

TO: Bismarck-Mandan Metropolitan Planning Organization Policy Board
FROM: Steve Saunders, MPO Executive Director
DATE: October 12, 2020
RE: Policy Board Meeting

The Bismarck-Mandan MPO Policy Board on **Tuesday, October 20, 2020, at 1:30 PM**. The meeting will be held in the Ed “Bosh” Froehlich Meeting Room, Mandan City Hall, 205 2nd Avenue NW, Mandan, ND. The agenda is outlined below.

Due to ongoing public health concerns related to COVID-19, citizens are encouraged to provide their comments for agenda items on the Metropolitan Planning Organization Policy Board agenda via email to mpo@bismarcknd.gov. Please include which item number your comment references. The comments 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 prior to the day of the meeting. If you would like to appear via video or audio link on an agenda item, please provide your e-mail address and contact information to the above e-mail at least 1 business day before the meeting.

The physical meeting room will be open to the public, but we certainly understand the public wishing to limit their exposure at this time but still participate in government. Before entering the meeting facility, all individuals should self-screen for COVID-19 symptoms or potential exposure and if unable to pass the screening protocol, will be requested to participate remotely in the meeting for the public’s safety. Some of the Policy Board members may attend this meeting remotely. The number of participants to be in person will be physically limited to a maximum total number of occupants in the Commission Chambers that can maintain social distancing. To adhere to public health recommendations to minimize public gatherings during this COVID-19 situation, the following options are being offered to accommodate public attendance and participation in Policy Board meetings:

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 Policy Board](#).

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Next scheduled Policy Board meeting is on 11/17/2020. Please call 701 355-1848 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 least five (5) days prior to the meeting.

PROJECTS UPDATE

<u>Project</u>	<u>% Complete</u>	<u>Contracted Completion Date</u>
Intersection Analysis Study	80	01/31/2021
Orthophotography & Topographic Mapping	95	10/31/2020
2020 Pavement Conditions & Analysis Report	75	12/31/2020

**BISMARCK-MANDAN METROPOLITAN PLANNING ORGANIZATION
POLICY BOARD MEETING
SEPTEMBER 15, 2020**

The Bismarck-Mandan Metropolitan Planning Organization (MPO) Policy Board met on September 15, 2020, at 1:30 p.m. in the Ed “Bosh” Froehlich Meeting Room, Mandan City Hall, 205 2nd Avenue NW, Mandan, ND. Chairman Gerarld Wise presided.

Members present or participating via Zoom were Gerarld Wise, Steve Bakken, Kathleen Jones, Andy Zachmeier, and Justin Froseth for Tim Helbling.

Tim Helbling was absent from the meeting.

Others present or attending via Zoom were Rachel Drewlow, Steve Saunders, and Kim Riepl of the Bismarck-Mandan MPO; Tyler Kaebisch, Ayres & Associates; Mike Bittner, KLJ; Stewart Milakovic, ND Department of Transportation; Baird Bream, Cambridge Systematics; and Ben Ehreth, Bismarck Community Development Department.

CALL TO ORDER

Chair Wise called the September 15, 2020 meeting of the Bismarck-Mandan Metropolitan Planning Organization Policy Board to order.

MINUTES

Chair Wise called for a motion to approve the minutes of the August 18, 2020 Policy Board meeting.

MOTION: Mr. Bakken made a motion to approve the minutes. Ms. Jones seconded the motion and with Andy Zachmeier, Kathleen Jones, Justin Froseth, Steve Bakken and Chair Wise all voting in favor, the minutes of the August 18, 2020 meeting were approved.

2021-2022 DRAFT UNIFIED PLANNING WORK PROGRAM (UPWP)

Ms. Drewlow presented the updated final draft of the UPWP, stating the comment period for review by staff members of the jurisdictions and oversight had been open since the document was first presented in August. Comments were received from the FTA (Federal Transit Administration) but resulted in no changes to the UPWP. However, comments received from the Federal Highway Administration (FHWA) and the North Dakota Department of Transportation (NDDOT) did result in minor typographical changes.

She presented a final draft version of the UPWP based on the changes. The newest version contains the final signed Self-Certification statement of the Bismarck-Mandan MPO which was not in the previous draft version.

Additionally, staff time has been allocated to TASK 206 to cover any amendment that may need to be made to the MTP. This was changed at the suggestion of NDDOT and federal oversight. Previous versions had no staff time allocated to this task, and this change affects TASK 101, the general Administrative task, as the staff time and hours were taken from that task and put towards TASK 206. The reallocation also affects the amounts shown in the cost summaries contained within the appendices of the document.

She concluded by noting other changes within the document were very minor, consisting of either updating of text or dates, and that TAC had recommended approval.

MOTION: Mr. Bakken made a motion to approve the 2021-2020 Unified Planning Work Program. Ms. Jones seconded the motion and with Andy Zachmeier, Kathleen Jones, Justin Froseth, Steve Bakken and Chair Wise all voting in favor, the motion was approved.

US HIGHWAY 83/71ST AVENUE INTERCHANGE

Mr. Saunders referred to Exhibit B in the packet and provided some background as to what prompted the letter. The City of Bismarck received a request by a local business entity regarding the development of the southwest quadrant of the ND Highway 1804/US Highway 83 intersection.

The City of Bismarck subsequently requested an analysis by the NDDOT of the access spacing and locations for that quadrant. NDDOT then inquired as to the City's intent regarding placement of an interchange at that intersection as some of the analysis would be impacted by the answer. The City's response at that time was to assume no interchange.

Mr. Saunders summarized the letter from NDDOT as requesting conversations be held between the MPO and its jurisdictions to ascertain whether a future interchange will be located at that intersection. Up to now, this has been a protected area (in terms of right-of-way) for a potential interchange.

Several previous MPO studies support the preservation of right-of-way, including the Northern Bridge Corridor Study of 2004, the US Highway Corridor Transportation Study of 2006, the North/South Beltway Study of 2009; and more recently, the Highway 83 Alternatives Study in 2019.

Mr. Saunders shared images from the Highway 83 Alternatives Study depicting recommendations for future improvements to the intersection. The study recommends and expansion on Highway 83 to six lanes from Calgary to 57th with turn lanes.

An at-grade intersection at 83/71st, according to the study, was estimated to cost approximately \$2.2 million. This cost estimate does not include the two extra lanes for the six-lane expansion. An interchange at this location was estimated to cost approximately \$25 million.

Mr. Saunders indicated that until now, no one had challenged the preservation of right-of-way for the interchange concept or offered an alternative through the platting process. That has changed now with the proposed development of the southwest

quadrant of the intersection, and NDDOT is challenged to determine whether right-of-way preservation is necessary or not.

He concluded with saying the TAC refrained from taking action on this item other than to vote in favor of having another meeting to discuss the issue.

Mr. Bakken asked if NDDOT had provided any reasons for their arguments to preserve the right-of-way for an interchange at the intersection and Mr. Saunders replied he could only surmise they were being made in the interest of preserving US Highway 83. He noted efforts by NDDOT to expand the scope of the Highway 83 Alternatives Study to include north/south alternatives to relieve pressure on Highway 83. The additional analysis performed did not yield viable alternatives in that respect. Further, the northern bridge concept has been examined as a reliever to Highway 83, but its impact is minimal.

Discussion ensued and Mr. Bakken expressed concern with NDDOT's desire for yet another study to be done, paid with taxpayer dollars. He encouraged more discussion to take place amongst the TAC members to find a resolution that is "near-future" rather than "distant-future".

MOTION: Ms. Jones made a motion to return the discussion of the US Highway 83/71st Avenue Interchange back to the Technical Advisory Committee. Mr. Bakken seconded the motion and with Andy Zachmeier, Kathleen Jones, Justin Froseth, Steve Bakken and Chair Wise all voting in favor, the motion was approved.

2021 HSIP PERFORMANCE TARGETS

Ms. Drewlow announced NDDOT has established their Highway Safety Improvement performance targets for the year 2021. The targets address the number and rate of fatalities, the number and rate of serious injuries, and the number of non-motorized fatalities and serious injuries for the entire state highway system.

By adopting these targets, the MPO would be supporting projects that help the state achieve the targets. The targets assist influence where federal funding is used, specifically which safety projects are funded. It also ensures the work that the decisions made by the MPO and its jurisdictions go directly to benefiting the state highway system and improving safety.

She stated TAC recommended adoption of the NDDOT 2021 HSIP targets.

MOTION: Ms. Jones made a motion to adopt the NDDOT 2021 HSIP Performance Targets as presented. Mr. Bakken seconded the motion and with Andy Zachmeier, Justin Froseth, Kathleen Jones, Steve Bakken and Chair Wise all voting in favor, the motion was approved.

2020 ORTHOPHOTOGRAPHY/TOPOGRAPHIC MAPPING PROJECT

Mr. Kaebisch reported the project is moving into its final stages as the Lidar and aerial imagery production for the entire project area had been processed and delivered to the MPO as of September 2nd. Individual Tiff imagery files and all Lidar files were

delivered via Amazon Cloud web services and external hard drives. Size limitation issues were encountered which is why additional hard drives were sent out to be shared.

Some comments have already been received and they are being addressed. There were some rendering issues occurring in ArcMap and ArcPro and that has been resolved by using MrSID files which were put on hard drives and have been sent out for review. The MPO should have those on Thursday.

Another request was received that the MrSID files be delivered in a Generation 3 file format which does not allow for infrared on the tile background (provided by a fourth band) or a transparent background on the mosaics. Although all the MrSID files were run on a Generation 3 format, the final deliverable will be produced in a Generation 4 format which will support a fourth band, allowing for the infrared on the tile background and a transparent background on the mosaics.

2020 PAVEMENT CONDITIONS & ANALYSIS REPORT

Ms. Drewlow reported the project to be approximately 60% complete. The City of Bismarck's PCI (pavement condition index) has been completed and is now with the City of Bismarck Engineering Department for review. The MPO's PCI is nearly complete and will be shared within the next week.

There will be a meeting with the jurisdictions to discuss the PCI as there are roadways on which the condition of the road is deteriorating more quickly than normal.

Everything is looking good and all the condition data should be delivered by the end of the week and work on the analysis and reporting will continue throughout the rest of the month. The project is on track to be finished on budget by the end of the year.

INTERSECTION ANALYSIS STUDY

Mr. Bittner announced the 2nd, and last, public information meeting was conducted virtually from August 17th through September 9th, and now complete, had been the emphasis of the past month. He recalled the interactive map-based survey that allowed people to comment on all the alternatives on a location-by-location basis. Very good response was received to the survey, with over 1,300 visitors to the website and nearly 350 survey comments on the intersections involved in the study. Additionally, there was an interactive Q&A session held on September 1, which proved to be a good tool to let people talk about their intersection concerns, even if the location of the intersection was outside of those included in the study.

Moving forward, the feedback received from the virtual public engagement opportunity will be summarized. The work on the traffic control playbook development, which is about one-third to half-way complete now, will continue, along with starting the implementation strategy.

ND HIGH CRASH LOCATIONS

Ms. Drewlow shared the presentation on the high crash locations in North Dakota, included as Exhibit G in the packet. She noted the data is compiled for North Dakota communities with populations greater than 5,000. It is published annually for a three-

year period, and this report is for the years 2017-2019.

2020-2023 TIP ADMINISTRATIVE MODIFICATION

Ms. Drewlow recalled the approval of the 2021-2024 TIP in August. Although approved by the Bismarck-Mandan MPO, it has not yet been approved by federal oversight, meaning the current TIP is still the 2020-2023 TIP.

She explained Exhibit H was an administrative modification for the year 2020 for the movement of 2025 Urban Roads program funding to help fund an Urban Grants project that includes portions of Main Street in Mandan. The project was originally planned for 2020-2021, but because of the decreased setbacks along Main Street, the project bids came in quite a bit higher than estimated. The movement of these funds was approved by the MPO and the Administrative Modification indicates the previous amount of federal funding given to the Urban Grants project, plus the infusion, and the total amount.

The project is not new to the TIP and the total amount of the funding transfer does not exceed 10% of the total amount of the 2020 year programmed within the 2020-2023 TIP; therefore, an administrative modification is sufficient and an amendment is not required.

TRANSPORTATION CONNECTION

Stewart Milakovic of NDDOT and Baird Bream of Cambridge Systematics addressed the TAC regarding the state's update to the Long Range Transportation Plan. The most recent work on the update, named the *Transportation Connection*, was presented through a slideshow included in the packet as Exhibit I.

Scenario planning was presented as part of the update, and details were provided on the following four plausible scenarios: Rural Renaissance; Cities and Centers; Ghost Towns; and Smart and Connected. More information on the scenarios presented and other information about the *Transportation Connection* can be found at www.transportationconnection.org.

OTHER BUSINESS

FAST Act Expiration

Mr. Saunders announced the FAST (Fixing America's Surface Transportation) Act will be expiring on September 30. He stated he had inquired of Wayne Zacher of NDDOT what the ramifications to the Bismarck-Mandan MPO might be with the bill's expiration. It seems there will be little impact as we are still using 2019 funding and have 2020 funds in reserve to take us beyond 2020.

BMMPO Executive Director Retirement

Ben Ehreth, City of Bismarck Community Development Director, disclosed the imminent retirement of Steve Saunders, who has been serving the MPO for the last 22 years. He announced Mr. Saunders' last day of service to the MPO will be December 1. A plan to find a replacement is being developed and will begin with the advertising of the

open position in the near future. The selection of the applicant will be an effort combining representatives from the City of Bismarck as well as externally, very likely from the Policy Board, to get representative input on who will be the next Principle Transportation Planner. Policy Board members expressed their thanks and appreciation to Mr. Saunders for his service to the MPO.

ADJOURNMENT

There being no further business, Chair Wise declared the meeting adjourned at 2:42 pm.

The next scheduled meeting will take place in the Ed “Bosh” Froehlich Meeting Room in Mandan City Hall, 205 2nd Avenue NW, Mandan, on October 19, 2020 at 1:30 p.m.

Respectfully submitted,

Kim Riepl
Recording Secretary

APPROVED:

MPO Policy Board Chair

Bismarck-Mandan MPO

TIP **Amendment**

Project Year(s)

Entity	Project	Federal	State	Local	Total	Federal Funding Source
NDDOT	21.6.02	\$495,221	\$55,024	\$0	\$550,245	IM

Project Description:

This project is for concrete pavement and ramp revisions to the Exit 153 Interchange at Mandan Ave. The project's previous total cost was \$3,500,000. The cost decreased more than a million dollars and meets the threshold for a TIP amendment. Additionally this project is being funded with 2020 funds, instead of 2021 funding. The project is being bid in November 2020 and is still expected to be constructed in 2021.

Consistency with the Bismarck-Mandan MPO Metropolitan Transportation Plan:

The project is in the current TIP and is consistent with the Arrive2045 Metropolitan Transportation Plan.

Amendment Approved on _____ by the Bismarck-Mandan MPO Policy Board

 Bismarck-Mandan MPO Policy Board Chair

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Bismarck-Mandan MPO

TIP **Amendment**

Project Year(s)

Entity	Project	Federal	State	Local	Total	Federal Funding Source
NDDOT	20.6.03	\$6,763,074	\$757,952	\$1,342,628	\$8,863,655	NHU

Project Description:

The project is for the reconstruction of approximately 4.2 miles of ND 1806, from the I-94 ramp to 27th St NW. The previous total cost was \$7,711,000, and this had increased over a million dollars. Therefore, a TIP amendment is needed. The project is being bid in November 2020.

Consistency with the Bismarck-Mandan MPO Metropolitan Transportation Plan:

The project is in the current TIP and is consistent with the Arrive2045 Metropolitan Transportation Plan.

Amendment Approved on _____ by the Bismarck-Mandan MPO Policy Board

 Bismarck-Mandan MPO Policy Board Chair

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TAC and Policy Board Handout

October 19-20th, 2020Re: **Urban Regional Program**

Total of 6 projects were submitted; all from City of Bismarck. The projects were scored by MPO staff against MPT Objectives. Points were provided to the Prioritization Committee for information during their prioritization process. Rankings of the Prioritization Team, who met on **October Xth**, are below. 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	MTP
Provided at Meeting	Bismarck	Maintenance	7th St & 9th St (Main Ave to Boulevard Ave): Mill and Overlay, consideration of revised lighting system (3500 ft – 7 th /4000 ft – 9 th)	1.650 Million / 1.32 Million	11.948	Yes
Provided at Meeting	Bismarck	Construction	Bismarck Expy/ND810 (18th St to 26th St): Add bicycle/pedestrian facilities, 6 ft wide (3600 ft); Pedestrian countdown timers and pushbutton actuation at the intersection of Airport Rd/Bismarck Expy.	380,000 / 304,000	14.632	Yes
Provided at Meeting	Bismarck	Construction	State Street/US 83 (Calgary Ave to 43rd Ave): Multi-use trail facility (2630 ft)	336,000 / 268,800	14.632	Yes
Provided at Meeting	Bismarck	Maintenance	Bismarck Expy/ ND 810 (I-94 to Rosser Ave): Concrete Pavement Repairs (CPR)/Grinding (1.325 miles)	2.461 Million / 1.9688 Million	14.632	Yes
Provided at Meeting	Bismarck	Maintenance	University Drive/ ND 1804 (Bismarck Expy to Burleigh Ave): Mill and Overlay (2.42 miles)	3.880 Million / 3.104 Million	11.948	Yes
Provided at Meeting	Bismarck	Maintenance	State Street/ Boulevard Ave (6th St to Divide Ave): Concrete Pavement Repairs (CPR)/Grinding (~0.78 miles)	1.143 Million/ 914,400	11.948	Yes

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**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: _____

PRIORITY# _____ Regional: Y/N Y Urban Roads: Y/N N

City: Bismarck Street: Const: 7th & 9th St – Main Avenue to Boulevard Avenue ESA: Same as construction limits

County: Burleigh Length: 7th St – 3500', 9th St – 4000'

Proposed Improvement: Mill and Overlay, consideration of revised lighting system.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
150	150	0	0	1,500	0		1,800

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

On Street Parking Allowed? _____ Present: (yes) One Side Both Sides Angle Parallel
 Parking on both side E Avenue A to Boulevard Ave – 7th and 9th
 Proposed: (yes) One Side Both Sides Angle Parallel

Proposed Improvements	
ADT Present: <u>13,500</u> Yr: <u>2019</u>	Travel Way Width : <u>48'</u>
ADT Design: _____ Design year _____	No. of Lanes: <u>4 (max)</u>
Design Speed: <u>25</u>	Roadway Width: <u>48'</u>
Maximum Curve: <u>N/A</u>	Min. R/W Width: <u>80'</u>
Maximum Grade: <u>N/A</u>	

Right of Way	
Will Additional ROW or easement be acquired? <u>No</u>	ROW acquisition by: <u>City DOT</u>
Has any ROW easements been acquired since 7-1-72: <u>No</u>	ROW Condemnation by: <u>City DOT</u>

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): <u>none</u>	
Will there be any impacts to 4(f) or 6(f) properties: <u>none</u>	
Airports: _____	Public Hearings: _____
Environmental Classification (Cat-Ex, EA, EIS): <u>Cat-Ex</u>	
Transportation Enhancements: _____	
Intermodal: _____	
Pedestrian Needs: _____	

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

Purpose and Need Statement:

The purpose of the project is to restore the load carrying capacity of the roadway and extend the useful life of the pavement.

Existing Conditions:

1. When was the current street section built? 1976
 Has there been any additional maintenance to the street section? Mill and overlay in 2009

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?
At the southern termini of the project, the lane configuration is 4 lanes one way with the outside being shared thru/turn lanes. Near the northern termini of the project, two driving lanes with parking allowed on both sides exists.

3. What is the condition of the pavement section? Pavement Management rating at the most recent survey in 2016 was a PCI value of 83. Utilizing pavement management predations models this roadway PCI value in 2020 was 73 and will reach a PCI value of 58 at the year 2025.
 - A. If the pavement section is asphalt, is there any alligator cracking,

longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting? At that time the survey in 2016 it identified 260 square feet of low severity alligator cracking, 12,500 linear feet of longitudinal/transverse cracking, 360 square feet of low severity rutting, 950 square feet of asphalt patching and 306,250 square feet of low severity weathering.

- 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?
Sidewalks are present on both sides of the roadways throughout the project area.
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Miscellaneous repairs on older manholes or inlets would be included
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?
Waterlines under 7th and 9th street replaced in 2020. No other work anticipated to municipal water/sewer lines.
9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
Existing lighting is 250 watt HPS luminaires on primarily 28' concrete poles. Analysis of existing lighting and potential to make adjustments potentially.
10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
Traffic signal modifications and replacement of outdated signal infrastructure is previously included in a separate programmed project.

The request for this project is based on the pavement condition. According to the City of Bismarck's Pavement Management System score for this section of roadway, this section of roadway should be milled and overlaid by 2025 when the PCI value is predicted to be 58. 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.

This roadway was originally constructed in 1976 with 3" of HBP placed on top of the existing 5" HBP or concrete pavement. The roadway received a mill and overlay in 2009. There is a minimum 80' of right of way. The pavement is repaired annually for alligator cracking and rutting with thin lift patch overlays that are chip sealed. The City of Bismarck has spent \$21,632 in maintenance cost from 2018 through 2020. This type of annual repair has a significant impact on the City of Bismarck's maintenance budget.

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. Sidewalks are in place along both sides of the corridor.

Remarks:

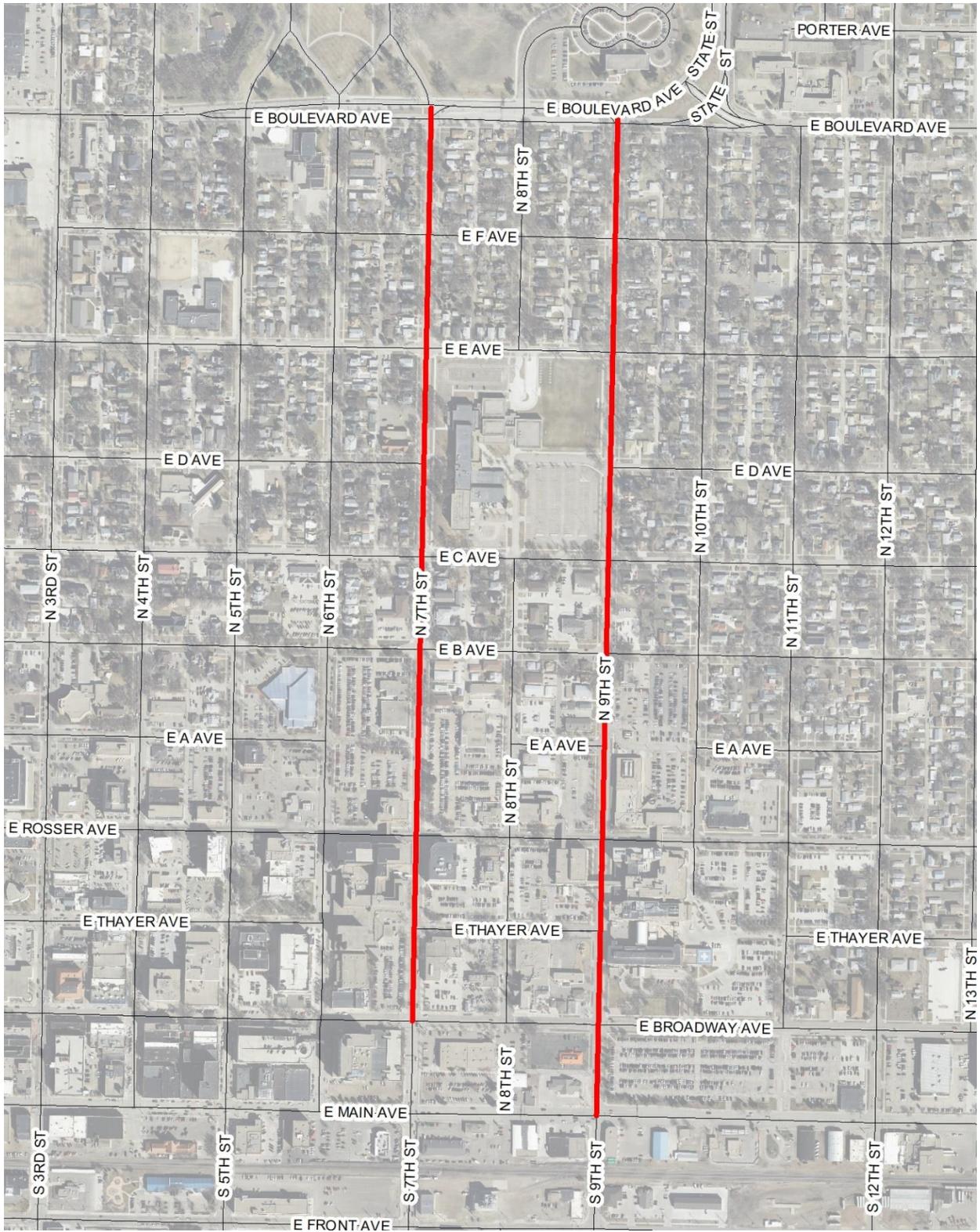
City Engineer: Gale Hill

Date: 9/30/20

District Engineer: Larry Lenz

Date: 10/6/20

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





CITY OF BISMARCK - ENGINEERING DEPT.
ND DOT Project Estimate
7th Street and 9th Street from Main Avenue to Boulevard Avenue

