties:
No

Airports: _____ Public Hearings: Yes

Environmental Classification (Cat-Ex, EA, EIS): Cat-ex

Transportation Enhancements: Yes

Intermodal: _____

Pedestrian Needs: Yes

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
No						

Purpose and Need Statement:

The propose and need for this project is to improve the safety and operations of the US 83 corridor by adding capacity for this segment. The current 6 lane facility has a termini of Calgary Avenue. Since the completion of the original State Street reconstruction, Bismarck has expanded with additional east-west arterials and collector roads primarily, 43rd Avenue, Skyline Boulevard, LaSalle Drive and 57th Avenue. 43rd Avenue/US 83 is listed as the number 2 intersection on the NDDOT's High Crash Locations List for 2019-2021

Existing Conditions:

1. When was the current street section built? 1979 Has there been any additional maintenance to the street section? Yes, 2020 pavement rehab.
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes? 4 - 12'traffic lanes with

divided median and turnings lanes at various intersections throughout the corridor

3. What is the condition of the pavement section? mill and overlay with micro surfacing in 2020
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting? NA, see comment above
 - B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

 4. Any existing geometric concerns? Yes
 5. Are there any access points to adjoining properties that present a special concern?
No
 6. Are there any existing sidewalks or shared use path in place?
No, 2023 will include a shared use path from Calgary Ave to 43rd Avenue. No other pedestrian/bike facilities are programmed on the corridor.
 7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Rural Roadway with ditches, if urbanized a collection system would need to be created.
 8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
No work required on City water/sewer
 9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
Galvanized 40-foot Standards with LED Fixtures
- What intersections currently have traffic signals? Calgary Avenue, 43rd Avenue, Skyline Boulevard, LaSalle Ave, 57th Ave. Are there any locations that have a high accident rate? 43rd and Calgary intersections are High Crash locations (2018-2020). 43rd is #2 location on 2019-2021 high crash list. Are additional turning lanes needed? TBD by traffic operations.

Remarks:

The City of Bismarck, working with the Bismarck-Mandan MPO and the NDDOT have conducted many planning studies to look at opportunities to develop north-south corridors through Bismarck. This has resulted in

improvements to existing north-south corridor crossings of I-94. As Bismarck continues to grow, the planning for north-south arterial corridors has been implemented. The city has half cent sales tax available for consideration of additional funding for this corridor as well as others that the voters approved in 2018.

Commercial developments are attracted to corridors that are heavily traveled. The city of Bismarck has a Land Use Plan to be used as part of the development process. Previous planning studies, US 83 Corridor Study 2006 – partnership with NDDOT identified US 83 as commercial corridor through ND 1804. More recent planning studies including US 83 Alternative identified either 4-lane expressway concept with limited access and interchanges at key intersecting roadways or 6-lane urbanization concept similar to the corridor characteristics on State St south of Calgary Ave. Access control north of 57th Avenue will limit access to half-mile spacing on US 83 for any new access points.

Arrive 2045 MTP has identified the US 83/State St. as a “Short Term” phase project (2020 -2030). The 2020-2045 MTP further compared the various options presented in the studies and concluded 6-lane alternatives with at grade intersections and access control north of 57th Ave resulted in lower costs to construct as well as highest benefit to the transportation system in terms of network delay. The access density between Calgary Avenue and 57th Avenue is much lower than compared to State Street south of Calgary Avenue. This benefits today’s traffic by allowing the existing 4-lane rural section roadway to perform adequately in most circumstances.

43rd Avenue east of the State Street corridor is currently being reconstructed into a multi-lane facility with completion in 2022. With the completion of this project State Street will be bisected by a major multi-lane east/west corridor which is anticipated to provide a more logical exit/entry point onto the State Street corridor than Calgary Avenue provides currently.

City Engineer: _____

Date: _____

District Engineer: _____

Date: _____

Note: *Please attach a map showing location and extent of the project and any additional supporting documents.*

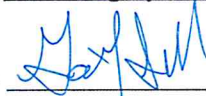
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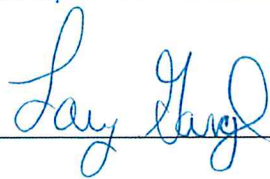
City Engineer: _____



Date: _____

10/14/22

District Engineer: _____

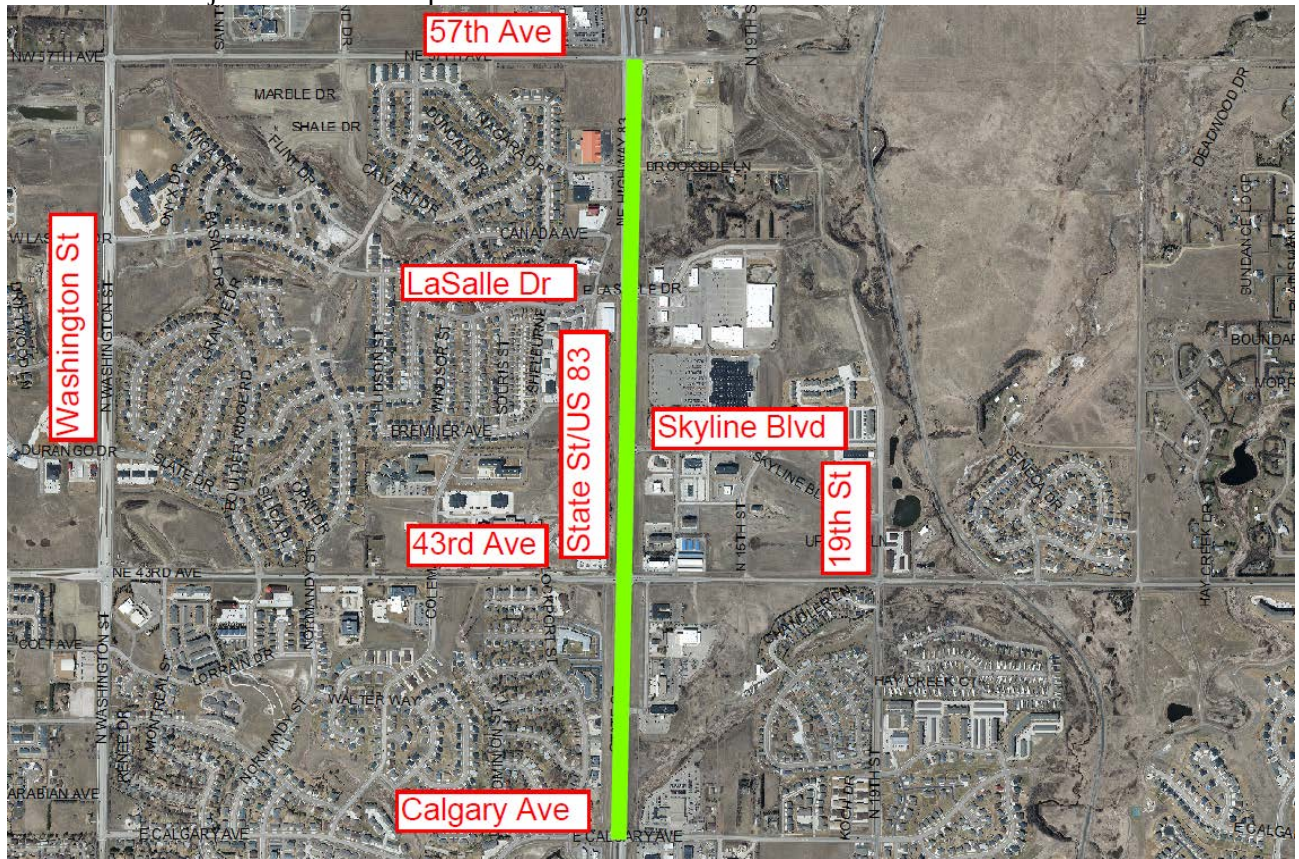


Date: _____

10/12/22

Note: Please attach a map showing location and extent of the project and any additional supporting documents.

