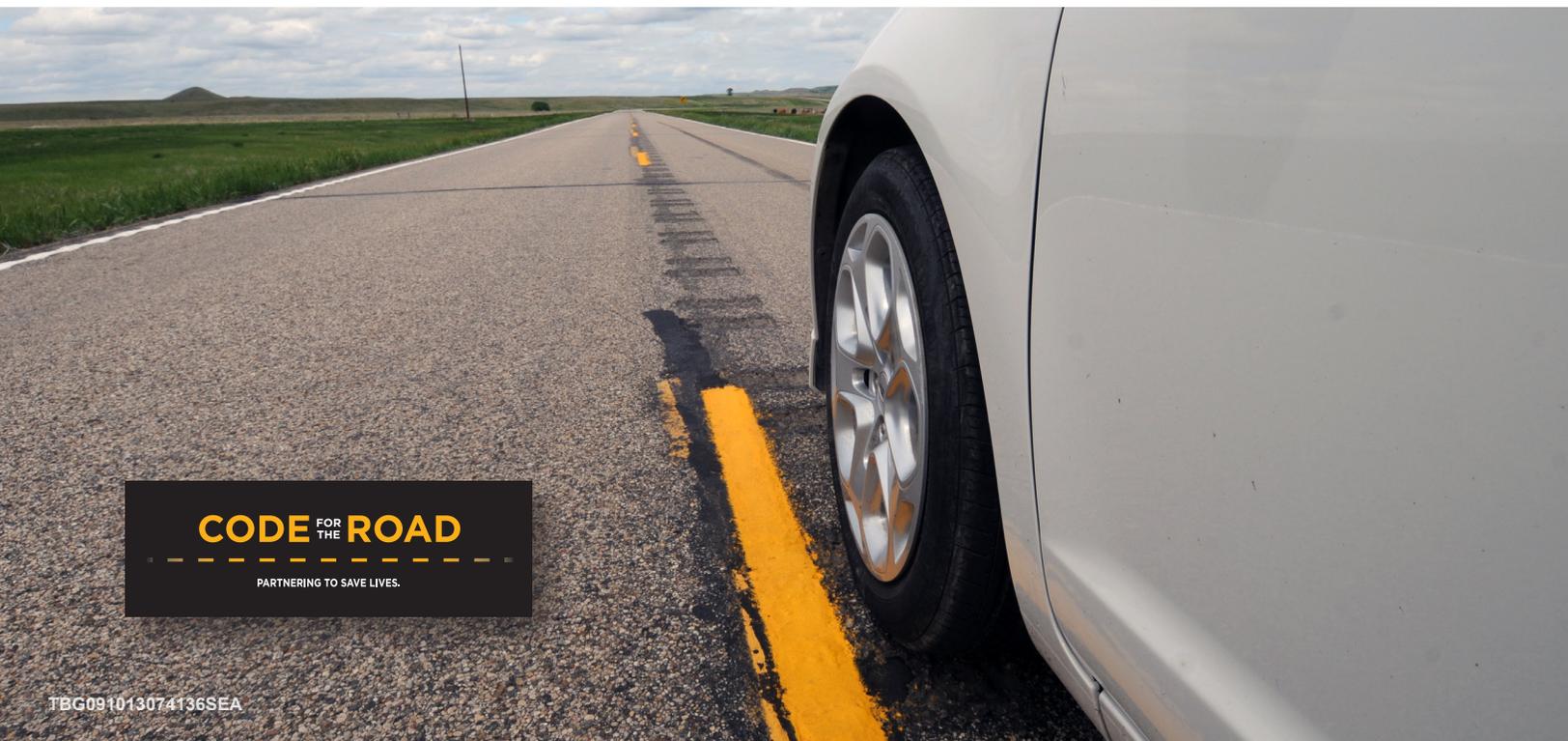
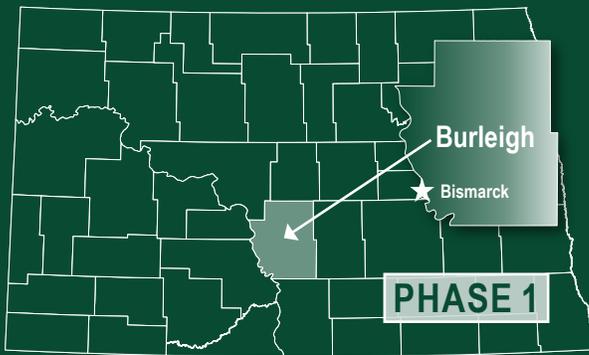




November 2013

North Dakota Local Road Safety Program



CODE FOR THE ROAD

PARTNERING TO SAVE LIVES.

North Dakota Local Road Safety Program

Prepared by

CH2M HILL

SRF Consulting Group, Inc.

On behalf of

North Dakota Department of Transportation

Grant Levi, P.E., Director

November 2013

23 USC 409
NDDOT Reserves All Objections

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Acronyms and Abbreviations

4Es	education, enforcement, engineering, and emergency medical services
AASHTO	American Association of State Highway and Transportation Officials
ADT	average daily traffic
CMC	county major collector
CMF	crash modification factor
CRS	Crash Reporting System (North Dakota Department of Transportation)
DUI	driving under the influence
EMS	emergency medical services
ERA	edge risk assessment
FHWA	Federal Highway Administration
GDL	graduated drivers license
GHSA	Governors Highway Safety Association
HSIP	Highway Safety Improvement Program
LEAD	Listen, Educate, Ask, Discuss
LRSP	Local Road Safety Program
MUTCD	<i>Manual on Uniform Traffic Control Devices</i>
NCHRP	National Cooperative Highway Research Program
NDDOT	North Dakota Department of Transportation
NHTSA	National Highway Traffic Safety Administration
Plan	LRSP Safety Plan
PSA	public service announcement
SHSP	Strategic Highway Safety Plan
TSO	Traffic Safety Office



Executive Summary

This Local Road Safety Program (LRSP) was prepared for Burleigh County and the City of Bismarck. The LRSP was prepared as part of North Dakota's statewide highway safety planning process. The contents are the result of a data-driven process, with a goal to reduce severe crashes (defined as those crashes resulting in at least one fatality or incapacitating injury) by documenting at-risk locations, identifying effective low-cost safety improvement strategies, and better positioning the county and city to compete for available safety funds. The LRSP includes a description of the connection to safety planning efforts at the national, state (through North Dakota's Strategic Highway Safety Plan and the Highway Safety Improvement Program), and regional levels.

This LRSP was commissioned by the North Dakota Department of Transportation (NDDOT) to provide a tool to assist counties in submitting proactive low-cost systematic safety projects for NDDOT to fund as part of the Highway Safety Improvement Program (HSIP). The LRSP is not intended to be a complete safety plan for the Burleigh County and the City of Bismarck, because there may be other safety improvement strategies that are considered high-cost or low-cost that are also effective, but cannot be systematically applied across a county or local road system. While this LRSP addresses many of the safety concerns for at-risk locations within the county, other high-priority projects may be identified after this safety planning effort is complete.

Specifically, this LRSP includes the following:

- Description of the safety emphasis areas.
- Identification of a short list of high-priority, low-cost Safety Strategies.
- Documentation of at-risk locations along the county/local road systems that are considered candidates for safety investment. At-risk locations include roadway segments, horizontal curves, and intersections with multiple severe crashes or with roadway geometry and traffic characteristics similar to other locations in North Dakota where severe crashes have occurred.
- Development of almost \$2 million of suggested safety projects across the County, including the completed forms suitable for submittal to NDDOT for their consideration for HSIP funding. These projects represent the application of high-priority safety strategies at the at-risk locations.
- Discussion of behavioral crash statistics, potential safety strategies, and current statewide resources available for implementation of behavioral safety strategies.

TABLE E-1
Burleigh County and City of Bismarck Total Project Costs

Rural Projects	Intersections	Segments	Curves	Total
Burleigh County	\$525,950	\$207,690	\$119,024	\$852,664
Urban Projects	Segments	Right Angle Intersections	Pedestrian and Bicyclist Intersections	Total
Bismarck	\$288,150	\$44,000	\$530,000	\$862,150
TOTAL				\$1,714,814

The information in this LRSP is consistent with best practices in safety planning as presented in guidance prepared by the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the National Cooperative Highway Research Program (NCHRP). This information is provided in an effort to reduce the number of severe crashes on the county/local road systems. It is understood that the final decision to implement any of the suggested projects resides with the respective county or city officials.

It should also be noted that the rankings of county/local roadway facilities are based on a comparison with documented risk factors. There is no expectation or requirement that the Burleigh County or the City of Bismarck pursue safety projects in the exact ranking order. The ranking suggests a general priority, and it is understood that actual project development decisions will be made by county or city staff based on consideration of economic, social, and political issues, as well as in coordination with other projects already in each agency’s Capital Improvement Program.

It should also be noted that some of the at-risk locations and suggested safety projects involve the intersection of a county roadway and a state route. It is acknowledged that the county does not have the authority to implement projects on the state’s right-of-way. The county is encouraged to coordinate with the NDDOT to pursue a partnership that identifies a path toward implementation. This LRSP (1) does **not** set requirements or mandates; (2) is **not** a standard; and (3) is neither intended to be nor does it establish a legal standard of care.