Prepared on:
8/27/20

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price	Amount
1	103	100	CONTRACT BOND	L SUM	1	\$ 10,000.00	\$ 10,000.00
2	202	130	REMOVAL OF CURB & GUTTER	LF	3000	\$ 3.00	\$ 9,000.00
3	202	132	REMOVAL OF BITUMINOUS SURFACING	SY	2170	\$ 3.00	\$ 6,510.00
4	203	101	COMMON EXCAVATION-TYPE A	CY	722	\$ 13.00	\$ 9,386.00
5	203	109	TOPSOIL	CY	37	\$ 4.00	\$ 148.00
6	251	300	SEEDING CLASS III	SY	330	\$ 25.00	\$ 8,250.00
7	253	200	HYDRAULIC MULCH	SY	330	\$ 3.00	\$ 990.00
8	302	121	AGGREGATE BASE COURSE CL 5	TON	1500	\$ 35.00	\$ 52,500.00
9	411	100	MILLING PAVEMENT SURFACE	TON	4000	\$ 22.00	\$ 88,000.00
10	420	111	CRS2P EMULSIFIED ASPHALT	GAL	14452	\$ 2.50	\$ 36,130.00
11	420	128	COVER COAT MATERIAL CL 41-M	SY	36130	\$ 1.00	\$ 36,130.00
12	430	145	RAP - SUPERPAVE FAA 45	TON	5020	\$ 45.00	\$ 225,900.00
13	430	5803	PG 58S-28 ASPHALT CEMENT	TON	402	\$ 470.00	\$ 188,940.00
14	704	1100	TRAFFIC CONTROL	L SUM	1	\$ 35,000.00	\$ 35,000.00
15	709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	2170	\$ 4.00	\$ 8,680.00
16	748	140	CURB & GUTTER-TYPE I	LF	3000	\$ 25.00	\$ 75,000.00
17	762	120	PREFORMED PATTERNED PVMT MK-MESSAGE	SF	928	\$ 26.00	\$ 24,128.00
18	762	1304	PREFORMED PATTERNED PVMT MK 4IN LINE	LF	4000	\$ 4.50	\$ 18,000.00
19	762	1255	PREFORMED THERMO PLASTIC PVMT MK 6IN LINE	LF	3600	\$ 10.50	\$ 37,800.00
20	762	1308	PREFORMED PATTERNED PVMT MK 8IN LINE	LF	2850	\$ 12.00	\$ 34,200.00
21	762	1270	PREFORMED THERMO PLASTIC PVMT MK 24IN LINE	LF	1458	\$ 36.00	\$ 52,488.00
22	SP	1	SIGNS	L SUM	1	\$ 15,000.00	\$ 15,000.00
23	SP	2	DESIGN ITEMS NOT INCLUDED - 15%	L SUM	1	\$ 145,827.00	\$ 145,827.00
CONSTRUCTION TOTAL							\$ 1,118,007.00
CONTINGENCY - 10%							\$ 111,800.70
2020 PROJECT COST							\$ 1,229,807.70

Design Assumptions:

2.5" Mill & Overlay - in urbanized sections with curb & gutter	2021	\$ 1,279,000.00
6% AC Full Depth Patching	2022	\$ 1,330,000.00
2020 Average Bid Prices with 4% increase per year	2023	\$ 1,383,000.00
	2024	\$ 1,438,000.00
	2025	\$ 1,496,000.00

STREET	From	To	2016 PCI	PREDICTION MODELING PCI VALUE					
				2020	2021	2022	2023	2024	2025
7TH STREET	BROADWAY AVENUE	THAYER AVENUE	83	73	70	67	65	62	59
7TH STREET	THAYER AVENUE	ROSSER AVENUE	86	76	73	70	68	65	62
7TH STREET	ROSSER AVENUE	B AVENUE	87	77	74	71	69	66	63
7TH STREET	B AVENUE	C AVENUE	76	66	63	60	58	55	52
7TH STREET	C AVENUE	D AVENUE	83	73	70	67	65	62	59
7TH STREET	D AVENUE	E AVENUE	72	62	59	56	54	51	48
7TH STREET	E AVENUE	F AVENUE	86	76	73	70	68	65	62
7TH STREET	F AVENUE	50' S OF BOULEVARD AVENUE	82	72	69	66	64	61	58
9TH STREET	100' N OF MAIN AVENUE	BROADWAY AVENUE	83	73	70	67	65	62	59
9TH STREET	BROADWAY AVENUE	THAYER AVENUE	83	73	70	67	65	62	59
9TH STREET	THAYER AVENUE	ROSSER AVENUE	79	69	66	63	61	58	55
9TH STREET	ROSSER AVENUE	A AVENUE	84	74	71	68	66	63	60
9TH STREET	A AVENUE	B AVENUE	83	73	70	67	65	62	59
9TH STREET	B AVENUE	C AVENUE	86	76	73	70	68	65	62
9TH STREET	C AVENUE	D AVENUE	82	72	69	66	64	61	58
9TH STREET	D AVENUE	E AVENUE	83	73	70	67	65	62	59
9TH STREET	E AVENUE	F AVENUE	82	72	69	66	64	61	58
9TH STREET	F AVENUE	50' S OF BOULEVARD AVENUE	84	74	71	68	66	63	60

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 9/30/2020

PRIORITY#

City: Bismarck Street: Constr limits: Bismarck Expressway/ND810 – 18th Street to 26th Street. ESA limits: 12th St to 26th St

County: Burleigh Length: 3125'/0.60 Miles

Proposed Improvement: Sidewalk/Pedestrian Facility

Cost Estimates Breakdown (in \$1,000)							
CE	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
70	70	0	0	310	0	0	450

Present Road: Surface Width? Multi-lane Hwy no ped facility 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: <u>N/A</u> Yr: <u> </u>	Travel Way Width : <u>6' sidewalk</u>
ADT Design: <u>N/A</u> Design year <u>N/A</u>	No. of Lanes: <u>N/A</u>
Design Speed: <u>N/A</u>	Roadway Width: <u>63' face to face</u>
Maximum Curve: <u>N/A</u>	Min. R/W Width: <u>80'</u>
Maximum Grade: <u>N/A</u>	

Right of Way
Will Additional ROW or easement be acquired? <u>Potentially</u> ROW acquisition by: <u>City (DOT)</u>
Has any ROW easements been acquired since 7-1-72: <u>No</u> ROW Condemnation by: <u>City DOT</u>
Est. No. of occupied family dwelling to be displaced? <u>None</u>

4. How are the existing geometrics of the roadway? NA
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?
There are no sidewalks or shared use paths within the project area.
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project? NA
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? Roadway lighting is in place

What intersections currently have traffic signals? Airport Road and Bismarck Expressway, 26th Street and Bismarck Expressway. Are there any locations that have a high accident rate? No. Are additional turning lanes needed? NA

Remarks:

The 2017 Bismarck Mandan Bicycle and Pedestrian plan identified continuing connections of non-motorized transportation facilities along Bismarck Expressway between 18th street and 26th Street. This project would address a need in the community providing connectivity and transportation access within a low- and moderate-income census tract to a shopping and grocery store. The Dakota Center for Independent Living provides services to people with disabilities. Their empowerment committee has provided an unsolicited letter on July 16, 2020 (attached) referencing the lack of pedestrian facilities on Bismarck Expressway.

The project includes approximately 3100 LF of 6' sidewalk on the north side of Bismarck Expressway approximately 500 LF of 6' sidewalk on the south side of Bismarck Expressway. Due to existing right of way constraints, 2' of stamped boulevard is also included in areas where the sidewalk would abut the curb. Project would include traffic signal modifications at Airport Rd/Bismarck Expy to include pedestrian countdown timers and pushbutton actuation where they are not currently present.

There is an approximate 8' boulevard behind the curb along the north side of Bismarck Expressway. While a 6' sidewalk could be placed within this area, we would propose outreach to the adjacent landowners to inquire if they would agree to an additional zero cost easement across the existing utility and access easements that front Bismarck Expressway in order to place a portion of the sidewalk within the easement area. This would provide additional pedestrian separation from the higher speed traffic on Bismarck Expressway and would provide an area for snow storage which would lessen the landowner's responsibility in keeping the sidewalk free of snow and ice.

City Engineer: Gale Hill

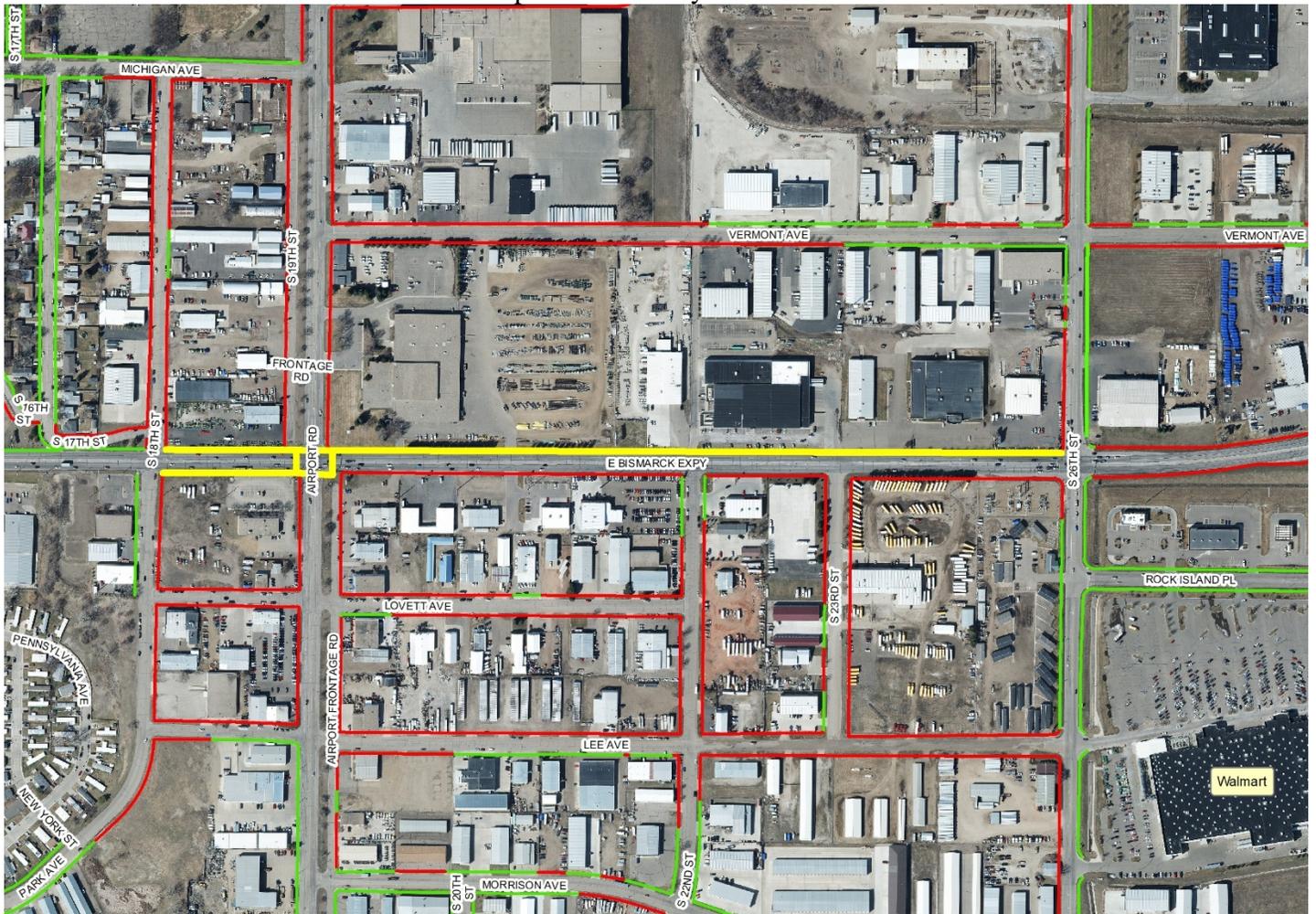
Date: 9/30/20

District Engineer: _____

Date: _____

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

Project area is shown in yellow in the exhibit below. Areas in green represent completed sidewalk while areas in red represent roadways with no sidewalks



City Engineer: Dale Hill

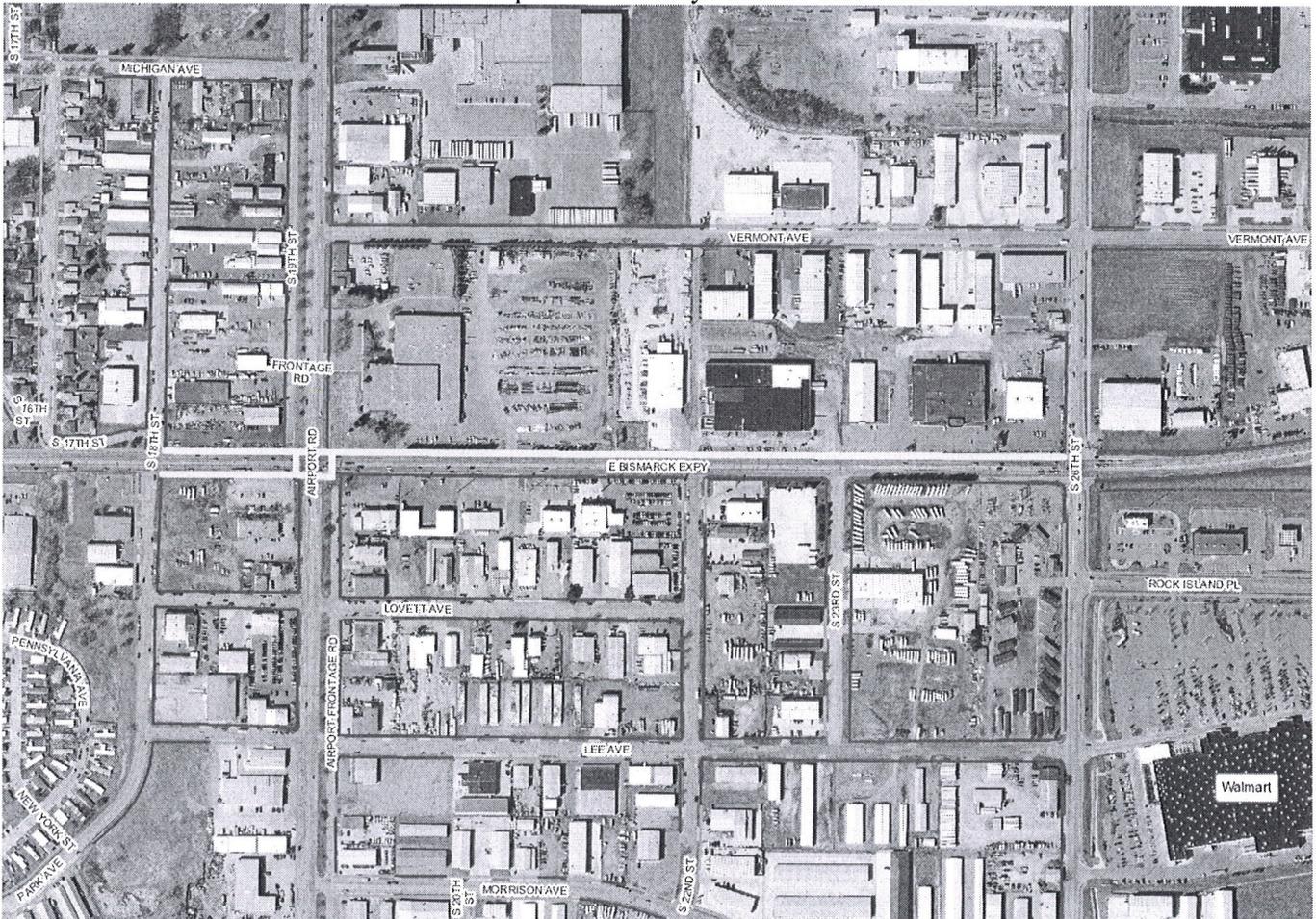
Date: 9/30/20

District Engineer: Larry Gay

Date: 10/6/20

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

Project area is shown in yellow in the exhibit below. Areas in green represent completed sidewalk while areas in red represent roadways with no sidewalks



Bismarck Expressway Sidewalk

18th St to 26th St - Estimate of Cost

City of Bismarck September 2020

<u>ITEMS</u>	<u>UNITS</u>	<u>QTY</u>	<u>PRICE</u>	<u>TOTAL</u>
ADA Curb Ramps	EA	8	\$4,000	\$32,000
6' concrete sidewalk	SY	3200	\$50	\$160,000
Aggr Base Course CL 5	TON	700	\$50	\$35,000
Traffic Signal Modifications	LS	1	\$35,000	\$35,000
Pavement Markings Modifications	EA	2	\$5,000	\$10,000
Contract Bond	EA	1	\$5,000	\$5,000
Traffic Control	EA	1	\$5,000	\$5,000
Mobilization	EA	1	\$5,000	\$5,000

ESTIMATE TOTAL

Total (2020)	\$287,000
Total (2023) (3%/3 Years)	\$310,000

Gabe Schell

From: Whitnie Olsen
Sent: Thursday, July 16, 2020 1:42 PM
Subject: FW: 20200716105716487.pdf
Attachments: 20200716105716487.pdf

Mayor and Commissioners,

Please see the attached document and message below from Kathy Temchack.

Thank you,

Whitnie Olsen**Administrative Technician****City of Bismarck Administration**

221 N 5th St, 4th Floor
Bismarck ND 58501

Phone: 701-355-1305

Fax: 701-222-6470



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From: kathyt@dakotacil.org <kathyt@dakotacil.org>
Sent: Thursday, July 16, 2020 11:35 AM
To: Whitnie Olsen <wolsen@bismarcknd.gov>
Subject: 20200716105716487.pdf

Whitney,

I work at Dakota Center for Independent Living where we provide services to people with disabilities of all ages and any type of disability. DCIL has an empowerment committee that advocates to stop barriers in our area. One of the big concerns are sidewalks on expressway because that is a major route for people because of Walmart and not everyone drives, some walk, have walkers and wheelchairs the street is very busy and having to go through parking lots is very dangerous.

One other big concern is there is one curb cut and that is by Mac's and they have that partially blocked with their signs and equipment, no way should this be allowed.

It is nice to see sidewalks and curb cuts now going up 26th street now we hope this will continue by the ND housing. I have seen people with walkers trying to push it so they don't fall and stroller's all types of people and in the winter this is impossible.

Please read the concerns of the people, I know this is in there handwriting and thoughts but their concerns are serious and in the safety of our residence.

Thank You

Kathy Temchack

DCIL Advocate Specialist

6-26-2020

City

Need - Curb cut app -

Need BUS STOPS

not fly bys -

some one with a disability & no auto needs a

Bus Stop not just a windowed chair to sit on (not enclosed for winter weather)

- access to bathrooms
- side walks needed in well traveled areas
- side walks should not contain outside displays of business places (Max) ex

12th street - auto company

On the Strip of Mandan - NO SIDEWALKS

Snow pushed over side walks that limits people in wheel chairs -

12th street BAD - people have to walk on street DANGEROUS

City of Bismarck

I'd like to see more sidewalks in Bismarck,
like going down 26th street from Main to Walmart,
same with Expressway from Walmart on 26th Street
to like around 15th Street there's no sidewalks. Those
two streets I feel are popular streets for walkers &
bikers, even wheelchair people.

Randee Saile,
randeesailer@yahoo.com

the sidewalks on 26th & Express way
Blocked. curbs threw out do not exist
the empty lots should have sidewalks,
parking lots are very ~~dangerous~~ dangerous
curb cut blocked by Mac's expressway

Thank you
Linda Fahl

City Concerns

Better accessibility at express way and 26th Street, only one curb cut useable, however other are not available especially during winter for wheel chair.

Curb cut ~~outs~~ outs for
+ elderly
* physically challenged
* mentally challenged

Curcuts not blocked



Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Aug 2018 © 2020 Google

Bismarck, North Dakota



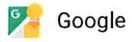
Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View



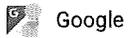
Attachment 1

Google Maps 2599 E Bismarck Expy



Image capture: Aug 2018 © 2020 Google

Bismarck, North Dakota



Street View





**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 9/30/2020

PRIORITY#

City: Bismarck Street: Constr Limits: State Street/US 83 – Calgary Av to 43rd Avenue ESA limits State St – Calgary Ave to 43rd Ave.

County: Burleigh Length: 2630'/0.50 Miles

Proposed Improvement: Multi-use Trail Facility

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
	56	0	0	280	0	0	336

Present Road: Surface Width? Dvd Hwy no ped facility 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: <u> </u> Yr: <u> </u>	Travel Way Width : <u>10'</u>
ADT Design: <u> </u> Design year <u> </u>	No. of Lanes: <u>1</u>
Design Speed: <u> </u>	Roadway Width: <u> </u>
Maximum Curve: <u> </u>	Min. R/W Width: <u> </u>
Maximum Grade: <u> </u>	

Right of Way	
Will Additional ROW or easement be acquired? <u>No</u>	ROW acquisition by: City DOT
Has any ROW easements been acquired since 7-1-72: <u>No</u>	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): _____No_____

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

Airports: _____No_____ Public Hearings: _____None_____

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

Transportation Enhancements: _____

Intermodal: _____

Pedestrian Needs: Extension of an existing facility linking commercial development areas to existing pedestrian facilities

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

Purpose and Need Statement

The purpose of the project is to provide additional pedestrian connectivity in order to improve safety and mobility of the pedestrian and bicycle user within the public right of way.

Existing Conditions

1. When was the current street section built. Has there been any additional maintenance to the street section. NA
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. NA
3. What is the condition of the pavement section. NA
 - 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? NA
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
7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project? NA
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? Roadway lighting is in place

What intersections currently have traffic signals? State Street and Calgary Avenue, and State Street and 43rd Avenue. Are there any locations that have a high accident rate? No. Are additional turning lanes needed? NA

Remarks:

The project includes approximately 2500 LF of asphalt pavement trail extension from the northwest pedestrian ramp of US 83/Calgary Avenue to the southwest pedestrian ramp of US 83/43rd Avenue (to be constructed in 2020). The 10' wide shared use path would be an extension of the north/south path along State Street that terminates at the ND Capitol Grounds and provides connectivity to east/west facilities such as sidewalks and on-street bike lanes on Divide Avenue and sidewalks and shared use paths on Century Avenue and 43rd Avenue.

The purpose of this project is to provide increased network connectivity of the non-motorized user by filling in what will be a gap in the network by 2022. This project would provide additional access to retail, shopping and housing uses in north Bismarck and provide critical system linkage to recently constructed or programmed pedestrian facilities on 43rd Avenue NE. The 2017 Bismarck Mandan Bicycle and Pedestrian plan identified continuing connections of non-motorized transportation facilities along State Street between Calgary Avenue and 43rd Avenue. All modifications to the signal system at US 83/43rd Avenue would be included in the 43rd Avenue reconstruction project and no funds are being requested from the urban regional program for that work. Comments/requests from the public and observation of pedestrians walking along the shoulder of US83/State Street including motorized wheel chairs.

City Engineer: Gale Hull

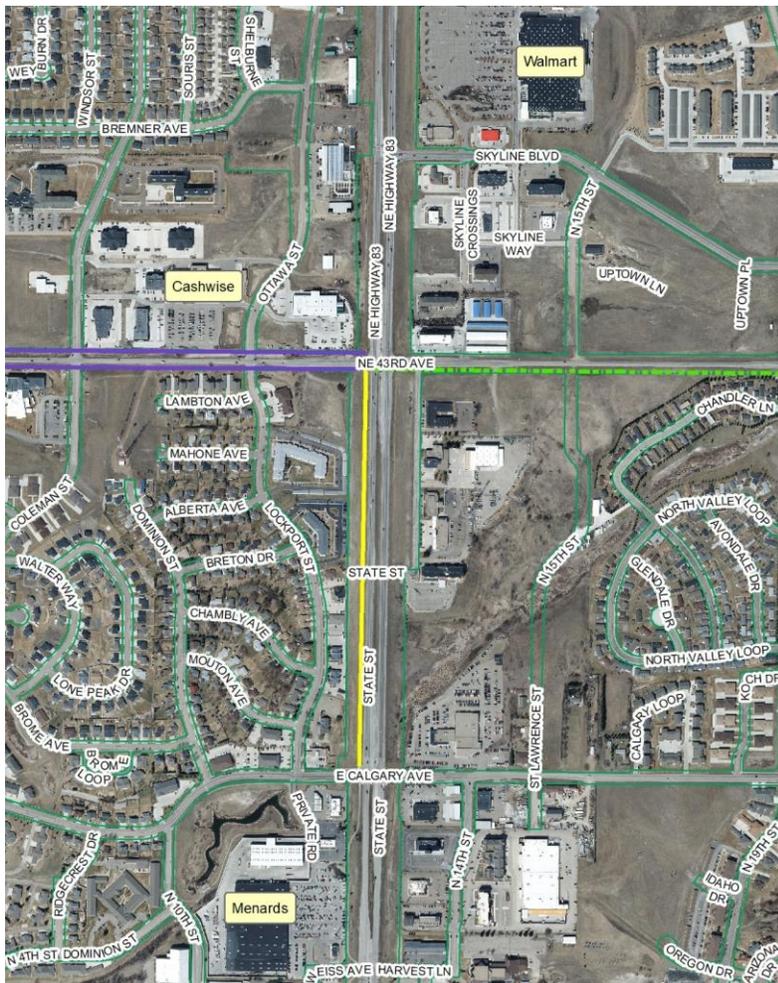
Date: 9/30/20

District Engineer: _____

Date: _____

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

The project is located along US 83/State Street beginning north of Calgary Avenue and continuing north to 43rd Avenue NE as shown in yellow. The purple lines reflect shared use path (north side) and sidewalks (south side) installed in 2020 as part of the 43rd Avenue NE reconstruction. The dashed green lines reflect the shared use path programmed for inclusion in the 43rd Avenue NE reconstruction project between State St and 26th Street programmed for 2024 fiscal year but would likely be advanced constructed by the City in 2022.