Exhibit A – Project Location Map



URBAN REGIONAL & URBAN ROADS PROJECT SCOPING WORKSHEET

DATE: _____

PRIORITY# _____

Regional: **Y** Urban Roads: **Y**City: Bismarck Street: US 83, ND 810, ND 1804, 94 BUSCounty: Burleigh Length: _____

Proposed Improvement: Replace all non-compliant highway signs on the regional highway system throughout the city of Bismarck, US 83, ND 810, ND 1804, and previous regional highway of Main Ave currently noted as I94 BUS in many signs. Scope of replacement project is unknown.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
40	10	0	0	200	0	0	250

Present Road: Surface Width? variesSurface Type? HMA and Concrete

On Street Parking Allowed? varies Present: (No) One Side **Both Sides** Angle **Parallel**
 Proposed: (No) One Side **Both Sides** Angle **Parallel**

Proposed Improvements	
ADT Present: _____ Yr: _____	Travel Way Width : _____
ADT Design: _____ Design year _____	No. of Lanes: _____
Design Speed: _____	Roadway Width: _____
Maximum Curve: _____	Min. R/W _____
Maximum Grade: _____	Width: _____

Right of Way

Will Additional ROW or easement be acquired? No ROW acquisition by: City DOT
 Has any ROW easements been acquired since 7-1-72: No ROW Condemnation by: City DOT
 Est. No. of occupied family dwelling to be displaced? 0
 Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): No
 Will there be any impacts to 4(f) or 6(f) properties: No
 Airports: No Public Hearings: No
 Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex
 Transportation Enhancements: No
 Intermodal: No
 Pedestrian Needs: No

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
None						

Purpose and Need Statement:

Pavement rehabilitation projects programmed on the regional highway system do not include an evaluation or replacement of regulatory, warning and guide signs. The typical life of the sign facing material is less than ten years. With new retro reflectivity requirements, some sign's service life can be less dependent on facing direction. This project would evaluate the existing signage on the regional system roadways in Bismarck (US 83, ND 1804, ND 810) and would include Main Ave (I94 BUS) post-mounted guide signs and overhead signs from when Main Ave was a regional highway. Non-compliant signs would be replaced.

Existing Conditions:

1. When was the current street section built? Has there been any additional maintenance to the street section? _____
2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?

3. What is the condition of the pavement section?
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting?

- B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

4. Any existing geometric concerns?
-
5. Are there any access points to adjoining properties that present a special concern?
-
6. Are there any existing sidewalks or shared use path in place?
-
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
-
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
-
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
-
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
-

Remarks:

City Engineer: _____

Date: _____

District Engineer: _____

Date: _____

faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

4. Any existing geometric concerns?

5. Are there any access points to adjoining properties that present a special concern?

6. Are there any existing sidewalks or shared use path in place?

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

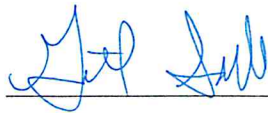
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

Remarks:

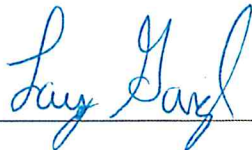
City Engineer:



Date:

10/14/22

District Engineer:



10/12/22

Date:

URBAN REGIONAL & URBAN ROADS PROJECT SCOPING WORKSHEET

DATE 10/10/22:

PRIORITY# _____

Regional: **Y**Urban Roads: **N**City: Bismarck Street: 7th St & 9th St BNSF RR underpasses (ND 83 Bus)County: Burleigh Length: 0.3 miles

Proposed Improvement: Evaluation of stormwater improvements for 7th Street and 9th Street underpasses. Recommendation is for preliminary engineering to evaluate possible cost-effective solutions that improve the current deficiencies. Possible solutions could be increased pump/outlet capacity, increased inlet capacity to reduce bypass flows, automated road closure gates, dynamic signage, etc. Costs are uncertain as solution is uncertain. A placeholder of \$1,000,000 construction costs is used. This would be more than enough funds if the solutions are small in scale but may be underfunded if the solution involves significant improvements to the storm sewer network.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
200	100	0	0	1,000	0	0	1,300

Present Road: Surface Width? 48'Surface Type? Concrete

On Street Parking Allowed? No Present: (No) One Side Both Sides Angle Parallel
Proposed: (No) One Side Both Sides Angle Parallel

Proposed Improvements

ADT Present: 7th St – 12990 9th St -11,540 Yr: 2019 Travel Way Width : 48

ADT Design: _____ Design year _____

No. of Lanes: _____

Design Speed: _____

Roadway Width: 48

Maximum Curve: _____

Min. R/W Width: 80

Maximum Grade: _____

Right of Way

Will Additional ROW or easement be acquired? Perhaps ROW acquisition by: City DOT
 Has any ROW easements been acquired since 7-1-72: No ROW Condemnation by: City DOT
 Est. No. of occupied family dwelling to be displaced? 0
 Est. No. business to be displaced? 0

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources): No
 Will there be any impacts to 4(f) or 6(f) properties: No
 Airports: No Public Hearings: No
 Environmental Classification (Cat-Ex, EA, EIS): Cat-Ex
 Transportation Enhancements: None
 Intermodal: None
 Pedestrian Needs: None

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	0	Underpass	25	25		

Purpose and Need Statement:

During large rain events, the existing storm water pumping system on 7th Street and gravity network on 9th Street are not capable of evacuating the stormwater fast enough to maintain traffic through the underpasses in a safe manner. It is not unusual during a large rain event to have vehicles drive into the flooded underpasses and stall sometimes requiring police and/or fire rescue. The project's purpose would be to remove current deficiencies in the system and/or alert drivers to the deficiencies via advance warning systems consisting of signage and/or automated gates. Driver warning systems would be less critical if the stormwater systems are improved and no ponding occurs. Driver warning systems are more critical if no action is taken on the stormwater systems due to costs or other constraints and the ponding event remains.

Existing Conditions:

- When was the current street section built? Has there been any additional maintenance to the street section?
7th St, 1976, 9th St, late 1940's – early 1950's
- How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?
4-lanes

3. What is the condition of the pavement section?
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting?
 - B. If the pavement section is concrete, are there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking.

CPR project planned for 2026 federal aid.
4. Any existing geometric concerns?

Sight distance limited to see bottom of underpass during inclement weather. Vertical height restrictions of 13'5" at 7th St and 13'8" on 9th street according to overhead warning signs.
5. Are there any access points to adjoining properties that present a special concern?

No
6. Are there any existing sidewalks or shared use path in place?

7th St sidewalk west side, 9th St sidewalk on both sides
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?

7th Street stormwater is evacuated via pump station and forcemain originally installed in 1979 at the time of the underpass construction. Forcemain outfalls at Front Ave/8th St intersection and combines with the City's trunk 54" storm outfall.

9th Street stormwater is evacuated via 15" gravity drain installed presumably with 1939 construction of RR underpass.

Both underpasses experience significant ponding during storm events. 7th Street is controlled by the rate at which the pumps evacuate the water. 9th Street is likely controlled by a combination of inlet capacity, pipe capacity, and downstream stormwater network capacity but it is unknown to what degree each controlling criteria contributes to the overall.
8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?

No work required
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?

