

## MEETING OF THE BOARD OF CITY COMMISSIONERS

AUGUST 9, 2016

The Board of City Commissioners met in regular session on August 9, 2016 at the hour of 5:15 p.m. in the Multi-Purpose Room, Lewis Goodhouse Wellness Center, Building 69, United Tribes Technical College (UTTC), 3315 University Drive, Bismarck, North Dakota. There were present: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary.

Posting of Colors will be presented by the United Tribes Technical College Veterans Color Guard.

Leander "Russ" McDonald, President, United Tribes Technical College, presented the invocation and a welcome.

1. The Board of City Commissioners considered approval of the minutes of the meeting on July 26, 2016.

Commissioner Askvig made a motion to approve the minutes. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

### 2. CONSENT AGENDA

A. The Board of City Commissioners considered and approved voucher numbers 1066343 to 1066667.

B. The Board of City Commissioners reviewed the personnel actions.

C. The Board of City Commissioners considered approval of the tax abatement application for Market Value Reduction at 1750 Bonn Blvd. Sherwin and Cathy Nelson qualified for the abatement.

D. The Board of City Commissioners considered the request from the City Administration Department to approve the renewal of the Memorandum of Understanding with ServeYes! for volunteers.

The city of Bismarck currently has a Memorandum of Understanding (MOU) with ServeYes! for the provision of volunteers for activities involving Emergency Management, Police Department, Public Health and other assigned locations. The current MOU is due for renewal and staff requests approval to renew it.

E. The Board of City Commissioners considered Consider request to call for public hearing on a request from a new owner of Bismarck Yellow Cab to obtain a new Taxi Cab License.

F. The Board of City Commissioners considered introduction of and called for a public hearing on the following:

- 1) Ordinance 6219 relating to the creation of the Bismarck Animal Advisory Board (*revised since original introduction on July 12, 2016*)

ORDINANCE NO. 6219

AN ORDINANCE TO CREATE AND ENACT CHAPTER 3-04 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO THE BISMARCK ANIMAL ADVISORY BOARD.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Chapter 3-04 of the City of Bismarck Code of Ordinances (1986 Rev.) relating to the Bismarck Animal Advisory Board is hereby created and enacted to read as follows:

CHAPTER 3-04  
BISMARCK ANIMAL ADVISORY BOARD

**3-04-01. Bismarck Animal Advisory Board; Purpose.** There is hereby created and established a body to be known as the Bismarck Animal Advisory Board. The purpose of the Animal Advisory Board is to advise the Bismarck Police Department on companion animal policies, promote collaboration between the City and private citizens, institutions, and agencies interested in or conducting activities relating to companion animals in the city, to identify proactive, creative approaches to engage and facilitate communication and education within the companion animal community and to foster and assist the development of companion animal programs in the community. The Animal Advisory Board may study, advise, and report on policy recommendations it deems effective to promote outcomes consistent with City goals and objectives as outlined by the Police Department and the City Commission.

**3-04-02. Membership – Terms – Filling Vacancies.** The Bismarck Animal Advisory Board shall consist of seven members, who will serve without pay. The make-up of the Bismarck Animal Advisory Board shall consist of one member of the board of city commissioners, or his or her designee, and six citizens who shall reside in or own property in the City of Bismarck. Members shall be nominated by members of the Board of City Commissioners and subject to confirmation by a majority of the Board of City Commissioners. It is the intent of this chapter for the Animal Advisory Board to be made up of a diverse membership from an array of companion animal businesses and organizations. This may include, but is not limited to; Small Animal Veterinarian; Large Animal Veterinarian; Animal Shelter; Animal Rescue; Attorney; Zoo; Large Animal organization; and a member at-large. City employees, whose chief function is to handle animals and enforce City Ordinances on a daily basis may staff the Animal Advisory

Board as non-voting, technical advisors at the discretion of their departments. Of the initial appointees, three shall serve for three year terms and four shall serve for two year terms. After expiration of each initial term, all terms shall run for three years. After the initial terms, no Board Member may serve on the Bismarck Animal Advisory Board more than an unexpired term plus two full terms. Appointees to the Board should promote companion animal welfare and represent the citizens and animals of the City of Bismarck.

**3-04-03. Board President – Meetings – Records to be kept.** The Bismarck Animal Advisory Board shall elect its President for a term of one year from among its members and shall hold regular meetings. The Bismarck Animal Advisory Board shall keep a record of its findings and determinations and all records shall be public records unless otherwise provided by North Dakota law. The Bismarck Animal Advisory Board may appoint such subcommittees from among the appointed members as may be necessary for its work.

**3-04-04. Powers and Duties of Board.** The Bismarck Animal Advisory Board shall:

1. Report to the Bismarck Police Department regarding the activities of the Bismarck Animal Advisory Board.

2. Recommend to the Bismarck Police Department action and programs within the authority of the City in furtherance of the purpose of the Bismarck Animal Advisory Board as described in this Chapter.

3. Consult with and advise public officials and agencies and with private individuals and organizations to provide education regarding companion animals.

4. Assist by offering information and referral guidance and services as a forum for discussion.

**3-04-05. Bismarck Animal Advisory Board Advisory in Nature.** The Bismarck Animal Advisory Board shall be advisory in nature and shall submit all reports and recommendations to the Bismarck Police Department.

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

- 2) Ordinance 6226 relating to city rights-of-way

ORDINANCE NO. 6226

AN ORDINANCE TO CREATE AND ENACT A NEW SECTION 2-01-04 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO CITY RIGHTS-OF-WAY.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 2-01-04 of the City of Bismarck Code of Ordinances (1986 Rev.) relating to City Rights-Of-Way is hereby created and enacted to read as follows:

**2-01-04. City Rights-Of-Way.** The City retains the full authority provided to cities by the North Dakota Century Code for the regulation and control of the public rights-of-way located within the City.

1. No person may dig up, remove, displace, break, or otherwise injure or destroy any public right-of-way, including any public improvement located thereon, in the City without first securing written permission, an appropriate permit as required by this code, a franchise available under this code or an encroachment agreement from the City.

2. No person shall obstruct, encroach or place any object, thing or improvement on or over any public right-of-way in any manner without first securing written permission, an appropriate permit as required by this code, a franchise available under this code or an encroachment agreement from the City. A person violating this section shall be guilty of an offense.

*Source; NDCC Section 40-05-01(8).*

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

- 3) Ordinance 6227 relating to rules and regulations for granting gaming site authorization.

ORDINANCE NO. 6227

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 6-06-04 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO RULES AND REGULATIONS FOR GRANTING SITE AUTHORIZATION.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 6-06-04 of the City of Bismarck Code of Ordinances (1986 Rev.) relating to Rules and Regulations for Granting Site Authorization is hereby amended and re-enacted to read as follows:

**6-06-04. Rules and Regulations for Granting Site Authorization.** In granting site authorization for locations at which eligible organizations licensed by the attorney general may conduct games of chance, the following rules and regulations apply:

\* \* \* \* \*

4. (a) Eligible organizations licensed by the city to conduct raffles may not sell tickets or conduct a raffle at a gaming site of another organization unless one of the conditions of NDCC Section 53-06.1-03(3)(a) are met. Organizations with a license issued by the state to conduct games of chance may conduct bingo, including electronic quick shot ~~or bingo with the aid of a Bingo Card Dispensing Device pursuant to rules and regulations as promulgated by the state~~ and only at locations other than licensed liquor premises, and may have pull-tabs at a location, other than a licensed liquor premises, where site authorization has been granted to conduct bingo.

(b) Organizations with a license issued by the state to conduct games of chance may conduct ~~promotional~~ bingo, including electronic quick shot bingo, on licensed liquor establishments. The following restrictions apply to ~~promotional~~ bingo conducted on licensed liquor establishments:

(i) ~~Promotional~~ Bingo may be conducted during the normal business hours of the licensed liquor premises and under such rules and regulations as promulgated by the state from 1:00 p.m. to 11:45 p.m. on Saturdays and New Years Day and from 5:30 p.m. to 11:45 p.m. every day.