City Engineer: Gabe Hill

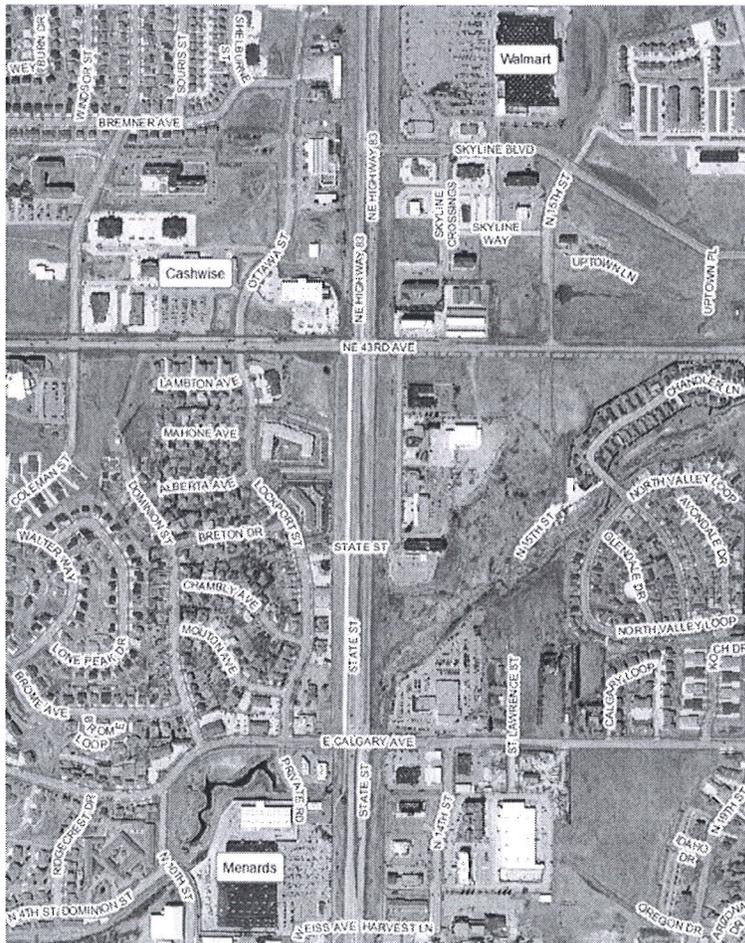
Date: 9/30/20

District Engineer: Larry Gaf

Date: 10/6/20

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

The project is located along US 83/State Street beginning north of Calgary Avenue and continuing north to 43rd Avenue NE as shown in yellow. The purple lines reflect shared use path (north side) and sidewalks (south side) installed in 2020 as part of the 43rd Avenue NE reconstruction. The dashed green lines reflect the shared use path programmed for inclusion in the 43rd Avenue NE reconstruction project between State St and 26th Street programmed for 2024 fiscal year but would likely be advanced constructed by the City in 2022.



US 83/State Street Trail

Estimate of Cost

City of Bismarck September 2020

DESCRIPTION	UNIT	QUANTITIY	UNIT PRICE	TOTAL COST
Contract Bond	LS	1	\$ 5,000.00	\$ 5,000.00
Common Excavation	CY	1350	\$ 30.00	\$ 40,500.00
Subgrade Preparatoin-Type A-12IN	Sta	25	\$ 300.00	\$ 7,500.00
Topsoil	CY	700	\$ 20.00	\$ 14,000.00
Seeding Class III	ACRE	1.5	\$ 1,500.00	\$ 2,250.00
Hydraulic Mulch	ACRE	1.5	\$ 3,000.00	\$ 4,500.00
Aggregate Base Course CL 5	TON	700	\$ 50.00	\$ 35,000.00
Commercial Grade Hot Mix Asphalt	TON	500	\$ 100.00	\$ 50,000.00
PG-58-28	TON	25	\$ 550.00	\$ 13,750.00
Sidewalk Removal and Replacement	SF	400	\$ 80.00	\$ 32,000.00
Mobilization	LS	1	\$ 20,000.00	\$ 20,000.00
Traffic Control	LS	1	\$ 5,000.00	\$ 5,000.00
Erosion Control	LS	1	\$ 5,000.00	\$ 5,000.00
			Estimated Construction Cost=	\$ 234,500.00
			Undeveloped Design Details (10%)=	\$ 23,450.00
			TOTAL ESTIMATED 2020 CONSTRUCTION COST=	\$ 257,950.00
			2% inflation index for 3 years (2023 Costs)	\$ 280,000.00
			TA Request (80%)	\$ 224,000.00
			Local Match (20%)	\$ 56,000.00

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 9/30/2020

PRIORITY# _____

City: Bismarck Street: Constr Limits: Bismarck Expressway/ ND 810 – I-94 to Rosser Avenue ESA limits: Bismarck Expressway/ND 810 – I-94 to Rosser Ave

County: Burleigh Length: 7000'/1.325 Mile

Proposed Improvement: CPR –Concrete Pavement Repairs/Grinding

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
	\$224	\$0	\$0	\$2,237	\$0	\$0	\$2,461

Present Road: Surface Width? 77' 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: <u>24,000</u> Yr: <u>2019</u> Travel Way Width : <u>60'</u>	
ADT Design: _____ Design year _____ No. of Lanes: <u>4</u>	
Design Speed: <u>50</u> Roadway Width: <u>77'</u>	
Maximum Curve: <u>NA</u> Min. R/W Width: <u>180'</u>	
Maximum Grade: <u>6%</u>	

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

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:	

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

Purpose and Need Statement

The purpose of the project is to restore distressed and spalled concrete areas and extend the useful life of the pavement.

Existing Conditions:

1. When was the current street section built? 2005
Has there been any additional maintenance to the street section? None
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’ travel lanes & center left turn lane
3. What is the condition of the pavement section? Pavement Management rating at the most recent survey in 2016 was a PCI value of 84. Utilizing pavement management predations models this roadway PCI value in 2020 was 79 and will reach a PCI value of 73 at the year 2025.
 - A. If the pavement section is asphalt, is there any alligator cracking, longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting? N/A
 - B. If the pavement section is concrete, is there any broken slabs, faulting, bituminous patching, joint spalling, transverse cracking, or longitudinal cracking?
At the time of the pavement survey in 2016 the follow distress is were noted:

55% of the joint sealant was damaged, 12% of the slabs have joint spalling, 3% of the slabs contain linear cracking, 3% of the slabs have patch cuts, 2% of slabs have corner spalling, and 1 % of slabs have corner breaks.

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
Multi-use trail along the west side the entire length of the project.
7. What is the condition of the existing storm sewer? Good
Will any additional storm sewer work need to be done along with this project?
Not at this time
8. What is the condition of the city's water and sewer line? Good
Will any work have to be done to the city's water and sewer lines along with this project? Not at this time.
9. Describe the existing lighting system currently in place? Staggered Spacing
What type of standards and luminaires are currently being used? 40' galvanized steel poles with 204 watt LED in a staggered pattern
10. What intersections currently have traffic signals? Miriam Avenue, Divide Avenue, and Rosser Avenue.
Are there any locations that have a high accident rate? No Are additional turning lanes needed? Not at this time

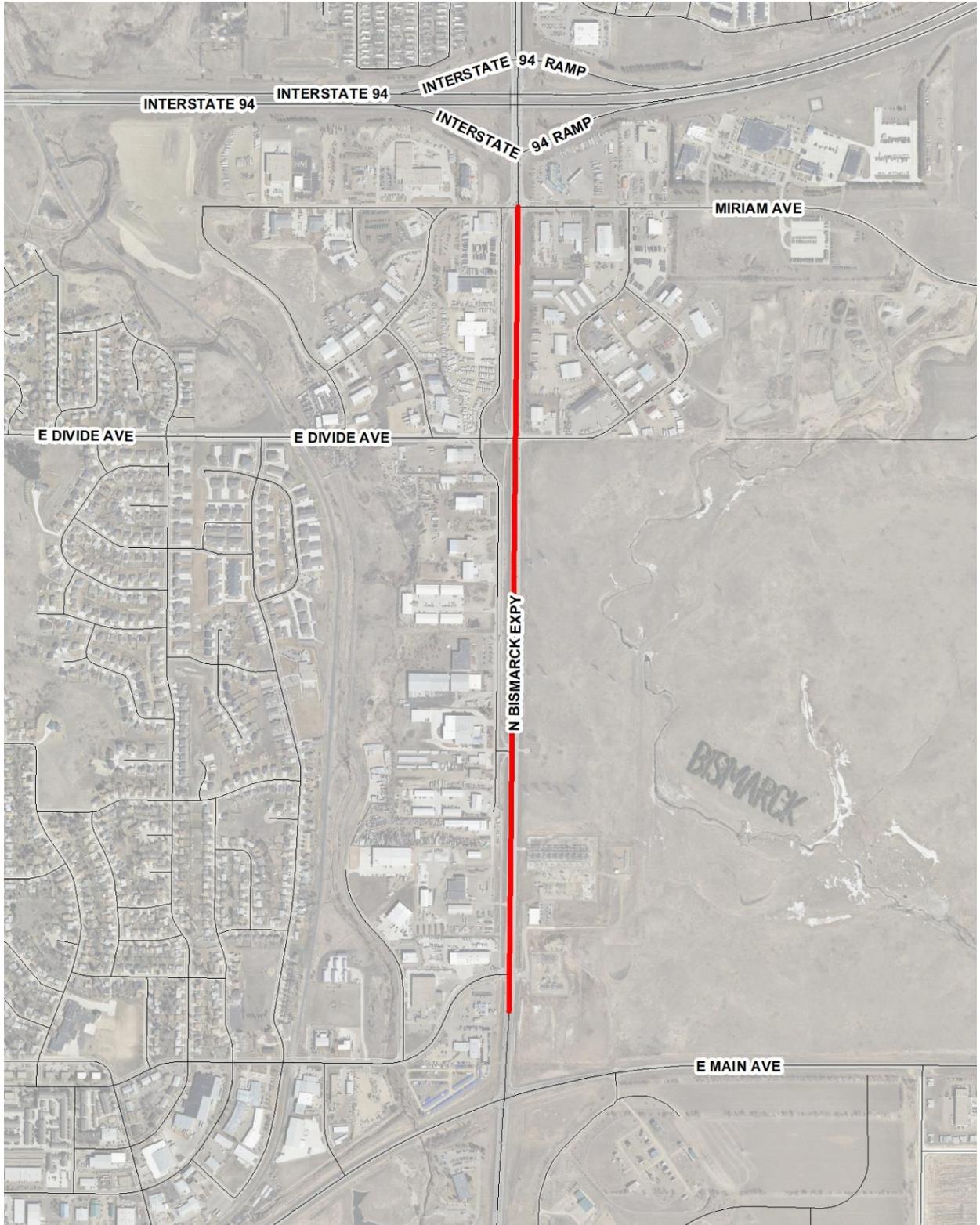
Purpose and Need

The request for this project is based on the pavement condition. According to the City of Bismarck's Pavement Management System score for this section of roadway, this section of roadway should have concrete pavement and joint sealant repairs performed.

This roadway was originally constructed in 2003 with 10" of non-reinforced concrete pavement on 12" of aggregate base course. The pavement is repaired as needed when blow outs occur. Corner spalls are filled with dura-patch material, an asphalt mixture with crushed granite. The City of Bismarck has spent \$18,565 in maintenance cost from 2018 through 2020. This type of annual repair has an impact on the City of Bismarck's maintenance budget.

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. Sidewalks are in place along both sides of the corridor.

Existing city underground infrastructure is adequate and does not require any upgrading. The current lighting system is laid out in a staggered configuration of 40' galvanized steel poles with 240 watt LED luminaires.





CITY OF BISMARCK - ENGINEERING DEPT
ND DOT Project Estimate
Bismarck Expressway from Rosser Ave to I-94

Prepared on:
8/28/2020

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price	Amount
1	103	100	CONTRACT BOND	L SUM	1	\$ 11,500.00	\$ 11,500.00
2	202	130	REMOVAL OF CURB & GUTTER	LF	1,500	\$ 4.50	\$ 6,750.00
3	203	101	COMMON EXCAVATION-TYPE A	CY	150	\$ 130.00	\$ 19,500.00
4	203	109	TOPSOIL	CY	40	\$ 4.50	\$ 180.00
5	251	300	SEEDING CLASS III	SY	250	\$ 3.00	\$ 750.00
6	253	200	HYDRAULIC MULCH	SY	250	\$ 3.00	\$ 750.00
7	302	121	AGGREGATE BASE COURSE CL 5	CY	150	\$ 73.50	\$ 11,025.00
8	570	650	CONCRETE PAVEMENT REPAIR-FULL DEPTH-DOWE	SY	2,000	\$ 198.00	\$ 396,000.00
9	570	963	TRANSVERSE PCC JOINT CLEANING & SEALING	LF	43,540	\$ 1.70	\$ 74,018.00
10	570	965	LONGITUDINAL PCC JOINT CLEANING & SEALING	LF	62,530	\$ 1.70	\$ 106,301.00
11	570	966	RANDOM PCC CRACK CLEANING & SEALING	LF	1,500	\$ 5.00	\$ 7,500.00
12	570	1512	SPALL REPAIR-PARTIAL DEPTH	SF	3,500	\$ 55.00	\$ 192,500.00
13	704	1100	TRAFFIC CONTROL	L SUM	1	\$ 30,000.00	\$ 30,000.00
14	709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	400	\$ 18.00	\$ 7,200.00
15	722	6200	ADJUST MANHOLE	EA	5	\$ 1,100.00	\$ 5,500.00
16	722	6160	ADJUST INLET	EA	5	\$ 810.00	\$ 4,050.00
17	722	6140	ADJUST GATE VALVE BOX	EA	5	\$ 680.00	\$ 3,400.00
18	748	140	CURB & GUTTER-TYPE I	LF	1,500	\$ 35.00	\$ 52,500.00
19	762	122	PREFORMED PATTERNED PVMT MK-MESSAGE(GRO	SF	624	\$ 32.00	\$ 19,968.00
20	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROO	LF	35,200	\$ 6.00	\$ 211,200.00
21	762	1307	PREFORMED PATTERNED PVMT MK 6IN LINE-GROO	LF	1,090	\$ 9.00	\$ 9,810.00
22	762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROO	LF	2,600	\$ 9.50	\$ 24,700.00
23	762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GRO	LF	4,680	\$ 53.00	\$ 248,040.00
24	SP	1	SIGNS	L SUM	1	\$ 10,000.00	\$ 10,000.00
25	SP	2	DESIGN ITEMS NOT INCLUDED - 15%	L SUM	1	\$ 217,971.00	\$ 217,971.00
CONSTRUCTION TOTAL							\$ 1,671,113.00
CONTINGENCY - 10%							\$ 167,111.30
2020 PROJECT COST							\$ 1,838,224.30

Design Assumptions:

2020 Average Bid Prices with 4% increase per year	2021	\$ 1,912,000.00
Clean and Seall all Joints	2022	\$ 1,988,000.00
	2023	\$ 2,068,000.00
	2024	\$ 2,151,000.00
	2025	\$ 2,237,000.00

STREET	FROM	TO	2016 PCI	PREDICTED MODELING PCI VALUE					
				2020	2021	2022	2023	2024	2025
BISMARCK EXPRESSWAY	325' S OF ROSSER AVENUE	ROSSER AVENUE	85	79	78	77	76	75	73
BISMARCK EXPRESSWAY	ROSSER AVENUE	FRONTAGE ROAD	85	80	79	78	77	76	74
BISMARCK EXPRESSWAY	FRONTAGE ROAD	REVERE DRIVE	87	82	81	80	79	78	76
BISMARCK EXPRESSWAY	REVERE DRIVE	DIVIDE AVENUE	82	76	75	74	73	72	70
BISMARCK EXPRESSWAY	DIVIDE AVENUE	775' N OF DIVIDE AVENUE	74	69	68	67	66	65	63
BISMARCK EXPRESSWAY	775' N OF DIVIDE AVENUE	1025' N OF DIVIDE AVENUE	98	94	93	92	91	90	88

**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: 9/30/2020

PRIORITY# _____

City: Bismarck Street: Constr Limits: University Drive/ ND 1804-
Bismarck Expressway to Burleigh Avenue, ESA Limits:
University Drive/ ND 1804- Bismarck Expressway to
Burleigh Avenue

County: Burleigh Length: 12,800'/2.42 Mile

Proposed Improvement: Mill and Overlay

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
	\$646	\$0	\$0	\$3,233	\$0	\$0	\$3,880

Present Road: Surface Width? 60' Surface Type? HBP
 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>12250</u> Yr: <u>2019</u> Travel Way Width : <u>60'</u>	
ADT Design: <u>15000</u> Design year <u>2021</u> No. of Lanes: <u>4</u>	
Design Speed: <u>45</u> Roadway Width: <u>60'</u>	
Maximum Curve: <u>NA</u> Min. R/W	
	Width: <u>82'</u>
Maximum Grade: <u>6%</u>	

Right of Way	
Will Additional ROW or easement be acquired? <u>No</u> ROW acquisition by: City DOT	
Has any ROW easements been acquired since 7-1-72: <u>No</u> ROW Condemnation by: City DOT	

alligator cracking, 27,400 linear feet of longitudinal/transverse cracking, 15,300 square feet of low severity rutting, 2,500 square feet of asphalt patching and 703,000 square feet of low severity weathering.

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
Multi-use trail along the west side the entire length of the project.
7. What is the condition of the existing storm sewer? Good
Will any additional storm sewer work need to be done along with this project?
Not at this time
8. What is the condition of the city's water and sewer line? Good
Will any work have to be done to the city's water and sewer lines along with this project? Not at this time.
9. Describe the existing lighting system currently in place? Staggered Spacing
What type of standards and luminaires are currently being used? 40' galvanized steel poles with 400 watt HPS in a staggered pattern
10. What intersections currently have traffic signals? Denver Avenue, Wachter Avenue, 12th Street and Airport Road.
Are there any locations that have a high accident rate? No
Are additional turning lanes needed? Not at this time

Remarks:

The request for this project is based on the pavement condition. According to the City of Bismarck's Pavement Management System score for this section of roadway, this section of roadway should be milled and overlaid by 2025 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.

This roadway was originally constructed in 2003 & 2005 with 15" of aggregate base course and 5.5" of HBP. The roadway received a micro surfacing in 2007. There is a minimum 80' of right of way. The pavement is repaired annually for alligator cracking and rutting with thin lift patch overlays that are chip sealed. The City of Bismarck has spent the following in maintenance cost over the past 4 years: \$16,275 in 2017, \$43,755 in 2018, \$30,153 in 2019 and \$7,800 in 2020. This type of annual repair has a significant impact on the City of Bismarck's maintenance budget.

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. Sidewalks are in place along both sides of the corridor.

Existing city underground infrastructure is adequate and does not require any upgrading. The

current lighting system is laid out in a staggered configuration of 40' galvanized steel poles with 250-watt HPS luminaires.

Should the NDDOT be in the process of scheduling roadway improvements on this roadway south of Durleigh Ave it may be advantageous to combine the two projects.

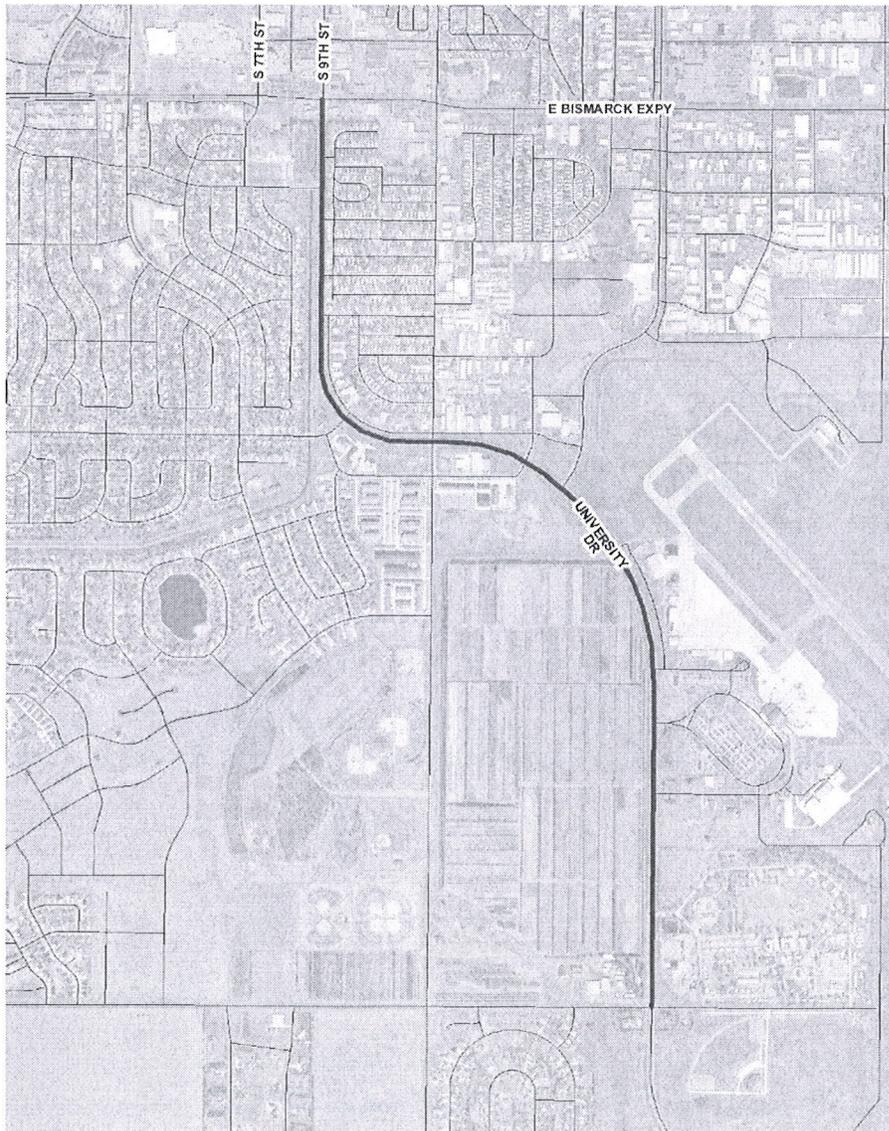
City Engineer: Gale Hill

Date: 9/30/20

District Engineer: Larry Huff

Date: 10/6/20

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



STREET	FROM	TO	2016	PREDITION MODELING PCI VALUE					
			PCI	2020	2021	2022	2023	2024	2025
UNIVERSITY DRIVE	BURLEIGH AVE	AIRPORT ROAD	78	68	65	62	60	57	54
UNIVERSITY DRIVE	AIRPORT ROAD	TACOMA AVENUE	90	80	77	74	72	69	66
UNIVERSITY DRIVE	TACOMA AVENUE	12TH STREET	88	78	75	72	70	67	64
UNIVERSITY DRIVE	12TH STREET	WACHTER AVENUE	86	76	73	70	68	65	62
UNIVERSITY DRIVE	WACHTER AVENUE	AMERICAN AVENUE	88	78	75	72	70	67	63
UNIVERSITY DRIVE	AMERICAN AVENUE	DENVER AVENUE	92	82	79	76	74	71	68
UNIVERSITY DRIVE	DENVER AVENUE	260' S OF BISMARCK EXPWY	96	81	78	75	73	70	67



CITY OF BISMARCK - ENGINEERING DEPT.
ND DOT Project Estimate
University Drive from Bismarck Expressway to Burleigh Ave

Prepared on:
8/27/20

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price	Amount
1	103	100	CONTRACT BOND	L SUM	1	\$ 10,000.00	\$ 10,000.00
2	202	130	REMOVAL OF CURB & GUTTER	LF	1300	\$ 3.00	\$ 3,900.00
3	202	132	REMOVAL OF BITUMINOUS SURFACING	SY	5100	\$ 3.00	\$ 15,300.00
4	203	101	COMMON EXCAVATION-TYPE A	CY	1705	\$ 13.00	\$ 22,165.00
5	203	109	TOPSOIL	CY	40	\$ 4.00	\$ 160.00
6	251	300	SEEDING CLASS III	SY	200	\$ 25.00	\$ 5,000.00
7	253	200	HYDRAULIC MULCH	SY	200	\$ 3.00	\$ 600.00
8	302	121	AGGREGATE BASE COURSE CL 5	TON	1705	\$ 35.00	\$ 59,675.00
9	411	100	MILLING PAVEMENT SURFACE	TON	8300	\$ 22.00	\$ 182,600.00
10	420	111	CRS2P EMULSIFIED ASPHALT	GAL	34120	\$ 2.50	\$ 85,300.00
11	420	128	COVER COAT MATERIAL CL 41-M	SY	85300	\$ 1.00	\$ 85,300.00
12	430	145	RAP - SUPERPAVE FAA 45	TON	13550	\$ 45.00	\$ 609,750.00
13	430	5803	PG 58S-28 ASPHALT CEMENT	TON	1084	\$ 470.00	\$ 509,480.00
14	704	1100	TRAFFIC CONTROL	L SUM	1	\$ 50,000.00	\$ 50,000.00
15	709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	5100	\$ 4.00	\$ 20,400.00
16	722	6200	ADJUST MANHOLE	EA	15	\$ 100.00	\$ 1,500.00
17	722	6160	ADJUST INLET	EA	10	\$ 200.00	\$ 2,000.00
18	722	6140	ADJUST GATE VALVE BOX	EA	12	\$ 200.00	\$ 2,400.00
19	748	140	CURB & GUTTER-TYPE I	LF	1300	\$ 25.00	\$ 32,500.00
20	762	120	PREFORMED PATTERNED PVMT MK-MESSAGE	SF	720	\$ 26.00	\$ 18,720.00
21	762	1304	PREFORMED PATTERNED PVMT MK 4IN LINE	LF	68900	\$ 4.50	\$ 310,050.00
22	762	1255	PREFORMED THERMO PLASTIC PVMT MK 6IN LINE	LF	840	\$ 10.50	\$ 8,820.00
23	762	1308	PREFORMED PATTERNED PVMT MK 8IN LINE	LF	3200	\$ 12.00	\$ 38,400.00
24	762	1270	PREFORMED THERMO PLASTIC PVMT MK 24IN LINE	LF	320	\$ 36.00	\$ 11,520.00
25	SP	1	SIGNS	L SUM	1	\$ 15,000.00	\$ 15,000.00
26	SP	2	DESIGN ITEMS NOT INCLUDED - 15%	L SUM	1	\$ 315,081.00	\$ 315,081.00
CONSTRUCTION TOTAL							\$ 2,415,621.00
CONTINGENCY - 10%							\$ 241,562.10
2020 PROJECT COST							\$ 2,657,183.10

Design Assumptions:

2.5" Mill & Overlay - in urbanized sections with curb & gutter	2021	\$ 2,763,000.00
1" Mill & 2.5" Overlay - rural ditch sections	2022	\$ 2,874,000.00
6% AC Full Depth Patching	2023	\$ 2,989,000.00
2020 Average Bid Prices with 4% increase per year	2024	\$ 3,109,000.00
	2025	\$ 3,233,000.00

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**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: _____

PRIORITY# _____

City: Bismarck Street: Constr limits: State St/ Boulevard Ave 6th St to Divide Ave, ESA Limits: State St/ Boulevard Ave 4th St to Divide Ave

County: Burleigh Length: 4100'/0.78 miles

Proposed Improvement: CPR –Concrete Pavement Repairs/Grinding

Cost Estimates Breakdown (in \$1,000)							
Alternate	PE	R/W	Utility	Constr.	Bridges	Misc.	Total
	\$104	\$0	\$0	\$1,039	\$0	\$0	\$1,143

Present Road: Surface Width? 48' - 72' 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: <u>10500 - 13700</u> Yr: <u>2016</u> Travel Way Width : <u>48' - 72'</u>	
ADT Design: <u>15000</u> Design year <u>2021</u> No. of Lanes: <u>4 - 6</u>	
Design Speed: <u>30-40 MPH</u> Roadway Width: <u>48' -72'</u>	
Maximum Curve: <u>NA</u> Min. R/W	
	Width: <u>100'</u>
Maximum Grade: <u>6%</u>	

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

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

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

Purpose and Need Statement

The purpose of the project is to restore distressed and spalled concrete areas and extend the useful life of the pavement.