7th St – signals at Main Ave and Front Ave – 9th St signals – Main Ave and Front Ave. All signals replaced in 2022

Remarks:

City Engineer: _____

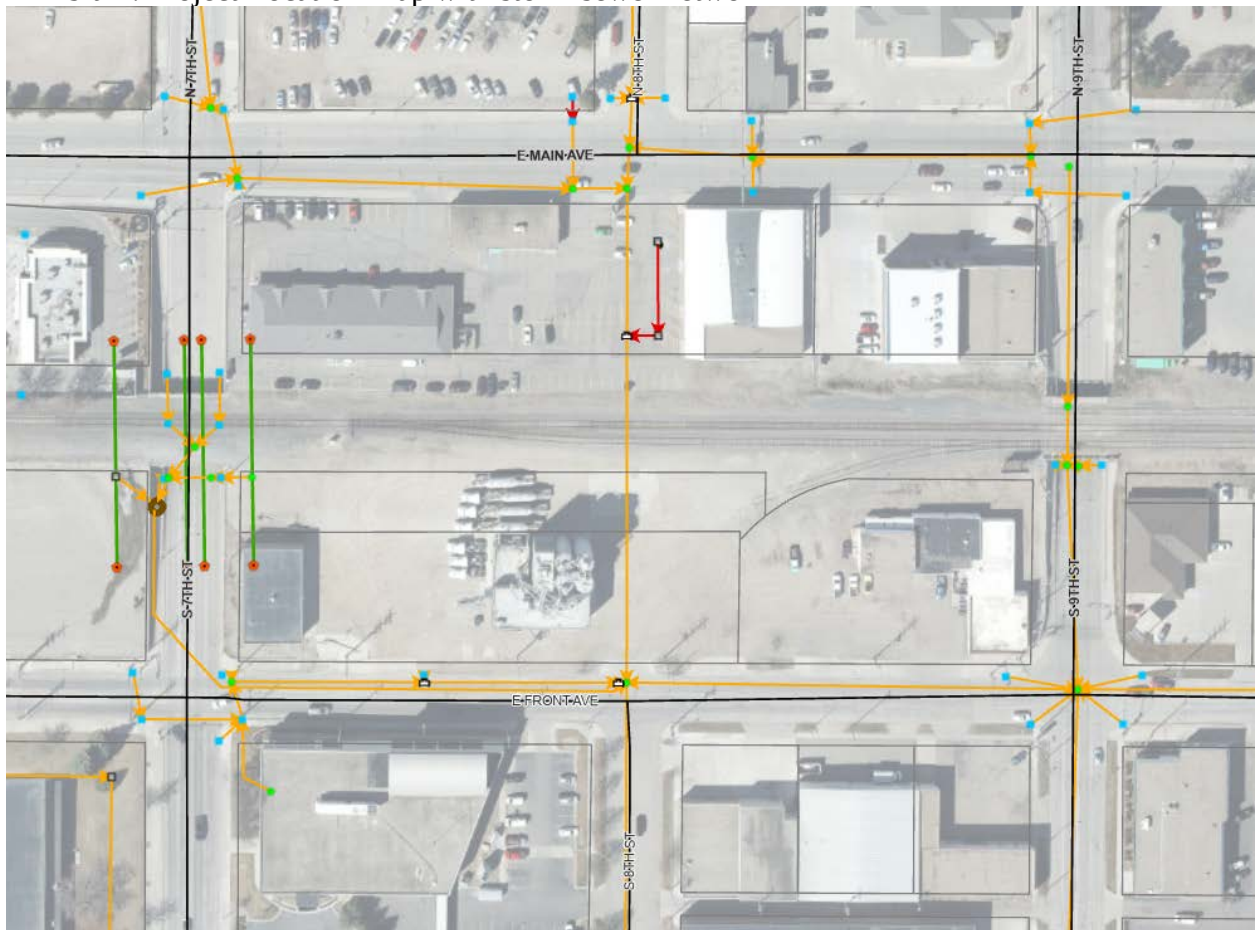
Date: _____

District Engineer: _____

Date: _____

Note: Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.

Exhibit A: Project Location Map with storm sewer network



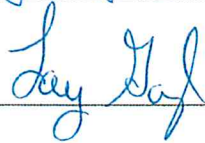
City Engineer: _____



Date: _____

10/14/22

District Engineer: _____



Date: _____

10/12/22

Note: Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.

Exhibit A: Project Location Map with storm sewer network

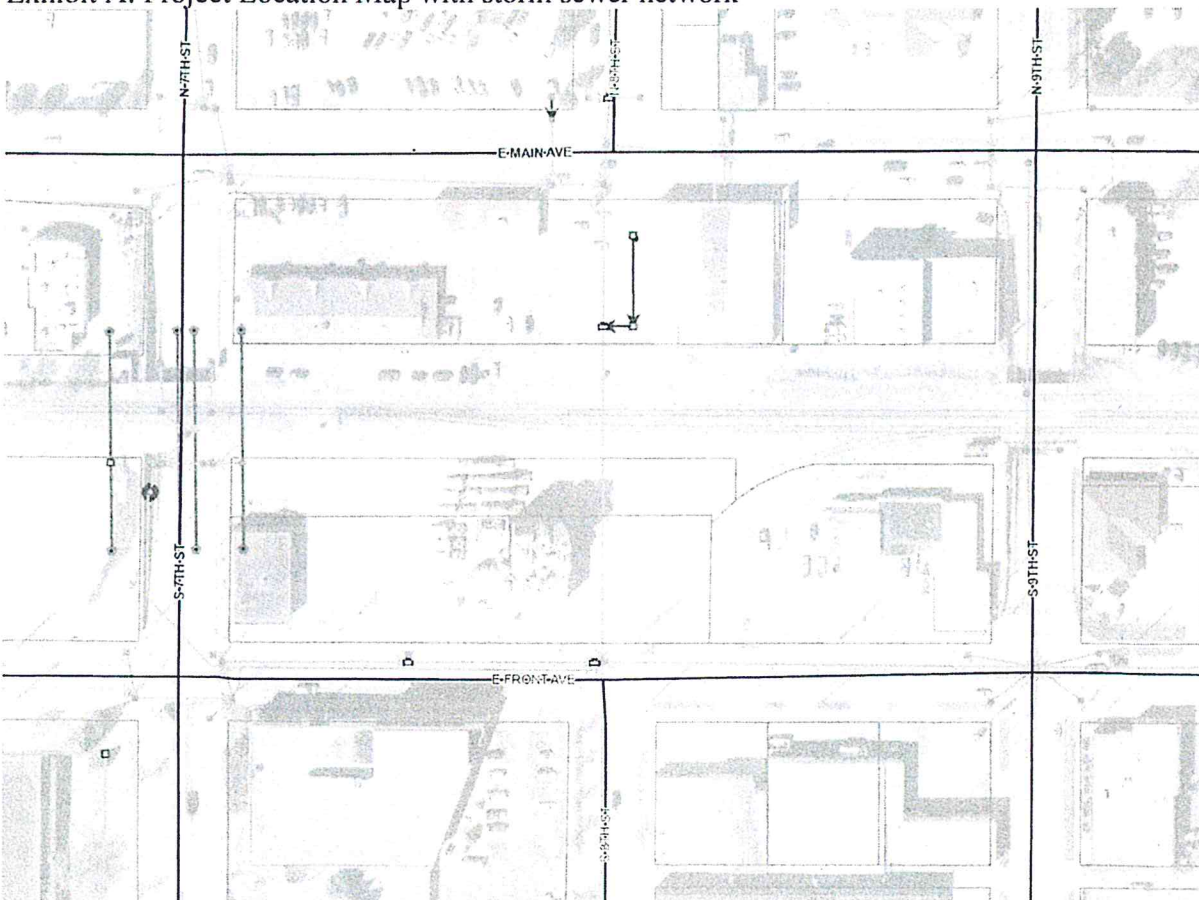


Exhibit B: 7th Street Underpass looking south during storm event





TAC and Policy Board Progress Report

Date: Friday, March 10, 2023

Project: Bismarck-Mandan Arrive 2050 Update

To: Rachel Lukaszewski

From: Jason Carbee

Subject: Progress Report for January 29, 2023 to February 28, 2023

Please note that this progress report summarizes the work completed during the period above.

TDMSE Task 1 – Project Management

- The consultants continued monthly accounting and progress reports.
- Conducted internal team coordination calls.
- Provided updates to TAC and Policy Board meetings February 21.