~~(ii) Charge per bingo card may not exceed one dollar.~~

(iii) Total pay out to the winner may not exceed five thousand dollars.

~~(c) Promotional Bingo may also be conducted with the aid of a Bingo Card Dispensing Device. The following additional restrictions will apply to the use of such a device.~~

~~(i) A gaming organization's employee with a valid work permit will be onsite during the operation of a Bingo Card Dispensing Device.~~

~~(ii) Winning bingo cards must be redeemed within 15 minutes of purchase.~~

~~(iii) A gaming employee may not pay a prize to a player who is redeeming a bingo card when the player and/or the bingo card has left the gaming site.~~

~~(iv) Restrictions contained in sections ii and iii must be legibly posted on or at the Bingo Card Dispensing Device.~~

~~(v) Promotional Bingo conducted with the aid of a Bingo Card Dispensing Device may be conducted between the hours of 2:00 p.m. and 12:00 a.m. (midnight).~~

\* \* \* \* \*

*Reference: Chapter 53-06.1, NDCC (1985 Supp.) (Ord. 4121, 12-30-86; Ord. 4131, 3-10-87; Ord. 4163, 6-30-87; Ord. 4164, 7-07-87; Ord. 4245, 2-28-89; Ord. 4268, 6-06-89; Ord. 4313, 1-23-90; Ord. 4357, 2-26-91; Ord. 4356, 1-19-91; Ord. 4409, 12-03-91; Ord. 4532, 07-06-93; Ord. 4549, 09-21-93; Ord. 4585, 02-15-94; Ord. 4636, 09-13-94; Ord. 4698, 06-13-95; Ord. 4722, 08-22-95; Ord. 5461, 10-11-05; Ord. 5757, 12-22-09; Ord. 5903, 07-10-12; Ord. 6183, 01-13-16)*

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

G. The Board of City Commissioners considered the requests from the Community Development Department for introduction of and call for public hearing on the following items. The Bismarck Planning and Zoning Commission recommends approval:

- 1) Ordinance 6228 relating to a zoning change for Koch Creek Commercial Subdivision.

ORDINANCE NO. 6228

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the A-Agriculture zoning district and included in the CG-Commercial zoning district:

Lots 1 and 2, Block 1, Koch Creek Commercial Subdivision

This zoning change is subject to the condition that Lot 2 (the southern lot) be annexed into the City of Bismarck and municipal services in place prior to development.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

- 2) Ordinance 6229 relating to a zoning change for Lots 1-3, Block 1, Sonnet Heights Subdivision.

ORDINANCE NO. 6229

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the PUD-Planned Unit Development zoning district and included in the RM15-Residential zoning district:

Lots 1-3, Block 1, Sonnet Heights Subdivision.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

- 3) Ordinance 6230 relating to a zoning change for Lots 14-19, Block 4, South Meadows Addition.

#### ORDINANCE NO. 6230

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the R5-Residential zoning district and included in the Conditional R10-Residential zoning district:

Lots 14-15, Block 4, South Meadows Addition, with the following condition:

1. The development of these two lots will be limited to two-family dwellings.

The following described property shall be excluded from the R10-Residential zoning district and included in the RM15-Residential zoning district:

Lots 16-19, Block 4, South Meadows Addition.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

- 4) Ordinance 6231 relating to a zoning change for part of Lot 21, Lounsberry Outlots (Saxvik Elementary School).

#### ORDINANCE NO. 6231

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the P – Public zoning district and included in the PUD – Planning Unit Development zoning district:

A Tract of Land in Lounsberry's Bismarck Outlots, described as beginning at a point 167 feet North of the Southwest corner of Outlot 21, thence North 340 feet, East 180 feet, North 50 feet, East 117 feet, South 390 feet, West 297 feet to the point of beginning, Outlot 21, Lounsberry's Bismarck Outlots.

This PUD is subject to the following development standards:

1. *Uses Permitted.* Uses permitted include adaptive reuse of the Saxvik Elementary School building and grounds for pre-kindergarten through 12th grade before and after school programming, adult education training, community meeting space and office uses to support the proposed uses.
2. *General Development Standards.* The lot coverage, setbacks and height limits shall be the same as the surrounding R10 – Residential zoning district.
3. Accessory buildings may be allowed in accordance with the provisions of Section 14-03-06 of the City Code of Ordinances (Incidental Uses) and shall be subject to the same setback requirements as the principal structure.
4. *Parking.* The existing off-street parking shall continue to be provided for the proposed reuses, with the understanding that additional parking may be provided if needed in accordance with applicable provisions of the City Code of Ordinances.
5. *Signage.* Signage is limited to the existing building signage and no more than one monument style sign with a face no more than 15 square feet in area on the front of the building. The existing signs may be upgraded and refurbished as needed, although the size of the faces cannot be increased.

6. *Changes.* This PUD shall only be amended in accordance with Section 14-04-18(4) of the City Code of Ordinances (Planned Unit Developments). Major changes require a public hearing and a majority vote of the Bismarck Planning & Zoning Commission.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

H. The Board of City Commissioners considered the following requests from the Engineering Department:

- 1) Approval of Contract Change Order No. 1 with Edling Electric for a change in contract timeline for Street Improvement District 15-492 from July 15, 2016 to September 30, 2016.
- 2) Approval of Contract Change Order No. 2 with Cofells Plumbing and Heating for a change in contract timeline for Water Improvement District 15-326/Sewer Improvement District 15-564 from September 30, 2015 to July 28, 2016.
- 3) Approval for department staff to notify property owners of their need to repair unsafe sidewalks in accordance with applicable Bismarck city ordinances.

I. The Board of City Commissioners considered the following requests relating to Water Improvement District 16-330 (installation of water trunk line and related items):

- Resolution Approving Plans and Specifications; and
- Resolution Directing Advertisement of Bids and Receive Bids.

Commissioner Guy introduced the following resolution and moved its adoption:

**RESOLUTION APPROVING PLANS AND SPECIFICATIONS FOR  
WATER IMPROVEMENT DISTRICT NUMBER THREE HUNDRED THIRTY (330)**

BE IT RESOLVED by the Board of City Commissioners of the City of Bismarck, North Dakota, that the plans and specifications for the work proposed to be done in and for Water Improvement District Number Three Hundred Thirty (330), as prepared by the engineer and presented to the Board of City Commissioners on this date, are hereby approved and ordered to be placed on file in the office of the City Administration and in the office of the City Engineer, where they shall remain on file and subject to inspection by anyone interested therein.

Commissioner Askvig seconded the motion on the foregoing resolution. Upon roll call, the Commissioners voted as follows. Ayes: Commissioners Askvig, Guy, Marquardt, Oban and President Seminary. Nays: None, the motion carried and said resolution was declared duly passed and adopted.

Commissioner Guy introduced the following resolution and moved its adoption:

RESOLUTION DIRECTING ADVERTISEMENT FOR BIDS FOR  
IMPROVEMENT DISTRICT NUMBER

BE IT RESOLVED by the Board of City Commissioners of the City of Bismarck, North Dakota, that proposals for the work of making the improvement in Water Improvement District Number Three Hundred Thirty (330), according to plans and specifications heretofore approved by this Board, shall be received on September 7, 2016, at the hour of 3:00 o'clock p.m. Advertisement for such proposals shall be published as required by Section 40-22-19, North Dakota Century Code.

Commissioner Askvig seconded the motion on the foregoing resolution. Upon roll call, the Commissioners voted as follows. Ayes: Commissioners Askvig, Guy, Marquardt, Oban and President Seminary. Nays: None, the motion carried and said resolution was declared duly passed and adopted.