To help reduce the potential exposure to claims of negligence associated with motor vehicle crashes on the county/local road system, the following key point should be considered:

- Federal law (23 USC Section 409) established that information generated as part of the statewide safety planning process is considered privileged and unavailable to the public. The privileged status includes crash data where value/detail has been added by analysts during the safety planning process (for example, computation of crash rates, disaggregation of crashes by type or severity, and documentation of contributing factors), the lists of at-risk locations, and information supporting the development and evaluation of potential safety projects. The federal law and the privileged status of the safety information was upheld by the U.S. Supreme Court in the case of Pierce County (Washington) v. Guillen (see Appendix I). North Dakota interprets Section 409 to mean that basic crash data is available

to the public on request, but that it cannot be used in legal proceedings associated with claims of negligence.

Regarding the expected life of this LRSP, the shelf life of this document is limited (as with any transportation plan). This is because the distribution of crashes can change over time, just as roadway and traffic conditions change, contributing to the occurrence of crashes. As a result, Burleigh County and the City of Bismarck are encouraged to consider periodically updating this LRSP.

The county and the City of Bismarck are encouraged to apply for these projects through the NDDOT's HSIP process. The anticipated annual HSIP process is shown in Table ES-2.

TABLE ES-2
HSIP Solicitation Schedule

Month	Task Description
October/November	Solicitation for HSIP is sent out to all counties, districts, MPOs, cities, and tribes. The counties, districts, MPOs, cities, and tribes will have about 6 weeks to respond .
January through March	NDDOT reviews the requests and conducts additional studies if required.
Following Fall	HSIP approval notices are sent after program concurrence from FHWA. Funding for an approved project will be provided as funding is available.



1.0 Introduction

1.1 Background

To fulfill a commitment in the 2013 North Dakota Strategic Highway Safety Plan (SHSP), the North Dakota Department of Transportation (NDDOT) began the Local Road Safety Program (LRSP). The purpose of the LRSP is to better engage local roadway agencies in the statewide safety planning process. The NDDOT’s commitment is based on two pieces of information:

- Based on 2007-to-2011 crash records, the SHSP identified that 56 percent of severe crashes in North Dakota occurred on roads operated by local agencies.
- The NDDOT had historically focused federal safety funds on interstates, U.S. highways, and state highways, even though approximately half of severe crashes occurred on those facilities.

The NDDOT set out to increase the level of participation of local agencies in safety planning and the amount of safety funds directed toward projects on local systems. To do this, the NDDOT first partnered with local agencies (including all 53 counties and 12 major cities in the state) to prepare safety plans for every region of North Dakota.

Representatives from the NDDOT, Burleigh County, and the City of Bismarck prepared this LRSP Safety Plan (Plan) as Phase 1 of a comprehensive effort to reduce the number of fatal and incapacitating injury crashes (referred collectively as severe crashes) that occur on North Dakota’s local road system in Burleigh County. The area covered by the Plan includes a portion of NDDOT District 1 – Bismarck (Figure 1-1). Additionally, Cavalier, Nelson, Pembina, Ramsey, Walsh and Ward counties and the cities of Devils Lake and Minot participated in Phase 1 of the study, but are presented in a separate report.

The purpose of this LRSP is to identify and implement specific safety strategies at specific locations and to link these projects directly with the contributing factors associated with the majority of severe crashes on the local roads. These safety projects are intended to be comprehensive by addressing both infrastructure- and driver-behavior-related crashes by including proactive projects developed through a system-wide risk assessment process. These projects are intended to compliment reactive projects developed through a site analysis approach focused on high-crash locations.

The Strategic Highway Safety Plan (SHSP) development process was key in helping us identify the importance of local roads to achieve our long-term safety goals. This data-driven process helped us to transition to a systemic identification of crash types on all roads in addition to our traditional crash location (or hot spot) approach on the state system. As a result, the NDDOT has partnered with local stakeholder to prepare road safety plans that will identify potential safety projects consistent with the SHSP.

— Grant Levi, P.E., Director
North Dakota Department of Transportation

- Steady increase in the number of vehicle miles traveled in North Dakota, which is counter to the flat or decreasing national trend in travel.
- Other states have a longer history using a systemic investment approach to focus on locations with risk factors for severe crashes.
- The growing challenges of providing emergency medical response and quick access to advanced health care in rural areas.

1.2.1 AASHTO's Strategic Highway Safety Plan and Safety Emphasis Areas

In the late 1990s, the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) supported a comprehensive and data-driven approach to reduce the number of traffic-related fatalities. Both AASHTO and FHWA concluded that up to that point, states' efforts had not been effective in lowering the number of severe crashes because: (1) efforts were not focused on severe crashes nor the primary factors resulting in severe crashes, and (2) safety project selection was not part of a data-driven process that implemented effective strategies at locations most at risk for a severe crash.

AASHTO and FHWA recommended a safety program development process that included 22 categories (or safety emphasis areas) in the areas of drivers, special users, vehicles, highways, emergency services, and management. The objective of this first step is to help agencies consider the 4Es – education, enforcement, engineering, and emergency medical services (EMS) – when identifying safety priorities for their roads. In addition, selecting safety emphasis areas focuses agencies on safety strategies linked to the problem.

In 2007, AASHTO set a goal to reduce the number of traffic fatalities by 1,000 each year for the next 20 years, which is an integral first step in a national *Toward Zero Death* safety vision. FHWA has determined that this goal will be reached only by partnering with individual states. This partnering will lead to more successful project implementation and will result in programs that target the factors contributing to the greatest number of fatal and severe crashes.

1.3 North Dakota's Statewide Safety Planning Efforts

As shown in Figure 1-2, through 2004, North Dakota had a fatality rate (1.34 fatalities per hundred million vehicle miles traveled [HMVMT] in 2004) that was less than the national average (1.44 fatalities per HMVMT). However, in recent years, the North Dakota fatality rate (1.61 fatalities per HMVMT in 2011) has risen to above the national average (1.10 fatalities per HMVMT) and the overall number of traffic fatalities has crept upward (see Figure 1-2). In 2011, there were 148 fatalities on North Dakota roads, which is the most traffic fatalities reported in the state since 1982.

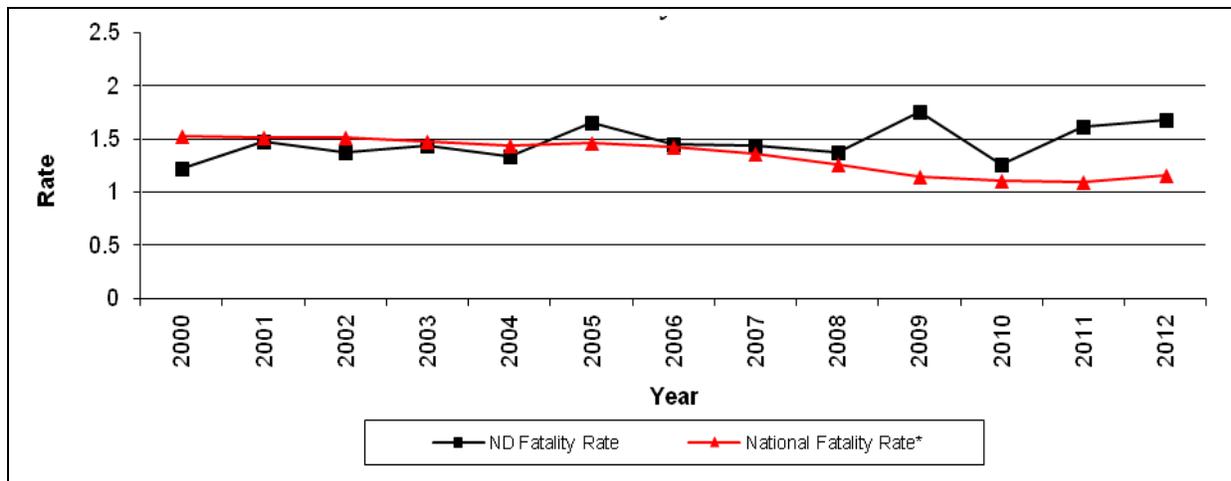


FIGURE 1-2
Fatality Rate – National and North Dakota (2000 to 2012)

In 2013, the NDDOT updated the state’s SHSP. Based on severe crashes (Table 1-1), the 2013 SHSP identified the following emphasis areas, as well as priority strategies in each area:

- Young drivers (under age 21)
- Excessive speed or aggressive driving
- Alcohol-related
- Unbelted vehicle occupants
- Lane departure
- Intersections

North Dakota also adopted a long-term vision of zero fatalities on its roadways. Achieving this vision will require many years and dramatic shifts in the safety culture for North Dakota residents. An aggressive intermediate goal was set to reduce the 3-year average of traffic fatalities to 100 or fewer by 2020.

TABLE 1-1
North Dakota Fatal and Incapacitating Injury Crashes by AASHTO Safety Emphasis Area

Safety Emphasis Area		Statewide (All Roads)	
		Percent	Number
Drivers	Involving Driver under Age 21	22%	501
	Involving drivers over the age of 64	13%	280
	Excessive Speed or Aggressive Driving	26%	576
	Alcohol-Related	30%	667
	Distracted, asleep, or fatigued drivers	9%	206
	Unbelted Vehicle Occupants	48%	1,067
Special Users	Pedestrians crashes	5%	117
	Bicycle crashes	2%	46

TABLE 1-1
North Dakota Fatal and Incapacitating Injury Crashes by AASHTO Safety Emphasis Area

Safety Emphasis Area		Statewide (All Roads)	
		Percent	Number
Vehicles	Motorcycles crashes	12%	265
	Heavy vehicle crashes	15%	342
Highways	Train-vehicle collisions	1%	13
	Lane-Departure Including both lane-departure (898 severe crashes) and head-on/ sideswipe-opposing crashes (150 severe crashes)	47%	1,048
	Intersections	23%	513
	Work zone crashes	2%	36
Total Severe (Fatal and Incapacitating Injury) Crashes		2,231	

Notes:

Information is from North Dakota crash data records, 2008 to 2012; which is an update to the information in the 2013 ND SHSP, which used 2007 to 2011 crash records.