Existing Conditions:

1. When was the current street section built? 2002 - 2003
Has there been any additional maintenance to the street section? None

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? Varied typical section from 4 – 12’ travel lanes to 6 – 12’ travel lanes with divided median.

3. What is the condition of the pavement section? Pavement Management rating at the most recent survey in 2016 was a PCI value of 85. Utilizing pavement management predations models this roadway PCI value in 2020 was 81 and will reach a PCI value of 76 at the year 2025.
 - 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?

At the time of the pavement survey in 2016 the follow distress were noted: 93% of the joint sealant was damaged, 22% of the slabs have joint spalling, 10% of the slabs contain linear cracking, 5% of the slabs have patch cuts and 11% of slabs have corner spalling.

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
Multi-use trail along the west side State Street. Sidewalks on both side of Boulevard Avenue.
7. What is the condition of the existing storm sewer? Good
Will any additional storm sewer work need to be done along with this project?
Not at this time
8. What is the condition of the city's water and sewer line? Good
Will any work have to be done to the city's water and sewer lines along with this project? Not at this time.
9. Describe the existing lighting system currently in place? Staggered Spacing
What type of standards and luminaires are currently being used? 40' galvanized steel poles with 250 watt equivalent LED in a staggered pattern
10. What intersections currently have traffic signals? Divide Avenue, 9th St, 7th St, and 6th St.
Are there any locations that have a high accident rate? No Are additional turning lanes needed? Not at this time

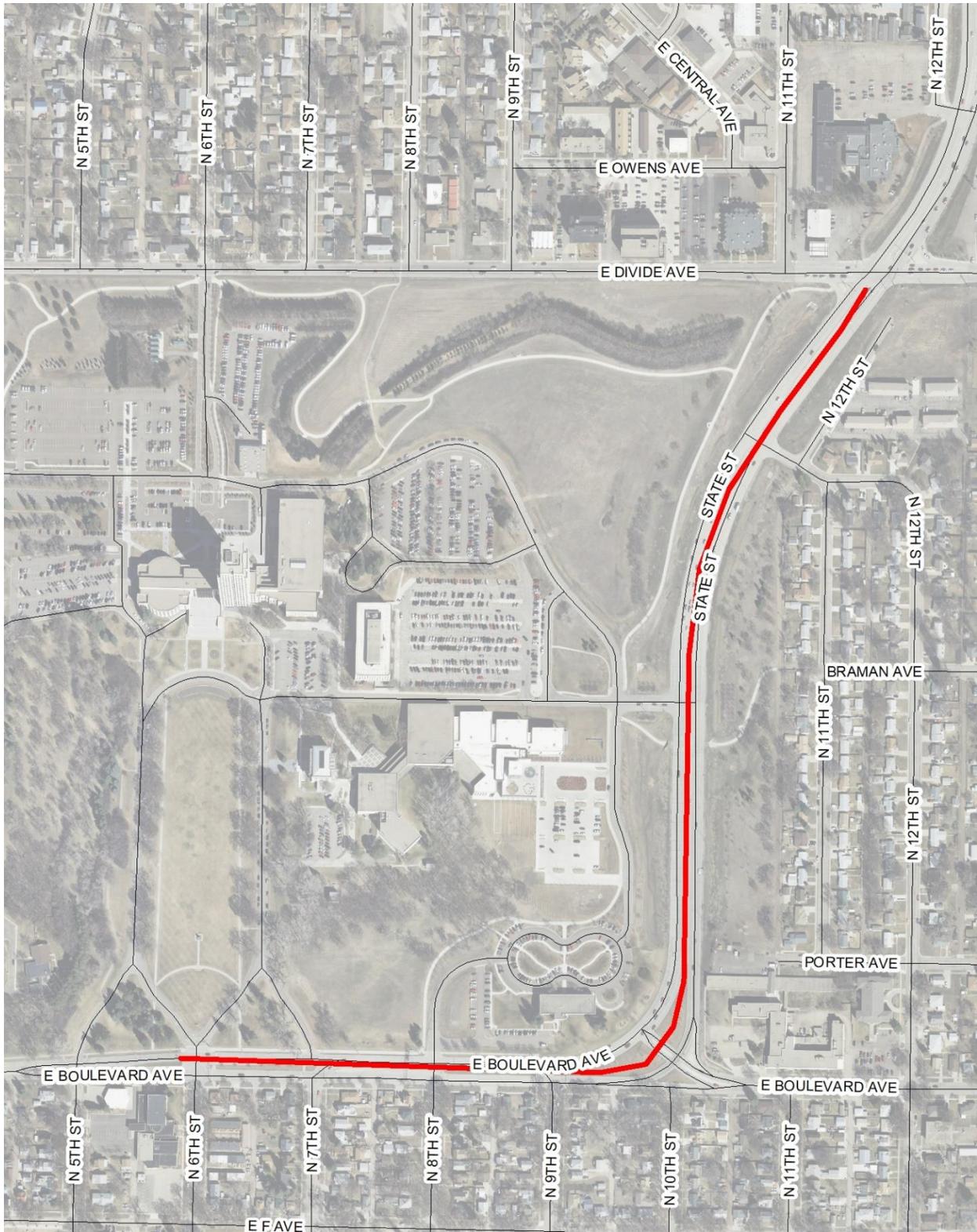
Purpose and Need

The request for this project is based on the pavement condition. According to the City of Bismarck's Pavement Management System score for this section of roadway, this section of roadway should have concrete pavement and joint sealant repairs performed.

This roadway was originally constructed in 2002-2003 with 8" doweled concrete pavement on 24" of blended base course. The pavement is repaired as needed when blow outs and joint delamination occur. Corner spalls are filled with dura-patch material, an asphalt mixture with crushed granite. The City of Bismarck has spent \$6,457 in maintenance cost from 2018 through 2020. This type of annual repair has an impact on the City of Bismarck's maintenance budget.

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. Sidewalks are in place along both sides of the corridor.

Existing city underground infrastructure is adequate and does not require any upgrading. The current lighting system is laid out in a staggered configuration of 40' galvanized steel poles with 204 watt LED luminaires.





CITY OF BISMARCK - ENGINEERING DEPT

ND DOT Project Estimate

State Street from Boulevard Ave to I-94
Boulevard Ave from 6th St to State St

Prepared on:
8/27/20

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price	Amount
1	103	100	CONTRACT BOND	L SUM	1	\$ 10,000.00	\$ 10,000.00
2	202	130	REMOVAL OF CURB & GUTTER	LF	1,000	\$ 4.50	\$ 4,500.00
3	203	101	COMMON EXCAVATION-TYPE A	CY	150	\$ 130.00	\$ 19,500.00
4	203	109	TOPSOIL	CY	30	\$ 4.50	\$ 135.00
5	251	300	SEEDING CLASS III	SY	200	\$ 3.00	\$ 600.00
6	253	200	HYDRAULIC MULCH	SY	200	\$ 3.00	\$ 600.00
7	302	120	AGGREGATE BASE COURSE CL 5	TON	120	\$ 73.50	\$ 8,820.00
8	570	650	CONCRETE PAVEMENT REPAIR-FULL DEPTH-DOWE	SY	1,500	\$ 198.00	\$ 297,000.00
9	570	963	TRANSVERSE PCC JOINT CLEANING & SEALING	LF	22,540	\$ 1.70	\$ 38,318.00
10	570	965	LONGITUDINAL PCC JOINT CLEANING & SEALING	LF	38,540	\$ 1.70	\$ 65,518.00
11	570	966	RANDOM PCC CRACK CLEANING & SEALING	LF	1,870	\$ 5.00	\$ 9,350.00
12	570	1512	SPALL REPAIR-PARTIAL DEPTH	SF	1,000	\$ 55.00	\$ 55,000.00
13	704	1100	TRAFFIC CONTROL	L SUM	1	\$ 30,000.00	\$ 30,000.00
14	709	151	GEOSYNTHETIC MATERIAL TYPE R1	SY	300	\$ 18.00	\$ 5,400.00
15	748	140	CURB & GUTTER-TYPE I	LF	1,000	\$ 37.00	\$ 37,000.00
16	762	122	PREFORMED PATTERNED PVMT MK-MESSAGE(GRO	SF	432	\$ 32.00	\$ 13,824.00
17	762	1305	PREFORMED PATTERNED PVMT MK 4IN LINE-GROO	LF	4,200	\$ 6.00	\$ 25,200.00
18	762	1307	PREFORMED PATTERNED PVMT MK 6IN LINE-GROO	LF	660	\$ 9.00	\$ 5,940.00
19	762	1309	PREFORMED PATTERNED PVMT MK 8IN LINE-GROO	LF	1,830	\$ 9.50	\$ 17,385.00
20	762	1325	PREFORMED PATTERNED PVMT MK 24IN LINE-GRO	LF	390	\$ 53.00	\$ 20,670.00
21	SP	1	SIGNS	L SUM	1	\$ 10,000.00	\$ 10,000.00
22	SP	2	DESIGN ITEMS NOT INCLUDED - 15%	L SUM	1	\$ 101,214.00	\$ 101,214.00
CONSTRUCTION TOTAL							\$ 775,974.00
CONTINGENCY - 10%							\$ 77,597.40
2020 PROJECT COST							\$ 853,571.40

Design Assumptions:

2020 Average Bid Prices with 4% increase per year	2021	\$ 888,000.00
Clean and Seal all Joints	2022	\$ 924,000.00
3% Panel - Full Depth Repairs	2023	\$ 961,000.00
1% Panel - Spall Repairs	2024	\$ 999,000.00
	2025	\$ 1,039,000.00

STREET	FROM	TO	2016 PCI	PREDICTED PCI VALUE					
				2020	2021	2022	2023	2024	2025
BOULEVARD AVENUE	06TH STREET	07TH STREET	72	68	66	65	64	63	62
BOULEVARD AVENUE	07TH STREET	08TH STREET	80	76	75	74	73	72	70
BOULEVARD AVENUE	08TH STREET	09TH STREET	87	83	81	80	79	78	77
BOULEVARD AVENUE	09TH STREET	STATE STREET	85	81	80	79	78	77	75
BOULEVARD AVENUE	STATE STREET	10TH STREET	89	85	83	82	81	80	79
STATE STREET	BOULEVARD AVENUE	12TH STREET	88	84	82	81	80	79	78
STATE STREET	12TH STREET	DIVIDE AVENUE	85	81	79	78	77	76	75

TAC and Policy Board Handout

October 19-20th, 2020

Re: **Urban Roads Program**

One project has been submitted by the City of Mandan for the 2025 Urban Roads Program. The project is ranked second in the 2020-2045 MTP and was previously approved for 2020-2025 funding by TAC and PB. Staff recommends approval of the application for construction in 2025.

MTP Rank	Jurisdiction	Type	Location: Project	Total Cost / Federal	MTP
2	Mandan	Reconstruction	Old Red Trail (40th Ave to 56th Ave): Reconstruct roadway from rural section to urban section with curb and gutter for 2,500 feet and repave remaining 2,900 feet as a rural section.	5,000,000 Million / 4,046,500 Million	Yes

//RAD October 2020

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**URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET**

DATE: September 30, 2020

PRIORITY# 1

Regional: Y/N

Urban Roads: Y/N

City: Mandan

Street: Project limits are Old Red Trail from 40th Avenue NW to west urbanized area boundary (UZA) of MPO.

Construction Limits are Old Red Trail from 40th Avenue NW to 56th Avenue NW

County: Morton

Length: Project Limits: 9,200 feet (1.74 miles)

Construction limits: 5,400 feet (1.02 miles)

Proposed Improvement: Reconstruct roadway from rural section to urban section with curb and gutter for 2,400 feet and repave the remainder as a rural section.

Cost Estimates Breakdown (in \$1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
500	500	0	0	4,000	0	0	5,000

Present Road: Surface Width? 3 lane urban section and 2 lane rural section
Surface Type? asphalt (5 L) or concrete (4 L w M)

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

Proposed Improvements	
ADT Present: 850 west - 3475 east Yr: 2014	Travel Way Width : 12'/lane
ADT Design: 16000 east of project Design year 2040	No. of Lanes: 3 or 2
Design Speed: 35	Roadway Width: Varies
Maximum Curve: almost straight	Min. R/W Width: 100'
Maximum Grade: within design requirements	

Right of Way

longitudinal cracking, transverse cracking, raveling, bituminous patching or rutting? It was showing a lot of cracking, rutting and generally in poor condition before overlaid in 2020. Knowing this, the overlay was completed on these poor conditions with the expectation that we would not expect to get much more than five years out of it.

- 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?
No.
 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.
 7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Existing storm sewer in good condition. Additional storm sewer work will be needed for drainage along urban section.
 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?
Water and sewer are in good condition. No work anticipated.
 9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
No lighting in place currently. N/A
 10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
No intersections have traffic signals. No locations for high accident rates. Yes turn lanes are needed.

Remarks:

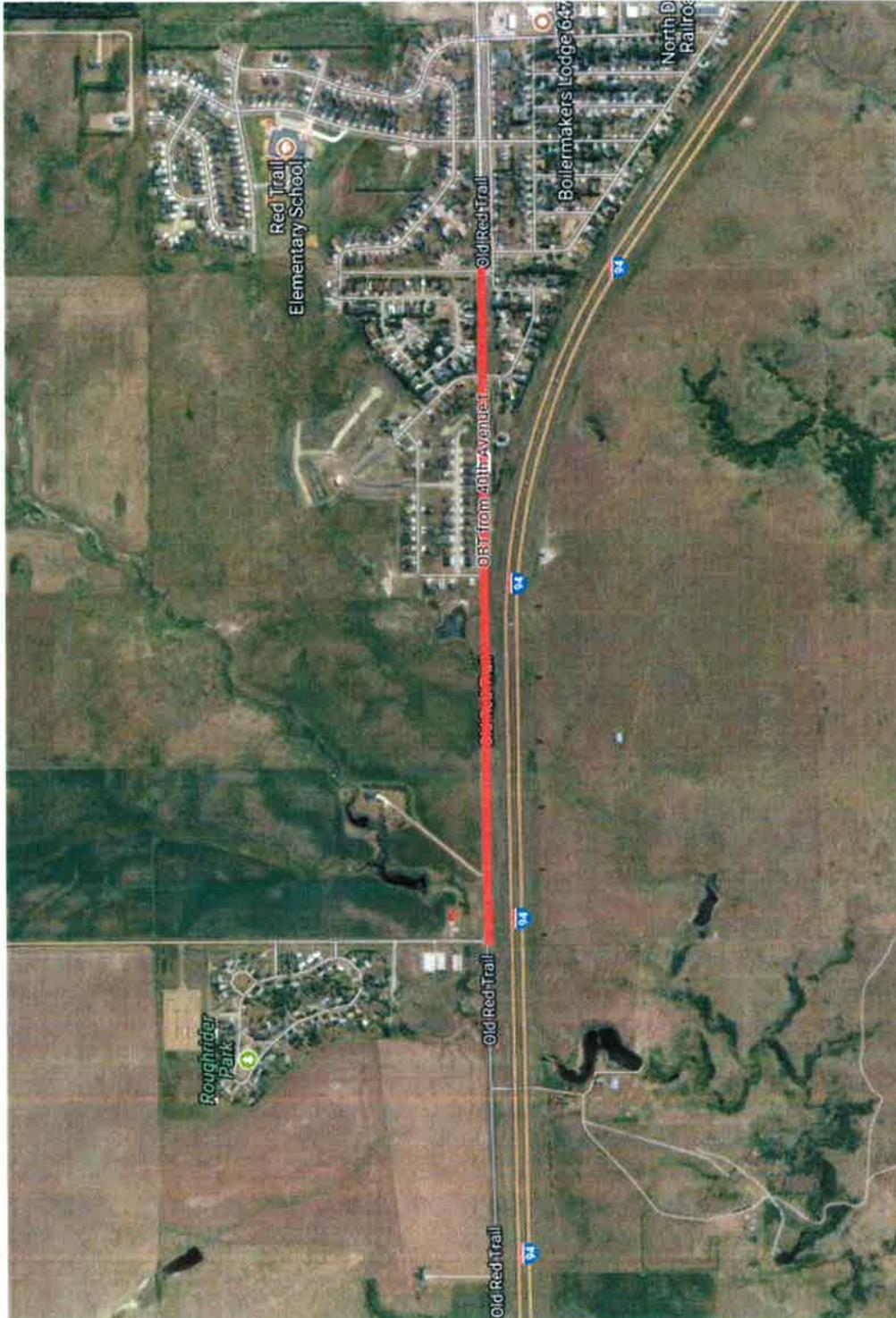
Old Red Trail from Highland to 40th was reconstructed in 2016. No additional right-of-way is expected to be needed. Increased traffic due to Red Trail elementary that opened in 2014 and new residential development. Potential area for large scale development. Primarily residential according to the city's 2015 comprehensive land use plan. Pedestrian improvements included. Would include a multi-use path.

City Engineer: Justin Froseth
Justin Froseth, PE

Date: 10-8-2020

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

Shown in the map below are intended construction limits. Limits of project for study purposes would extend further to the west to the UZA boundary.



TAC and Policy Board Handout

October 19-20th, 2020Re: **Highway Safety Improvement Program/ Local Roads Safety Program**

A total of 2 projects were submitted; both were from the City of Bismarck. The projects were scored by MPO staff against MPT Objectives. Points are provided to TAC and Policy Board for information, discussion, and potential prioritization. Boards can prioritize as/if they see necessary.

Jurisdiction	Type	Location: Project	Total Cost / Federal	MTP	Points
Bismarck	Construction	Bismarck Expy/ND810 (18th St to 26th St): Add bicycle/pedestrian facilities, 6 ft wide (3600 ft); Pedestrian countdown timers and pushbutton actuation at the intersection of Airport Rd/Bismarck Expy.	310,000 / 248,000	Yes	11.3
Bismarck	Signal Head Replacement	Citywide: Replace existing protected/permissive traffic signal heads with Flashing Yellow Left Turns. Nine locations total.	54,000 / 43,200	Yes	12.5

//RAD October 2020

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**HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)
PROJECT APPLICATION**

North Dakota Department of Transportation, Programming
SFN 59959 (11-2019)

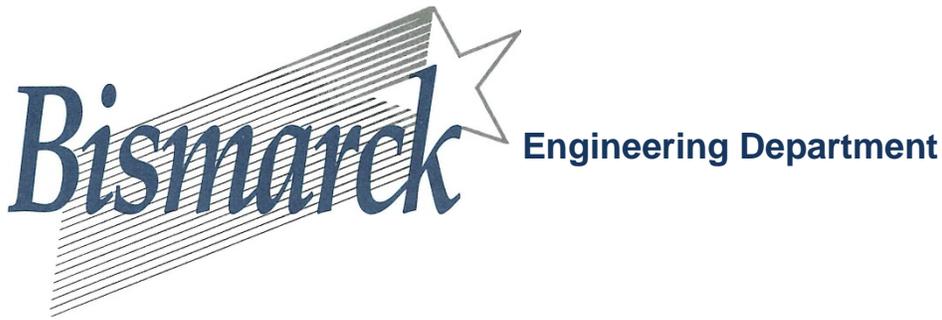
**23 USC § 409 Documents
NDDOT Reserves All Objections**

Please attach a location map(s). You may use additional sheets to further describe your project.

Agency Name City of Bismarck		NDDOT District Bismarck	
Contact Name Mark Berg		Current Date 10/01/2020	
Email Address mberg@bismarcknd.gov		Telephone Number 701-355-1529	Project Cost Estimate (attach detailed copy) \$310,000.00
Location Description Parallel to Bismarck Expressway from 18th Street to 26th Street	Roadway Ownership <input checked="" type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> City <input type="checkbox"/> Tribe	Vision Zero Emphasis Area (check all that apply) <input type="checkbox"/> Younger Drivers <input checked="" type="checkbox"/> Speeding or Aggressive Drivers <input type="checkbox"/> Alcohol-Related <input type="checkbox"/> Unbelted Vehicle Occupants <input checked="" type="checkbox"/> Lane Departure <input checked="" type="checkbox"/> Intersections	Functional Class <input type="checkbox"/> Local Road or Street <input type="checkbox"/> Minor Collector <input type="checkbox"/> Major Collector <input type="checkbox"/> Minor Arterial <input checked="" type="checkbox"/> Principal Arterial
Improvement Category (check all that apply)			
<input type="checkbox"/> Access Management	<input type="checkbox"/> Intersection Geometry	<input type="checkbox"/> Parking	<input type="checkbox"/> Roadway Delineation
<input type="checkbox"/> Advanced Technology & ITS	<input checked="" type="checkbox"/> Intersection Traffic Control	<input checked="" type="checkbox"/> Pedestrians & Bicyclists	<input type="checkbox"/> Roadway Signs & Traffic Control
<input type="checkbox"/> Alignment	<input type="checkbox"/> Lighting	<input type="checkbox"/> Railroad Grade Crossings	<input type="checkbox"/> Shoulder Treatments
<input type="checkbox"/> Animal Related	<input type="checkbox"/> Miscellaneous	<input checked="" type="checkbox"/> Roadside	<input type="checkbox"/> Speed Management
<input type="checkbox"/> Interchange Design	<input type="checkbox"/> Non-infrastructure	<input type="checkbox"/> Roadway	<input type="checkbox"/> Work Zone
Describe Current Safety Issues The safety concern for this project is based on pedestrians and bicyclists being observed on a daily basis interacting with vehicular traffic on Bismarck Expressway due to a lack of a pedestrian/bicycle facility adjacent to the roadway. Drivers make radical lane changes to avoid striking pedestrian/bicyclist in the roadway. At the intersection of Airport Road and Bismarck Expressway there are currently no pedestrian crossing facilities, crosswalks, and pedestrian pushbutton actuated control equipment. The lack of facilities to accommodate pedestrian/bicyclist needs and the higher speed of the adjacent roadway has a high potential for an injury/fatality if there were to be an interaction between a pedestrian/bicyclist and motor vehicle traveling at this higher speed. Installation of pedestrian facilities as an infrastructure improvement is called out in The Big Book of Ideas Engineering Safety Strategies under Urban Segments.			
Describe Proposed Safety Improvements This project will consist of 6' wide concrete sidewalk facility running parallel along the north side of Bismarck Expressway between 18th Street and 26th Street. The trail will begin at the northwest corner of the 18th Street and continue east through the Airport Road and Bismarck Expressway and end at 26th Street and Bismarck Expressway. The sidewalk facility would be constructed within the existing right of way of Bismarck Expressway and may require additional right of way and/or easements. The traffic signal at Bismarck Expressway and Airport Road will require pedestrian crossing heads and pushbutton on all four corners and minor cabinet modifications to accommodate pedestrians. Permanent preformed pavement markings and ADA ramps will also need to be installed at the intersections.			

For questions or comments contact:
Justin Schlosser
701-328-2673
jjschlosser@nd.gov

Please email completed form to this address: hsp@nd.gov



September 30, 2020

Mr. Justin Schlosser, PE
Traffic Operations
North Dakota Department of Transportation
608 Boulevard Avenue
Bismarck, North Dakota 58505-0700

Subject: Highway Safety Improvement Project (HSIP)

Justin:

This letter is to submit the attached application for HSIP funding for a pedestrian/bicycle facility project along the Bismarck Expressway between 26th Street and 18th Street. The roadway on which this project is located is ND 810 which is part of the secondary regional highway system through Bismarck.

The request for a HSIP project is based on the concern for the safety of pedestrians traveling along Bismarck Expressway. There are no pedestrian facilities along Bismarck Expressway between 18th street and 26th Street on this corridor. Pedestrians can be observed on a daily basis utilizing the grassed boulevard as a worn path. There have not been any recorded crashes involving pedestrians on Bismarck Expressway during the last 5 years.

To improve safety, the City of Bismarck would like to propose a project to install a pedestrian facility along Bismarck Expressway which would improve safety by reducing the interaction of pedestrians and vehicles on Bismarck Expressway. The long-term benefits after implementation would be realized through improved accessibility for non-motorized public and safety through a reduction in the potential interaction of pedestrians/bicyclist and motor vehicles.

I have attached the required HSIP project applications, aerial photo, traffic study and a detailed estimate of cost for the improvements.

If you have any question, contact my office.

Sincerely,

Mark Berg \s\

Mark A. Berg, PE
Bismarck Traffic Engineer

Attachment

Traffic Study

Existing Conditions

This portion of the Bismarck Expressway corridor is part of the secondary regional (ND 810) and is functionally classified as a principal arterial. The average daily traffic on Bismarck Expressway through this area is 20,000 ADT. The existing traffic control for this corridor is traffic actuated signal systems at Airport Road, 26th Street and Burlington Drive. The posted speed limit is 40 MPH.

Safety Concern

The safety concern for this project is based on pedestrians being observed on a daily basis utilizing the boulevard as a path. There is a potentially dangerous situation if there were to be an interaction between a pedestrians/bicyclists and motor vehicles.

The purpose and need for this project is to meet the accessibility needs of non-motorized pedestrians to connect a big box retail center from a center city residential area, providing the opportunity of customers and employees to reach these locations by non-motorized method of transportation.

Currently a multi-use trail ends on the northside of Bismarck Expressway at 18th Street. From that point east there is no type of pedestrian or bicycle facility to the east until you reach 26th Street.