J. The Board of City Commissioners considered the request from the Finance Department for approval of pledge bonds.

In accordance with the provisions of NDCC 21-04, bank with City deposits are required to pledge securities equivalent to 110% of the deposit. The Commission is required to approve the pledge bonds for the deposit of the City funds semi-annually. The list of pledge bonds as of June 30, 2016 was included in the agenda packet.

K. The Board of City Commissioners considered the request from the Human Resources Department to approve the reclassification of the Master Electrician position.

An Electrician position was approved by the Board of City Commissioner during the 2016 Budget. Since then, Condrey & Associates has reviewed a PDQ and classified the position as a Master Electrician at Grade 17 and provided a Job Description. Department staff recommends approval of the classification and job description for a Master Electrician assigned to Public Works-Services.

L. The Board of City Commissioners considered the request from the Police Department for permission for city employees to participate in and donate blood on duty for the United Blood Services "Battle of the Badges" Blood Drive September 6-8, 2016.

United Blood Services has scheduled the annual "Battle of the Badges" blood drive event for September 6-8, 2016 at Kirkwood Mall. This event is designed to encourage the public to donate blood as part of a friendly competition between law

enforcement officers and firefighters. When a person donates blood at this event, the donor indicates whether the donation is credited towards the police or fire total. The group that has the highest total of donations is declared the winner of the "battle." During the event, there will be competitive events, pitting "Team Law" against "Team Fire," to attract public interest. This event involves not only Bismarck police and fire, but also includes Mandan, Morton County, Burleigh County, and Lincoln emergency services. Not only is this event beneficial to the community by encouraging blood donations, it also provides an excellent opportunity to further our positive relations with those we serve. This has proven to be United Blood Service's largest donation event.

Staff requests authorization to allow City employees to participate and donate blood on duty for scheduled times. The Commission has historically approved City employees to participate in blood drives that are held at City offices. Approval is being sought since this event will not be held on site.

M. The Board of City Commissioners considered the request from the Public Works Service Operations Department to allow banners to be hung on city street light poles that surround Camp Hancock historical site on Main Avenue.

Myron Atkinson, ND Title, recently contacted the Downtowners regarding Camp Hancock on Main Avenue. He is part of a small group that is looking to make some upgrades to the Camp Hancock historical site, spruce it up, make it accessible and get more users to the site. Mr. Atkinson said they have some private funds for signage.

The banners and hardware will be purchased privately and will be installed and maintained by the Downtowners staff, with City Street Light staff overseeing the installation. We will be on site to make sure that the banners would not impede our future maintenance to the light fixtures. A picture of the banners was included in the agenda packet.

N. The Board of City Commissioners considered the request from Public Works Utility Operations Department for approval of Change Order 3 with AE2S for \$13,100 for design-related changes on the water treatment plant softening expansion project.

Michelle Klose, Public Works Utility Operations Director, noted on the change order form that grit removal had been discussed back in 2014 and the city decided not to proceed based on unknowns with the horizontal collector well and this construction project. A new handling system for the grit is now required. Recommend approval with this contract. The additional grit is tied with the current contract construction.

Commissioner Askvig asked to pull Item #2E for discussion. Commissioner Guy made a motion to approve the remaining items on the consent agenda. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes:

Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

Item #2E - The Board of City Commissioners considered Consider request to call for public hearing on a request from a new owner of Bismarck Yellow Cab to obtain a new Taxi Cab License.

Commissioner Askvig expressed concern about calling for a public hearing on this taxi cab license when we don't have all of the necessary paperwork. Jason Tomanek, Assistant City Administrator, said this is a transfer of ownership for the Bismarck Yellow Cab from its current owner to a new owner. The request would be conditional based upon the submission of the items needing to be addressed and that we are tracking in our digital review system. Commissioner Askvig asked if we are allowing this to move forward with the understanding that the other paperwork is still required. Mr. Tomanek said that's correct.

Commissioner Askvig made a motion to approve the request. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

### 3. REGULAR AGENDA

3A. Receive an update from Lorraine Davis, special advisor to the mayor on Native American Career Development.

Ms. Davis said she takes great pride in her role as advisor to the mayor on Native American Career Development. She thanked the Board for meeting at the UTTC campus tonight; it means a lot to her and all of the Native Americans in our community. Ms. Davis said she would like to make the Board aware of two very important dates coming: First Nations Day is recognized on October 7 and Native American Heritage Month is recognized in November. She recommends that the Board of City Commissioners recognize these dates that coincide with the governor's proclamation in October and November.

President Seminary asked Ms. Davis if she would write up the proclamations and coordinate with city staff to get them on before the Board of City Commissioners. Ms. Davis agreed.

3B. The Board of City Commissioners considered the request from the Bismarck-Mandan Metropolitan Planning Organization (MPO) for Rick Stoppelmoor of HDR to appear and present the Mandan and Bismarck Corridor Improvement Study for consideration and acceptance by the Board.

Rick Stoppelmoor, HDR, appeared before the Board. He presented the Mandan and Bismarck Corridor Improvement Study. Note: the Executive Summary was included in the agenda packet and will also be attached at the end of the minutes for this meeting.

There was discussion between the Board and Mr. Stoppelmoor. Commissioner Askvig expressed concern with the recommendation to remove on-street parking on the arterial roadways, asked about the bike lanes, for example on Divide Avenue then followed up asking about the realignment of Ward Road and College Drive. Mr. Stoppelmoor then gave the reasoning behind the recommendations. Commissioner Askvig also expressed concern with the ranking of 7<sup>th</sup> and 9<sup>th</sup> Street in the recommendations. Mr. Stoppelmoor deferred the question to Whitney Schroeder, Traffic Engineer at HDR. Ms. Schroeder appeared and gave a brief explanation for the ranking factors. Commissioners Guy asked for additional information of the Ward Road recommendation and Mr. Stoppelmoor explained it in a little more detail. Commissioners Guy expressed concern with the traffic safety on 7<sup>th</sup> Street in front of Bismarck High School (BHS). Mr. Stoppelmoor said that there is currently a school safety study under way through the Metropolitan Planning Organization (MPO) that is looking at this in more detail and recommendations will come out of that study as well. Commissioner Oban said his focus is on the issues with 7<sup>th</sup> and 9<sup>th</sup> Streets due to his day job with Bismarck Public Schools. He's concerned with the no-parking suggestion around the school on 7<sup>th</sup> and 9<sup>th</sup> and also concerned with the flashing lights suggested. Mr. Stoppelmoor explained the recommendations for those areas.

Commissioner Askvig made a motion to accept the study. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3C. The Board of City Commissioners considered the request to receive the Annual Report from the Mayor's Committee on Human Relations.

Rissa Williams, Human Relations committee member, appeared before the Board to provide a brief overview of the Committee and what they've been doing over the last year. She said the full report is available on the city's website (<http://www.bismarcknd.gov/DocumentCenter/View/26479>). There was discussion between the Board and Ms. Williams. The Board received the Annual Report but took no formal action.

3D. The President of the Board of City Commissioners announced the hour had arrived for the PUBLIC HEARING and approval of the waste collection franchise for IHD Solids Management.

Jeff Heintz, Public Works Service Operations Director, appeared before the Board and gave a brief update on this request.

There were no oral or written protests.

Commissioner Marquardt made a motion to approve the waste collection franchise for IHD Solids Management. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3E. The President of the Board of City Commissioners announced the hour had arrived for the PUBLIC HEARING on Ordinance 6225 relating to harassment.

#### ORDINANCE NO. 6225

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 6-03-03 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO HARASSMENT.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

There were no oral or written protests.

Commissioner Marquardt made a motion to adopt Ordinance 6225. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3F. The Board of City Commissioners considered the request for approval of the minor subdivision final plat of Sonnet Heights Subdivision 6th Replat, requested by J & D Construction. The Bismarck Planning and Zoning Commission recommends approval.