Numbers in this table do not add up to the statewide crash numbers because one crash may be categorized into multiple emphasis areas. For example, one crash may involve a young driver at an intersection and, therefore, be included in both of these emphasis areas.

1.4 Local Road Safety Program Overview

North Dakota’s local road system encompasses more than 97,500 miles of roadway out of approximately 106,000 miles statewide. Although, historically, more than 50 percent of severe crashes in North Dakota occur on local roads, the density of these crashes was very low (approximately 0.002 severe crash per mile per year). As a result, local agencies were unable to identify high-crash locations to nominate for funding through the Highway Safety Improvement Program (HSIP). Therefore, using stand-in data for the severe crashes, safety projects were identified using a systemic process to evaluate at-risk locations. The use of the systemic process was necessary due to the low crash density. Based on revised FHWA policy, the NDDOT expanded the HSIP to include projects identified through the systemic analysis of local roads.

The focus areas of the systemic risk assessment are rural, paved county and tribal highways¹ and urban arterials and collectors in North Dakota’s larger cities (cities with a population greater than 5,000). Paved, rural county highways were selected based on an analysis of statewide crash data that indicated that approximately 61 percent of severe local road crashes occurred on rural county roads. Of these crashes, approximately half occurred on paved roads, which accounted for less than 10 percent of county roads (approximately 6,200 miles). Further analysis indicated that on these rural highways, the most at-risk elements included roadway segments (60 percent of severe crashes), horizontal curves (32 percent of severe crashes), and intersections (32 percent of severe crashes).

¹ Does not include all paved roads outside municipal limits, but focuses on routes that serve regional travel. For example, a loop road that is paved and yet only provides access to a residential neighborhood was considered to be a local road given the type of traffic served by the facility.

Major cities were selected as a focus because the 12 cities in this category account for approximately 90 percent of the severe local road crashes within city boundaries. Furthermore, arterials and collectors accounted for 40 percent of the severe crashes. In addition, because these 12 cities are responsible for operation and maintenance of U.S. highway and state highway routes within the municipal limits (not including fully access managed facilities, such as the interstate), the U.S. and state highways were included in the review.

Figure 1-3 shows the approach used to develop this Plan for Burleigh County. Beginning with the crash analysis and concluding with this LRSP Plan report, the process is a culmination of NDDOT and concerned local agencies working together for nearly half a year.

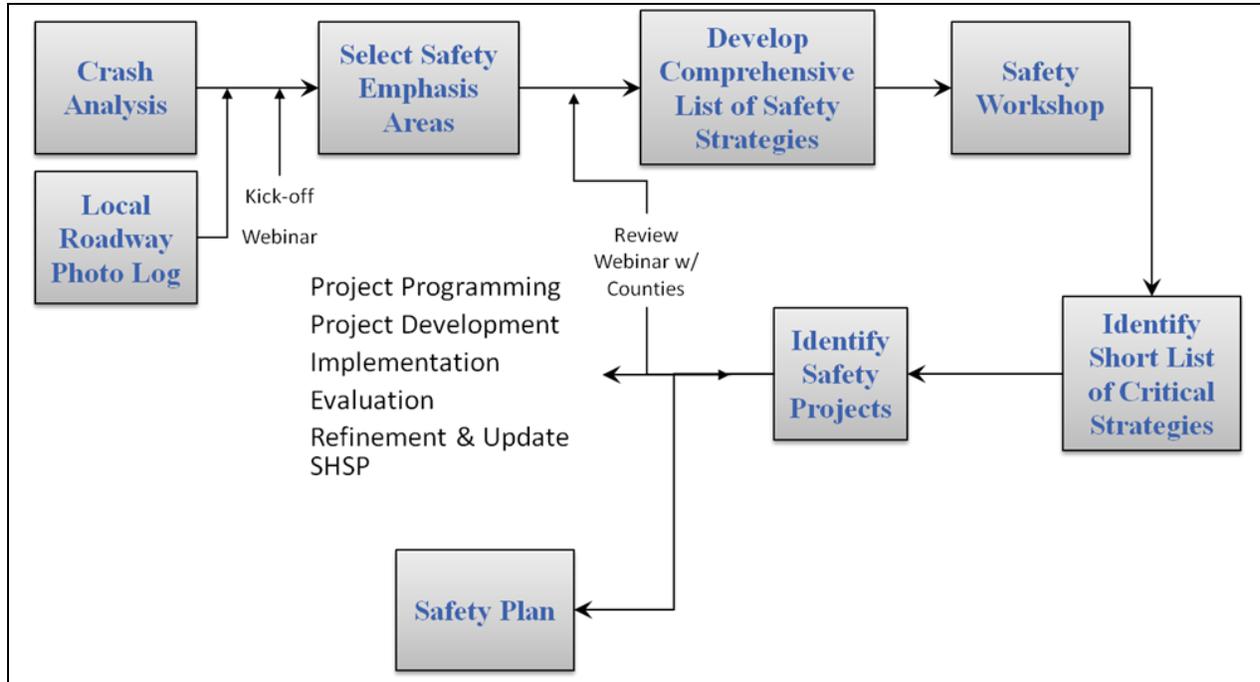


FIGURE 1-3
Local Road Safety Program Safety Plan Approach



2.0 Safety Emphasis Areas and Crash Overview

The first step in the process to prepare Safety Plans for Burleigh County was to conduct a crash analysis overview statewide for North Dakota and then for the county as a whole.

2.1 Burleigh County Crash Overview

2.1.1 North Dakota Crash Mapping

Crash data was taken from NDDOT's Crash Reporting System (CRS) and placed into ArcGIS for data exportation based on specific locations relative to local roads. The most recent 5 years of crash data (from 2008 to 2012) was analyzed and used to determine risk factors specific to the county's local roads. Consistent with NDDOT's SHSP, the analysis focused on severe (fatal and incapacitating injury) crashes.

2.1.2 Facilities Analyzed

The crash analysis was broken into three main facility types: road segments, curves, and intersections.

- Paved rural local road segments were analyzed and local county major collector (CMC) gravel roads were analyzed for multiple crash locations. Other local gravel roads were removed from the analysis because of the relatively low percentage of severe crashes and due to the lack of infrastructure-based strategies that can be applied to this roadway type.
- Local rural road intersections with state highways or other local roads were included in the analysis. Local non-CMC gravel roads intersecting with other local roads were removed from the analysis due to the very low number of crashes at these intersections.
- Horizontal curves on paved rural local roads were included in analysis.
- Urban segments and intersections were analyzed in the City of Bismarck. Urban roadway types analyzed within the city limits included:
 - State routes
 - Urban principal arterials
 - Urban minor arterials
 - Urban collector roads
- All other local road segments and intersections, including gravel roads, were reviewed for locations with multiple severe crashes or "hot spots."

2.1.3 Crash Data Sets

Crash data for the 5 years from 2008 to 2012 was used for countywide crash analysis. In safety analysis, it is recommended that more than 1 year of data be studied to reduce the possibility of examining an unusual year. It is also important to include as many years as necessary to produce a data set that will provide statistically reliable results but not too long so that changed conditions are a concern (for example, reconstructed roads, addition of STOP signs and changed speed limits). Burleigh County did not have enough crashes to be statistically reliable; therefore, decisions were based on the crashes for all Phase I counties combined (Figure 2-1), statewide data (Figure 2-2), or national research.

The Burleigh County data set includes 10,876 crashes on local roads; of these, 114 were fatal or serious injury crashes. Disaggregating the severe crashes by road type (paved, gravel, or local), area (urban versus rural) and then by crash type category (intersection versus segment crashes) results in the distribution shown in Table 2-1, Figure 2-1, and Figure 2-2.

TABLE 2-1
 Crash Distribution (2008 to 2012)

Location	Burleigh (Percent/Number)	Statewide (Percent/Number)
Rural Roads	31% (36 crashes)	61% (740 crashes)
Paved Rural Roads	67% (24 crashes)	52% (387 crashes)
Local Gravel CMC Roads	70% (7 crashes)	9% (68 crashes)
Paved Rural Road Segments	50% (11 crashes)	60% (226 crashes)
Single Vehicle, Lane-Departure Crashes on Paved Rural Road Segments	55% (6 crashes)	76% (171 crashes)
Paved Rural Road Intersections	59% (67 crashes)	32% (120 crashes)
Paved Rural Road Thru-STOP Intersections	31% (21 crashes)	42% (50 crashes)

This review shows that, on the local system, severe lane-departure crashes on paved roads and at angle crashes at Thru-STOP intersections are overrepresented. Based on statewide traffic safety data, severe lane-departure crashes in curves are also overrepresented.