The project includes approximately 3100 LF of 6' sidewalk on the north side of Bismarck Expressway approximately 500 LF of 6' sidewalk on the south side of Bismarck Expressway. Due to existing right of way constraints, 2' of stamped boulevard is also included in areas where the sidewalk would abut the curb. Project would include traffic signal modifications at Airport Rd/Bismarck Expy to include pedestrian countdown timers and pushbutton actuation where they are not currently present.

Supportive Documentation

The sidewalk facility from 18th Street to 26th Street would address the accessibility needs of the non-motorized pedestrian traffic along this corridor that is currently unmet. A pedestrian facility has historically been incorporated into the larger reconstruction of a roadway but with the recent mill and overlay of Bismarck Expressway, a reconstruction will not be necessary until well into the future. Consideration should be given to meeting the current pedestrian/bicycle needs in the interim.

The 2017 Bismarck Mandan Bicycle and Pedestrian plan identified continuing connections of non-motorized transportation facilities along Bismarck Expressway

between 18th street and 26th Street. This project would address a need in the community providing connectivity and transportation access within a low- and moderate-income census tract to a shopping and grocery store. The Dakota Center for Independent Living provides services to people with disabilities. Their empowerment committee has provided an unsolicited letter on July 16, 2020 (attached) referencing the lack of pedestrian facilities on Bismarck Expressway.

Counter Measure

The recommended solution is to design and construct a multi-use facility along this corridor between 18th Street and 26th Street.

Cost Analysis

Bismarck Expressway Sidewalk

18th St to 26th St - Estimate of Cost

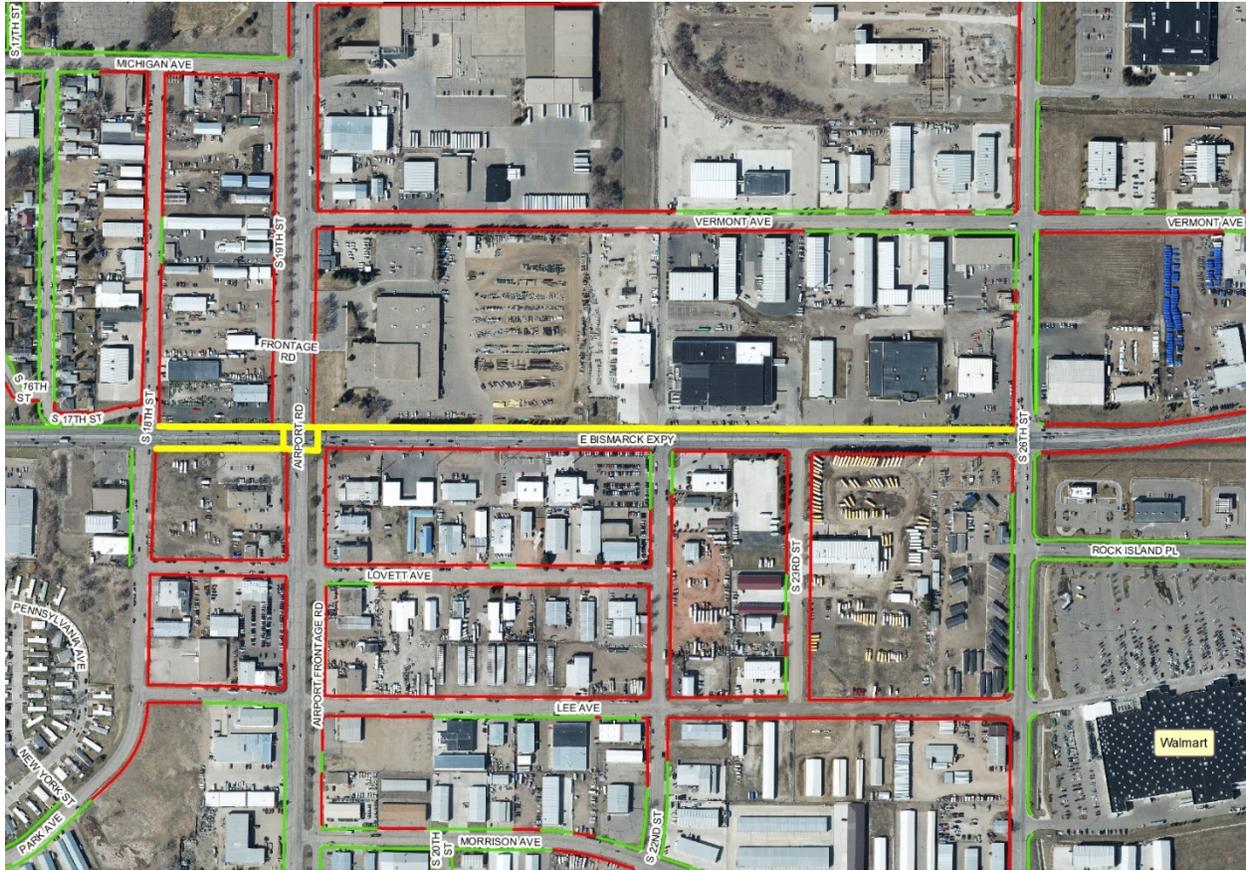
City of Bismarck September 2020

<u>ITEMS</u>	<u>UNITS</u>	<u>QTY</u>	<u>PRICE</u>	<u>TOTAL</u>
ADA Curb Ramps	EA	8	\$4,000	\$32,000
6' concrete sidewalk	SY	3200	\$50	\$160,000
Aggr Base Course CL 5	TON	700	\$50	\$35,000
Traffic Signal Modifications	LS	1	\$35,000	\$35,000
Pavement Markings Modifications	EA	2	\$5,000	\$10,000
Contract Bond	EA	1	\$5,000	\$5,000
Traffic Control	EA	1	\$5,000	\$5,000
Mobilization	EA	1	\$5,000	\$5,000
				<u>ESTIMATE TOTAL</u>
Total (2020)				\$287,000
Total (2023) (3%/3 Years)				\$310,000

There is an approximate 8' boulevard behind the curb along the north side of Bismarck Expressway. While a 6' sidewalk could be placed within this area, we would propose outreach to the adjacent landowners to inquire if they would agree to an additional zero cost easement across the existing utility and access easements that front Bismarck Expressway in order to place a portion of the sidewalk within the easement area. This would provide additional pedestrian separation from the higher speed traffic on Bismarck Expressway and would provide an area for snow storage which would lessen the landowner's responsibility in keeping the sidewalk free of snow and ice.

Project Location

The project is located along Bismarck Expressway between 18th Street and 26th Street as shown in yellow in the exhibit below. Areas in green represent completed sidewalk while areas in red represent roadways with no sidewalks.



Gabe Schell

From: Whitnie Olsen
Sent: Thursday, July 16, 2020 1:42 PM
Subject: FW: 20200716105716487.pdf
Attachments: 20200716105716487.pdf

Mayor and Commissioners,

Please see the attached document and message below from Kathy Temchack.

Thank you,

Whitnie Olsen**Administrative Technician****City of Bismarck Administration**

221 N 5th St, 4th Floor
Bismarck ND 58501

Phone: 701-355-1305

Fax: 701-222-6470



Disclaimer: This e-mail, including attachments, is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510 et seq., may be confidential, or may contain confidential material. It is intended for use only by the person(s) to whom it is directed. If you are not the intended recipient and/or received it in error, you should (1) reply by e-mail to the sender; (2) delete this e-mail, including deletion of all associated text files from all storage locations including individual and network storage devices; and (3) refrain from disseminating or copying this communication. The media in which any electronic data files are transmitted can deteriorate over time and under various conditions. The City does not warrant the accuracy of any information contained in electronic data files transmitted by e-mail.

From: kathyt@dakotacil.org <kathyt@dakotacil.org>
Sent: Thursday, July 16, 2020 11:35 AM
To: Whitnie Olsen <wolsen@bismarcknd.gov>
Subject: 20200716105716487.pdf

Whitney,

I work at Dakota Center for Independent Living where we provide services to people with disabilities of all ages and any type of disability. DCIL has an empowerment committee that advocates to stop barriers in our area. One of the big concerns are sidewalks on expressway because that is a major route for people because of Walmart and not everyone drives, some walk, have walkers and wheelchairs the street is very busy and having to go through parking lots is very dangerous.

One other big concern is there is one curb cut and that is by Mac's and they have that partially blocked with their signs and equipment, no way should this be allowed.

It is nice to see sidewalks and curb cuts now going up 26th street now we hope this will continue by the ND housing. I have seen people with walkers trying to push it so they don't fall and stroller's all types of people and in the winter this is impossible.

Please read the concerns of the people, I know this is in there handwriting and thoughts but their concerns are serious and in the safety of our residence.

Thank You

Kathy Temchack

DCIL Advocate Specialist

6-26-2020

City

Need - Curb Cut app -

Need BUS STOPS

not fly bys -

some one with a disability & no auto needs a

Bus Stop not just a windowed chair to sit on (not enclosed for winter weather)

- access to bathrooms
- side walks needed in well traveled areas
- side walks should not contain outside displays of business places (Max) ex

12th street - auto company

On the Strip of Mandan - NO SIDEWALKS

Snow pushed over side walks that limits people in wheel chairs -

12th street BAD - people have to walk on street DANGEROUS

City of Bismarck

I'd like to see more sidewalks in Bismarck,
like going down 26th street from Main to Walmart,
same with Expressway from Walmart on 26th Street
to like around 15th Street there's no sidewalks. Those
two streets I feel are popular streets for walkers &
bikers, even wheelchair people.

Randee Saile,
randeesailer@yahoo.com

the sidewalks on 26th & Express way
Blocked. curbs threw out do not exist
the empty lots should have sidewalks,
parking lots are very ~~dangerous~~ dangerous
curb cut blocked by Mac's expressway

Thank you
Linda Fahl

City Concerns

Better accessibility at express way and 26th street, only one curb cut useable, however other are not available especially during winter for wheel chair.

Curbs cut ~~out~~ cuts for
+ elderly
* physically challenged
* mentally challenged

Curbs not blocked



Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Aug 2018 © 2020 Google

Bismarck, North Dakota



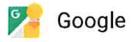
Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View





Image capture: Jul 2019 © 2020 Google

Bismarck, North Dakota



Street View

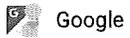


Google Maps 2599 E Bismarck Expy

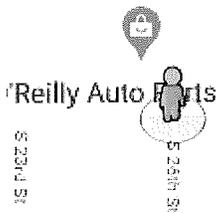


Image capture: Aug 2018 © 2020 Google

Bismarck, North Dakota



Street View





**HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)
PROJECT APPLICATION**

North Dakota Department of Transportation, Programming
SFN 59959 (11-2019)

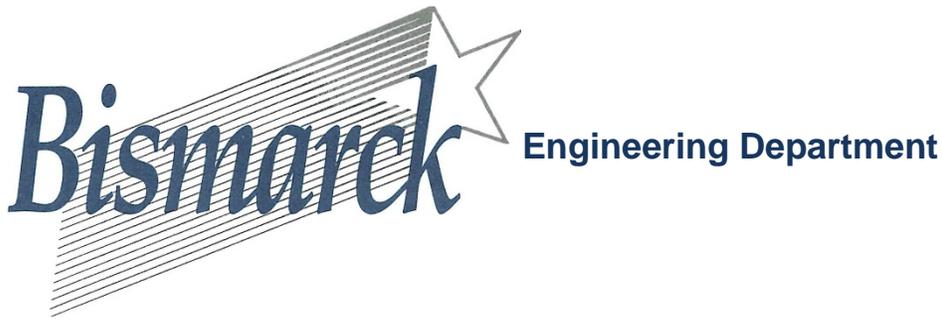
**23 USC § 409 Documents
NDDOT Reserves All Objections**

Please attach a location map(s). You may use additional sheets to further describe your project.

Agency Name City of Bismarck		NDDOT District Bismarck	
Contact Name Mark Berg		Current Date 10/01/2020	
Email Address mberg@bismarcknd.gov		Telephone Number 701-355-1529	Project Cost Estimate (attach detailed copy)
Location Description	Roadway Ownership <input type="checkbox"/> State <input type="checkbox"/> County <input checked="" type="checkbox"/> City <input type="checkbox"/> Tribe	Vision Zero Emphasis Area (check all that apply) <input type="checkbox"/> Younger Drivers <input type="checkbox"/> Speeding or Aggressive Drivers <input type="checkbox"/> Alcohol-Related <input type="checkbox"/> Unbelted Vehicle Occupants <input type="checkbox"/> Lane Departure <input checked="" type="checkbox"/> Intersections	Functional Class <input type="checkbox"/> Local Road or Street <input type="checkbox"/> Minor Collector <input type="checkbox"/> Major Collector <input type="checkbox"/> Minor Arterial <input type="checkbox"/> Principal Arterial
Improvement Category (check all that apply)			
<input type="checkbox"/> Access Management <input type="checkbox"/> Intersection Geometry <input type="checkbox"/> Parking <input type="checkbox"/> Roadway Delineation <input type="checkbox"/> Advanced Technology & ITS <input checked="" type="checkbox"/> Intersection Traffic Control <input type="checkbox"/> Pedestrians & Bicyclists <input checked="" type="checkbox"/> Roadway Signs & Traffic Control <input type="checkbox"/> Alignment <input type="checkbox"/> Lighting <input type="checkbox"/> Railroad Grade Crossings <input type="checkbox"/> Shoulder Treatments <input type="checkbox"/> Animal Related <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Roadside <input type="checkbox"/> Speed Management <input type="checkbox"/> Interchange Design <input type="checkbox"/> Non-infrastructure <input type="checkbox"/> Roadway <input type="checkbox"/> Work Zone			
Describe Current Safety Issues Currently the city of Bismarck utilizes both types of protected/permissive left turn control operations. The city has been upgrading to the Flashing Yellow Arrows (FYA) as part of annual upgrade of traffic signal control equipment. The purpose of this request is to complete the implementation of FYA at the remaining 9 intersections to have continuity of operations throughout the city.			
Describe Proposed Safety Improvements This project will consist of replacing the existing 5-section "doghouse" signal heads with 4-section Flashing Yellow Arrows at nine intersections on local street network. Additional modifications to the cabinet and reprogramming of the traffic controller will be required in the traffic signal controller cabinets. The intersection of Pinehurst and Century Avenue will to have the existing traffic signal controller upgrade to operate the Flashing Yellow Arrow operation.			

For questions or comments contact:
Justin Schlosser
701-328-2673
jjschlosser@nd.gov

Please email completed form to this address: hsip@nd.gov



September 30, 2020

Mr. Justin Schlosser, PE
Traffic Operations
North Dakota Department of Transportation
608 Boulevard Avenue
Bismarck, North Dakota 58505-0700

Subject: Highway Safety Improvement Project (HSIP)

Justin:

This letter is to submit the attached application for HSIP funding for the conversion of existing 5-section protective/permissive traffic signal heads to Flashing Yellow Left Turns. There are nine intersections in the City of Bismarck that are currently operating 5-section "doghouse" signal heads.

The request for a HSIP project is based on the concern for the safety and continuity of traffic signal equipment. The safety aspect will be achieved through the intuitiveness of operation through better driver understanding reducing crash rates. The city wants to pursue standardizing traffic signal operations.

To improve safety, the City of Bismarck would like to propose a project to replace existing 5-section "doghouse" signal heads. The long-term benefits after implementation would be realized through safety, efficiency through increased driver expectancy for the flashing yellow arrow indication.

I have attached the required HSIP project applications, aerial photo, traffic study and a detailed estimate of cost for the improvements.

If you have any question, contact my office.

Sincerely,

Mark Berg \s\

Mark A. Berg, PE
Bismarck Traffic Engineer

Attachment

Traffic Study

Existing Conditions

Currently, the protective/permissive left turn operations along Bismarck Expressway and University Drive were converted to Flashing Yellow Arrows as part of a project in 2016. Flashing Yellow Arrows are being included as part of the safety improvements on an HSIP project at the intersections of Washington Street and Century Avenue and 4th Century Avenue. Also, the city has implemented Flashing Yellow Arrows across the city as part of traffic signal upgrade projects using local funds.

Safety Concern

The safety concern for this project is based on reduction in intersection crashes through continuity and intuitiveness leading to better driver understanding of permissive left turn operation.

The propose and need for this project is reduce intersection crashes at signalized intersections with protective/ permissive left turn operations.

This project will consist of replacing the existing 5-section “doghouse” signal heads with 4-section Flashing Yellow Arrows at nine intersections. Additional modifications and programming will be required in the traffic signal controller cabinets. The intersection of Pinehurst and Century Avenue will to have the existing traffic signal controller upgrade to operate the Flashing Yellow Arrow operation.

Supportive Documentation

Follow-up studies conducted by DOT’s throughout the nation have concluded that the use of Flashing Yellow Arrows has improved safety through the reduction of left turning angle crashes. An additional benefit has been improved intersection efficiency. The use of FYA allow for the ability to vary the type of left-turn phasing to suit traffic volume demands throughout the day and to vary the phase to provide optimal corridor two-way progression across multiple timing plans.

Counter Measure

The recommended solution is to convert existing 5-section “doghouse” signal heads to 4-section Flashing Yellow Arrows at nine intersections in the city of Bismarck.

Cost Analysis

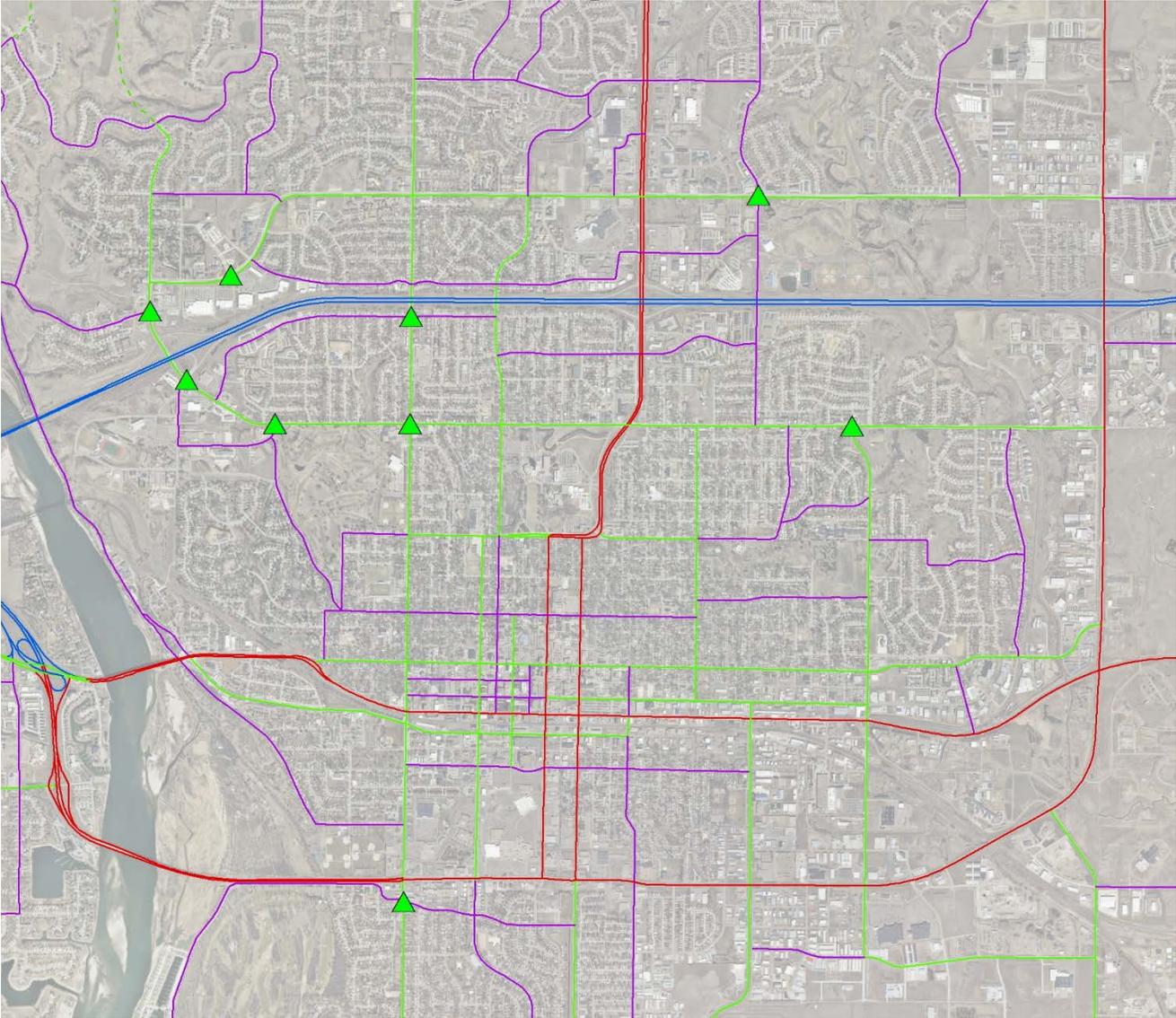
Bismarck Flashing Yellow Arrows

<u>Location</u>	<u>QTY</u>	<u>Controller</u>	<u>Unit PRICE</u>	<u>TOTAL</u>
Washington St & Denver Ave	3	McCain	\$2,000.00	\$6,000
Tyler Parkway & Burnt Boat Drive	3	ASC/3-1000	\$2,000.00	\$6,000
Divide Avenue & Schafer St	3	ASC/3-1000	\$2,000.00	\$6,000
Divide Avenue & College Drive	1	ASC/3-1000	\$2,000.00	\$2,000
Washington Street & Turnpike Avenue	2	Cobalt G	\$2,000.00	\$4,000
19 th street & Century Avenue	3	ASC/3-1000	\$2,000.00	\$6,000
Washington Street & Divide Avenue	4	ASC/3-1000	\$2,000.00	\$8,000
26 th Street & Divide Avenue	1	ASC/3-1000	\$2,000.00	\$2,000
Century Avenue & Pinehurst	2	ASC/2S-1000	\$2,000 + *\$4,000	\$8,000
Total (2020)				\$ 48,000
Total (2023) (4%/3 Years)				\$ 54,000

*Controller upgrade and cabinet wiring

Project Location

Intersection locations shown with a green triangle below.



TAC and Policy Handout

October 19-20th, 2020Re: **Urban Grant Program**

Two projects were submitted; one from the City of Bismarck and one from Bis-Man Transit. The projects were scored by MPO staff against MPT Objectives. Points are provided to TAC and Policy Board for information, discussion, and potential prioritization. Boards can prioritize as/if they see necessary.

Jurisdiction	Type	Location: Project	Total Cost / Federal	MTP	Points
Bismarck	Rehabilitation	Downtown Bismarck: Downtown Street Improvement Projects – includes CPR, curb and gutter repair, sidewalk repair, ADA ramp upgrades, plastic pavement marking, lighting upgrades, tree and landscaping improvements, and signage on remaining 6 blocks of downtown area; recommended in the Downtown Bismarck Subarea Study	1.804 Million / 1.450 Million	Yes	12.948
Bis-Man Transit	Installation	Service-Area Wide: Enhance 13 to bus shelters with solar lights and installing benches at least 12 locations along the fixed routes in Bismarck and Mandan.	14,000 / 11,200	Yes	12.948

//RAD October 2020

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Urban Grant Program Application

Coversheet

LPA

Bismarck

Contact Person

Deidre Hughes

Title

Executive Director – Bis-Man Transit

Address

3750 E Rosser Ave, Bismarck, ND 58501

Telephone

701.258.6817

Email

dhughes@bismantransit.com

Project Name

Bus shelter enhancements – Solar lighting and additional seating

LPA Applicant Signature (Highest Elected Official)

Deidre Hughes - Bis-Man Transit Executive Director

NDDOT District Engineer Signature if project is located on/impacts a State Highway

Date Submitted

10/7/2020

[Click here to enter a date.](#)

Application Attachment Checklist (check all that have been attached)

- Relevant excerpts from adopted plans
 Map(s) depicting project location
 Cross Section of Roadway/facility
 Pictures, Graphics, and/or other visual aids
 Relevant supporting data
 Other Attachments (describe)
 Mobility 2017 Study, Transit Development Plan 2019

Information in this Box is for NDDOT to Complete

Date Received _____

Is this Project Title 23 Code of Federal Regulation Eligible including location on a federal aid route?

Yes No

General Project Information

Project Description (including location and scope of work for which funding is requested)

This project will enhance 13 existing bus shelters in the Bismarck-Mandan fixed route service area by providing solar lighting. Currently, all shelters are primitive and provide no lighting for passengers waiting for the bus. Solar lighting would not increase operating cost for Bis-Man Transit.

There are 28 benches installed in Bismarck. With the expansion of the fixed route service area, there are many areas where benches could be placed along route for riders to utilize. Additionally, no benches have been placed in Mandan, at this time. Benches are a low-cost option for promote the fixed route system and require minimal maintenance.

Total Project Cost

\$14,000

Amount of Grant Funds Requested (cannot exceed 80% of total project cost)

\$11,200

Competitive Criteria

- 1. Community Need for Project:** Explain why the project is needed including appropriate detail. Include any 100% locally funded components of the project that are part of the overall project or other planned projects that may compliment this project. Documentation of information to support the need such as relevant data, existing and if appropriate projected conditions, and any related analysis through studies or reports would be appropriate to identify in this section. Attachments such as but not limited to: maps, pictures, other graphics; and supporting data demonstrating the need for the project is encouraged.

The Capital Area Transit system operates 6 fixed routes within the Bismarck-Mandan communities. Riders are able to “flag down” the bus at any safe location along the route; however, many riders chose to wait at benches or in shelters along these routes. Shelters and benches provide a better presence for the fixed route system while being a functional tool for riders.