Kim Lee, Planning Manager, appeared before the Board. Jason Voegele, J & D Construction, is requesting approval of a minor subdivision final plat for Sonnet Heights Subdivision Sixth Replat. This action would allow the development of five rowhouses in two buildings (one two-unit building and one three unit building) and future multi-family development. The property is located in north Bismarck, west of US Highway 83 and south of 57<sup>th</sup> Avenue NE in the southeast quadrant of the intersection of Normandy Street and Calvert Drive. Additional information is available in the staff report contained in the agenda packet.

Ms. Lee said the Planning & Zoning Commission held a public hearing on minor subdivision final plat request on July 27, 2016. No members of the public spoke at the public hearing. At the conclusion of the public hearing, and based on the findings contained in the staff report, the Planning & Zoning Commission unanimously recommended approval of the minor subdivision final plat for Sonnet Heights Subdivision Sixth Replat. Commissioner Marquardt asked what the area around that is classified as. Ms. Lee said it is surrounded by RM to the east and R10 is across the street.

Commissioner Askvig made a motion to approve the request. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3G. The Board of City Commissioners considered the request for approval of the minor subdivision final plat of Southbay Third Addition First Replat, requested by Alcor Investment, Inc. and Mitch Neumiller and Stacey Neumiller. The Bismarck Planning and Zoning Commission recommends approval.

Kim Lee, Planning Manager, appeared before the Board. Alcor Investments, Inc. and Mitch and Stacy Neumiller are requesting approval of a minor subdivision final plat for SouthBay Third Addition First Replat. This action would allow the realignment of lot lines and eliminate auditor's plats. The property is located in southwest Bismarck, west of South Washington Street and south of East Burleigh Avenue, along the southeast side of Calypso Drive. Additional information is available in the staff report contained in the agenda packet.

The Planning & Zoning Commission held a public hearing on minor subdivision final plat request on July 27, 2016. No members of the public spoke at the public hearing. At the conclusion of the public hearing, and based on the findings contained in the staff report, the Planning & Zoning Commission unanimously recommended approval of the minor subdivision final plat for SouthBay Third Addition First Replat.

Commissioner Askvig made a motion to approve the request. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3H. The Board of City Commissioners considered the following requests from the Bismarck Airport regarding the Vehicle Parking Concession (pay parking lot) Requests For Proposal (RFP) at the airport terminal:

- Receive proposals and consider selection committee's recommendation to award (these will be provided at the meeting); and
- Approval of the format for the Concession Agreement.

President Seminary said this item has been pulled from the agenda and will be considered at the following meeting.

3I. The Board of City Commissioners considered the request from the Engineering Department for approval of consultant services with Apex Engineering Group for the Tyler Coulee sanitary sewer servicing plan.

Gabe Schell, City Engineer, appeared before the Board. Mr. Schell said they put out an RFP for this project. There were 13 proposals, they interviewed six firms about a month ago and went through contract negotiations with Apex Engineering for this project.

This project will plan the sanitary sewer and related infrastructure required to serve the undeveloped area of Tyler Coulee and the adjacent areas to the north and west. This planning will include coordination with the property owners and other affected stakeholders. The scope and fee information was included in the agenda packet and the full contract is available up request. Contract is hourly, not to exceed \$118,969. Design and construction phases may be added by amendment to this contract at a future date with Board approval.

Mr. Schell said they request approval of the contract with Apex Engineering Group. Based on the project schedule, Apex is planning to have the draft sewer service plan to the city by November 14, 2016 and the final servicing plan to the city by December 5, 2016.

Commissioner Askvig made a motion to approve the request. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

3J. The Board of City Commissioners considered other business.

President Seminary thanked Dakota Media Access, city staff and United Tribes Technical College for all of their hard work for allowing the city to move this commission meeting out to the campus for this historic event.

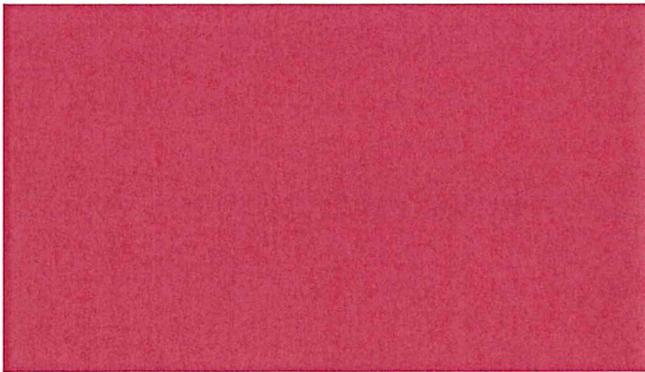
Having completed the items on the agenda, President Seminary asked if there was any further business for this meeting. There being none, the meeting was declared adjourned at 6:29 p.m.

# Executive Summary

---

Mandan-Bismarck Corridor Improvement Study

*Mandan and Bismarck, North Dakota*  
July 19, 2016



# Mandan-Bismarck Corridor Improvement Study: Executive Summary

## Introduction

This document summarizes the results of the Mandan-Bismarck Corridor Improvement Study Final Report. The Bismarck-Mandan Metropolitan Planning Organization (MPO), the City of Mandan, and the City of Bismarck requested a transportation planning study be developed to evaluate 20 total corridors and a possible truck route within the Mandan and Bismarck city limits. Project oversight was provided by the North Dakota Department of Transportation (NDDOT), Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). The corridors selected for this project were selected by the MPO and project entities.

## Objective

The corridors included in this study provide mobility for high volumes of traffic daily and are vital for connecting major activity centers. This transportation study evaluates the selected corridors and develops low-cost alternatives for each that will address both safety and operational concerns to help them function as the arterial roadways they are intended to be. The objective of the study was to develop low-cost solutions to aid in improving traffic operations, as well as enhancing safety by reducing crashes along each selected corridor.

A secondary objective was to determine the need for a truck route in the City of Mandan to alleviate heavy vehicle traffic along Main Street/Business I-94 between ND Highway 25 to Twin City Drive.

The corridors selected by the Bismarck-Mandan MPO to be included within the study for the City of Bismarck include the following Figure ES-1:

- Washington Street (Calgary Avenue to Divide Avenue)
- Divide Avenue (Schafer Street to Bismarck Expressway/ND Highway 810)
- 4<sup>th</sup> Street (Century Avenue to Boulevard Avenue)
- 7<sup>th</sup> Street (Boulevard Avenue to Rosser Avenue)
- 9<sup>th</sup> Street (Boulevard Avenue to Rosser Avenue)
- Front Avenue/Memorial Highway (Main Avenue to 12<sup>th</sup> Street)
- 26<sup>th</sup> Street (Divide Avenue to Airway Avenue)
- 19<sup>th</sup> Street (Divide Avenue to LaSalle Drive)
- Ward Road (Edwards Avenue to Divide Avenue)

The corridors selected for the City of Mandan include the following Figure ES-2:

- Main Street /Business I-94 (ND Highway 25 to Twin City Drive)
- Sunset Drive/6<sup>th</sup> Avenue NW (Main Street to Oil Red Trail)
- ND Highway 6 (Main Street to 19<sup>th</sup> Street NW)
- Old Red Trail (Mandan Avenue to Sunset Drive)
- Mandan Avenue/ND Highway 1806 (Main Street to Old Red Trail)
- 3<sup>rd</sup> Street (ND Highway 6 to Memorial Highway)

- 19<sup>th</sup> Street (ND Highway 6 to ND Highway 1806)
- Collins Avenue (Main Street to Old Red Trail)
- ND Highway 1806 North (Old Red Trail to 38<sup>th</sup> Street)
- ND Highway 1806 South (Main Street to 19<sup>th</sup> Street)
- Division Street (Sunset Avenue to 8<sup>th</sup> Avenue NE)