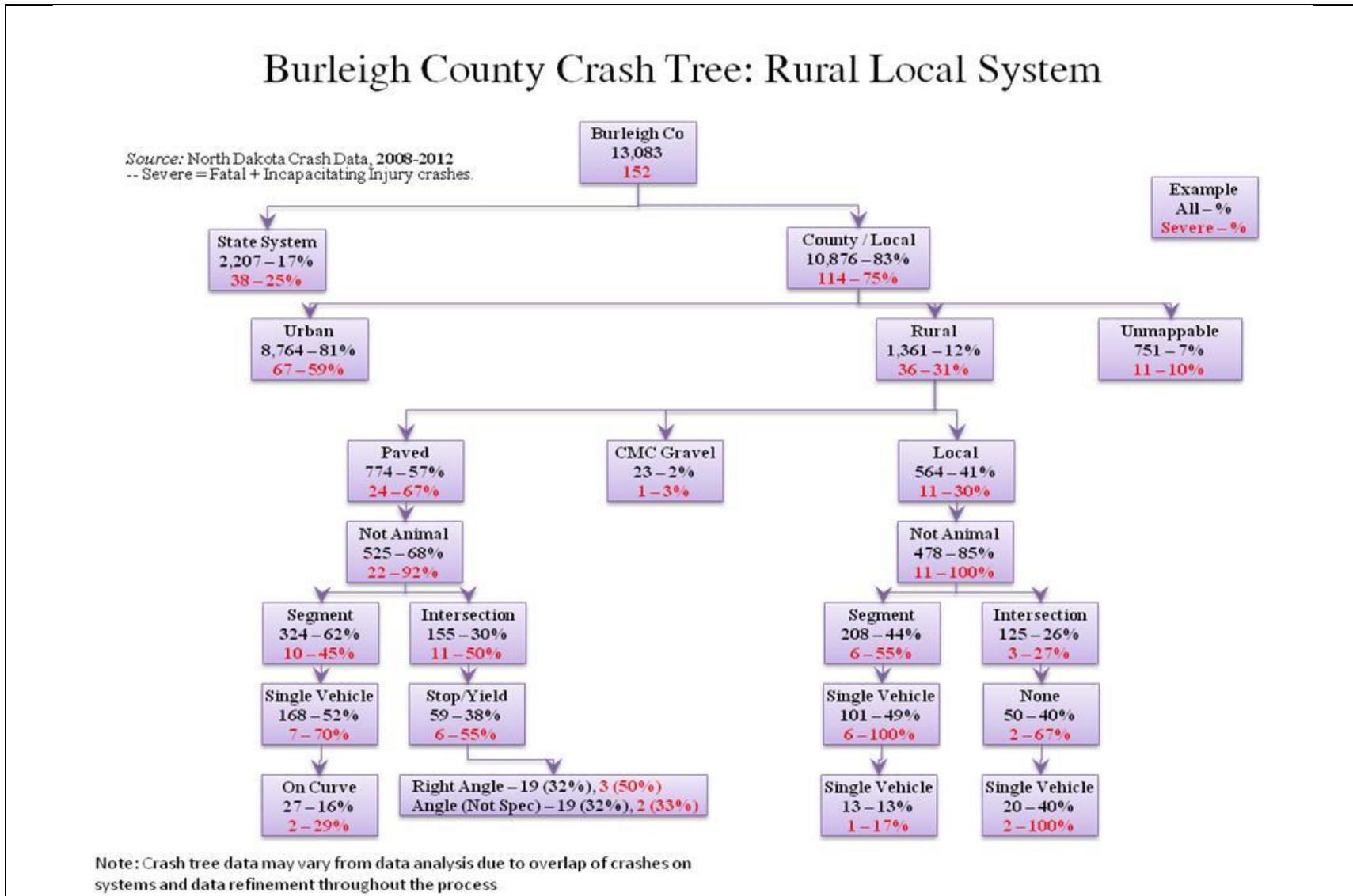


FIGURE 2-1
 Burleigh County Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

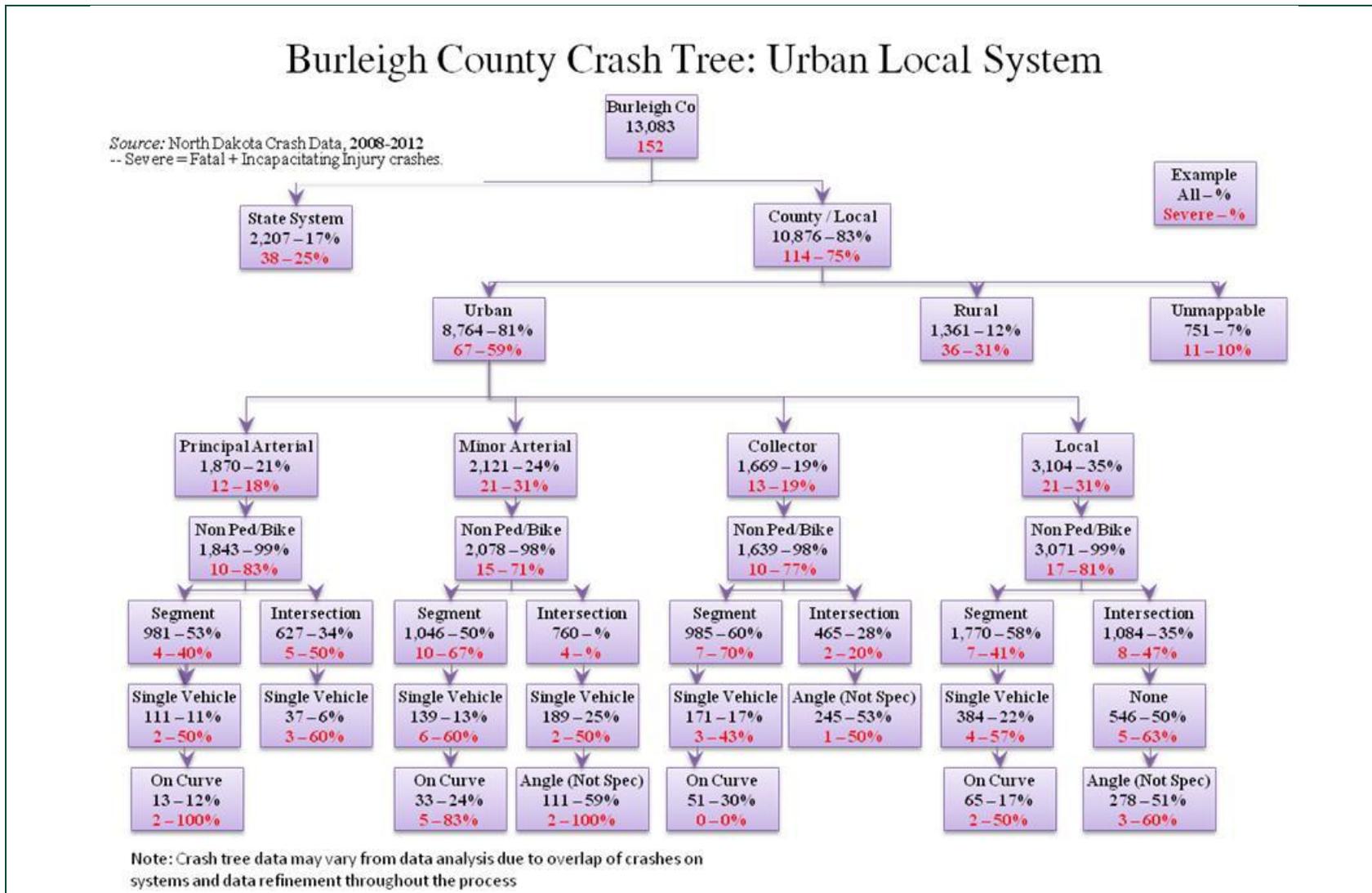


FIGURE 2-1 (Continued)
 Burleigh County Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