TDMSE Task 2 - Outreach and Stakeholder Consultation

- SRF solicited feedback from Mandan development community.

TDMSE Task 3- TDMSE Data Needs

- Finalized.

TDMSE Task 4 – TDMSE Methodology

- SRF updated Draft Forecast Methodology Memo and Draft Previous Study Memo based on Steering Committee comments at meeting #2.

TDMSE Task 5 – TDMSE Development Scenario and Forecasts

- SRF updated Draft Forecast Scenarios Memo based on Steering Committee comments at meeting #2.

TDMSE Task 6 – TDMSE Baseline Study Expectations

- Continued work on refining baseline TAZ socioeconomic data in ArcGIS.

Project Progress Summary

Task	Start Date	End Date	Percent Complete		Explanation / Discussion
			Period Start	Period End	
TDMSE Task 1 - Project Management	Sep-22	Jun-23	50%	60%	Reflects combined SRF / HDR hours for TDMSE.
TDMSE Task 2 - Outreach and Stakeholder Consultation	Sep-22	Jun-23	95%	99%	
TDMSE Task 3- TDMSE Data Needs	Sep-22	Nov-23	99%	99%	
TDMSE Task 4 - TDMSE Methodology	Oct-22	Nov-23	75%	95%	
TDMSE Task 5 - Development Scenario and Forecasts	Nov-22	Feb-23	10%	95%	
TDMSE Task 6 - Baseline Study Expectations (Forecasts)	Nov-22	Mar-23	0%	25%	
TDMSE Task 7- Allocate Socioeconomic Data	Dec-22	May-23	0%	0%	
TDMSE Task 8 - Model Performance Review and Validation	Feb-23	Jun-23	0%	0%	
TDMSE Task 9 - Report	Sep-22	Jul-23	0%	0%	
MTP TASK 1 - Project Management	Jun-23	Dec-24	5%	6%	Continued accounting and invoicing.
MTP TASK 2 – Public Engagement	Jun-23	Dec-24	1%	1%	
MTP TASK 3 – Data Collection	Jun-23	Sep-23	0%	0%	
MTP TASK 4 - Goals, Objectives & Performance Measures	Aug-23	Oct-23	0%	0%	
MTP TASK 5 – Baseline System Conditions	Aug-23	Jan-24	0%	0%	
MTP TASK 6 - Develop & Screen Alternatives	Jan-24	May-24	0%	0%	
MTP TASK 7 – Financial Plan and Implementation Schedule	Oct-23	Jun-24	0%	0%	
MTP TASK 8 – MTP Document Development and Review	Jun-24	Dec-24	0%	0%	
Project Totals	Sep-22	Dec-24	10%	13%	

Preferred Population Growth Scenario

Transportation Advisory Committee (TAC) &
Policy Board

March 20th & 21st, 2023

Luke Champa, SRF Consulting Group

Scott Harmstead, SRF Consulting Group

Jason Carbee, HDR



ARRIVE 2050

FORECASTS

Arrive 2050 Forecasts

Discussion Item

- Last Month (Feb.)
 - Schedule
 - Focus Group Meeting Summary
 - Previous Study Review
 - Forecast Methodology
 - Forecast Scenarios
 - Preferred Scenario Discussion
 - Next Steps

Action Item

- **This Month (March)**
 - **Previous Study Review**
 - **Preferred Growth Scenario**
 - **Preferred Forecast**
 - **Schedule & Next Steps**



Previous Study Review

Together 2045: Bismarck's Comp Plan (2022)

	Pop.	Households	Employment
2020	80,000	34,049	57,500
2045	99,647	44,971 - 50,938	N/A
Compound Growth Rate	1.2%	1.1% - 1.6%	N/A

Source: Together 2045: Bismarck's Comprehensive Plan *Imputed

Arrive 2045 Metropolitan Transportation Plan (2020)

	Pop.	Households	Employment
2020	114,300	46,300	71,800
2045	164,500	65,400	121,000
Compound Growth Rate	1.2%	1.2%	1.7%

Source: Arrive 2045 Metropolitan Transportation Plan

Envision 2040: 2015-2040 Bismarck-Mandan MPO Long Range Transportation Plan (2015)

	Households	Employment
2010	41,756	64,100
2040	73,088	124,200
Compound Growth Rate	1.88%	2.23%

Source: Envision 2040: 2015-2040 Bismarck-Mandan MPO Long Range Transportation Plan

Bismarck-Mandan MPO 2010-2035 Long Range Transportation Plan (2010)

	Households	Employment
2007	37,300	52,100
2035	52,900	73,300
Compound Growth Rate	1.26%	1.23%

Source: Bismarck-Mandan MPO 2010-2035 Long Range Transportation Plan



Preferred Population Growth Scenario

- **Today's Action**

- ***Recommend Medium Growth (1.1%) for the BMMPO as the preferred growth scenario, as discussed at February TAC/PB and Steering Committee #2.***

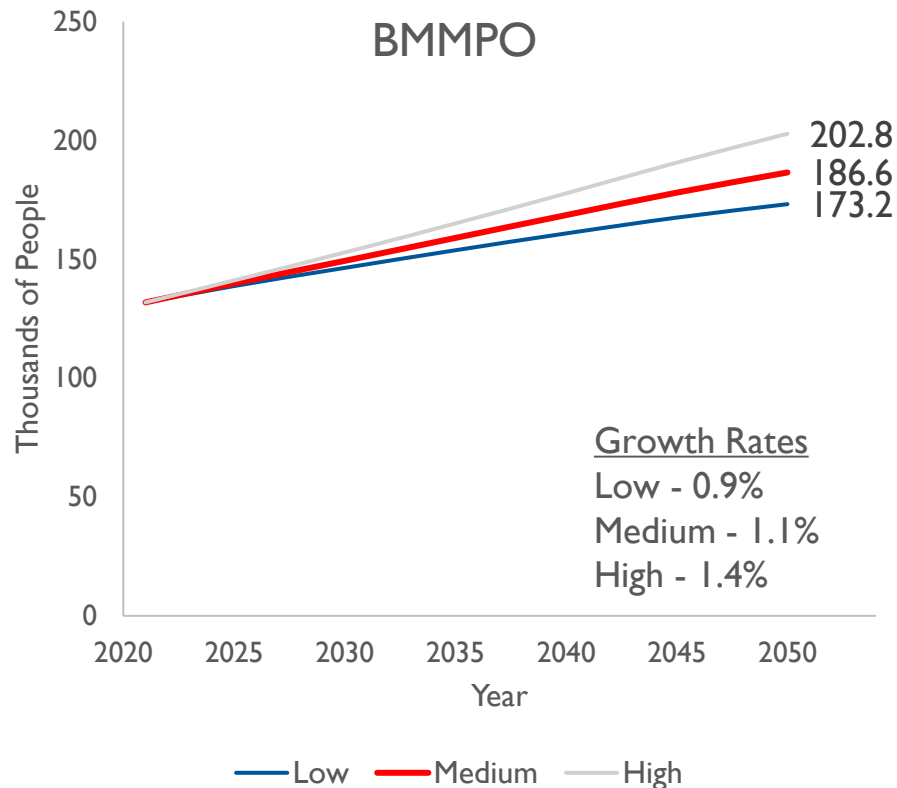
- **How will the preferred population growth scenario be used?**

- Growth is allocated to Traffic Analysis Zones (TAZs). There may be minor adjustments by jurisdiction depending on land use capacity/development assumptions, but overall BMMPO population projection will stay the same.
- The socioeconomic data is used to update the Travel Demand Model (TDM).
- TDM is updated prior to developing the Metropolitan Transportation Plan and will forecast traffic behavior and demand in the region based upon several socioeconomic assumptions under the preferred growth scenario.