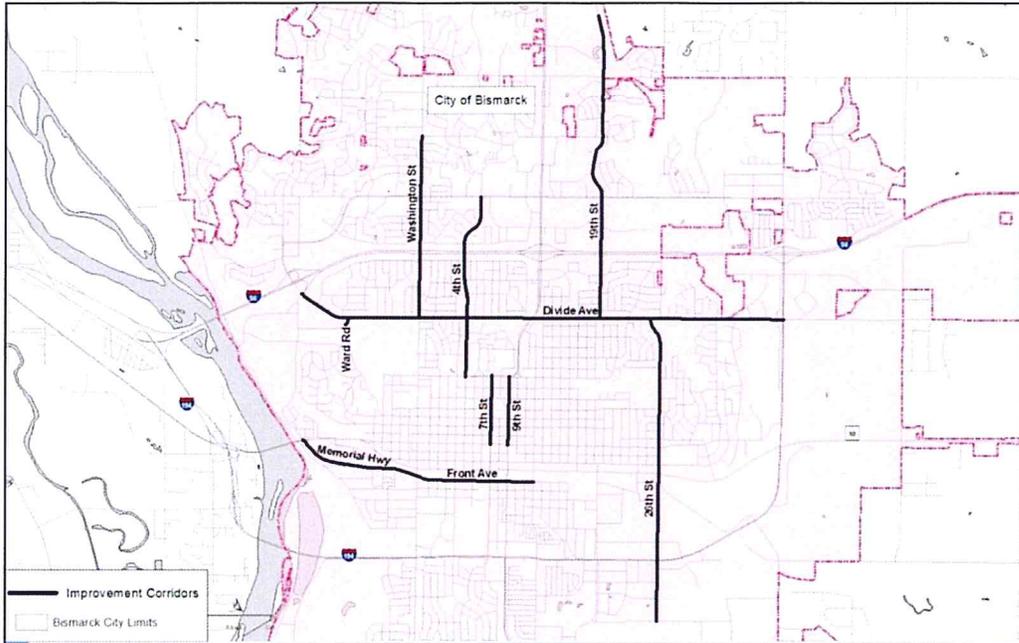


Figure ES-1. Bismarck Improvement Corridors

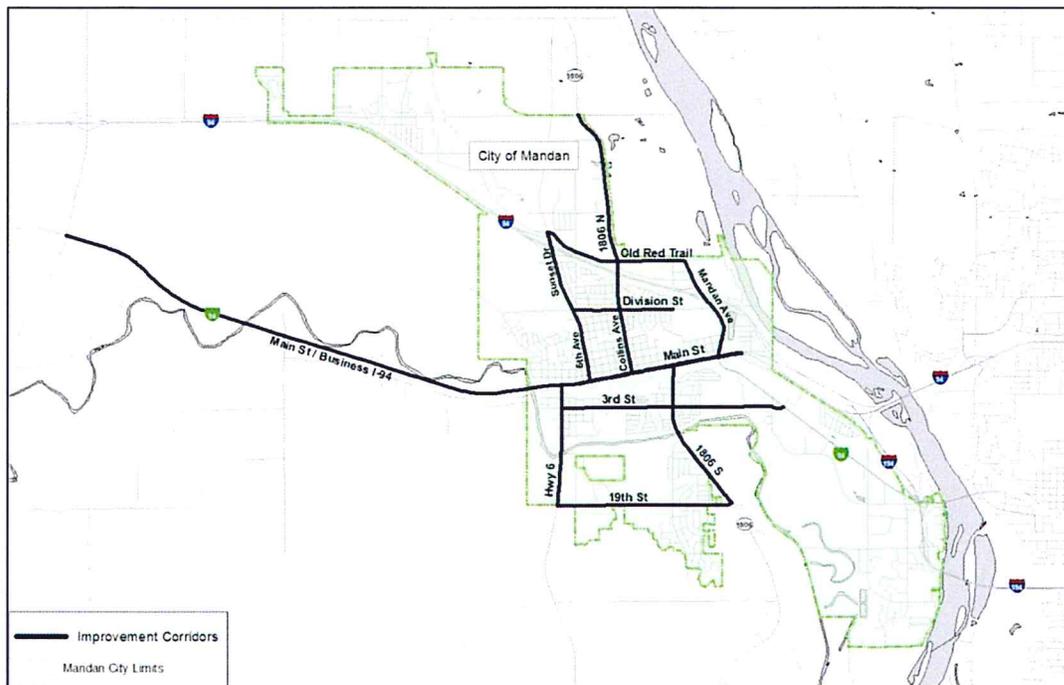


Figure ES-2. Mandan Improvement Corridors

## Methodology

### Existing 2014 Traffic Operations

The existing traffic operations of the corridors were analyzed using a planning-level Level of Service (LOS) approach based on the ARTPLAN analysis program within the Highway Capacity Manual (HCM). Using this methodology, characteristics such as daily traffic volumes, signal timings, and basic roadway geometry at major intersections were taken into account and used as inputs to generate generalized peak hour estimates of traffic operations for each corridor.

A safety analysis was also conducted using NDDOT provided crash data for the calendar years of 2012, 2013, and 2014. The data provided by NDDOT contained crash report information that allowed crashes to be categorized based on characteristics such as location, manner of collision, and severity. This information was used to identify which intersections or roadway segments within the study area experienced the most crashes, and what types of crashes occurred.

### Forecasted 2040 Traffic Operations (No-Build)

The traffic growth rates were forecasted for corridor segments by evaluating outputs from the Bismarck-Mandan MPO travel demand model. The year 2014 ADT volumes were used as the baseline data source for the analysis and forecasts. The modeled growth rates were prorated to a rate reflecting growth as a 30-year trend from the model to the year 2040.

Using the constraints of the existing infrastructure, also referred to as the No-Build Alternative, the forecasted 2040 traffic volumes were applied to determine the estimated 2040 LOS for each corridor segment located within the Bismarck-Mandan study area. The 2040 LOS results are provided in Figure ES-3.

Comparing the 2014 and 2040 LOS results, there is no variance for Mandan but several corridors in Bismarck are projected to see deterioration in Level of Service by the year 2040. Divide Avenue from Schafer Street to Washington Street will decrease from LOS A to LOS F. 4<sup>th</sup> Street from Interstate Avenue to Divide Avenue will decrease from LOS C to LOS D. 7<sup>th</sup> Street from Boulevard Avenue to Rosser Avenue will decrease from LOS E to LOS F. Finally, Front Avenue from 3<sup>rd</sup> Street to 7<sup>th</sup> Street will decrease from LOS E to LOS F.