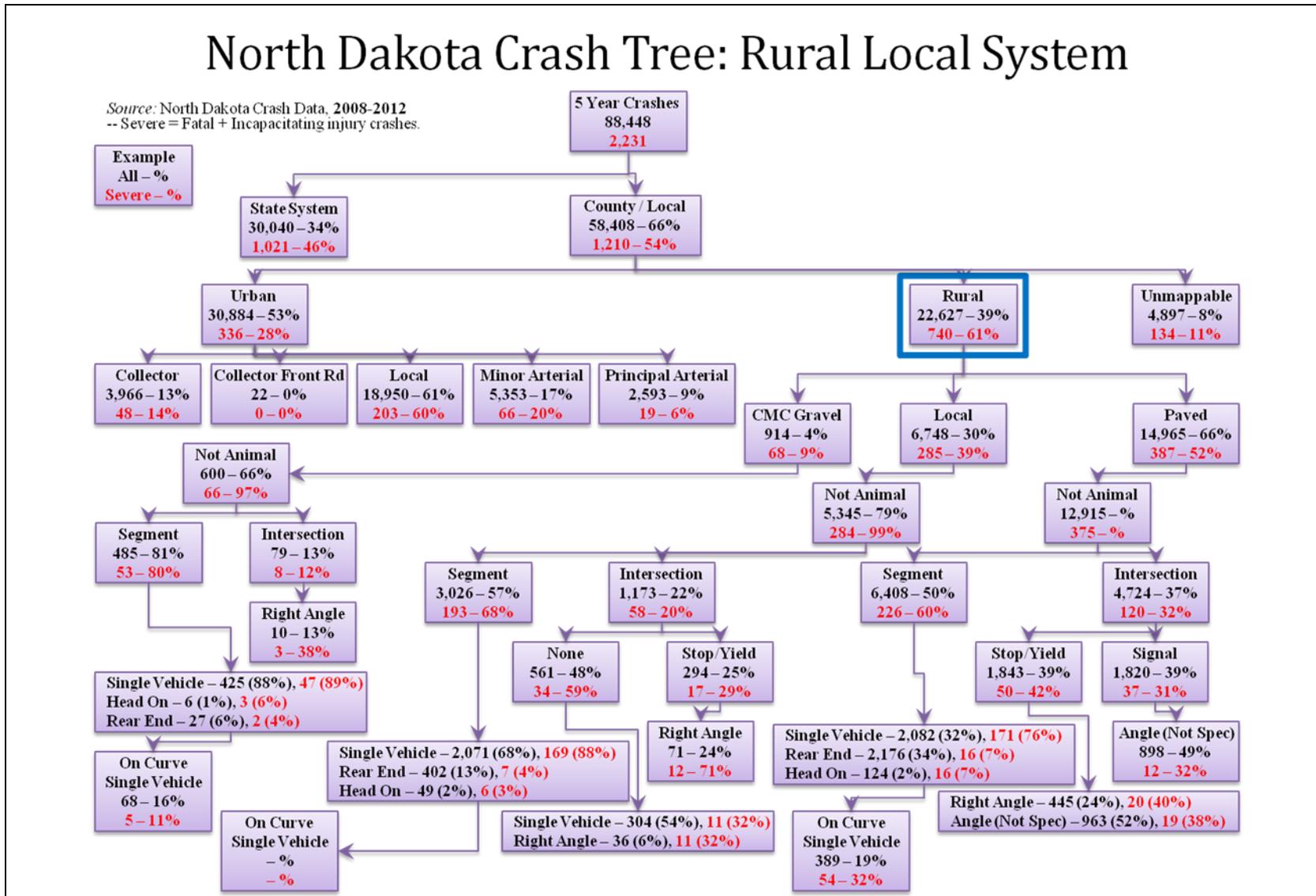


FIGURE 2-2
 North Dakota Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

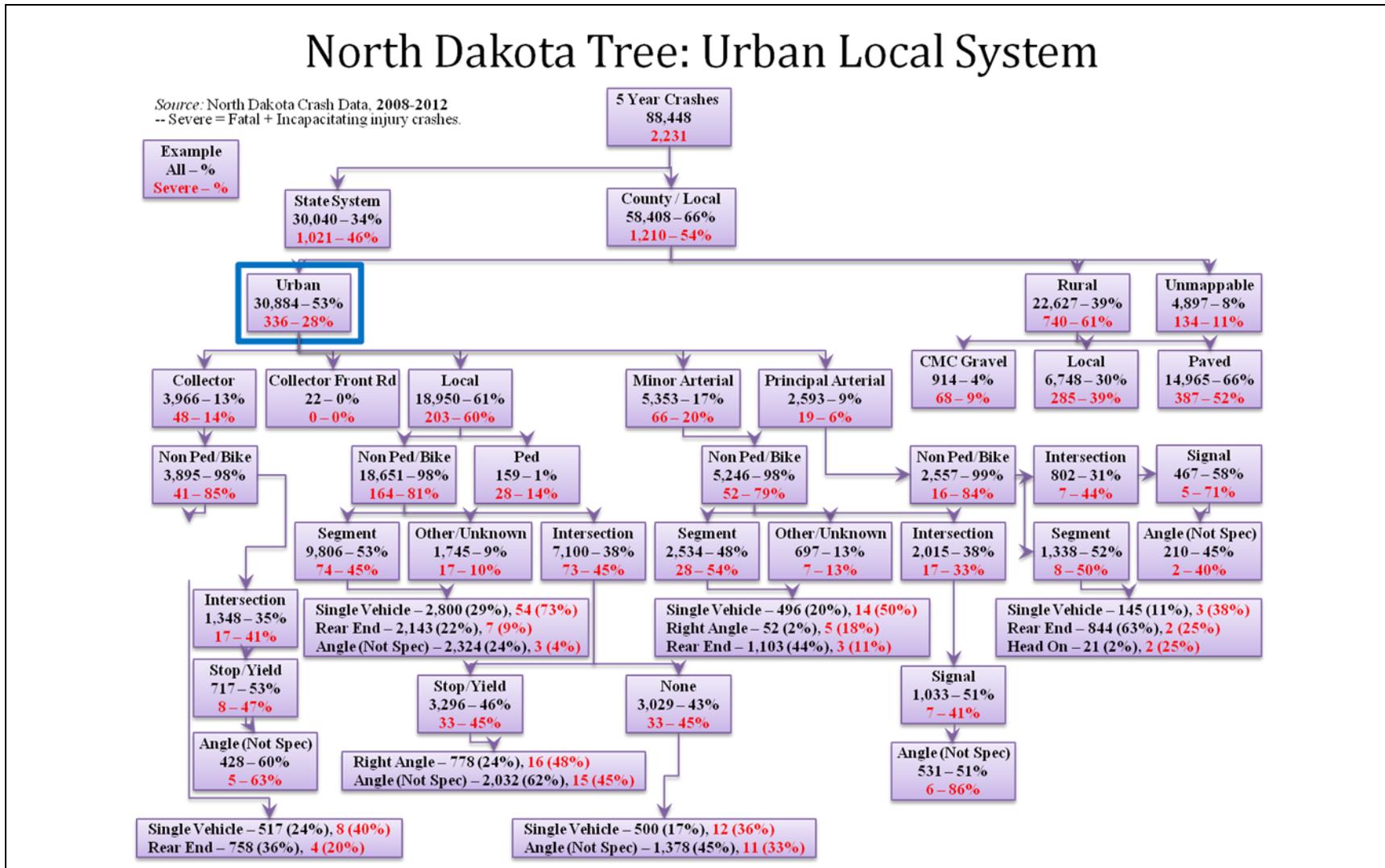


FIGURE 2-2 (Continued)
 North Dakota Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

2.2 Burleigh County Safety Emphasis Areas

The total number of severe crashes(those crashes resulting in a fatality or incapacitating injury) in each county over 5 years from 2008 to 2012 was so few that the crash data is analyzed at regional, statewide, and national levels for various risk factors.

Section 1.2 described the development of AASHTO’s emphasis areas, and how this process was applied to the State of North Dakota to identify statewide safety emphasis areas (Table 1-1). An identical process was followed for Burleigh County, resulting in the distribution of severe crashes among AASHTO’s 22 emphasis areas (Table 2-2). The emphasis areas for the county are consistent with the state’s emphasis areas. This process revealed where crashes were overrepresented based on a comparison to statewide averages or where a large enough number of crashes represented an opportunity to substantially reduce crashes. As a result, the following safety emphasis areas were identified as priorities for safety investments:

- Driver Behavior – Young drivers, aggressive drivers, alcohol-related, and unbelted vehicle occupants
- Highways – Lane-departure and intersection crashes

TABLE 2-2
Burleigh County Severe Crashes by Safety Emphasis Areas (2008 to 2012)

Safety Emphasis Areas	Statewide (% of Total)	2008 to 2012 Severe Crashes					
		Burleigh County		State Roads		Local System	
		%	#	%	#	%	#
Total Severe Crashes	2,231	152		37		115	
Involving Drivers Under Age 21	22%	22%	34	16%	6	24%	28
Involving Drivers Over Age 64	13%	13%	19	14%	5	12%	14
Excessive Speed or Aggressive Driving	26%	22%	33	24%	9	21%	24
Alcohol-Related	30%	34%	51	27%	10	36%	41
Distracted, Asleep, or Fatigued Drivers	9%	16%	24	19%	7	15%	17
Unbelted Vehicle Occupants	48%	53%	81	65%	24	50%	57
Pedestrian Crashes	5%	11%	17	5%	2	13%	15
Bicycle Crashes	2%	1%	2	0%	0	2%	2
Motorcycle Crashes	12%	18%	28	24%	9	17%	19
Heavy Vehicle Crashes	15%	6%	9	16%	6	3%	3
Train-Vehicle Collisions	1%	0%	0	0%	0	0%	0
Lane-Departure (Run-Off-the-Road and Head-On) Crashes	47%	34%	51	49%	18	29%	33
<i>Head-On</i>	<i>7%</i>	<i>7%</i>	<i>10</i>	<i>8%</i>	<i>3</i>	<i>6%</i>	<i>7</i>
<i>Run-off-the-Road Crashes</i>	<i>40%</i>	<i>27%</i>	<i>41</i>	<i>41%</i>	<i>15</i>	<i>23%</i>	<i>26</i>
Intersection Crashes	23%	32%	48	22%	8	35%	40
Work Zone Crashes	2%	0%	0	0%	0	0%	0

TABLE 2-2
 Burleigh County Severe Crashes by Safety Emphasis Areas (2008 to 2012)

Safety Emphasis Areas	Statewide (% of Total)	2008 to 2012 Severe Crashes					
		Burleigh County		State Roads		Local System	
		%	#	%	#	%	#
Deer Collisions	1%	1%	1	0%	0	1%	1
Adverse (Winter) Weather Related	17%	13%	20	16%	6	12%	14

Note:
 Severe crashes are those crashes that result in at least one fatality or incapacitating injury.