Forecast Scenarios

- BMMPO Metropolitan Planning Area



Recommended Growth Scenario

BMMPO			
Year	Low	Medium	High
2021*	133,760	133,760	133,760
2025	138,740	139,860	141,130
2030	146,380	149,380	152,860
2035	153,790	159,040	165,070
2040	160,880	168,640	177,700
2045	167,530	178,120	190,660
2050	173,180	186,610	202,780
Growth Rate	0.9%	1.1%	1.4%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



Arrive 2050 Forecasts Schedule



Next Steps

- Baseline Expectations: refine population, households, and employment projections
 - 5-year increments
- Baseline Traffic Analysis Zone (TAZ) allocation
- TAZ Allocation workshops with local jurisdictions/major stakeholders
 - identify growth areas & assign future households and jobs



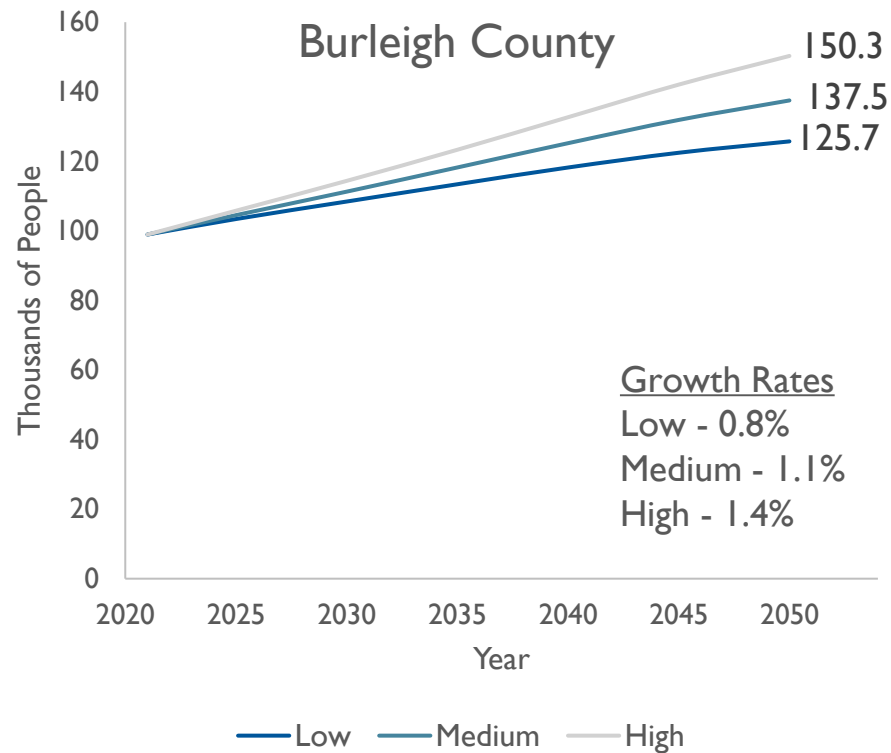
Suggested Action

Recommend to the Policy Board that the Medium Growth Scenario be used as the preferred growth scenario for the Travel Demand Model update and subsequent update of the Metropolitan Transportation Plan.



Forecast Scenarios

- Burleigh County



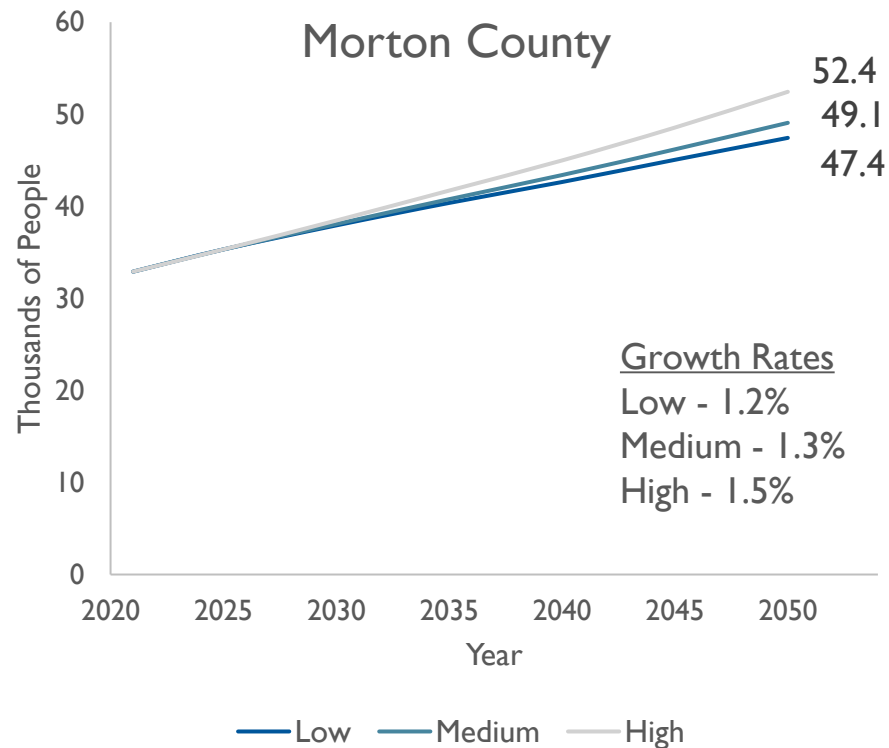
Burleigh County			
Year	Low	Medium	High
2021*	100,250	100,250	100,250
2025	103,410	104,530	105,800
2030	108,440	111,290	114,390
2035	113,410	118,250	123,350
2040	118,230	125,230	132,710
2045	122,470	131,920	142,100
2050	125,740	137,530	150,340
Growth Rate	0.8%	1.1%	1.4%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



Forecast Scenarios

- Morton County



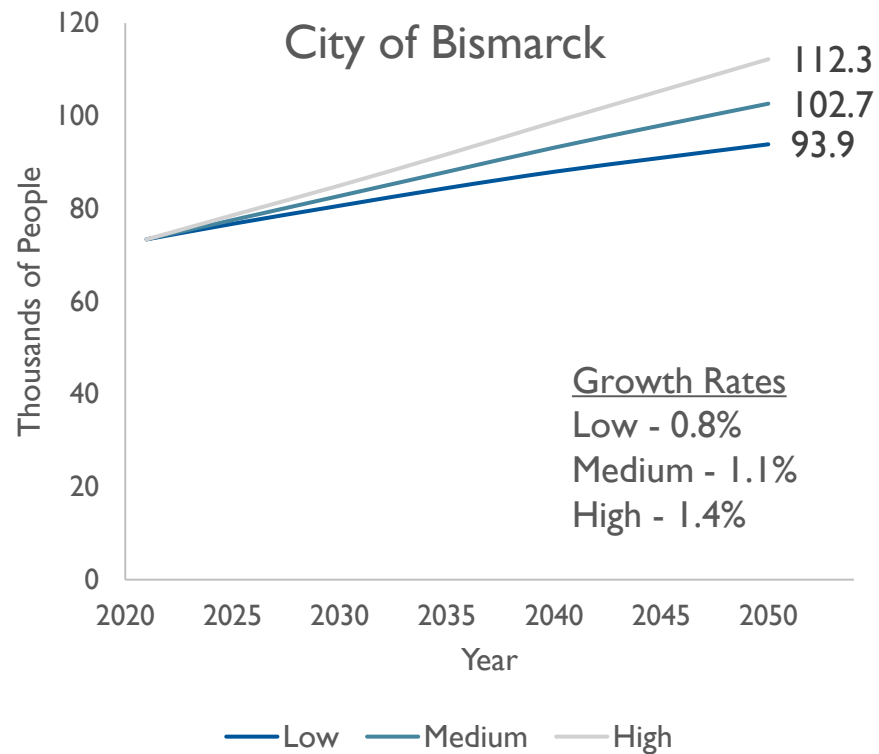
Morton County			
Year	Low	Medium	High
2021*	33,510	33,510	33,510
2025	35,330	35,330	35,330
2030	37,940	38,090	38,470
2035	40,380	40,790	41,720
2040	42,650	43,410	44,990
2045	45,060	46,200	48,560
2050	47,440	49,080	52,440
Growth Rate	1.2%	1.3%	1.5%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