2. **Community Impact of Project:** Describe how the project will offer significant long term value to the community specifically in addressing the following program objectives (a-f):

a) Preserve existing transportation assets

Having a public transportation system that provides safe, well-lit seating options for riders encourages use of the system. In turn, potential riders are more likely to leave their personal vehicles at home which decreases traffic congestions and creates less wear on the existing roads.

b) Ensure safety of all users of the transportation system

Installing additional benches and replacing damaged benches throughout the service area encourages riders to congregate in safe stop locations for the fixed route buses and provides rest locations for those struggling with mobility. Additionally, solar lit bus stops allow law enforcement and bus operators a better view of individuals and activity within the shelters.

c) Improve multi-modal transportation options such as walking, bicycling, and public transportation

Increasing the bus bench count draws attention to locations potential riders know where the bus will be passing through without being familiar with the systems. Bikers will be more willing to wait at a location with a bench knowing that it is a safe zone for boarding the bus.

d) Enhance the economic vitality of the area by providing transportation assets that support: revitalization efforts; development of vacant or underutilized parcels within existing urban areas; and/or redevelopment of established portions of communities

By adding desirable bus bench locations in previously unserved areas, transportation options increase for those looking to work and shop.

e) Support economically sustainable growth, lessening the need for outward expansion of community transportation infrastructure and associated services

Easily accessible public transportation allows for more walkable community especially with major corridors. Generally, where transportation goes, the community grows.

3. **Consistency with an LPA Associated Plan:** Document linkage between the proposed project and a publicly accepted/adopted plan(s) and/or public involvement process. Clear linkage should be demonstrated between the proposed project and the associated public acceptance/support which would include documenting the reference(s) in the plan and/or public involvement process. Relevant excerpts from such documents are encouraged to attach with the application. Examples of publicly accepted/adopted plans might include but are not limited to: Community Comprehensive Plan; Downtown Master Plan; Neighborhood/Subarea/Corridor Plan; Bicycle/Pedestrian Plan; Housing Plan; Long Range Transportation Plan; Transit Development Plan; and/or Renaissance Zone Plan. A stand-alone public involvement process which demonstrates community support for

the specific project is also acceptable and should be documented in the application.

The 2019 Transit Development Plan encourages additional focus be placed on bus stops and amenities. This allows Bis-Man Transit the opportunity to use these platforms (shelters and benches) to market the services to riders and non-riders. Easy access to information about the fixed route system makes for a more usable service. (page 79)

The Mobility 2017 Transportation plan included \$178,000 to be spent on bus stop signs, benches and shelters. Minimal maintenance improvements have been made to date. No additional shelters or benches have been installed.

4. **Project Support of Urban Core/Central Business District:** Projects which directly support the urban core/central business district (CBD) will be given preferential consideration. Identify the project location and how it will support the urban core/CBD. (Attach 8.5" x 11" or 11" x 17" color map depicting project location in relation to urban core/CBD if applicable to the project type)
Placement of additional benches will be in areas with higher ridership. This includes the downtown areas of Bismarck and Mandan. All proposed bench locations will be approved with the Cities prior to installation.

5. **Projects that Maximize the Return on Investment from Public Funds:** Projects which can demonstrate a positive private return on investment of public funds will be given preferential consideration. Examples of this may include but not be limited to increased retail sales, new jobs, and/or new dwelling units anticipated as a direct result of the proposed project.
Safe and convenient bus stops increase ridership which in turn increase economic growth. On average for every dollar spent on public transportation, the economic return in the community is four dollars.

Existing Conditions

(information requested in this section may not be appropriate for all project types)

Functional Classification of Roadway

[Click here to enter text.](#)

Current AADT (including source)

[Click here to enter text.](#)

Forecasted AADT (including source)

[Click here to enter text.](#)

Posted or Statutory Speed Limit

[Click here to enter text.](#)

Cross Section of Roadway (attach graphics depicting current dimensions and key roadway elements)

[Click here to enter text.](#)

Pavement rating or condition

Click here to enter text.

Year of Last Federal Investment at this Location

Click here to enter text.

When was the current section built?

Click here to enter text.

Year last surfaced or received maintenance?

Click here to enter text.

Lighting

Click here to enter text.

Crash Rate or Number of Crashes?

Click here to enter text.

Other Known Safety Concerns?

Click here to enter text.

Intersections (how many, type, control, etc.)

Click here to enter text.

Is parking allowed and what type?

Click here to enter text.

Are there any bridges, box culverts, etc. within the project corridor?

Click here to enter text.

What is the condition of the existing sanitary sewer, storm sewer, and water lines?

Click here to enter text.

Are there any Access points to adjoining property that present a special concern?

Click here to enter text.

Bicycle/Pedestrian, and Public Transportation Accommodations (Sidewalk, shared use paths, bicycle lanes)?

All additional benches will be placed in City controlled boulevards or incorporated into the sidewalk system.

Is there an existing transit or other public transportation facility located within the project limits?

There is existing public transportation with limited seating area. The fixed route system operates as a "flag down" system.

Do any school buses, transit buses, other multi-modal vehicles, etc. use this route?

The fixed routes run through Bismarck and Mandan. All stops are dedicated for public transit use.

Does a RRX or RR facility exist within the project limits?

Click here to enter text.

Other existing conditions that are not listed identified above?

Click here to enter text.

Proposed Improvements
(information requested in this section may not be appropriate for all project types)

What are the proposed Improvements (specific scope of work)?

With the proposed improvements, Bis-Man Transit would provide the public with well lit, safe bus shelters throughout Bismarck and Mandan. Additional benches increase the presence of fixed route public transportation within the service area.

Proposed Length

[Click here to enter text.](#)

Proposed Cross Section (attach graphics depicting current dimensions and key roadway elements)

[Click here to enter text.](#)

Proposed Surfacing Type

Proposed Lighting, if applicable

Lighting within the existing bus shelter locations will be solar powered.

Proposed Traffic Control changes

[Click here to enter text.](#)

Proposed Safety Improvements

[Click here to enter text.](#)

Proposed Intersection Improvements

[Click here to enter text.](#)

Proposed Traffic Calming Measures

[Click here to enter text.](#)

Will parking be allowed and type?

[Click here to enter text.](#)

Will any bridges, box culverts, etc. be built/replaced within the project corridor and how will they be modified?

[Click here to enter text.](#)

Will any private utilities, water lines, sanitary sewer, and/or storm sewer lines need to be replaced or worked on with this project or potentially in the recent future (identify year)? Have private utilities been coordinated with?

[Click here to enter text.](#)

Are there any access points along the project corridor that need to be addressed for mobility or safety concerns?

[Click here to enter text.](#)

Will a Sidewalk or shared use path be installed or replaced?

[Click here to enter text.](#)

What ADA improvements will need to be made on this project?

[Click here to enter text.](#)

Do any special accommodations need to be made for school buses, public transportation, other multi-modal vehicles, etc. on this route?

[Click here to enter text.](#)

Proposed Railroad Crossing Work

Click here to enter text.

Other Proposed Improvements

Click here to enter text.

Environmental/Cultural Issues on the proposed Projects

Identify *Yes, No, or Unknown* for each environmental/cultural issue. If *Yes*, provide a brief description of the issue in the *Comments* box.

Agricultural, Archeological sites, and/or Historical sites

No

Lakes, waterways, floodplains Wetland

No

Stormwater management

No

Hazardous materials sites

No

Hazardous materials on existing structure

No

Upland habitat

No

Endangered/threatened/migratory species

No

Section 4(f) (Refers to the use of publicly owned park and recreational lands, wildlife and waterfowl refuges, and significant historical or archeological sites in transportation project development.)

No

Section 6(f) (Refers to Land and Water Conservation Fund (LWCF) Act - the conversion to other use of lands or facilities acquired with LWCF Act funds and requires replacement of used land with lands of equal value and use.)

No

Through/adjacent to tribal land

No

Additional comments on Environmental/Cultural Issues section

No

Miscellaneous Issues of Proposed Improvements

Construction Restrictions (*migratory bird, local events, etc.*)

Click here to enter text.

Right-of-Way Required (parcels, owners, relocations, etc.) (NOTE: It is recommended that local funds be used to acquire right-of-way on the LPA system.)

All benches will be placed on city property unless an agreement is made with a private land owner.

Proposed Traffic Control during Construction

Click here to enter text.

Ineligible Project Items

Click here to enter text.

Additional comments on Miscellaneous Issues section

Click here to enter text.

Cost Estimate

Itemized Project Cost Estimate (For roadway projects this might include things like preliminary engineering, right-of-way, utilities, construction, construction engineering, bridges, and miscellaneous. For other types of projects include relevant items. Rows can be added as to the following table as necessary).

Item	Total	Federal	State	Local
Bus Benches (11)	\$8,000	\$6,400		\$1,600
Bench Back - Plexiglass	\$1,000	\$800		\$200
Shelter Solar Lighting (13 Shelters)	\$5,000	\$4,000		\$1,000
Preliminary Engineering	\$0			
Right of Way	\$0			
Utilities	\$0			
Construction	\$0			
Construction Engineering	\$0			
Bridges	\$0			
Totals	\$14,000	\$11,200		\$2,800

What is the source of the local funds?

Local funds will be taken from Bis-Man Transit cash reserves which were derived from local mill levy.

Deider Hughes *10/6/2020*
 Bisman Transit Executive Director



Proposed Bus Bench Additions – Pending City Approval

Mandan

- Raging Rivers 46th Ave SE
- Mandan Walmart
- Mandan Library
- Family Dollar
- Dan's Supermarket (Transfer Point)
- Custer Elementary

Bismarck

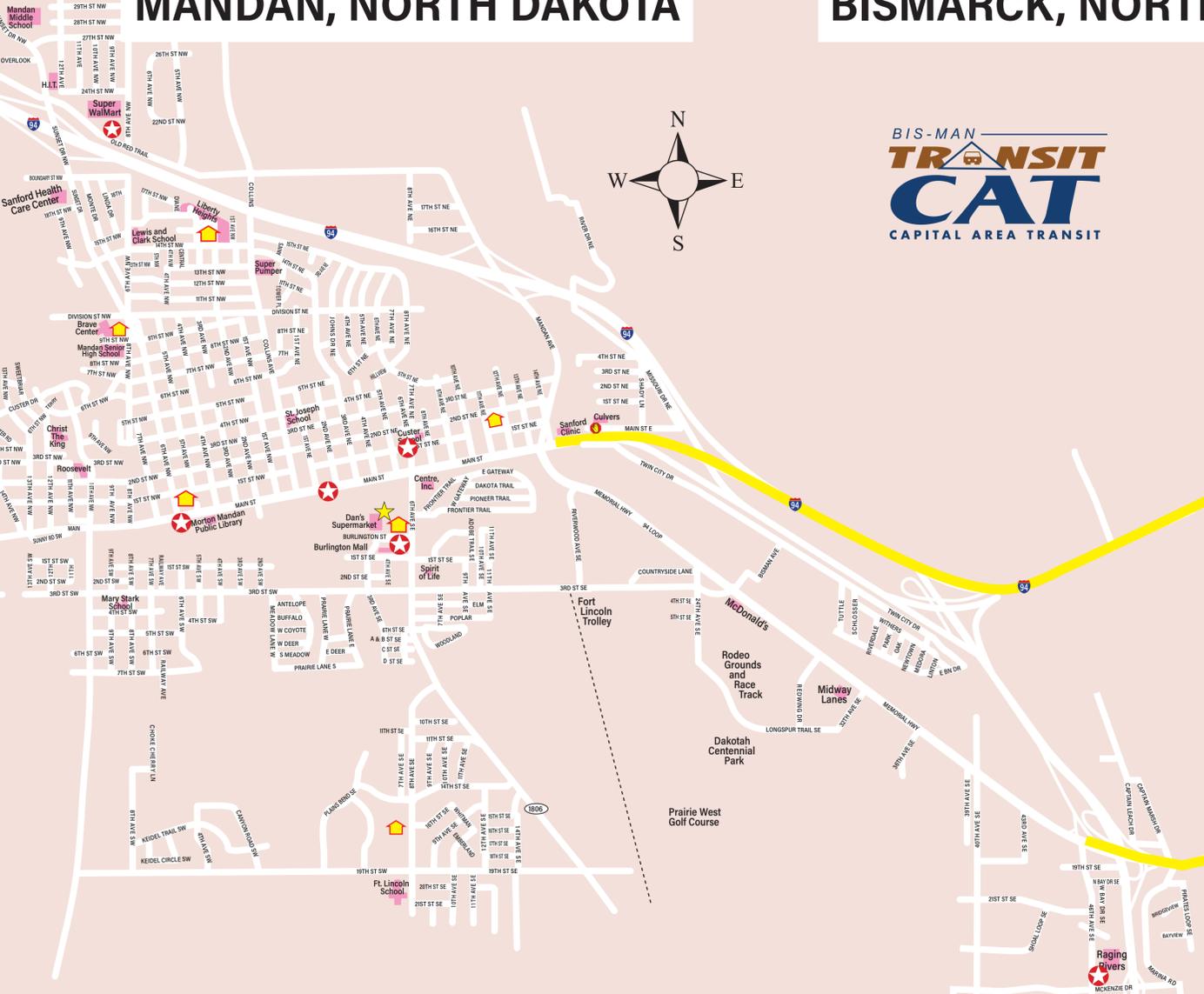
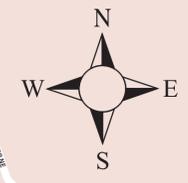
- Dan's (Yorktown Drive)
- Dan's Supermarket (Weiss Avenue)
- Capitol Ave & State St. (SW Corner/Pizza Hut)
- 4th St & Century Ave. (SE Corner)
- London Ave (Across from Tatley Place.)
- 24th St & Rosser Ave. (SW Corner)

Bis-Man Transit delivers valued public transportation, linking people, jobs and communities.

3750 East Rosser Avenue, Bismarck, ND 58501 • P: (701) 258-6817 • F: (701) 258-6752 • www.bismantransit.com

MANDAN, NORTH DAKOTA

BISMARCK, NORTH DAKOTA



Proposed Bench Location

Bis-Man Fixed Bus Route

- Route 1 (Black)
- Route 2 (Blue)
- Route 3 (Green)
- Route 4 (Red)
- Route 5 (Orange)
- Route 6 (Purple)

Shelter

No Stop Zone

Indicates Stop Permitted

Transfer Point

Highlighted times on timetables do not run on Saturdays

1 Black Route

Northbound	Southbound
7:00	7:03
8:00	8:03
9:00	9:03
10:00	10:03
11:00	11:03
12:00	12:03
1:00	1:03
2:00	2:03
3:00	3:03
4:00	4:03
5:00	5:03
6:00	6:03

2 Blue Route

Northbound	Southbound
7:00	7:03
8:00	8:03
9:00	9:03
10:00	10:03
11:00	11:03
12:00	12:03
1:00	1:03
2:00	2:03
3:00	3:03
4:00	4:03
5:00	5:03
6:00	6:03

3 Green Route

Southbound	Northbound
7:00	7:03
8:00	8:03
9:00	9:03
10:00	10:03
11:00	11:03
12:00	12:03
1:00	1:03
2:00	2:03
3:00	3:03
4:00	4:03
5:00	5:03
6:00	6:03

Tagline Marketing Campaign

Within the service area there is a divided perception that paratransit and fixed route service are operated by entirely different organizations. When fixed route service was implemented in 2004, it was branded as Capitol Area Transit (CAT) as a means of building a brand. That brand building has worked, but in the process the connectivity between fixed route and paratransit has been somewhat lost. Bis-Man Transit should engage in developing a new or modified tagline line that retains the identify of both services, however, ensures that users and non-users understand both are operated by one agency and in a coordinated manner. Essentially, you cannot have one without the other.

Bus Stop Information and Amenities

An opportunity for Bis-Man Transit for expanding information is to distribute the Rider Guide and Route Map brochure to more locations, including shelters. It is suggested that a six-month campaign of distribution and monitoring, noting how many brochures are actually taken at each location, be completed. Tracking should be done to note percentage completion of this effort so that this can be communicated to stakeholders.

Flag stops are the most prolific type of bus stop in the system; however, flag stops often do not contain information on which routes or served by the service. Updating key flag stops to include easy to access information on routes served, sources for obtaining real time bus information via mobile phones, and customer service numbers will enhance the visibility and ease of use of the service for both existing and potential riders.

Website and Mobile Application Improvement

Internet and technology focused marketing are essential to the growth of any business. A website is the face of a company or agency and is the first place many people look for information on services offered. Bis-Man Transit has an active website and social media

GoPass[®]
Mobile App

Smartphone
"wallet" stores
DART passes
and more

Download the new GoPass[®] app
Available on the App Store
ANDROID APP ON Google play

BUY PASSES for DART, TRE, The T and DCTA.

STORE and ACTIVATE passes for up to 60 days.

Travel **WITHOUT CASH.**

Access **TRAVEL TOOLS** like Trip Planning and Rider Alerts.

Discover **EVENTS and OFFERS**

Sample Smartphone Transit Applications

Source: Dallas Area Regional Transit

accounts, as well as a mobile application to track bus locations. Table 17 highlights key statistics for activity on www.bismantransit.com.

One capability recommended to add to each is the ability to purchase tickets and/or passes for using the system (both fixed route and paratransit). This feature will allow Bis-Man Transit to offer alternative payment options, but may require farebox upgrades. Mobile fare payment has the advantage of speeding up the fare collection on the buses to allow for faster travel times and improved reliability. The smart phone payment is designed to complement the cash fare system and offer options to riders.

Table 17. Bis-Man Transit Website Activity Statistics (October 2018-January 2019)

Descriptor	Activity Level
Monthly Visitors	1,400
Average Page Views	2.7 Per Visit
Average Session Time	2:30 Minutes
10 Most Viewed Pages (Percent of total viewed pages)	Home Page - 21.2% Routes/Schedules - 20.9% Black Route - 4.99% Red Route - 4.81% Procurement - 3.48% Purple Route - 3.10% Schedules - 3.05%

Long-Term Marketing Strategies

Long-term marketing strategies are meant to consistently remind the customer about a brand and entice them to continue purchase those services. The following long-term marketing strategies are recommended for Bis-Man Transit to maintain and expand their ridership base into the future.

Partnerships with Local Businesses

Partnerships with local businesses have been commonly used by transit systems to promote transit ridership. For example, businesses could partner with Bis-Man Transit to advertise and provide discounts for customers that use transit to get to the store. Businesses can provide their employees with bus passes to commute to and from work as a benefit of employment. Local businesses can also purchase advertising space on the Bis-Man Transit website, on vehicles (which is done today through wraps), at bus stops, or at a future transit center. Developing strong relationships with the local business community can not only help to maintain current ridership, but attract new riders by offering incentives to use the transit system. It is recommended to approach and discuss developing partnerships with the local business community on an ongoing basis.

One possible strategy that has been recommended is maintaining the current eligibility policies for Bis-Man Paratransit, but charging individuals who are not ADA-paratransit eligible double the prevailing ADA fares. As a result, non-ADA riders would pay \$5.00 per trip. This strategy assumes that approximately 30% of non-ADA riders will stop riding Bis-Man Paratransit, and about 10,000 of those trips would be shifted onto CAT service. Following are the anticipated results from this strategy:

- The amount of cost savings under this strategy is less significant than the other two strategies, reflecting the fact that the savings are not generated by increased fares so much as by shifting of trips from Bis-Man Paratransit to CAT service.
- An estimated 5,446 CAT VSHs would be available for expanded service.

One of the key recommendations of this report has been the implementation of a more accurate eligibility screening process for Bis-Man Paratransit service. Since this recommendation could be implemented under any of the three scenarios described above, and would have varying effects on each one, the ridership and financial impacts of this strategy are not provided in a separate table. However, it should be noted that more accurate eligibility screening would lead to an even greater shift in ridership to CAT, particularly if this was combined with the provision of travel training and fare incentives for using CAT services. Systems that have introduced in-person assessments for paratransit eligibility have experienced a reduction of 15% to 25% in application volumes, and additional reductions from individuals who do not follow through with the assessment. This self-selection is part of the educational process that potential applicants undergo in which they gain a greater understanding of the intended role of ADA paratransit services as a safety net service, and pursue possibilities of fixed-route service that may not have been previously considered. Combining this strategy with the major improvements to CAT service in 2013 can be particularly effective, so the timing of the two measures should be carefully coordinated.

CAPITAL COSTS

Required Capital Investments

The primary capital needs of Bis-Man Transit are vehicle replacements. Other capital requirements include bus stops and shelters if the routes are restructured as recommended in this report. The capital projects and their costs are presented in Figure 9-15 and discussed below.

Figure 9-15 Five-Year Capital Budget

Capital Expense Item	2013	2014	2015	2016	2017	5-Year Total
Vehicle Replacements (1)	\$0	\$0	\$240,000	\$360,000	\$750,000	\$1,350,000
Bus Stops Signs (2)	\$14,000	\$1,000	\$1,000	\$1,000	\$1,000	\$18,000
Benches & Shelters (3)	\$96,000	\$16,000	\$16,000	\$16,000	\$16,000	\$160,000
Office Equipment Expenses	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
Miscellaneous Equipment Expenses	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
Total Capital Expenses	\$135,000	\$42,000	\$282,000	\$402,000	\$792,000	\$1,653,000

(1) Assumes replacement of sixteen paratransit vehicles in 2012 that have exceeded their five year lifespan, and four in 2015 and six in 2016. Three fixed-route vehicles replaced in 2017. Paratransit vehicle cost: \$60,000. Fixed-route vehicle cost: \$250,000/vehicle.

(2) Assumes 70 bus stops in 2013, and 5 per year for remaining years at \$200/stop.

(3) Assumes 12 benches and shelters in 2013, and two annually through 2017, @ \$8,000 per shelter

Vehicle Replacement

Bis-Man Transit's current fleet (see page 3-2) includes sixteen paratransit vehicles that will have exceeded their five-year lifespan by 2012. For the purposes of this Plan, which uses 2012 as a baseline year, only vehicles beyond 2012 are included in the fleet replacement schedule. These would include the 2009 and newer Chevys, and the 2009 Chrysler T&C. For CAT vehicles, it is assumed that the three Gilligs purchased in 2004 will reach the end of their lifespan in 2017, while the others will not need to be replaced during this Five-Year Plan.

Bus Stops and Shelters

Assuming Bis-Man Transit moves forward with the study's recommendations for restructured CAT routes, the Plan assumes that 70 bus stops with signs will need to be installed in 2013, followed by five per year in the subsequent years of this plan. At the bare minimum, bus stop signs will need to be created and installed and poles will need to be placed to attach the signs if light poles or other poles are not available. Benches at each stop are also desirable. Bis-Man Transit will also want to consider shelters at highly utilized stops. This plan assumes that twelve shelters with benches will be installed in 2013, with two installed annually after that.

Office Equipment Expenses

This is an ongoing expense to replace and upgrade office equipment including computers, hardware, software, and office furniture. Over the next five years, \$10,000 per year is programmed for equipment purchases.

Miscellaneous Equipment Expenses

This is an expense to replace and upgrade maintenance and shop equipment. Over the next five years, \$15,000 per year is programmed for shop equipment upgrades.

Desired Capital Improvements

In addition to the capital requirements discussed, both new technologies and a new transit center should be considered as desirable capital investments that would necessitate additional capital funding. These are costly items and are shown in Figure 9-16, separate from the required capital needs shown in Figure 9-15.

Figure 9-16 Additional Five-Year Capital Improvements

Capital Expense Item	2013	2014	2015	2016	2017	5-Year Total
Technology Purchases (1)	\$0	\$0	\$0	\$825,000	\$425,000	\$1,250,000
Transit Center Design, Environmental Analysis, and Construction (2)	\$0	\$0	\$250,000	\$1,500,000	\$750,000	\$2,500,000
Total Capital Expenses	\$0	\$0	\$250,000	\$2,325,000	\$1,175,000	\$3,750,000

(1) Assumes comprehensive AVL-based operations and information system for a small-medium transit system
 (2) Based on peer costs, assumes development of a new transit center, environmental analysis, and construction

Urban Grant Program Application

Coversheet

LPA

Bismarck

Contact Person

Gabe Schell

Title

City Engineer

Address

221 N 5th Street, Bismarck, ND

Telephone

701-355-1505

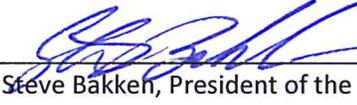
Email

gschell@bismarcknd.gov

Project Name

West CBD- Pavement Upgrade

LPA Applicant Signature (Highest Elected Official)



Steve Bakken, President of the Board of City Commissioners

NDDOT District Engineer Signature if project is located on/impacts a State Highway

Date Submitted

9/30/2020

Application Attachment Checklist (check all that have been attached)

- Relevant excerpts from adopted plans Map(s) depicting project location Cross Section of Roadway/facility
- Pictures, Graphics, and/or other visual aids Relevant supporting data
- Other Attachments (describe)
Click here to enter text.

Information in this Box is for NDDOT to Complete

Date Received _____

Is this Project Title 23 Code of Federal Regulation Eligible including location on a federal aid route?
 Yes No

General Project Information

Project Description (including location and scope of work for which funding is requested)

Project consists of improvements to downtown Bismarck primarily on N 3rd St and E Rosser Avenue bounded by Main Avenue on the south, Rosser Avenue on the north, 3rd Street on the west and 7th Street on the east. Project scope includes mill and overlay, curb and gutter repairs, sidewalk repairs, ADA ramp upgrades, plastic pavement marking, roadway and pedestrian lighting upgrades, street trees and landscaping improvements modifications of traffic signals for implementing leading pedestrian intervals, and signage.

Construction Limits: 3rd St from Main Ave to Rosser Ave, Rosser Ave from 3rd St to 7th St, 4th St from Rosser Ave to Thayer Ave, 5th St from Rosser Ave to Thayer Ave, Broadway Ave from 3rd St to 4th St. and Broadway Ave from 6th Street to 7th St.

Environmental Area: 3rd St from Main Ave to Rosser Ave, Rosser Ave from 3rd St to 7th St, 4th St from Rosser Ave to Thayer Ave, 5th St from Rosser Ave to Thayer Ave, Broadway Ave from 3rd St to 4th St. and Broadway Ave from 6th Street to 7th St.



Total Project Cost

\$1,804,00

Amount of Grant Funds Requested (cannot exceed 80% of total project cost)

\$1,450,000 in 2023

Competitive Criteria

1. **Community Need for Project:** Explain why the project is needed including appropriate detail. Include any 100% locally funded components of the project that are part of the overall project or other planned projects that may compliment this project. Documentation of information to support the need such as relevant data, existing and if appropriate projected conditions, and any related analysis through studies or reports would be appropriate to identify in this section. Attachments such as but not limited to: maps, pictures, other graphics; and supporting data demonstrating the need for the project is encouraged.