Strategies to reduce crashes depend on whether a safety emphasis area is infrastructure-based or driver-behavior-based. Infrastructure-based emphasis areas refer to characteristics of the location (for example, roadway segment, curve, intersection) where crashes occurred. Driver-behavior-based emphasis areas refer to motorist characteristics or actions that contribute to crashes. Because driver behavior is tied to laws made at the national and state levels, roadway agencies generally have less ability to address driver-behavior-based emphasis areas. The most effective approach for road authorities to addressing driver-behavior-based emphasis areas is to focus on public education and law enforcement through cooperation and collaboration with other county departments, agencies, and schools. Generally, more opportunities exist for county and city road authorities to address infrastructure-based emphasis areas, because many of the associated strategies can be implemented as separate roadway improvement projects, or along with other planned improvements. Specific infrastructure- and driver-behavior-based strategies presented to the participants of the safety workshop held for Burleigh County are provided in Section 3.2.

2.3 Burleigh County Crash Risk Factors

The objective of the analytical process is to identify candidates for safety investment based on two criteria – high-crash locations and at-risk locations. A more detailed crash analysis was performed for each priority crash type to identify (1) locations where these priority crash types occur at a rate of one or more severe crashes per year, and (2) basic roadway and traffic characteristics of locations with severe crashes. These characteristics are not considered to be the cause of crashes, but instead are used to determine the risk that a future severe crash would occur at a particular location. Information from historic crashes was used to evaluate the remainder of the county’s local road system and prioritize locations for safety investment based on similar characteristics.

Three urban areas were studied as a part of Phase I in the LRSP in addition to the nine region counties: Bismarck, Minot, and Devils Lake. Bismarck is the subject of the urban portion of this Plan, but for analysis purposes, the data were combined for all of Phase I urban areas.

2.3.1 Rural Segments – Crashes on Paved Roads

Of the more than 97,500 miles of local road system in North Dakota, only 7 percent of the roads are paved. However, 52 percent of crashes occurred on paved roads. Therefore, the focus of the LRSP is on rural paved road segments.

There are 148 miles of rural paved roads in Burleigh County. From 2008 to 2012, 15 severe crashes were reported on these roads. The predominant crash type on these roads was lane-departure (involving a single vehicle, Figure 2-3). The following five risk factors were identified for rural lane departure crashes on paved roads in the county:

1. **Average Daily Traffic (ADT)** –Of the rural paved roads, 39 percent have an ADT greater than 650 vehicles per day. However, 74 percent of the severe crashes and 80 percent of the severe lane-departure crashes occurred within this ADT range (Figure 2-4). Therefore, any segment with an ADT greater than 650 vehicles per day received a star¹.
2. **Access Density** – Nationally, research has shown that an access density of eight or more access points per mile (including field entrances, commercial entrances, roadway access, etc.) increased the likelihood of a severe crash occurring. A review of Burleigh County’s severes crashes had a slightly higher density of ten access per mile. Any segment with an access density greater than ten access points per mile received a star.
3. **Lane-Departure Density** – The average lane-departure density for the county was 0.23 crash per mile per year. Due to limited number of crashes in each county, any roadway segment where the lane-departure density was greater than the average for the county received a star.
4. **Critical Radius CurveDensity** – Nationally, lane-departure crashes frequently occur within curves. Curves with radii between 500 and 1,200 feet [i.e., critical radius curves] have a higher severe crash rate than other curve radii and segments with a more curves in this range are considered to have greater risk. The risk factor is determined by the number of critical radius curves divided by the length of the segment. The county’s average critical curve radius density for these types of curves along roadway segments was 0.09 curve per mile. Any segment with a curve critical radius density greater than 0.09 received a star.
5. **Edge Risk Assessment (ERA)** – A rating system was developed to categorize the risk level of vehicles leaving the travel lane. Roads with a usable shoulder and reasonable clear zone received a rating of 1. Roads with little or no usable shoulder but with a reasonable clear zone received a rating of 2, as did roads with a usable shoulder but with fixed objects in the clear zone. Roads with no usable shoulder and fixed objects in the clear zone received a rating of 3. Examples of these edge risks are shown in Figure 2-5. Roads were evaluated via photos taken in the summer of 2013 to determine the rating. Roads with a rating of 2 or 3 received a star.

Detailed segment analysis and results for the county is provided in Chapter 4. A prioritization process for each roadway segment was put into place using the five risk factors by giving stars to each risk factor present. The highest-priority roadway segments received the most stars. In cases where roadway segments received the same number of stars, the ERA and ADT were used to break the tie.

¹ When a risk factor is present, the segment, curve or intersection is given a star. The more risk factors present (that is, more stars) indicates greater potential for a severe crash to occur.

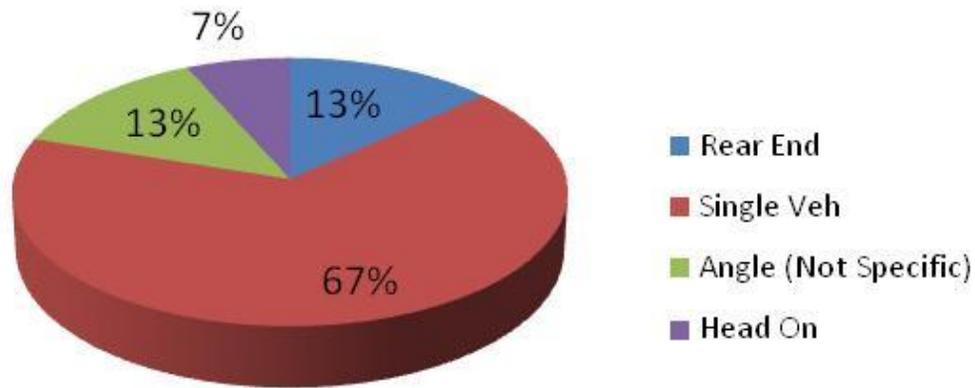


FIGURE 2-3
 Burleigh County Severe Crash Types on Rural Paved Roads (2008 to 2012)

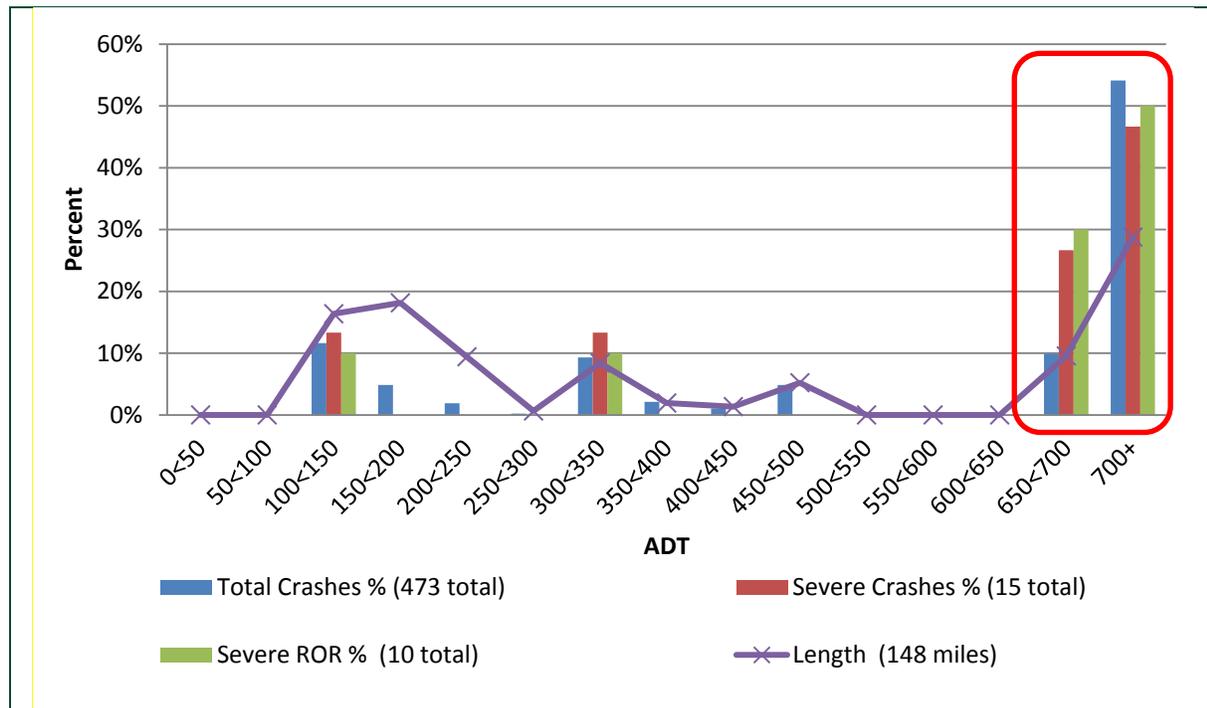


FIGURE 2-4
 Burleigh County Rural Roadway Segment Average Daily Traffic (ADT) Crash Data (2008 to 2012)



1 – Usable Shoulder, Reasonable Clear Zone

2 – No Usable Shoulder, Reasonable Clear Zone

2 – Usable Shoulder, Roadside with Fixed Obstacles

3 – No Usable Shoulder, Roadside with Fixed Obstacles

FIGURE 2-5
Sample Edge Risk Assessment Ratings and Descriptions

2.3.2 Rural Curves – Crashes on Paved Roads in Curves

Detailed crash analysis included horizontal curves on rural paved local roads. Research indicates horizontal curves with certain characteristics contribute to the overall frequency of lane-departure crashes. The 148 miles of rural paved roads in the county contain 43 curves totaling almost 8 miles in length (5 percent of the road system mileage).