Forecast Scenarios

- Bismarck



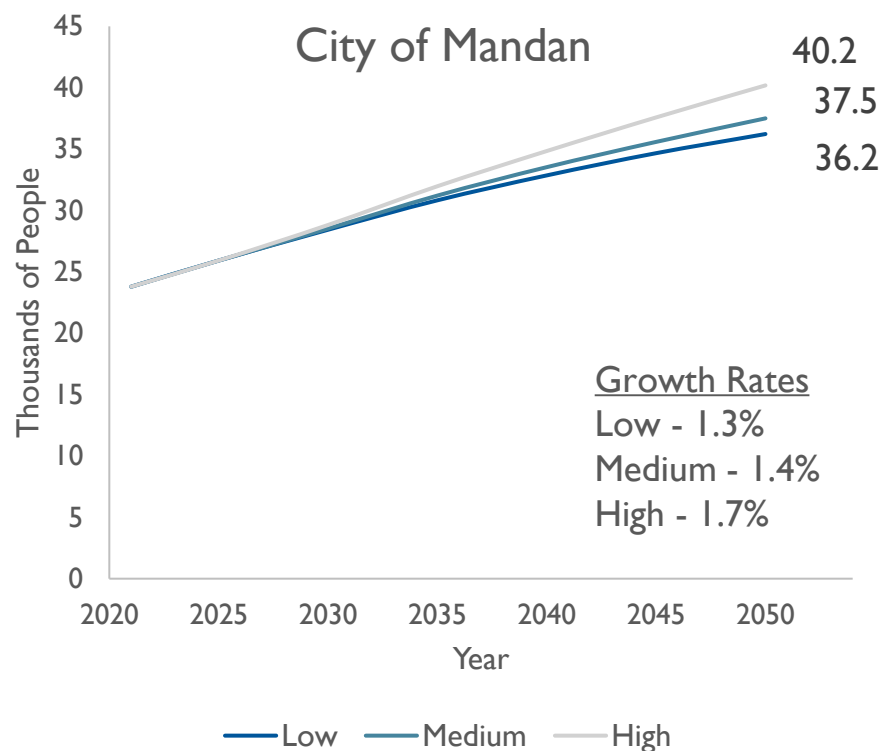
Bismarck			
Year	Low	Medium	High
2021*	73,960	73,960	73,960
2025	76,710	77,530	78,560
2030	80,630	82,740	84,980
2035	84,450	87,950	91,720
2040	87,960	93,160	98,690
2045	90,980	97,980	105,460
2050	93,900	102,670	112,260
Growth Rate	0.8%	1.1%	1.4%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



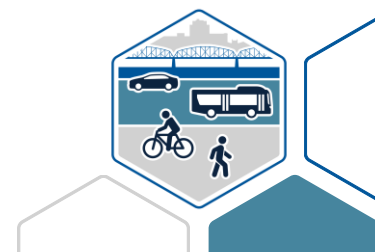
Forecast Scenarios

- Mandan



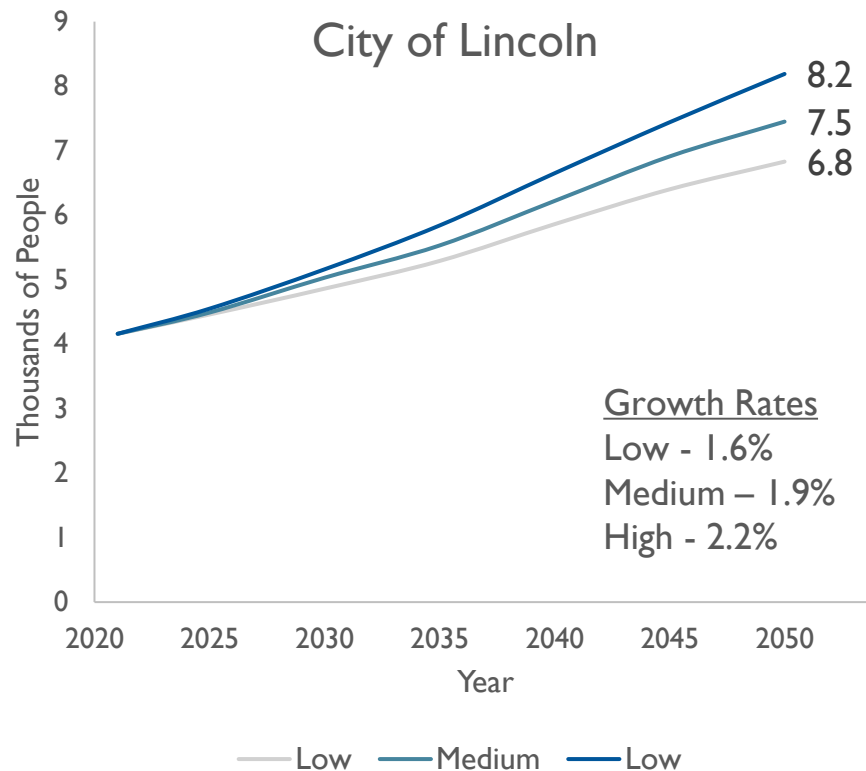
Mandan			
Year	Low	Medium	High
2021*	24,760	24,760	24,760
2025	25,910	25,910	25,910
2030	28,420	28,520	28,810
2035	30,820	31,210	31,970
2040	32,850	33,530	34,840
2045	34,660	35,590	37,580
2050	36,220	37,510	40,190
Growth Rate	1.3%	1.4%	1.7%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



Forecast Scenarios

- Lincoln



Lincoln			
Year	Low	Medium	High
2021*	4,280	4,280	4,280
2025	4,460	4,490	4,550
2030	4,860	5,030	5,160
2035	5,290	5,530	5,840
2040	5,860	6,220	6,650
2045	6,400	6,910	7,440
2050	6,830	7,450	8,190
Growth Rate	1.6%	1.9%	2.2%

*Source: 2020 Decennial Census & 2009 – 2021 ACS 5-Year Estimates



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PROGRESS REPORT

SRF COMM. NOS.	14186
PROGRESS REPORT NO.	13
DATE	March 3, 2023

REPORTING PERIOD	February 2023
PROJECT NAME	Bismarck E Main Ave Corridor Study
PREPARED BY	Scott Harmstead – SRF

PROBLEMS ENCOUNTERED/ITEMS OF CONCERN

Project Issues/Concerns

NA. Contract executed 2/14/22

April snowstorm delayed traffic counts/cameras to week of May 2. No significant impact to overall project schedule anticipated.

Existing Conditions and Issues and Needs memorandums have been combined.