The primary component of the project is a mill and overlay of the roadway. The proposed work would repair the distressed wearing course and would restore the useful life of the previously invested infrastructure through increased load carrying capacity. 3rd Street and Rosser Avenue are functionally classified as minor arterials and provide north/south and east/west connectivity into and out of the CBD. Broadway Avenue, 4th Street and 5th Street are functionally classified as collector roadways within the project area. 3rd Street N with its quiet zone at-grade crossing of BNSF railroad provides interconnectivity for all modes of transportation from downtown Bismarck to land uses south of the railroad tracks. The project would also revise/improve any non-compliant pedestrian crossing to meet ADA requirements. Select traffic signals would modified to include push-button activation in order to implement leading pedestrian intervals which have shown to reduce pedestrian/vehicle crashes. The existing lighting along 3rd Street between Broadway Ave and Rosser Ave would be improved and would expand the existing pedestrian lighting system to include 3rd Street.

2. **Community Impact of Project:** Describe how the project will offer significant long-term value to the community specifically in addressing the following program objectives (a-f):
 - a) **Preserve existing transportation assets**

This project would preserve the existing useful life of the asphalt surfacing by milling the wearing course of pavement and overlaying roadway. Damaged curb would be replaced to improve stormwater conveyance and aesthetic appeal. The existing boulevard trees would be maintained and opportunities for replanting empty tree wells would be included. Implementation of this project will preserve the majority of the existing infrastructure by making minimal modifications to better serve the public transportation needs.
 - b) **Ensure safety of all users of the transportation system**

Unwarranted traffic signals would be removed and the proposed improvements to the ADA ramps would be located at areas closer to the stopping location of vehicles to improve visibility of the pedestrian in the cross walk. Where traffic signals are no longer warranted and are to be removed, pedestrian crossing improvements would be made such as curb extensions and/or pushbutton actuated Rectangular Rapid Flashing Beacons. Traffic signals would include push-button activation in order to implement leading pedestrian intervals which have shown to reduce crashes involving pedestrians. Leading pedestrian interval would allow the pedestrians to get a “head start” into entering the crosswalk with all four signalized approaches showing a red indication for vehicular traffic for 2-3 seconds while the activated pedestrian receives the “walk” designation. This safety feature is proposed only if the signal infrastructure includes pedestrian activated crosswalk in order to minimize vehicular driver frustration of an “all red” indication during the signal cycles with no pedestrian activity.
 - c) **Improve multi-modal transportation options such as walking, bicycling, and public transportation**

This project would evaluate and enhance multi-modal options by improving ADA ramp locations and realigning curbs to better delineate pedestrian spaces. Public transportation Black and Red Routes utilize 5th Street through the project area with service to the City/County Building and County Courthouse among other locations.
 - d) **Enhance the economic vitality of the area by providing transportation assets that support: revitalization efforts; development of vacant or underutilized parcels within existing urban areas;**

and/or redevelopment of established portions of communities

This project would increase the economic viability of the area by providing a street that accommodates all users. This is an area which has hosted community and economic events such as the Downtown Street Fair that promotes economic activity at both the street vendor as well as the store front level. By providing a reliable transportation network for all modes of travel, development and redevelopment interest is maintained or expanded.

e) Support economically sustainable growth, lessening the need for outward expansion of community transportation infrastructure and associated services

This project supports existing business and the development of new business in downtown Bismarck by creating an atmosphere more conducive to pedestrian activity both during daytime work and evening social activity. This is accomplished by focusing more on multimodal forms of transportation.

There is adequate utility servicing from water and sanitary sewer and no rehabilitation of those facilities is anticipated as part of this project.

3. **Consistency with an LPA Associated Plan:** Document linkage between the proposed project and a publicly accepted/adopted plan(s) and/or public involvement process. Clear linkage should be demonstrated between the proposed project and the associated public acceptance/support which would include documenting the reference(s) in the plan and/or public involvement process. Relevant excerpts from such documents are encouraged to attach with the application. Examples of publicly accepted/adopted plans might include but are not limited to: Community Comprehensive Plan; Downtown Master Plan; Neighborhood/Subarea/Corridor Plan; Bicycle/Pedestrian Plan; Housing Plan; Long Range Transportation Plan; Transit Development Plan; and/or Renaissance Zone Plan. A stand-alone public involvement process which demonstrates community support for the specific project is also acceptable and should be documented in the application.

This project was identified in the Downtown Bismarck Subarea plan to include traffic calming measures and provide for existing business and the development of new business in downtown Bismarck by creating an atmosphere more conducive to pedestrian activity both during daytime work and evening social activity.

In August of 2019 the board of City Commissioners adopted the Downtown Streetscape Standards. The purpose of these standards was to enhance and preserve the quality of the public right of way in the downtown core and provide an attractive, coherent and safe experience. The streets of the downtown core serve as an open space for public gatherings and festivals as well carrying traffic.



“What attracts people most, it would appear, is other people.”

-William Whyte

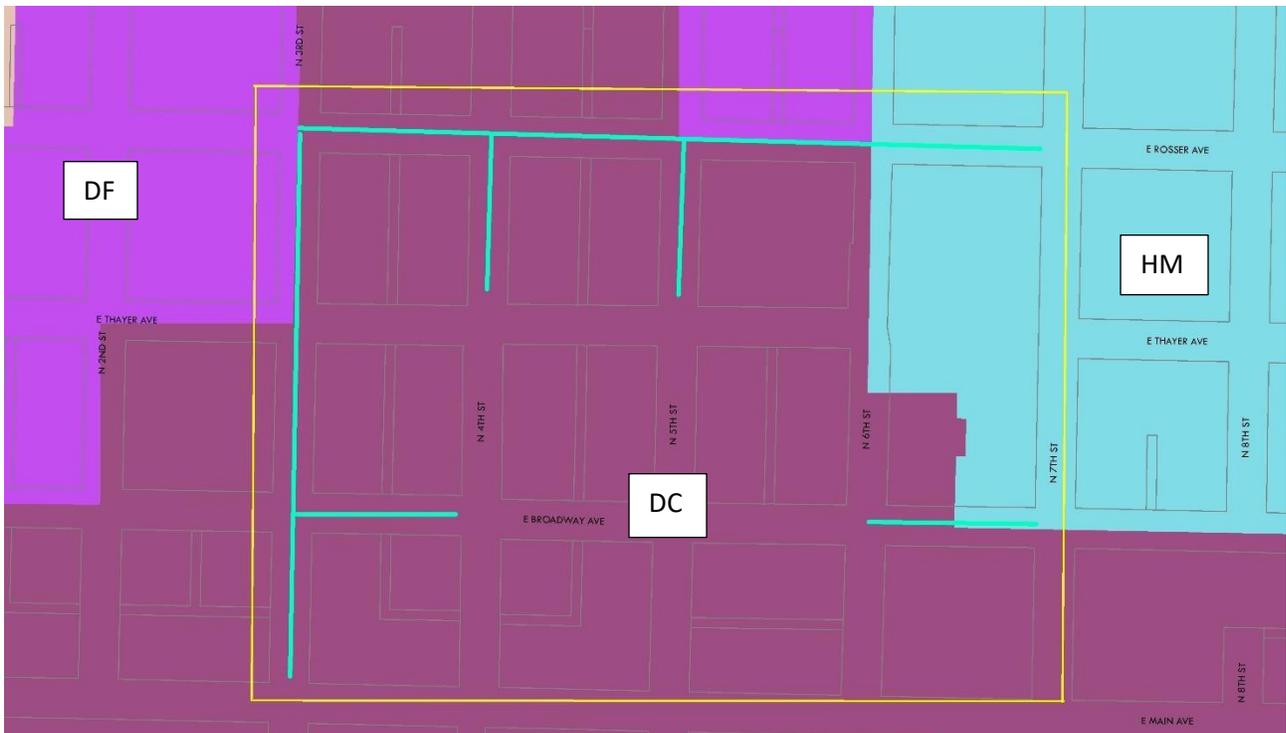
“Streets and their sidewalks, the public places of a city, are its most vital organs.”
-Jane Jacobs



Downtown Streetscape Standards Website:

https://www.bismarcknd.gov/DocumentCenter/View/33761/Downtown-Streetscape-Standards_071119

- Project Support of Urban Core/Central Business District:** Projects which directly support the urban core/central business district (CBD) will be given preferential consideration. Identify the project location and how it will support the urban core/CBD. (Attach 8.5” x 11” or 11” x 17” color map depicting project location in relation to urban core/CBD if applicable to the project type). This proposed project is near the north and west fringe of the downtown core as shown on the map below. Improvements are currently being implemented in the downtown core that are being funded through previous urban grants. This project will continue expand the area to support the continued growth of the activities of the central business district. Investing transportation dollars into these roadways would provide a funding source that would lessen the costs to the adjacent property owners for these improvements.



DC = Downtown Core

DF = Downtown Fringe

HM = Medical

5. **Projects that Maximize the Return on Investment from Public Funds:** Projects which can demonstrate a positive private return on investment of public funds will be given preferential consideration. Examples of this may include but not be limited to increased retail sales, new jobs, and/or new dwelling units anticipated as a direct result of the proposed project.

The zoning is downtown core, downtown fringe and Hospital medical for all of the properties within the project area. The land uses vary from medical, retail, office, and restaurants to mixed use residential and public. Maintaining a healthy level of service on the infrastructure within the downtown core, downtown fringe and hospital medical is essential to continuing the development and redevelopment potential in all of these properties. City pedestrian activity on subject corridors and the relationship of non-time limit parking just outside of this area as a generator of pedestrian activity into and out of these roadways throughout the day. Please see the attached letter of support from the Downtown Business Association of Bismarck for additional information.

Existing Conditions

(information requested in this section may not be appropriate for all project types)

Functional Classification of Roadway

Minor Arterial – 3rd Street and Rosser Avenue

Collectors – Broadway Avenue, 4th Street and 5th Street

Current AADT (including source)

3rd Street – 8585 ADT (2019)

Rosser Avenue – 7895 ADT (2019)

Thayer Avenue – 2500 ADT (2019)

Broadway Avenue – 2755 ADT (2019)

4th Street – 3200 ADT (2018 Miovision)

5th Street – 4400 ADT (2019)

Source: NDDOT Interactive Map

Forecasted AADT (including source)

Recently completed 2020-2045 MTP did not cite traffic growth on a corridor by corridor level but the 2045 transportation model did include a percentage of growth anticipated to occur within the community through 2045 to be absorbed by the traffic analysis zones located in the downtown area due to redevelopment.

Posted or Statutory Speed Limit

25 MPH

Cross Section of Roadway (attach graphics depicting current dimensions and key roadway elements)

Majority of roadway widths 48' face of curb to face of curb. Two-way traffic. Sidewalk widths vary from 6' to as wide as 16' in areas. Right of way width is 80'.

Pavement rating or condition

The pavement is in fair condition with the average Pavement Condition Index score of 71 in 2020. The pavement is projected to be in a degraded condition with an anticipated pavement condition index score of 63 in 2023, requiring a mill and overlay.

Year of Last Federal Investment at this Location

1978

When was the current section built?

3rd Street - Reconstruction 1978, Mill and overlay 2008

Rosser Avenue – Reconstruction 1978, Mill and overlay 2007

Year last surfaced or received maintenance?

3rd Street - Mill and overlay 2008

Rosser Avenue – Mill and overlay 2007

Lighting

In place

Crash Rate or Number of Crashes?

Crashes occurring in the last 10 years with in the projects are mainly property damage type collisions. Two crashes did occur involving bicycles along Rosser Avenue which is marked as a “Share the Road” bicycle facility.

Other Known Safety Concerns?

A number of near misses are reported at the intersection of 6th street and Rosser Avenue by Sanford employees crossing Rosser Avenue.

Intersections (how many, type, control, etc.)

Total of 6 intersections, Traffic signals are in place on Rosser Avenue at 3rd, 4th, 5th, and 6th Street and on Thayer Avenue and Broadway along 3rd Street.

Is parking allowed and what type?

Yes, parallel parking on all roadways

Are there any bridges, box culverts, etc. within the project corridor?

None

What is the condition of the existing sanitary sewer, storm sewer, and water lines?

Underground infrastructure in good repair at this time, watermain improvements 2020

Are there any Access points to adjoining property that present a special concern?

None

Bicycle/Pedestrian, and Public Transportation Accommodations (Sidewalk, shared use paths, bicycle lanes)?

Sidewalks on both sides of all streets.

Is there an existing transit or other public transportation facility located within the project limits?

Blue Transit Routes utilize 3rd Street and include stops on demand for users of the system.

Do any school buses, transit buses, other multi-modal vehicles, etc. use this route?

Blue transit route operates on 3rd Street from Main Avenue to Rosser Avenue

Does a RRX or RR facility exist within the project limits?

No, but there are quiet zone at-grade crossings of BNSF railroad located south of the project on 3rd Street and 5th Street.

Other existing conditions that are not listed identified above?

None at this time.

Proposed Improvements

(information requested in this section may not be appropriate for all project types)

What are the proposed Improvements (specific scope of work)?

Mill & Overlay (HBP), Installation of permanent pavement markings, upgrade street lighting and Upgrade ADA ramps, and aesthetic improvements.

Proposed Length

2630'/0.50 mi.

Proposed Cross Section (attach graphics depicting current dimensions and key roadway elements)

No Change, all work will be performed within the

Proposed Surfacing Type

HBP, No Change

Proposed Lighting, if applicable

Convert fixtures to LED. On 3rd Street from Rosser Avenue to Broadway install pedestrian lighting.

Proposed Traffic Control changes

Remove unwarranted Traffic Signals

Proposed Safety Improvements

Should any of the existing traffic signals be unwarranted and the signal is removed, pedestrians crossing at the intersection would be addressed by installing pedestrian actuated flashing beacon system. At the intersections where, near miss interactions between pedestrians and vehicular traffic is occurring, the implementation of leading pedestrian intervals could be considered to give more of an advantage to pedestrians by allowing pedestrians extra crossing time before cars can go. signal.

Proposed Intersection Improvements

ADA ramp and stop bar proposed to move to create a "tighter" intersection that would increase pedestrian visibility. Consideration for high visibility crosswalks.

Proposed Traffic Calming Measures

Pedestrian curb extensions included at select intersections currently without extensions.

Will parking be allowed and type?

Yes. Parallel

Will any bridges, box culverts, etc. be built/replaced within the project corridor and how will they be modified?

No

Will any private utilities, water lines, sanitary sewer, and/or storm sewer lines need to be replaced or worked on with this project or potentially in the recent future (identify year)? Have private utilities been coordinated with?

Spot repairs on water and sanitary sewer.

Are there any access points along the project corridor that need to be addressed for mobility or safety concerns?

No

Will a Sidewalk or shared use path be installed or replaced?

No, sidewalks in place, some repairs

What ADA improvements will need to be made on this project?

Installation of Tactile truncated dome panels at pedestrian crossings. Moving locations of ADA ramps to provide increased visibility to pedestrians.

Do any special accommodations need to be made for school buses, public transportation, other multi-modal vehicles, etc. on this route?

Consideration for transit route on 3rd Street and how detour during construction may impact route.

Proposed Railroad Crossing Work

No

Other Proposed Improvements

[Click here to enter text.](#)

Environmental/Cultural Issues on the proposed Projects

Identify *Yes, No, or Unknown* for each environmental/cultural issue. If *Yes*, provide a brief description of the issue in the *Comments* box.

Agricultural, Archeological sites, and/or Historical sites

Yes, portions of some the streets lie within the Downtown Bismarck Historic District. Within the district are many buildings list as individually eligible/contributing structures. Project improvements would not require right of way or impact any existing building and there are no contributing historical elements within the right of way itself.

Lakes, waterways, floodplains Wetland

No

Stormwater management

No

Hazardous materials sites

No

Hazardous materials on existing structure

No

Upland habitat

No

Endangered/threatened/migratory species

No

Section 4(f) (Refers to the use of publicly owned park and recreational lands, wildlife and waterfowl refuges, and significant historical or archeological sites in transportation project development.)

No

Section 6(f) (Refers to Land and Water Conservation Fund (LWCF) Act - the conversion to other use of lands or facilities acquired with LWCF Act funds and requires replacement of used land with lands of equal value and use.)

No

Through/adjacent to tribal land

No

Additional comments on Environmental/Cultural Issues section

[Click here to enter text.](#)

Miscellaneous Issues of Proposed Improvements

Construction Restrictions (*migratory bird, local events, etc.*)

Downtown Street Fair in September

Right-of-Way Required (parcels, owners, relocations, etc.) (NOTE: It is recommended that local funds be used to acquire right-of-way on the LPA system.)

No right of way acquisition required.

Proposed Traffic Control during Construction

Maintain traffic on roadway. Detours used at times or restriction to one-way traffic during phasing.

Ineligible Project Items

None

Additional comments on Miscellaneous Issues section

[Click here to enter text.](#)

Cost Estimate

Itemized Project Cost Estimate (For roadway projects this might include things like preliminary engineering, right-of-way, utilities, construction, construction engineering, bridges, and miscellaneous. For other types of projects include relevant items. Rows can be added as to the following table as necessary).

Item	Total	Federal	State	Local
Preliminary Engineering (In House)	108,400	0	0	108,400
Construction Engineering (In house)	0	0	0	0
Construction of Project (2025)	1,804,000	1,443,200	0	360,800
Utilities	0			
Bridge	0	0	0	0
Right of Way	0	0	0	0
Totals	1,912,000	1,443,200		469,200

What is the source of the local funds?

Sales Tax and/or special assessments.

City of Bismarck
Engineering Department
NDDOT Grant Support

September 11, 2020

Mark Berg, Gabe Schell, City of Bismarck elected officials & NDDOT

I'm writing to express support for Bismarck's current NDDOT Urban Grant Program for Downtown Bismarck. Our organizations represent over 200 businesses with nearly 9,000 employees, we also advocate for the largest and densest employment center in Bismarck located Downtown.



This project application is targeted near a growing and emerging portion of our west Downtown commercial district. This is an area that was originally more industrial and has over the last two decades turned more commercial and within the last 5 years more mixed-used. Mixed use development is the key to sustainable growth in Downtown Bismarck and making infrastructure improvements that target pedestrians as well as vehicles produces a stronger ROI. Furthermore, portions of this area in the Downtown Fringe are now parking exempt and open up more opportunities for private development.

I again want to touch briefly on the return on investment for road improvements in Downtown Bismarck. When done with all modes of transportation and pedestrians in mind, we can see a very positive ROI. Improvement's like our Main Ave Road Diet, Quiet Rail Zone, Chancellor Square Reconfiguration, and our 5th St Demonstration Project have produced positive returns including:

- Increase in private commercial activity (based on permit applications)
- Increase in pedestrian activity
- New housing units
- Safer intersections and roadways
- Improved pedestrian environment and experience
- Continued increase in property valuation

We will continue to work with our partners at the City of Bismarck and NDDOT to help further this application in any way. Thank you for your consideration.

Sincerely,

Kate Herzog, President & COO
Downtown Bismarck Community Foundation 501c3 &
Downtown Business Association of Bismarck 501c6

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October 8, 2020

Steve Saunders
Executive Director
Bismarck-Mandan Metropolitan Planning Organization
221 N. 5th Street
PO Box 5503
Bismarck, ND 58506-5503

Re: 2020 Orthophotography & Topographic Mapping Project

Dear Mr. Saunders:

I have provided an update regarding the status of the 2020 Orthophotography & Topographic Mapping Project below.

**2020 Orthophotography & Topographic Mapping Project
10/8/2020 Progress Report – Tyler Kaebisch, Ayres Associates**

- The review period for the 2020 Orthophotography and Topographic Mapping project deliverables has been completed as of October 5th, 2020. An amendment to extend the contract period was made on September 23rd, 2020. The contract amendment extends the completion date of the contract from October 31st, 2020 to November 30th, 2020. Final deliverables are currently being prepared, including Generation 4 SID tiles (tiled by PLSS Section) and individual ortho mosaics.
- As of October 8th, 2020, the 2020 Orthophotography & Topographic Mapping Project is approximately 95% complete.

In the event that you require additional information or clarification of any issue, please feel free to contact me at 608.441.3590.

Sincerely,

Ayres Associates Inc



Tyler Kaebisch
Project Manager – Geospatial Services
Direct: 608-441-3590
KaebischT@AyresAssociates.com

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AMENDMENT TO EXISTING CONTRACT WITH THE BISMARCK-MANDAN
METROPOLITAN PLANNING ORGANIZATION AND AYRES ASSOCIATES INC. FOR
ORTHOPHOTOGRAPHY/TOPOGRAPHIC MAPPING SERVICES

The Bismarck-Mandan Metropolitan Planning Organization (MPO), in agreement with Ayres Associates Inc., wish to extend the completion date of the contract to November 30, 2020 instead of the previously agreed to contracted date of October 31, 2020. This contract change was executed by the Bismarck-Mandan MPO Policy Board on October 20, 2020.

No compensatory changes result from this amendment.

Gerard Wise,
Chairman, Bismarck-Mandan MPO Policy Board

Date

Jason Krueger
Jason Krueger, CP, GISP
Manager- Aerial Mapping, Geospatial Services, AYRES Associates

9-23-2020
Date

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Gorrondona and Associates, Inc.

Status Report #4

Reporting Period: September 2020.

***Bismarck-Mandan MPO
Pavement Conditions and Analysis Report Project***

Summary of activities:

- Data collection completed
- Data processing 100% complete
- Data analysis and reporting approximately 50% complete
- Overall project progress stands at approximately 75%

Projected activity next period:

- Complete reporting

Required action by BMMPO:

- None – keep up the great work!

Problems encountered:

- None

Summary of project decisions:

- None

Out of scope services:

- None

Additional comments/issues:

- Kurt Keifer will be transitioning to IMS Infrastructure Management Services on October 5, 2020. However, he will continue to work through G&AI to ensure the successful completion of this project.

Milestone schedule/comments:

Task	Description	Duration (Weeks)	Milestone Completion	Pct. Complete	Actual Date	Milestones, Comments, and Assumptions
1	Project Initiation, Steering Committee Development, and Kickoff Meeting	NA	Week of 7/6 (or earlier)	100%	7/9	<ul style="list-style-type: none"> • Web conference (in person, if possible) • Current, accurate GIS provided prior to meeting • Existing PAVER databases (Bismarck and Mandan) provided prior to meeting
2	Project-Specific Quality Management Plan (QMP) Development	NA	Within two weeks following kickoff.	100%	8/3	Concise document supplementing <i>PathRunner QC/QA Planning Guide</i> .
3	Pavement Data Verification and PAVER Database Creation – <i>Phase 1</i>	3	7/13-7/31	100%	NA	*Milestone: Initial PAVER database complete. Several reconnaissance calls and emails exchanges with MPO TAC and participating agency technical staff to acquire and verify roadway attribute data.
4A	Mobilization	NA	NA	100%	7/27-8/10	Immediately prior to and following 4B
4B	Pavement Condition Data Collection	1 to 2	8/3-8/14	100%	8/15	*Milestone: Pavement data collection complete.
5	Pavement Condition Data Processing + QC/QA	3	8/17-9/4	100%	8/17-8/31	*Milestone: Pavement data processing complete.
6	Pavement Data Verification – <i>Phase 2</i>	2	9/7-9/18	100%	NA	*Milestone: PAVER database complete with condition data.
7	PAVER Customization	4	8/3-8/28	100%	NA	*Milestone: PAVER system table customization complete. <ul style="list-style-type: none"> • In parallel with data collection, processing, etc. • Several calls/exchanges with MPO and participating jurisdictions required.
8	Five- to Seven-Year Pavement M&R Plan Development	3	9/21-10/9	50%	NA	*Milestone: Draft five- to seven-year programs complete. <ul style="list-style-type: none"> • Begins following Tasks 6 and 7. • Several calls/exchanges with MPO TAC and participating agency technical staff required. • Collaborative effort.
9A	Reporting	2	9/28-10/9	50%	NA	*Milestone: Draft report complete. <ul style="list-style-type: none"> • Begins in parallel with Task 8 • Several calls/exchanges with MPO TAC and participating agency technical staff required.
9B	Draft Report Review with Updates – MPO and jurisdictional staff	2-3	10/12-10/30	0%	NA	*Milestone: Draft reports reviews complete with updates made by Consultant. Assumes draft report reviews by all agencies occur simultaneously. If this assumption is incorrect, schedule can easily be adjusted to sequence the reviews and still meet the end of year project completion goal.
9C	Draft Report Review with Updates – <i>NDDOT, FHWA, and FTA</i>	4	10/12-11/6	0%	NA	
9D	Final Reports	2	11/9-11/20	0%	NA	*Milestone: Final reports complete.
9E	Presentation	TBD	In November and December	0%	NA	*Milestone: All reporting/presentation complete by end of December 2020.
10	Training	TBD	In November and December	0%	NA	Two (2) days of web-based training.
NA	Project Management	NA	TBD	50%	NA	Including monthly updates and project-related correspondence at a rate of \$150/hour

Total Percent Complete: 75%

Bismarck-Mandan Intersection Analysis Study (IAS) Status Report #16

Reporting Period: September 2020

SUMMARY OF ACTIVITIES:

- Summarize Public Engagement feedback and discuss with the Steering Committee.
- Continue to advance development of Intersection Playbooks:
 - Develop toolbox of alternatives for Traffic Control, Pedestrian and Bicycle Crossing Control and Traffic Calming countermeasures.
 - Develop cursory analysis and screening spreadsheet.
 - Develop online form for traffic control requests.
 - Develop process and procedures for traffic study completion.
- Begin work on the Implementation Plan.

PROJECTED ACTIVITY NEXT PERIOD

- Complete Intersection Playbooks and send to Steering Committee for review.
- Conduct fourth Steering Committee Meeting.
- Develop draft Implementation Plan.

REQUIRED ACTION BY BMMPO:

- None in this reporting period.

PROBLEMS ENCOUNTERED:

- None in this reporting period.

SUMMARY OF PROJECT DECISIONS:

- None in this reporting period.

OUT OF SCOPE SERVICES:

- None in this reporting period.