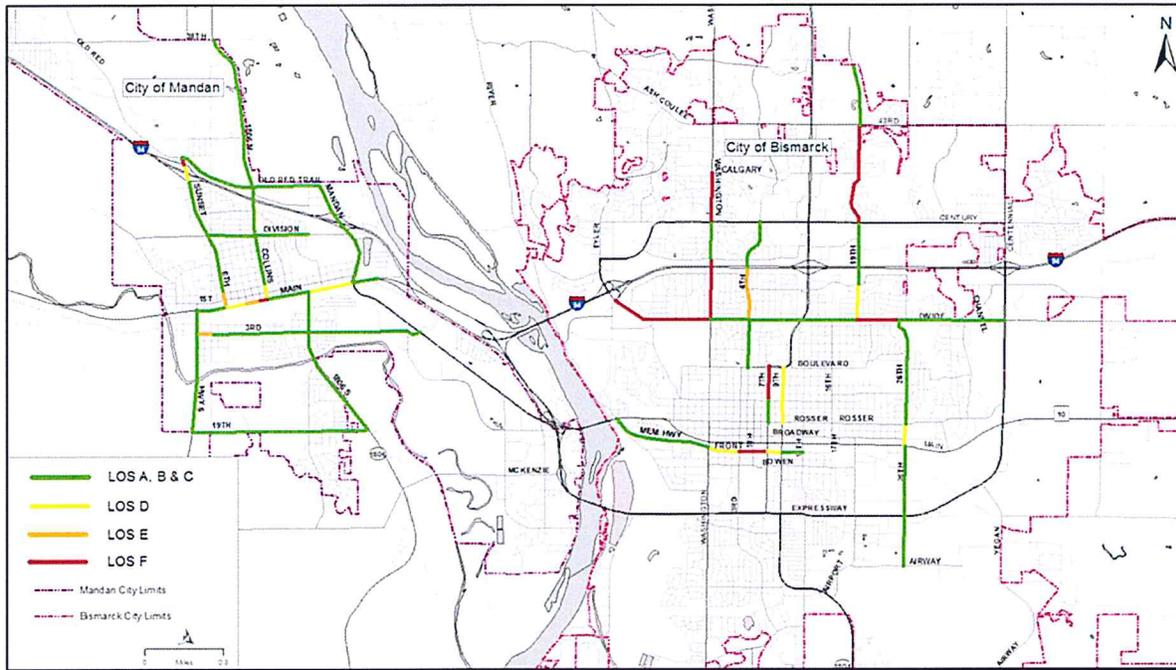


Figure ES-3. 2040 Forecasted LOS

### Mandan Safety Analysis

There were a total of 259 intersection crashes and 183 segment crashes that occurred on the City of Mandan study corridors between 2012, 2013 and 2014.

The intersections that experienced the highest number of injury-related crashes were the intersections of Main Street and ND 1806 S, and the intersection of ND 1806 S and Burlington Street SE.

The roadway segment that experienced the most injury-related crashes was Main Street between Highway 6 and Twin City Drive, with one fatality and three non-incapacitating injury crashes being reported during the study period. Main Street between ND Hwy 6 and Twin City Drive. experienced the highest frequency of angle crashes in comparison with other corridors, comprising approximately 33% of its total crashes. 3<sup>rd</sup> Street and Hwy 1806 S experienced the highest total rear-end crashes.

### Bismarck Safety Analysis

There were a total of 524 reported intersection crashes and 716 reported segment crashes occurring on Bismarck corridors between the years of 2012, 2013 and 2014. There were no reported fatalities during the study period for any of the Bismarck corridors.

The Bismarck intersection with the highest intersection crash rate was identified as Front Avenue and 3<sup>rd</sup> Street. The intersection of 4<sup>th</sup> Street and Century Avenue had the second highest crash rate and the intersection of Front Avenue and 9<sup>th</sup> Street had the third highest crash rate. The intersection with the highest injury crash rate was identified as 7<sup>th</sup> Street and Rosser Avenue.

Divide Ave was found to not only have the highest number of total segment crashes (186 crashes), but it experienced the highest total of head-on collisions (4 crashes) and non-collision with motor vehicle crashes (19 crashes) as well. Washington Street, 9<sup>th</sup> Street, and Divide Avenue experienced the highest total crashes resulting in injury. 9<sup>th</sup> Street and 7<sup>th</sup> Street were found to have the highest segment crash rates for corridors studied within the City of Bismarck. Memorial Highway/ Front Street was found to have the third highest segment crash rate.

### **Mandan Truck Route**

To determine existing truck patterns on Main Street through central Mandan, three different sources of data were used to assess truck flows, focusing primarily on through-movements. These sources were:

- A StreetLight commercial vehicle flow dataset, purchased from StreetLight Data, Inc.
- Assessing current corridor truck patterns based on NDDOT truck counts from various locations within the corridor.
- Conducting interviews with major trucking companies and locations that generate truck traffic in and around Mandan to understand truck travel patterns.

Evaluating the data from the aforementioned sources it was concluded that although Main Street is the most direct route for many truck trips in Mandan, a route south of Main Street would provide the most direct option for an alternate truck route. An aggregate pit and asphalt plant located west of Mandan accounts for approximately 66% of the truck traffic along Main Street. Based upon conversations with the aggregate pit owner, the aggregate pit will be relocated in the near future due to lack of available natural resources within the area. The asphalt plant will also be relocated in the near future to the Twin City Industrial Site in East Mandan.

### **Development of Alternatives**

The alternatives presented in this report are intended for long-term planning purposes only, not for design. Prior to implementation, a field review should be done to examine existing roadway widths and a more detailed analysis conducted to determine the necessary lane widths for proposed typical sections. Parking will also need to be evaluated in more detail prior to alternative implementation.

## **Recommended Alternatives**

The LOS of each corridor was re-evaluated with the proposed mitigation characteristics applied to help measure the effectiveness of each alternative. Keep in mind that certain improvements, namely those that are safety related (i.e. improving lighting, signing, pedestrian crossing, etc.) may not have a direct improvement on LOS but are desirable because they enhance driver awareness and safety.

### **Mandan Corridor Alternatives**

The following list provides the proposed alternatives for each corridor within the study areas of Mandan. A no-build alternative is proposed for certain segments where forecasted traffic is

expected to function at acceptable levels or where future changes are constrained by existing parameters.

**MAIN STREET (ND HWY 25 TO TWIN CITY DRIVE)**

Recommended Alternative:

- No-build between Hwy 25 and 10th Avenue NW (Hwy 6)
- Install 3-lane section between 10th Avenue NW and 3rd Avenue NE
  - Maintain on-street parking on north side, except for areas near intersection where a few stalls will be eliminated to incorporate extended right-turn lane.
  - Add on-street parking on the south side
  - Lengthen right-turn lane at major intersections
- Coordinate all traffic signals and add protected left turn phasing at all signalized intersections
- Re-stripe all crosswalks and improve all crosswalks
- Install Pedestrian Hybrid Beacon, (HAWK beacon) at un-signalized intersections, if warranted
- Add advanced pedestrian crossing signage at the intersections of 2nd Avenue NW and 4th Avenue NW

The anticipated construction cost of the recommended alternative is approximately \$910,000. This cost includes approximately \$780,000 for HAWK beacons if warranted.

**SUNSET DRIVE / 6<sup>TH</sup> AVENUE (MAIN STREET TO OLD RED TRAIL)**

Recommended Alternative:

- No-build between Main Street and North ramp terminal of the I-94/Sunset Drive Interchange
- Intersection of Sunset Drive and Old Red Trail
  - Install a dedicated right turn lane for northbound to eastbound traffic on Sunset Drive
  - Remove island on the west approach of Old Red Trail, and remove the channelized right-turn lane
  - Narrow the through lane for the southbound traffic immediately south of the intersection
  - Add clear advanced signage for drivers on the westbound I-94 off-ramp
- South ramp terminal of the I-94/Sunset Drive Interchange Install signal control on channelized right turn on eastbound-to-southbound approach
- Coordinate timing of signals at the I-94 westbound and eastbound ramp terminals with the signal at Old Red Trail

The anticipated construction cost of the recommended alternative is approximately \$180,000.

**ND HIGHWAY 6 (19<sup>TH</sup> STREET TO MAIN STREET)**

Recommended Alternative:

- No-build between 19<sup>th</sup> Street and Main Street
- Intersection of ND Hwy 6 and 19<sup>th</sup> Street
  - Install a southbound left turn lane and a northbound right turn lane (Currently under development and includes intersection lighting)
  - Install advance intersection signing

The anticipated construction cost of the recommended alternative is approximately \$235,000.

**OLD RED TRAIL (MANDAN AVENUE TO SUNSET DRIVE)**

Recommended Alternative:

- No-build between Mandan Avenue and Sunset Drive
- Intersection of Old Red Trail and Mandan Avenue
  - Flatten horizontal curve
  - Add advance intersection signing
  - Consolidate Tesoro access to one approach as a radial “T” intersection
  - Provide left and right turn lanes

The anticipated construction cost of the recommended alternative is approximately \$700,000.