TASK PROGRESS – SCHEDULE/BUDGET SUMMARY

TASK	PERCENT COMPLETE	NOTES	STATUS
Phase 1 – Baseline Input	99%	Traffic data collection complete. Existing operations analysis via VISSIM complete. ATAC has completed existing and future model runs, currently under SRF review. Issues and Needs memorandum to be combined with Existing Conditions memorandum. Draft memo posted on project website (About page).	On Schedule
Phase 2 – Issues and Needs	99%	VISSIM model further developed and 2045 no-build model complete. Issues and Needs memorandum to be combined with Existing Conditions memorandum. Draft memo posted on project website (About page).	On Schedule
Phase 3 – Alternative Development	100%	Apex Engineering has developed cross sections and layouts for three alternatives for each segment (three segments total), property redevelopment concepts developed by SRF. Apex developed alternative cost estimates.	On Schedule
Phase 4- Alternative Analysis	99%	3-lane VISSIM model and results completed for three corridor alternatives. Draft of Alternatives Analysis memorandum developed and posted on project website (About page). Comments received from G. Schell.	On Schedule
Phase 5 – Finalization and Implementation	80%	Apex Engineering developed preferred alternatives, funding options, and storm water evaluation/City utility assessment. Draft study report submitted and initial comments received.	On Schedule
Engagement	90%	Issues and Needs and Alternative Corridor Improvement stakeholder open houses and public meetings complete. SRC meetings completed. Alternative improvements survey completed. Final public meeting March 6.	On Schedule
Project Management	95%	Client check-ins, progress reports, internal coordination	On Schedule
Total	90%		On Schedule

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Status Report #9

Project: Sunset Drive Corridor Study

Consultant: KLJ

Reporting Period: 2/10/2023 to 3/10/2023

Tasks Completed to Date:

Task	% of Task Complete
Task 1 – Project Management and Coordination	90%
Task 2 – Public Engagement	90%
Task 3 – Existing Conditions Documentation	100%
Task 4 – Future Conditions Analysis	100%
Task 5 – Goals/Objectives/Project Purpose & Need	95%
Task 6 – Alternatives Development	100%
Task 7 – Alternative Analysis	100%
Task 8 – Project Implementation & Corridor Concept Plan	90%
Task 9 – Draft/Final Report	35%

Overall percentage of project complete: 89%

Summary of activities within reporting period:

Task 1 – Project Management and Coordination

- Project Oversight and management with BM-MPO

Task 2 – Public Engagement

- Public meeting #2 was held on Thursday March 9th.
 - Project website with survey up and running through March 23rd.
 - Social Media ad up and running – Statistics to be provided at next update
 - Stakeholder meeting
 - Representatives from the City of Mandan, Mandan School District, and Morton County attended the meeting.
 - Evening Public Meeting
 - 20-30 people attended the meeting.
 - Public Involvement Report to be prepared after 2-week response period is complete

Sunset Drive Corridor Study

Task 3 – Existing Conditions Report

- Completed

Task 4 – Future Conditions Analysis

- Completed

Task 5 – Goals/Objectives/Project Purpose & Need

- Final Development ongoing

Task 6 – Alternatives Development

- Completed.

Task 7 – Alternative Analysis

- Completed.

Task 8 – Project Implementation & Corridor Concept Plan

- Corridor concepts completed and the implementation plan being developed.

Task 9 – Draft and Final Report

- Draft report started.



PROGRESS REPORT

SRF COMMISSION NO.	022-15824
PROGRESS REPORT NO.	6
DATE	February 28, 2023

REPORTING PERIOD	February 1, 2023 through February 28, 2023
PROJECT NAME	Bismarck-Mandan MPO Transit Development Plan
PREPARED BY	Bill Troe
ROUTE/COPY TO	Teresa Carey
Percent Complete through Period	50%

COMPLETED ACTIVITIES PREVIOUS PERIOD (February 2023)

- Continued detailing organizational structure alternatives.
- Prepared draft of existing conditions.
- Detailed the financials for the last five years and initiated the look forward.
- Coordinated Public Meeting round 2 with staff and the libraries.
- Completed peer assessment tech memo.

ONGOING ACTIVITY THIS PERIOD (March 2023)

- Prepare future funding scenario memo.
- Finalize a draft of the alternate governance options and document.
- Develop alternate service options for conditions where financials are balanced.

PROJECTED ACTIVITY NEXT PERIOD (April 2023)

- Public Meeting2.
- Review organizational structure material with Board of Directors.

PROBLEMS ENCOUNTERED/ITEMS OF NOTE/SCHEDULE REVISIONS

- None.

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Bismarck-Mandan MPO

TIP 2023-2026 Administrative ModificationProject Year(s) 2024; 2023

Entity	Project	Federal	State	Local	Total	Federal Funding Source
NDDOT	24.6.01 (old) 23.6.36 (new)	\$2,529,062	\$283,438	\$312,500 (Bismarck)	\$3,125,000	NHU

Project Description:

This project is for mill and overlay, signal revision, and lighting work on 7th Street in Bismarck, from Front Avenue to Bismarck Expressway. This modification moves the project funding year from 2024 to 2023. It is tied to project 23.6.37. The PCN is 23201.

Consistency with the
Bismarck-Mandan MPO
Metropolitan
Transportation Plan:

This project is currently in the TIP and is therefore consistent with the Arrive 2045 MTP.

Bismarck-Mandan MPO Policy Board informed of Administrative Modification at the _____ meeting.
(date)

Bismarck-Mandan MPO

TIP 2023-2026 **Administrative Modification**

Project Year(s) 2025; 2023

Entity	Project	Federal	State	Local	Total	Federal Funding Source
NDDOT	25.6.12 (old) 23.6.37 (new)	\$2,531,177	\$283,674	\$312,761 (Bismarck)	\$3,127,612	NHU & CRP

Project Description:

This project is for mill and overlay, ADA ramps, and lighting work on 7th and 9th Streets in Bismarck, from Main Avenue to Boulevard Avenue. This modification moves the project funding year from 2025 to 2023. It is tied to project 23.6.36. The PCN is 23347.

Consistency with the
Bismarck-Mandan MPO
Metropolitan
Transportation Plan:

This project is currently in the TIP and is therefore consistent with the Arrive 2045 MTP.

Bismarck-Mandan MPO Policy Board informed of Administrative Modification at the _____ meeting.
(date)