With only 20 crashes, none of them severe crashes reported from 2008 to 2012, too few crashes occurred on these curves to serve as a reliable indicator of the relative degree of risk. However, statewide data show the importance of safety improvements on curves to reduce severe crashes since 32 percent of severe lane-departure crashes occur in curves. As a result, the LRSP team used characteristics of curves in the county where crashes had previously occurred as well as available information from similar analysis across the nation and statewide data. Results from *Cost-Benefit Analysis of In-Vehicle Technologies and Infrastructure Changes to Avoid Crashes Along Curves and Shoulders* (compiled by the University of Minnesota and CH2M HILL in June 2009) were also used in curve analysis and prioritization.

Based on a review of these sources, the following five risk factors were identified for crashes within curves in the county:

1. **Curve Radius** – In Burleigh County, curves with mid-range radii had higher crash densities (Figure 2-6), similar to the national data. An upper limit of 1,200 feet was used for at-risk curves, because 1,200 feet is a 60-mile-per-hour design speed based on AASHTO’s *A Policy on Geometric Design of Highways and Streets* (commonly referred to as the “Green Book,” 6th edition, 2011). A lower limit of 500 feet was used to represent the severe lane-departure crashes that were reported in the county from 2008 to 2012. Any curve with a radius between 500 and 1,200 feet received a star.

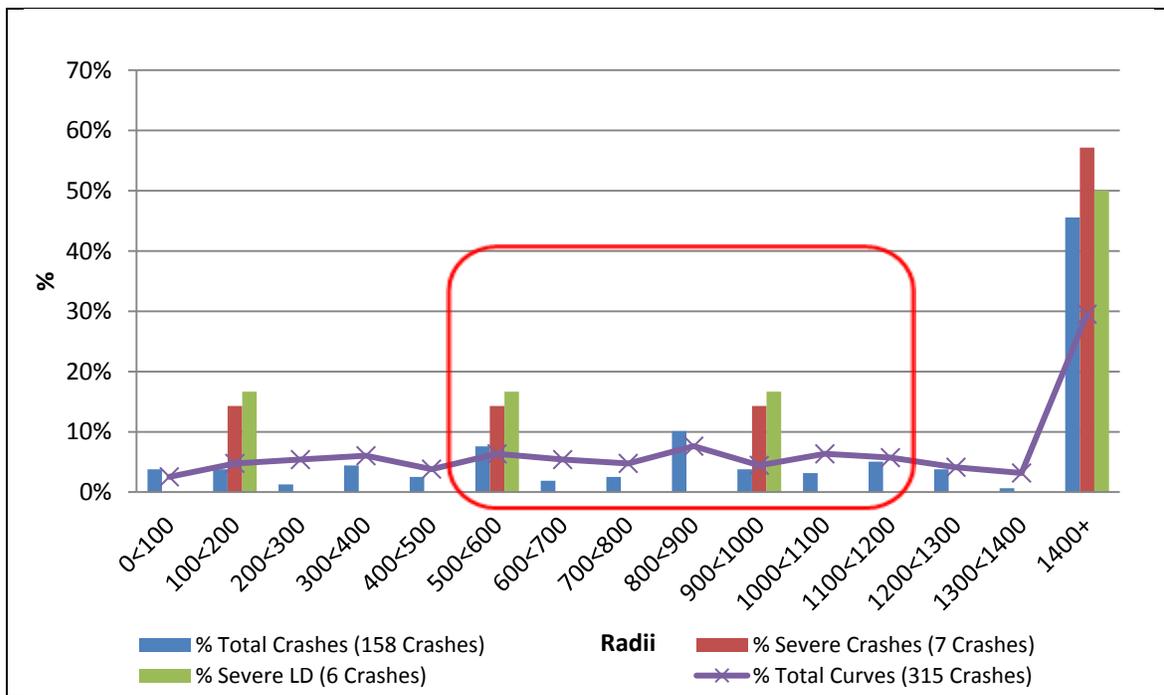


FIGURE 2-6
 Burleigh County Curve Crashes by Radii – 500 to 1,200 feet (2008 to 2012)

2. **Average Daily Traffic (ADT) -** Traffic volumes between 350 and 650 vehicles per day present a risk factor in the Burleigh County and represent a higher risk for crashes (Figure 2-7). Sixty-eight percent of crashes occurred in curves with this ADT, while only 28 percent of curves are represented in this range. Therefore, curves with an ADT between 350 and 650 vehicles per day received a star.

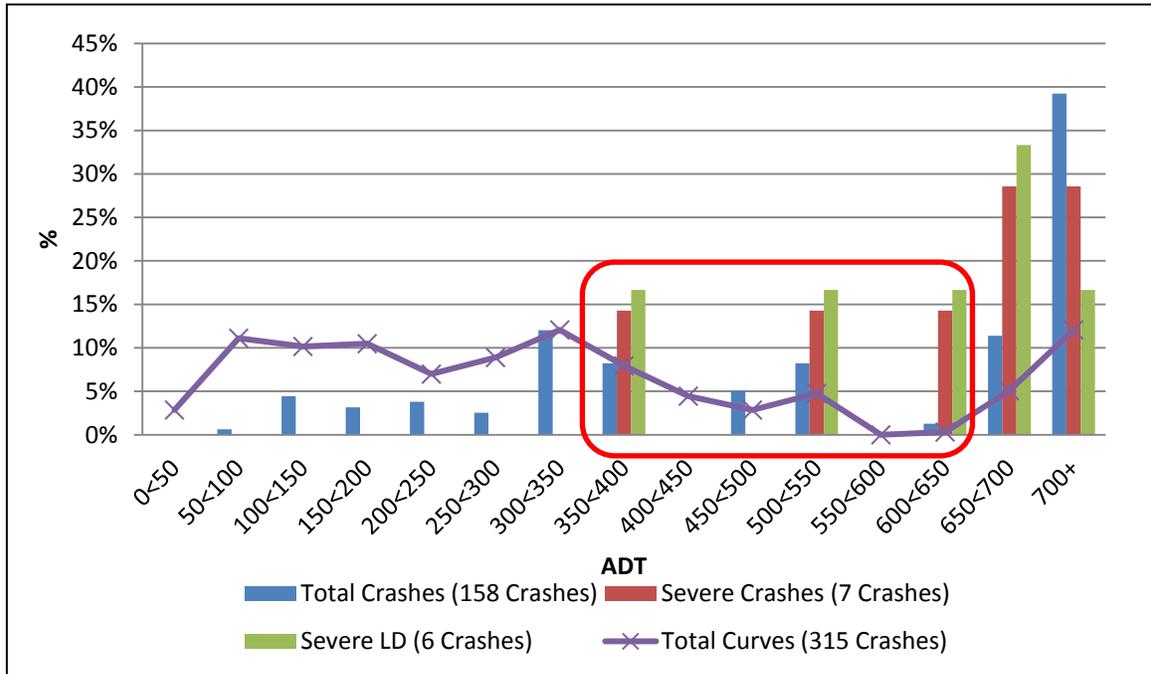


FIGURE 2-7
 Phase I Curve Crashes by Average Daily Traffic (ADT) – 350 to 650 Vehicles per Day (2008 to 2012)

3. **Intersection on the Curve -** In Burleigh County, the presence of an intersection within a curve increased the risk for a severe crash (Figure 2-8). Curves with at least one intersection within the curve received a star.
4. **Visual Trap -** A visual trap exists when the crest of a vertical curve is located before a horizontal curve or where a minor road, tree line, or line of utility poles continues on a tangent to the curve, thereby creating the illusion that the road continues straight ahead (Figure 2-9). The presence of a visual trap increased the risk of crashes in Burleigh County (Figure 2-8) and, therefore, received a star.
5. **Severe Crashes -** If a severe crash occurred on a curve between 2008 and 2012, the curve received a star.