**MANDAN AVENUE (MAIN STREET TO OLD RED TRAIL)**

Recommended Alternative:

- No-build between Main Street and Old Red Trail
- Intersection of Mandan Avenue and Main Street
  - Update and restripe the pavement markings on intersection approaches
  - Add lane extension skips through the intersection to help drivers navigate
  - Add overhead lane designation signs on mast arms of traffic signal

The anticipated construction cost of the recommended alternative is approximately \$13,000.

**3<sup>RD</sup> STREET (ND HWY 6 TO MEMORIAL HWY)**

Recommended Alternative:

- No-build between ND Hwy 6 and Memorial Highway
- Intersection of 3<sup>rd</sup> Street and 9<sup>th</sup> Avenue
  - Replace 4-way stop with 2-way stop
  - Add Pedestrian Signing
  - Install Pedestrian Hybrid Beacon, (HAWK beacon)
- Intersection of 3<sup>rd</sup> Street and 8<sup>th</sup> Avenue
  - Replace 4-way stop with 2-way stop
  - Add Pedestrian Signing
  - Install Pedestrian Hybrid Beacon, (HAWK beacon)
- Intersection of 3<sup>rd</sup> Street and Memorial Highway
  - Add curb and gutter or guardrail along radius to prevent erosion and enhance safety of turning vehicles

The anticipated construction cost of the recommended alternative is approximately \$264,000.

**19<sup>TH</sup> STREET (ND HWY 6 TO ND HWY 1806)**

Recommended Alternative:

- Extend the existing urban section from Ridge Drive to ND HWY 6 with a 3-lane section
  - No on-street parking
- Extend the existing urban section from 14<sup>th</sup> Avenue SE to ND Hwy 1806 with a 3-lane section
  - No on-street parking

- Provide turn lanes to all major intersections between Ridge Drive and ND Hwy 6
- 3-lane section between Ridge Drive and 14th Avenue SE
  - No on-street parking

The anticipated construction cost of the recommended alternative is approximately \$3,411,000.

#### COLLINS AVENUE (MAIN STREET TO OLD RED TRAIL)

Recommended Alternative:

- No-build between Main Street and Old Red Trail
- Intersection of Collins Avenue and 5<sup>th</sup> Street NE Improve sight distance by offsetting retaining walls at the 5<sup>th</sup> Street NE, 7<sup>th</sup> Street NE and Division Street intersections
- Intersection of Collins Avenue and 14th Street
  - Replace 4-way stop with a 2-way stop
  - Signalize if warranted
- Intersection of Collins Avenue and Old Red Trail
  - Because of the proposed Starion Sports Complex intersection improvements may be needed
    - Install traffic signal and left turn lanes in all quadrants or Install a roundabout.

The anticipated construction cost of the recommended alternative is approximately \$390,000.

#### HIGHWAY 1806 N (38<sup>TH</sup> STREET TO OLD RED TRAIL)

Recommended Alternative:

- No-build between Old Red Trail and 38<sup>th</sup> Street
- Intersection of ND Hwy 1806 N and 27<sup>th</sup> Street NW
  - Installation of left turn lane on northbound ND 1806 N at the intersection of 27<sup>th</sup> Street
  - Installation of right turn lane on southbound ND 1806 at the intersection of 27<sup>th</sup> Street
  - Provide right/left turn lanes on the eastbound minor approach 27<sup>th</sup> Street at intersection with ND 1806 N
  - Install a Pedestrian Hybrid Beacon (HAWK beacon) at the pedestrian crossing, if warranted

The anticipated construction cost of the recommended alternative is approximately \$322,000.

#### HIGHWAY 1806 S (MAIN STREET TO 19<sup>TH</sup> STREET SE)

Recommended Alternative:

- 3-lane section between 3<sup>rd</sup> Street SE to Main Street
  - No on-street parking
- Intersection of ND Hwy 1806 S and 3<sup>rd</sup> Street SE
  - Extend curb and gutter around radius to control access into the gas station
  - Line up left turn lane offsets on the east and west approaches
  - Utilize the boulevard on the east approach between the curb and sidewalk to improve intersection lane geometry without eliminating on-street parking

- Intersection of ND Hwy 1806 S and Burlington Street
  - Add a pedestrian crossing and sidewalk along the east side of ND 1806 S (6th Avenue SE)
  - Install traffic signal if warranted
  - If signal not warranted install a Pedestrian Hybrid Beacon (HAWK beacon) at the pedestrian crossing
  - Install left turn lane on ND 1806 S on the south approach and right turn lane on north approach for vehicles turning onto Burlington Street
- Just south of the intersection of 3<sup>rd</sup> Street and ND 1806 S, the southbound through movement quickly merges from two through lanes to one with very little transition.
  - Use one lane as a right turn lane on the north approach and drop it at the intersection. Therefore only one lane is carried through the intersection and eliminates the need for merging
  - Incorporate a dedicated left turn lane
- No-build between 3<sup>rd</sup> Street SE and 19<sup>th</sup> Street SE

The anticipated construction cost of the recommended alternative is approximately \$405,000.

#### **DIVISION STREET (SUNSET AVENUE TO 8<sup>TH</sup> AVE NE)**

Recommended Alternative:

- No –build between Sunset Drive and 8<sup>th</sup> Avenue NE
- At the intersection of Sunset Drive and Division Street:
  - Restripe stop bar on Division Street closer to perpendicular travel lane on Sunset Drive to increase sight distance on approach
  - Maintain roadside vegetation and prune trees as necessary to provide adequate sight distance for drivers on Division Street approach
- At the intersection of Division Street and 6<sup>th</sup> Avenue:
  - Eliminate yield and stop control for Division Street approaches and allow for free through movement. Make 6<sup>th</sup> Avenue approaches stop controlled
- At the intersection of Division Street and Collins Avenue:
  - As previously mentioned, offset retaining wall further from roadway to provide increased sight distance for drivers on east Division Street approach

The anticipated construction cost of the recommended alternative is approximately \$13,700.

#### **MANDAN TRUCK ROUTE**

With a significant reduction of truck traffic on Main Street imminent due to the relocation of the aggregate pit and asphalt plant west of Mandan, and the high cost of improving an alternative route for a small number of trucks we recommend the no-build alternative.

#### **Bismarck Corridor Alternatives**

The following list provides the proposed alternatives for each corridor within the study areas of Bismarck. A no-build alternative is proposed for certain segments where forecasted traffic is expected to function at acceptable levels or where future changes are constrained by existing parameters.

#### WASHINGTON STREET (DIVIDE AVENUE TO CALGARY AVENUE)

Recommended Alternative:

- 3-lane section from Divide Avenue to Calgary Avenue
  - No on street parking
- Reduce the number of driveways (vehicle access points) from Washington Street to the Northbrook Tesoro Gas Station at Central Avenue
- Washington Street & Century Avenue Intersection
  - Re-align the Century Avenue left turn lanes to remove negative offsets
  - Install Flashing Yellows (FYA) on all approaches
  - Relocate light poles
- Improve coordination of traffic signals between Interstate Avenue and Turnpike Avenue

The anticipated construction cost of the recommended alternative is approximately \$253,000.

#### DIVIDE AVENUE (SHAFER STREET TO BISMARCK EXPRESSWAY)

Recommended Alternative:

- 3-lane section from Shafer Street to 26<sup>th</sup> Street. (This recommendation is consistent with the NDDOT Local Safety Plan recommendation)
  - No on street parking
  - Keep bike lanes from Shafer Street to Washington Street and State Street to 26<sup>th</sup> Street
  - Enhance visibility of bike lane pavement markings
  - Keep share the road signage from Washington Street to State Street
- Divide Avenue & Washington Street Intersection
  - Increase curb radius in each quadrant
- Divide Avenue & 4<sup>th</sup> Street Intersection
  - Increase length of Divide Avenue left turn lanes
  - Install Flashing Yellows (FYA) on all approaches

The anticipated construction cost of the recommended alternative is approximately \$136,000.