PROJECT FUNDING YEAR 2023

ESTIMATED COST IN DOLLARS

LEAD AGENCY	REFERENCE NUMBER	PROJECT DESCRIPTION	FEDERAL	STATE	LOCAL	TOTAL	FEDERAL PROGRAM SOURCE	PCN	ESTIMATED CONSTRUCTION YEAR	AMENDMENT/ MODIFICATION (Date)
BISMARCK	23.1.01	¹ Urban Roads - Bismarck 43rd Ave 43rd Ave (State St - 26th St) & 19th St (N Valley Pl/Yuoca Av - 43rd Ave) (Reconstruction and Widening)	\$4,800,000 \$574,285	\$0	\$7,700,649 \$5,290,769 \$4,000,000 (Bismarck)	\$22,365,703	NHU CVD	22929	2022	
BISMARCK	23.1.02	Safety - Rectangular Rapid Flashing Beacons (RRFB) in Bismarck (Various Locations) (Install RRFB at up to 11 locations, recommended by School Safety Crossing Study)	\$378,000	\$0	\$42,000 (Bismarck)	\$420,000	HEU	23372	2023	
BISMARCK	23.1.03	Urban Grants Project - Bismarck 3rd/4th/5th St, Rosser Av, Broadway (3rd St from Main-Rosser, Rosser from 3rd-7th, 4th St from Rosser-Thayer, 5th St from Rosser-Thayer, & Broadway from 3rd-4th & 6th-7th) (Mill & Overlay, Curb & Gutter, ADA Ramp Rev, Bikeway/Walkway, Lighting, Signal Revision, Landscaping, Signaling, Signal Modifications, Pavement Marking)	\$786,313	\$0	\$1,125,687 (Bismarck)	\$1,912,000	UGP	23216	NA	
BISMARCK	23.1.05	² Projects of Local Importance (PLI) - Ash Coulee Dr Reconstruction (Tyler Parkway/15th St NW to N Washington St) (Reconstruction and conversion to curb and gutter roadway)	\$0	\$0	\$12,000,000 (Bismarck)	\$12,000,000	NA		2023	
BURLEIGH	23.2.01	³ Urban Roads - Burleigh County 66th St (Apple Creek Rd to Northgate Dr) (Reconstruction, Structures)	\$8,000,000 (UR) \$2,710,000 (CO Federal Aid) \$171,147 (CVD)	\$0	\$2,718,853 (Burleigh)	\$13,600,000	SU CVD	23055	NA	
MANDAN	23.4.01 22.4.03	⁴ Urban Roads - 8th Ave NW (Old Red Trail to 24th St NW) (Reconstruction)	\$1,052,000	\$0	\$1,248,000 (Mandan)	\$2,300,000	SU	23699	2023	Amendment (should have been modification) Moved from 2022 (FEBRUARY 2023)
NDDOT	23.6.15	Bridge - I-94 (2 miles west of US Highway 83, Tyler Parkway, EB) (Expansion Joint Modifications, Approach Slabs, Spall Repair)	\$308,876 \$763,000	\$34,320 \$67,000	\$0 (Bismarck)	\$343,196 \$870,000	IM	22603	NA	Amendment Cost Increase (JAN 2023)
NDDOT	23.6.16	Bridge - I-94 (3 miles west of US Highway 83, Grant Marsh, EB) (Structure Paint, Median X-Over)	\$526,707	\$58,523	\$0 (Multiple)	\$585,230	IM	22603	NA	
NDDOT	23.6.17	Bridge - I-94 (3 miles west of US Highway 83, Grant Marsh, EB) (Deck Overlay, Approach Slabs, Structure Paint, Spall Repair, Structure/Incidentals)	\$4,494,321 \$9,000,000	\$490,364 \$1,000,000	\$0 (Multiple)	\$4,984,685 \$10,000,000	IM	22603	NA	Amendment Cost Increase (JAN 2023)
NDDOT	23.6.20	Safety - Roundabouts Statewide (ND 1804 & N Washington St Intersection) (Addition of 4 roundabout signs for intersection)	\$27,000	\$3,000	\$0 (Burleigh)	\$30,000	HES	23529	NA	
NDDOT	23.6.21	⁵ Rural - Statewide ITS Equipment (One Location at Bismarck Expressway/ND 810, various other locations in western ND) (Weigh in Motion and Automatic Traffic Recorder Maintenance)	\$609,000	\$191,000	\$0 (Bismarck)	\$1,000,000	SS	23603	NA	
NDDOT	23.6.22	⁶ Bridge - I-94 (various locations throughout Bismarck District, one within MPO area) (19th St separation abt 1/2 mile E of US 83 N) (Structure Paint)	\$224,000	\$25,000	\$0 (Bismarck)	\$249,000	SS	22614	NA	
NDDOT	23.6.24	Urban Regional - Mandan Memorial Highway (Memorial Highway Phase 3, Extends TBD) (3.3 miles, Reconstruction, City Utilities)	\$16,212,000 \$27,216,000	\$1,873,000 \$3,050,000	\$6,505,000 \$7,391,000 (Mandan)	\$24,090,000 \$37,657,000	SU-CPU	23278	NA	Amendment Cost Increase (JAN 2023)
NDDOT	23.6.25	Carbon Reduction - Bismarck State St (Calgary Ave to 43rd Ave) (Shared Use Path/Bikeway Roadside Improvements)	\$320,000	\$0	\$75,000 (Bismarck)	\$395,000	CRP	23671	NA	
NDDOT	23.6.26	Bridge - I-94 (I-94 Midway and Grant Marsh Bridge) (Preliminary Engineering work for a highway planning study evaluating Grant Marsh Bridge)	\$4,500,000	\$500,000	\$0	\$5,000,000	IM	23595	NA	Modification Moved from 2022 (OCTOBER 2022)
NDDOT	23.6.27 23.6.28	⁷ Rural - I-94 (East of 161 Interchange to east of Menoken Interchange) (8.8 miles, Median X-Over, Ramp Connections)	\$1,368,544	\$151,838	\$0 (Burleigh)	\$1,518,382	IM	22639	NA	Modification Moved from 2022 (DECEMBER 2022)
NDDOT	23.6.28 22.6.28	Urban Regional - Mandan Memorial Highway (Memorial Highway Phase 1, Extends TBD) (Reconstruction, Sanitary Sewer & Drainage)	\$2,706,000	\$303,000	\$2,999,000 (Mandan)	\$6,008,000	SU-CPU	22005 23133	NA	Modification Moved from 2022 (DECEMBER 2022)
NDDOT	23.6.29 23.6.33	Urban Regional - Mandan Memorial Highway (Memorial Highway Phase 2, Extends TBD) (Reconstruction, City Utilities)	\$15,848,000	\$1,776,000	\$5,398,000 (Mandan)	\$23,022,000	SU-CPU	23277	NA	Modification Moved from 2022 (DECEMBER 2022)
NDDOT	23.6.30	⁸ Safety - Bismarck District Highways (Various Highways throughout NDDOT's Bismarck District) (Pavement Markings)	\$1,125,845	\$125,093	\$0	\$1,250,938	HES	23792	NA	Amendment New Project (JAN 2023)
NDDOT	23.6.31	Safety - Bismarck Tyler Parkway Interchange (Tyler Parkway Interchange and Crossroad) (Signage)	\$103,270	\$11,474	\$0 (Burleigh)	\$114,744	IM	23807	NA	Amendment New Project (JAN 2023)
NDDOT	23.6.33	⁹ Rural - Hwy 1806 (From South of Fort Lincoln to South of 10th St SE) (Chip-Seal Costs)	\$208,224	\$33,136	\$0	\$231,360	SS	23836	NA	Amendment Project (Removed State Funded) (FEB 2023)
NDDOT	23.6.33	¹⁰ Rural - Hwy 1804 (From Burnt Creek Loop to US 83, only about 7 miles within MPO boundary) (Chip Seal Costs)	\$1,244,202	\$138,244	\$0	\$1,382,446	SS	23837	NA	Amendment New Project (JAN 2023)
NDDOT	23.6.34 22.6.35	Bridge - I-94 (CP railway creek strud, 1 mile E of US 83 N, 19th St separation abt 1/2 mile E of US 83 N) (Deck Overlay, Rail Retrofit, Approach Slabs, Expand Joint Mod)	\$1,195,087	\$132,788	\$0 (Bismarck)	\$1,327,875	IM	23009	NA	Modification Moved from 2022 (JANUARY 2023)
NDDOT	23.6.35	Rural - Statewide ITS equipment (Apple Creek Weigh in Motion sites, east and westbound, around I-94 mile marker 165) (Electronics calibration)	\$39,600	\$4,400	\$0	\$44,000	NH	23886	NA	Amendment New Project (FEBRUARY 2023)
NDDOT	23.6.36 24.6.04	¹¹ Urban Regional - Bismarck 7th St (Front Av to Bismarck Expressway) (Mill and Overlay, Signal Revision, Lighting, tied to project 23.6.37)	\$2,529,062	\$283,438	\$312,500 (Bismarck)	\$3,125,000	NHU	23201	NA	Modification Moved from 2024 (MARCH 2023)
NDDOT	23.6.37 25.6.13	Urban Regional - Bismarck 7th St/5th St (CRP funding has a federal funding cap of \$570,000) (Main Ave to Boulevard Ave) (Mill and Overlay, ADA Ramps, Lighting, tied to project 23.6.36, Bismarck provides local match)	\$1,061,177 \$570,000 \$2,531,177	\$219,793 \$63,891 \$283,674	\$242,330 \$70,431 \$312,761 (Bismarck)	\$2,423,300 \$704,312 \$3,127,612	NHU CRP TOTALS	23347	NA	Modification Moved from 2025 (MARCH 2023)
BISMARCK PARKS & REC DIST/ BISMARCK	23.7.02	Transportation Alternatives - Bismarck Ash Coulee & Tyler Parkway (Bikeway/Walkway) (Sidewalk Improvements)	\$383,000	\$0	\$90,000 (Bis P&R District)	\$473,000	TAU	23236	2023	

¹ Represents an "Expansion" project. An expansion project is focused on improving traffic flow through efforts such as: adding through lanes or turn lanes, new streetlights, upgrading an intersection to a roundabout, or new/improved interchanges.

² Pending Availability of Federal Funds

³ City plans to advance control project in 2022

⁴ Project area extent is larger than the MPO area. Costs have not been provided.