MILESTONE SCHEDULE/COMMENTS:

<i>ACTIVITY</i>	<i>MILESTONE COMPLETION</i>	<i>PERCENT COMPLETE</i>	<i>ACTUAL DATE</i>
Steering Committee Meeting #1	July, 2019	100%	7/18/19
Phase 1 – Data Collection Report	October 2019	100%	10/28/19
Phase 2 – Macro-Level Intersection Report	December, 2019	100%	12/4/19
Steering Committee Meeting #2	December 2019	100%	12/20/19
Public Input Meeting #1	January, 2020	100%	1/28/20
Phase 3 – Micro-Level Intersection Report	May, 2020	100%	6/9/20
Steering Committee #3	June, 2020	100%	6/19/20
Public Input Meeting #2	August, 2020	100%	8/17/20 - 9/8/20
Phase 4 - Playbooks	September, 2020	90%	
Steering Committee Meeting #4	October, 2020	0%	
Phase 5 – Improvement Plan Development	November, 2020	15%	
Steering Committee Meeting #5	December, 2020	0%	
Draft Report	December, 2020	0%	
Oversight Agency Review	December, 2020	0%	
Final Report	January, 2021	0%	
Final Presentations (City Commission, MPO TAC, MPO Policy Board)	January, 2021	0%	
Estimated Total % Complete	January, 2021	80%	

Bismarck-Mandan MPO

TIP 2020-2023 **Administrative Modification**

Project Year(s) 2023

Entity	Project	Federal	State	Local	Total	Federal Funding Source
Burleigh	23.6.02	\$8,000,000 \$2,880,000	\$0	\$2,720,000	\$13,600,000	SU SC

Project Description:

This project is for the construction of a railroad overpass on 66th Street in Burleigh County. The project extends between Northgate Drive and Apple Creek Road. The total cost of this project has increased from \$12.7M to \$13.6M. \$2,880,000 of additional federal funding is going to this project through the County's rural federal aid funds. Since the project is on a functionally classified roadway and is outside of corporate limits, the project is eligible for these rural federal funds. The local entity will cover the remaining amount, or \$2,720,000. Since the total cost increase of the project is \$900,000, and does not meet the threshold for a TIP amendment, an administrative modification has been formed.

Consistency with the Bismarck-Mandan MPO Metropolitan Transportation Plan:

The project is in the TIP and has been adopted into the Arrive 2045 MTP.

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

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Transportation Connection

MPO Update

October 2020

Plan Development Progress

- **Continuing our partner and public outreach**
 - Introductory meetings with tribal authorities
- **Launched Priorities Survey**
 - https://form.jotform.com/NDDOT_LRTP/priorities
- **Launched Bike/Ped Survey**
 - Partnership with North Dakota Active Transportation Alliance
- **Launching virtual tools to connect expectations, funding, and performance**
 - Public education on transportation funding, budget allocations, and performance outcomes
 - Experiment for public: Meeting performance targets with additional revenues
 - Survey information on Willingness to Pay provides context for TC Plan goal-setting

Engagement Reach

26

...public and partner events

557

...online survey responses

250+

...virtual meeting participants

**Over
1,300**

...unique website visitors

1,300

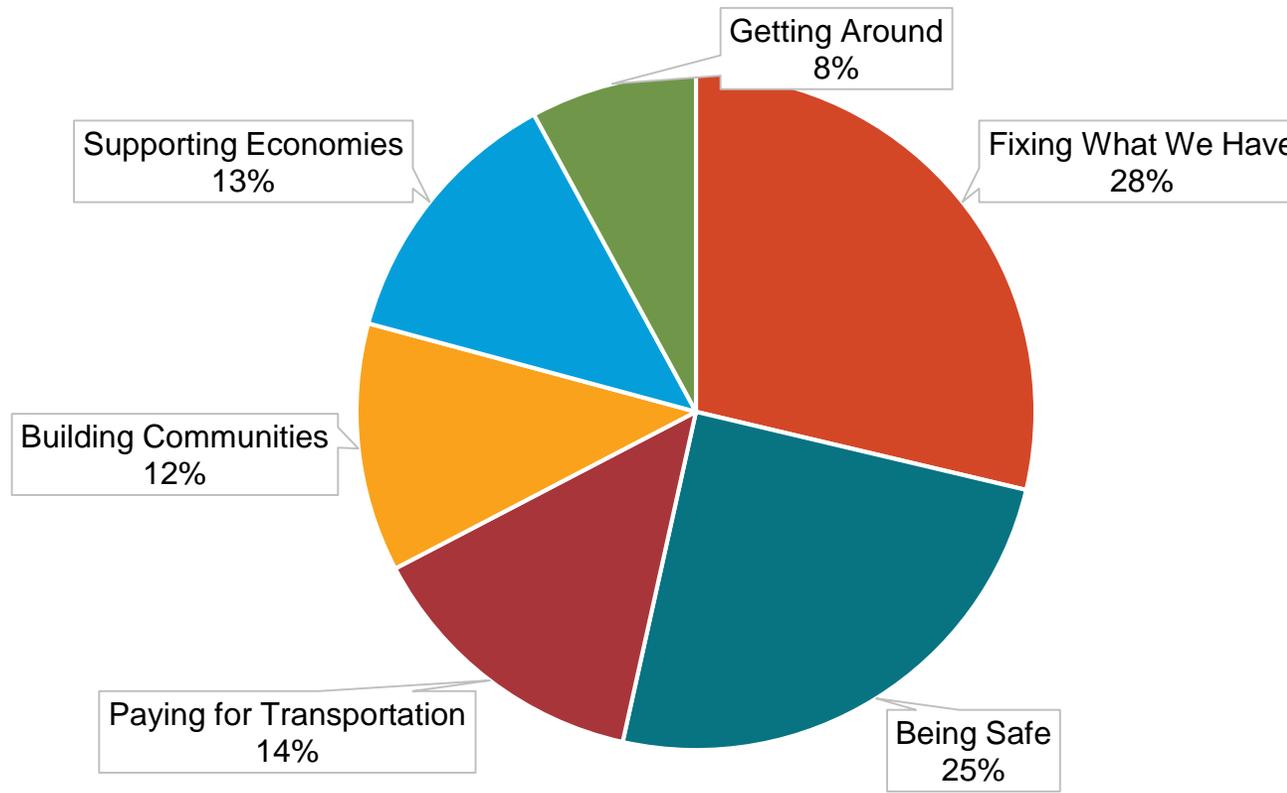
...views of TC101 online meeting

3,887

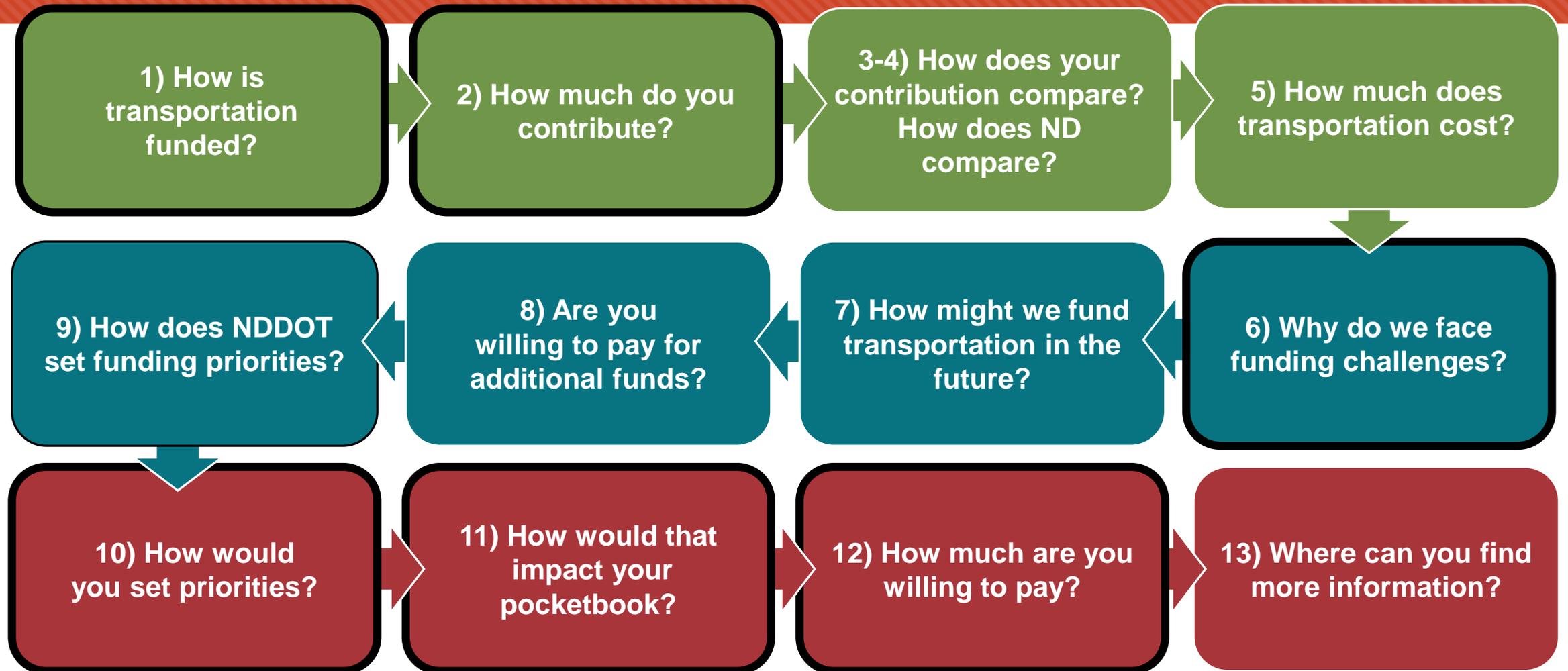
... likes and interactions on social media in the past 30 days

What Are We Hearing?: What are our priorities?

What are the most significant transportation issues facing North Dakota today?
Choose your top 3 issues



Telling The Story

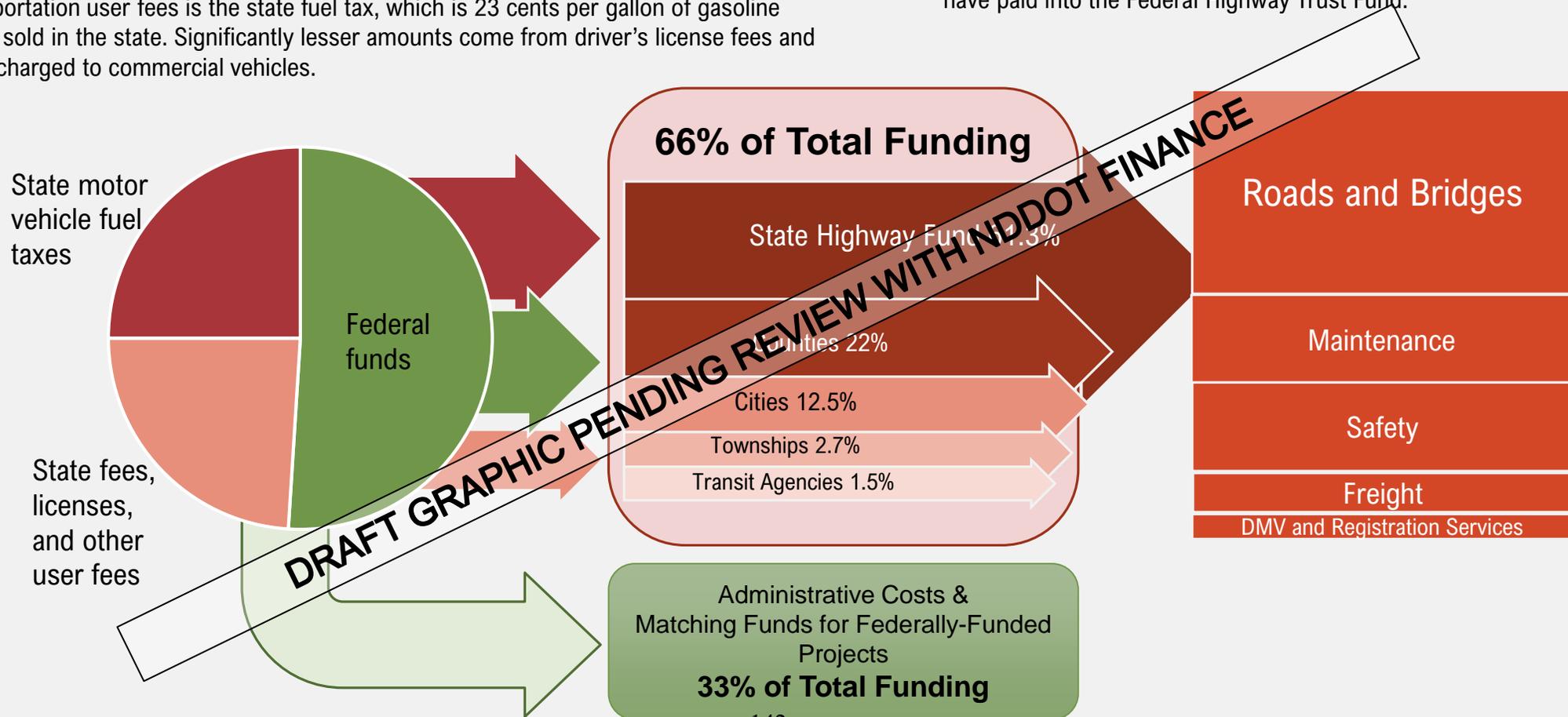


How is transportation funded in North Dakota?

North Dakota's transportation system is a tremendous asset. The system was built by our parents and grandparents who believed investing in transportation was important for them and future generations. Today it has a replacement value of \$14.2 billion.

The state transportation user revenue comes from state fuel taxes you pay when you buy fuel for your vehicle and registration fees you pay to license your vehicle. The largest source of revenue for state transportation user fees is the state fuel tax, which is 23 cents per gallon of gasoline and diesel fuel sold in the state. Significantly lesser amounts come from driver's license fees and some permits charged to commercial vehicles.

A significant amount of transportation funding comes from the federal government. Federal funding is generated by the federal fuel tax – 18.4 cents per gallon for gasoline and 24.4 cents per gallon for diesel. The majority of federal revenue is dedicated to pay for a share of eligible highway improvement project costs. Historically, North Dakota has received \$2 of Federal Highway funds for every \$1 North Dakota drivers have paid into the Federal Highway Trust Fund.



How much do you pay each month?

If you drive a pickup truck that averages 20 mpg and you drive 12,000 miles per year, you pay \$11.50/month or \$138/year. **Select an option from the drop-down menus that is the closest to your driving experience to see how much you pay each month.**



Your average mpg

Miles driven each year

Age of your vehicle

Weight of your vehicle
(Select the example that best matches your vehicle)

You currently pay

\$11.50

per month in **North Dakota state fuel taxes** and

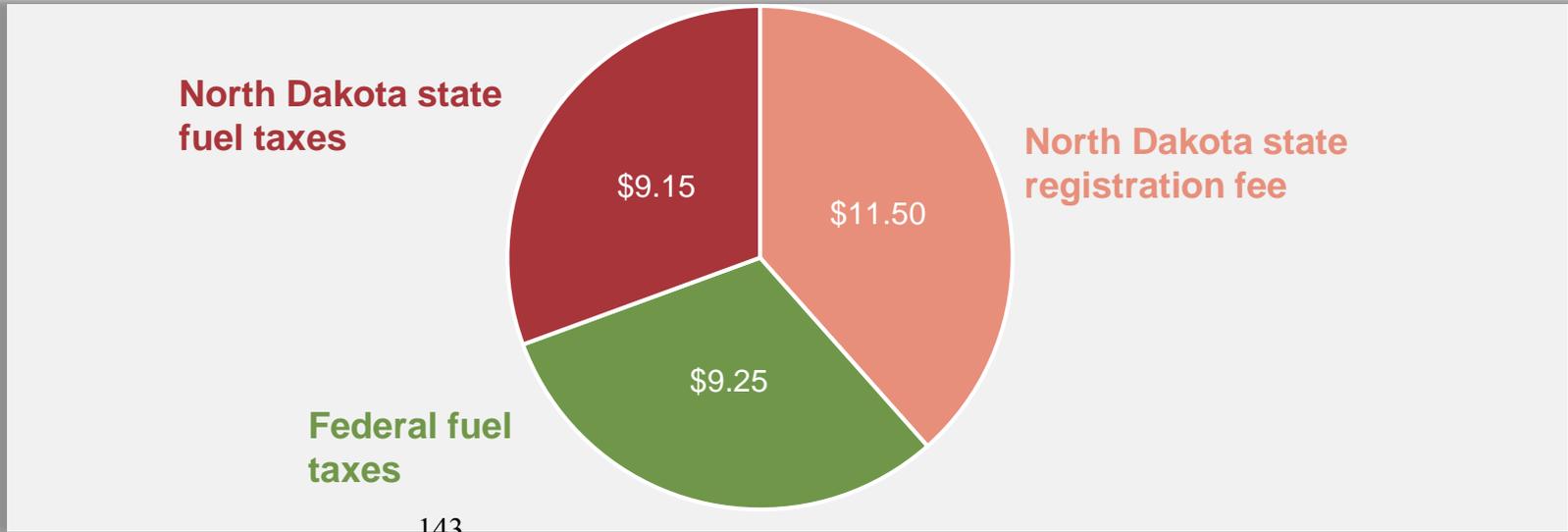
\$9.25

per month in **registration fees**

In addition to state fuel taxes and fees you pay approximately

\$9.16

in **Federal fuel taxes** each month.



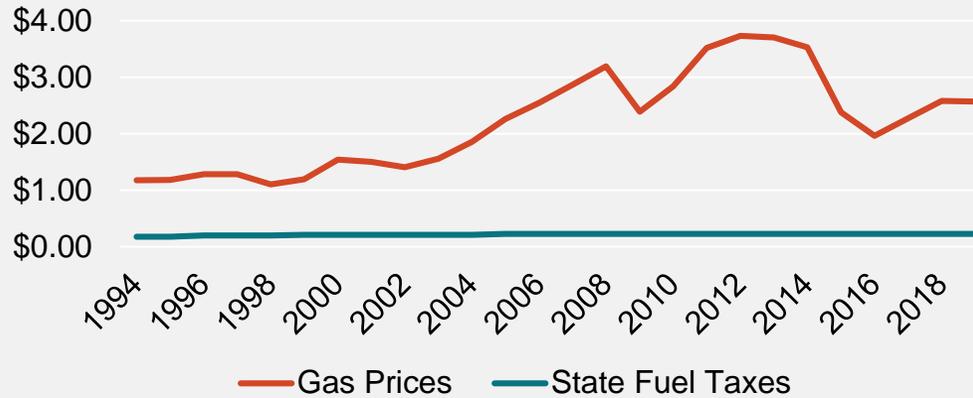
Why are we facing funding challenges?

North Dakota's state transportation revenues are heavily dependent on motor fuel taxes and vehicle registration fees.

Motor fuel taxes are levied per gallon, not per dollar. **As fuel economy improves, people buy less gas and the state receives less revenue.**

The last time North Dakota state rates were raised was in 2005. The last time Federal gas rates were raised was 1993. The same amount of revenue purchases fewer projects as project costs increase.

ND Gas Prices and State Fuel Taxes, 1994-2019



Because services or service levels are directly related to available funding, all of the transportation services NDDOT provides today would require **\$24.6 billion over the next 20 years**. This equates to a gap of \$14.6 billion of additional funding compared to today's funding levels over the next 20 years.

Move ND has identified \$2.2 billion in critical investments for the highway network alone over the next 10 years. These are crucial investments to maintain key system components and minimize freight restrictions.

North Dakota's federal funding is projected to remain relatively flat, while North Dakota's state transportation revenues are likely to grow very slowly under current conditions. North Dakota raised fees on electric and hybrid vehicles to compensate for their lower-to-zero gas tax contributions, but these vehicles are a small percentage of the total number of vehicles in the State, and their funding contributions are similarly low.

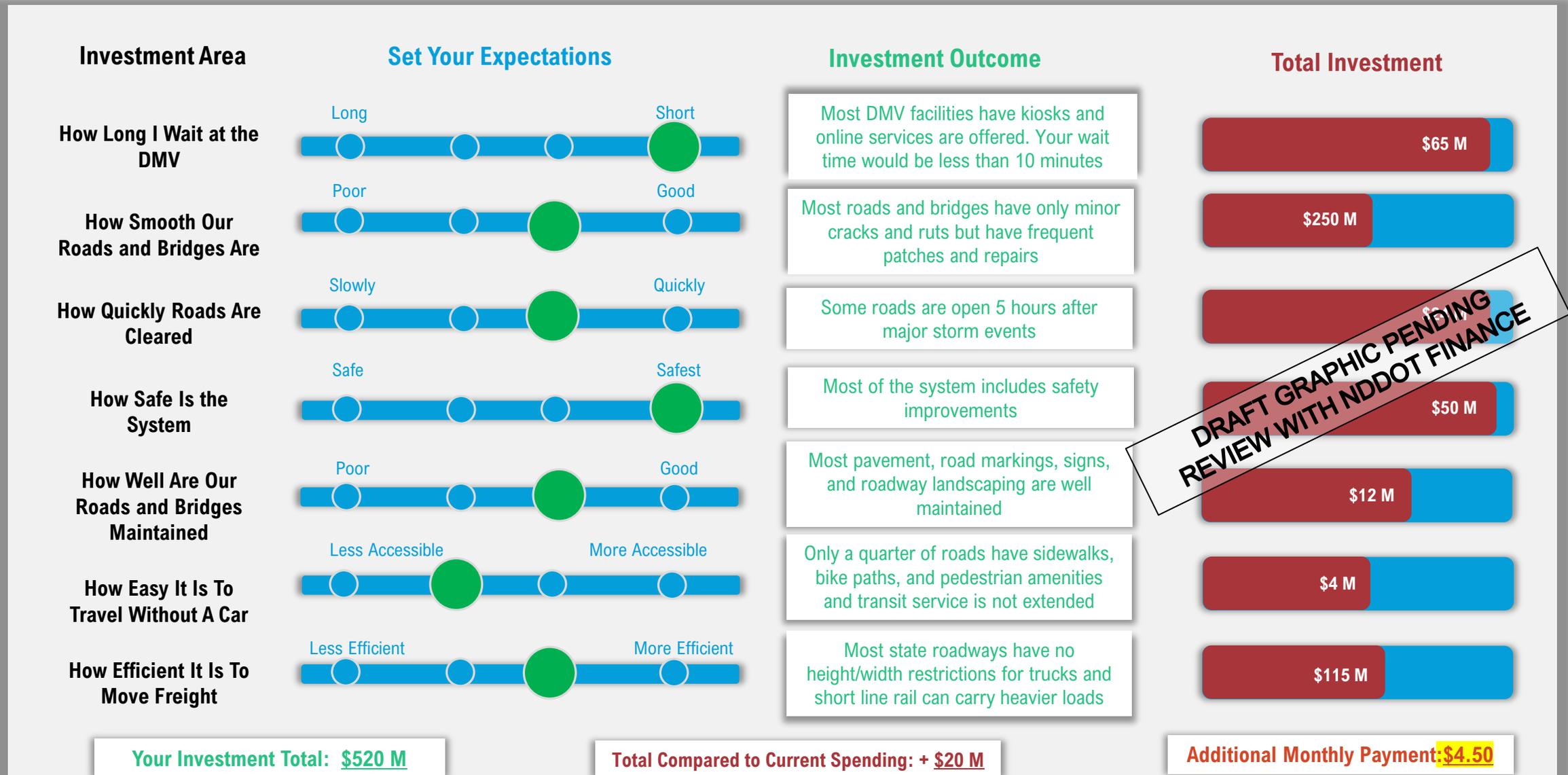
Would you support additional funding for transportation infrastructure and services?

- No, we can make do with what we have
- Yes, we can make good use of additional funds



How would you invest in transportation?

Slide the bars to set your expectations for each area. Invest as little or as much as you choose and see if you're investing more or less than what is currently available.



DRAFT GRAPHIC PENDING REVIEW WITH NDDOT FINANCE

How would new funds impact your pocketbook?

Now you've learned more about how transportation is funded and what challenges we face in meeting our future needs. You've set your own budget priorities and invested in North Dakota's transportation system and seen how that investment compares to current levels. At your proposed level of investment, how would your contribution to transportation change?

Additional Monthly Contributions Needed: \$4.50

Choose from the options at right to see how much more could be raised for transportation.

Change in State fuel tax **\$0.05**

Change in registration fees **\$1.00**

You elected to contribute an additional

\$3.75

per month in state transportation costs.

If everyone in North Dakota did the same, an additional

\$37.0 million

could be available to support our state transportation system and services.

How much would you invest in transportation?

Based on what you just learned about how much it costs for NDDOT to deliver your expectations and keep North Dakota's transportation system and services in good order. Please tell us a bit more! Your responses will help NDDOT understand North Dakotans' priorities and values for the state's transportation network.

	Decrease	No Change	Increase
How Long I Wait at the DMV	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Smooth Our Roads and Bridges Are	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Quickly Roads Are Cleared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Safe Is the System	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Well Are Our Roads and Bridges Maintained	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Easy It Is To Travel Without A Car	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How Efficient It Is To Move Freight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now that you've learned about how transportation is funded in North Dakota...

Do you support a change in fuel taxes?

- Increase of 1 to 5 cents
- Increase of 5 to 10 cents
- Decrease of 1 to 5 cents
- Decrease of 5 to 10 cents
- No change

Would you support a change in monthly registration fees?

- Increase of \$1
- Increase of \$1 to \$5
- Decrease of \$1
- Decrease of \$1 to \$5
- No change

Please share any other comments you have on this topic

SUBMIT

Next Steps

- Develop Funding and Performance tool in late September/early October
- Send Funding and Performance tool to NDDOT Project Advisory Team members for testing in early October
- Roll-out Funding and Performance tool in mid-October
- Conduct social media blitz to promote Funding and Performance tool, priority survey, and other Transportation Connection content
- Develop Transportation Connection plan framework

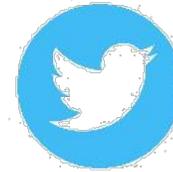
How Can You Reach Us?



www.dot.nd.gov/projects/lrtp/



www.facebook.com/TransportationConnection/



www.twitter.com/ndlrtp



www.instagram.com/transportationconnection/

ND Dept of Transportation

Stewart Milakovic | smilakovic@nd.gov

Project Team

Evan Enarson | eenarson@camsys.com