#### 4<sup>TH</sup> STREET (BOULEVARD AVENUE TO CENTURY AVENUE)

Recommended Alternative:

- 3-lane section from Boulevard Avenue to Century Avenue (This recommendation is consistent with the NDDOT Local Safety Plan recommendation)
  - No on street parking
  - Improve street lighting from Interstate Avenue to Century Avenue
- 4<sup>th</sup> Street & Century Avenue Intersection
  - Re-align the Century Avenue left turn lanes to remove negative offsets
  - Install Flashing Yellows (FYA) on all approaches
  - Relocate light poles
- Divide Ave. & 4<sup>th</sup> Street Intersection
  - Increase length of Divide Avenue left turn lanes
  - Install Flashing Yellows (FYA) on all approaches
- Coordinate traffic signals along Boulevard Avenue between 3<sup>rd</sup> Street and 7<sup>th</sup> Street

The anticipated construction cost of the recommended alternative is approximately \$370,000.

**7<sup>TH</sup> STREET (BOULEVARD AVENUE TO ROSSER AVENUE)**

Recommended Alternative:

- Install 3 through lanes from Boulevard Avenue to Rosser Avenue
  - No parking on west side
- Improve lighting along 7th Street corridor, especially in the school zone at Bismarck High School
- Move stop bars further back from crosswalks.
- Install “Stop Here for Pedestrian” signing to get vehicles to stop further away from crosswalks.
- Add and improve signing and pavement marking to all pedestrian crossings to increase visibility

The anticipated construction cost of the recommended alternative is approximately \$98,000.

**9<sup>TH</sup> STREET (BOULEVARD AVENUE TO ROSSER AVENUE)**

Recommended Alternative:

- Install 3 through lanes from Rosser Avenue to Boulevard Avenue
  - No parking on east side
- Improve lighting along 9th Street corridor, especially in the school zone at Bismarck High School
- Move stop bars further back from crosswalks.
- Install “Stop Here for Pedestrian” signing to get vehicles to stop further away from crosswalks
- Add and improve signing and pavement markings to all pedestrian crossings to increase visibility

The anticipated construction cost of the recommended alternative is approximately \$96,000.

**FRONT AVE/MEMORIAL HIGHWAY (MAIN AVENUE TO 12<sup>TH</sup> STREET)**

Recommended Alternative:

- No build between Main Avenue and Washington Street
- 3-lane section from Washington Street to 12<sup>th</sup> Street (This recommendation is consistent with the NDDOT Local Safety Plan recommendation)
  - No on street parking
- Front Street & 3<sup>rd</sup> Street Intersection
  - Install Flashing Yellows (FYA) on all approaches
- Eliminate 2 accesses from strip mall north of Front Street near Washington Street

The anticipated construction cost of the recommended alternative is approximately \$72,600.

**26<sup>TH</sup> STREET (AIRWAY AVENUE TO DIVIDE AVENUE)**

Recommended Alternative:

- No build between Airway Avenue and Main Avenue

- 3-lane section from Main Ave. to Ave D.
  - No on street parking from Thayer Ave. to Ave D.
- No build between Ave D. and Divide Ave.

The anticipated construction cost of the recommended alternative is approximately \$24,000.

#### **19<sup>TH</sup> STREET (DIVIDE AVENUE TO LASALLE DRIVE)**

Recommended Alternative:

- 3-lane section from Divide Avenue to Capitol Avenue
  - No on street parking
- Between Capitol Avenue to Century Avenue, extend 3-lane section further south to accommodate turn lane at Basin Electric
- 3-lane section from Century Avenue to LaSalle Drive (This recommendation is consistent with the NDDOT Local Safety Plan recommendation)
  - Eliminate on street parking
- Between Yucca Avenue to 43<sup>rd</sup> Avenue
  - Extend urban from where it ends south of Yucca Drive to 43<sup>rd</sup> Avenue and strip as a 3 lane section with no parking
  - Re-align the 19<sup>th</sup> Street south approach to line up with the 19<sup>th</sup> Street north approach
  - Provide left turn lane and a right/through lane on south approach

The anticipated construction cost of the recommended alternative is approximately \$780,000.

#### **WARD ROAD (DIVIDE AVENUE TO EDWARDS AVENUE)**

Recommended Alternative:

- Realignment of Ward Road and College Drive

The anticipated construction cost of the recommended alternative is approximately \$354,000.

## **Conclusions**

Based on the safety analysis and the existing and forecasted LOS results, various recommended alternatives were developed for each corridor within the study area. Some alternatives focus more on traffic operations and efficiency, while others are meant to mitigate safety concerns and crashes. Project stakeholders were included in the development of the preliminary alternatives and provided helpful insight. Utilizing various aspects of each of the proposed recommendation will be beneficial in improving traffic operations along each corridor and will also improve the overall safety at major intersections by reducing either the frequency of crashes or severity of crashes. Ultimately, these recommendations are intended to assist the corridors in functioning as the high-volume, high-mobility arterial roadways they should be.

## **Implementation**

Evaluation of LOS, social impacts, comparison between advantages and disadvantages, cost comparisons, as well as overall construction feasibility were all considered in recommending a low-cost alternative. Prioritization should be given to alternatives that improve safety and driver

understanding relating to signing, striping, signalization, and improving visibility and line of sight at intersections.

It is recommended that a more thorough evaluation be conducted as a separate study before the future implementation of any of the proposed alternatives. This further analysis should include any site-specific traffic volumes and turning movement counts, signalization timings, and should also take into consideration details regarding existing utilities and nearby landowners as relevant to the proposed alternative project location.

### **Prioritization**

Lists prioritizing the corridors for each city are provided below. These lists may be used as a guideline when deciding which corridor should be studied further for alternative implementation as funds are made available. The prioritization ranking is based on forecasted 2040 LOS as well as the segment and intersection crash rates associated with each corridor and its major intersections.

The Bismarck corridors are listed in order of highest priority (1) to lowest priority (9) below:

1. 9<sup>th</sup> Street (Boulevard Avenue to Rosser Avenue)
2. 7<sup>th</sup> Street (Boulevard Avenue to Rosser Avenue)
3. Washington Street (Calgary Avenue to Divide Avenue)
4. Front Avenue/Memorial Highway (Main Avenue to 12<sup>th</sup> Street)
5. Divide Avenue (Schafer Street to Bismarck Expressway/ND Highway 810)
6. 19<sup>th</sup> Street (Divide Avenue to LaSalle Drive)
7. 26<sup>th</sup> Street (Divide Avenue to Airway Avenue)
8. 4<sup>th</sup> Street (Century Avenue to Boulevard Avenue)
9. Ward Road (Edwards Avenue to Divide Avenue)

The Mandan corridors are listed in order of highest priority (1) to lowest priority (11) below:

1. Main Street /Business I-94 (ND Highway 25 to Twin City Drive)
2. Collins Avenue (Main Street to Oil Red Trail)
3. 3<sup>rd</sup> Street (ND Highway 6 to Memorial Highway)
4. Sunset Drive/6<sup>th</sup> Avenue NW (Main Street to Oil Red Trail)
5. ND Highway 1806 South (Main Street to 19<sup>th</sup> Street)
6. ND Highway 6 (Main Street to 19<sup>th</sup> Street NW)
7. Old Red Trail (Mandan Avenue to Sunset Drive)
8. Mandan Avenue/ND Highway 1806 (Main Street to Old Red Trail)
9. ND Highway 1806 North (Old Red Trail to 38<sup>th</sup> Street)
10. 19<sup>th</sup> Street (ND Highway 6 to ND Highway 1806)
11. Division Street (Sunset Avenue to 8<sup>th</sup> Avenue NE)