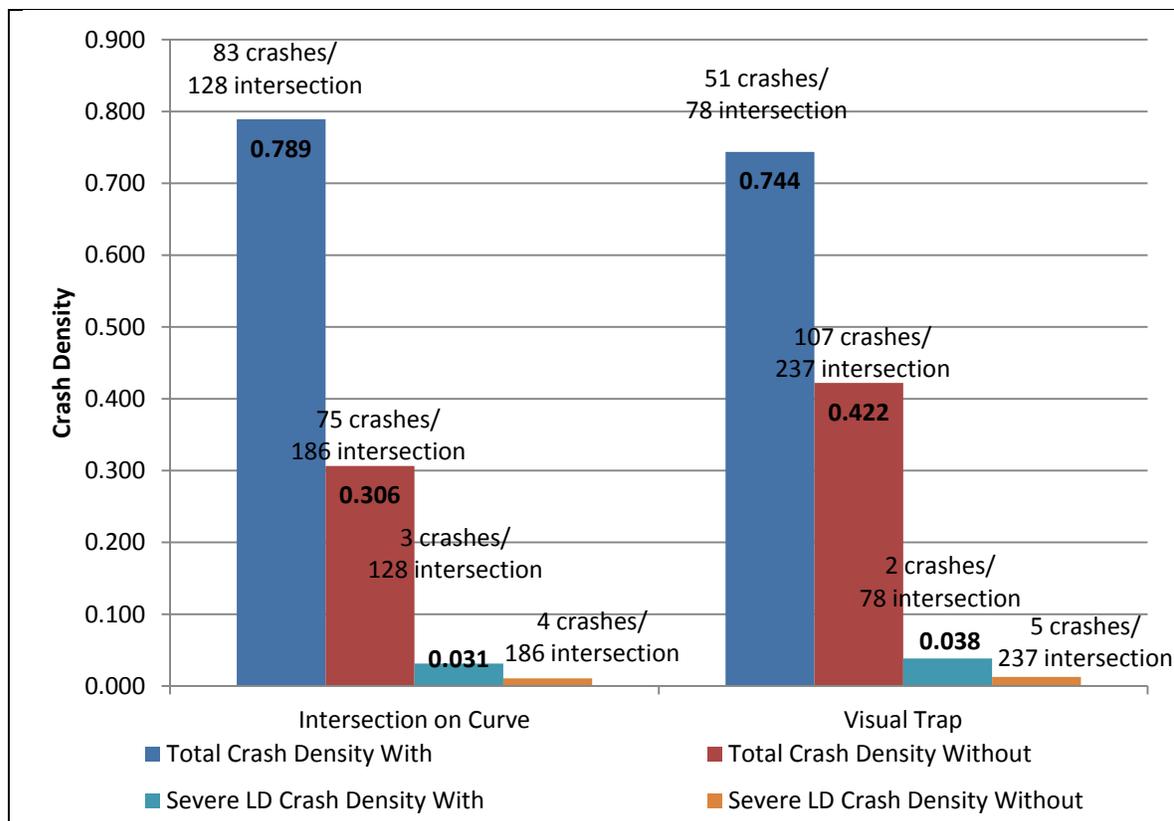


FIGURE 2-8
 Rural Curve Risk Factors for Burleigh County



FIGURE 2-9
 Example of a Visual Trap – Minor Road Intersects Roadway on a Curve

Based on 158 total crashes and 7 severe lane-departure crashes in the county, curves with intersections and visual traps have a higher crash density (are more at risk) than those without such features. These risk factors have also been observed nationally.

Detailed curve analysis and results for the county is provided in Chapter 4. The five risk factors were used to prioritize curves in the county, with the highest-priority curves receiving the most

stars. Curves were reviewed for proximity to high-priority curves and existing conditions as well.

Curves were screened for compliance with the *Manual on Uniform Traffic Control Devices* (MUTCD; 2009) requirement regarding traffic signs at horizontal curves. Under this requirement, a curve must have an advance horizontal alignment warning sign if the daily traffic is greater than 1,000 vehicles per day and if speed differentials (between the speed limit and the advisory speed) meet certain thresholds. A horizontal alignment sign and advisory speed plaque are recommended when the speed differential is 5 mph, and they are required if the speed differential is 10 mph or greater. Curve radius was used to estimate whether individual curves meet the speed differential requirements for advance warning signs and advisory speed plaques. The estimated advisory speeds (assuming a 55-mph speed limit, 6-percent superelevation, and a friction factor consistent with the AASHTO Green Book) based on the curve radius are as follows:

- 900 to 1,100 feet – 50 mph
- 700 to 900 feet – 45 mph
- 500 to 700 feet – 40 mph
- 300 to 500 feet – 35 mph
- Under 300 feet – 30 mph or slower

For this analysis, no suggested advisory speed is provided for curves with a radius under 300 feet; these curves should be investigated further by the County to determine the appropriate advisory speed. Additionally, it is recommended that the County complete its own ball-bank indicator assessment of all curves to determine whether the curves on their road system meet the MUTCD requirement and to verify suggested advisory speeds.

If a curve was not selected as a project candidate through the LRSP risk assessment process (although the curve has an ADT greater than 1,000 vehicles per day and a radius under 1,100 feet), the curve was flagged for the County to determine the need for additional signs based on MUTCD guidance.

2.3.3 Rural Intersections – Crashes at Thru-STOP Intersections

On Burleigh County's rural local roads, a severe crash is most common at Thru-STOP intersections,² where 100 percent of severe intersection crashes (6 crashes) occurred from 2008 to 2012. Severe right-angle and angle crashes are the most common types of crashes at these intersections (Figure 2-11). While there are few crashes in the county, statewide crash data supports these crash types as the most common at rural Thru-STOP locations.

² Those intersections where traffic on the more heavily used road may proceed through the intersection without stopping, while traffic on the less-used crossroad must stop at the STOP sign before proceeding through the intersection.

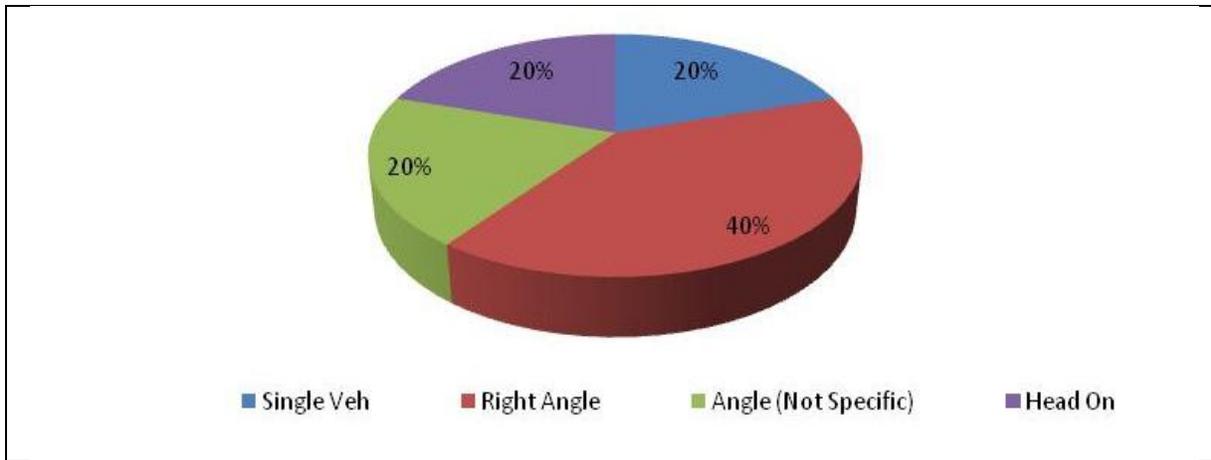


FIGURE 2-11
 Burleigh County Rural Thru-STOP Intersections Severe Crash Types (2008 to 2012)

In Burleigh County, 63 rural intersections with 58 Thru-STOP locations were reviewed. The average severe crash density at rural Thru-STOP locations is 0.003 severe crash per intersection per year. This low density supports assessing an intersection risk based on the characteristics of the locations where severe crashes occurred. The following seven rural Thru-STOP risk factors were identified for severe right-angle crashes in the county:

1. **ADT Cross Product** - 100 percent of the severe right angle crashes at rural Thru-STOP intersections occurred at intersections with an ADT Cross Product³ of major and minor entering vehicles greater than 100,000 (Figure 2-12). An intersection was considered to have a higher risk of severe right angle crashes if the ADT Cross Product was greater than 100,000. These intersections received a star.

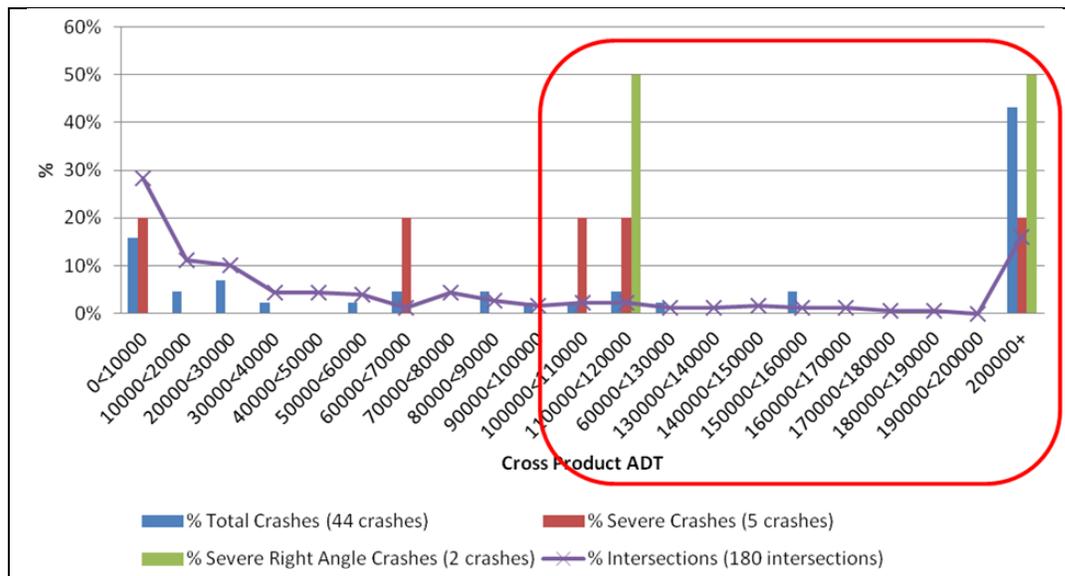


FIGURE 2-12
 Phase I Rural Intersection ADT Cross Product (2008 to 2012)

³ The ADT Cross Product is the major-street entering volume multiplied by the minor-street entering volume.

2. **Skew** - As the intersection skew (the angle at which one road intersects another) increases, the crash risk also increases (Figure 2-13). At a 20-degree skew, the crash risk compared to that of a 90-degree intersection is increased by approximately 10 percent. While the county's severe right-angle crash data set was too small to determine if skew plays a role in crashes, it has been proven nationally that the greater the skew, the greater the likelihood for a crash (Figure 2-14). Intersections with a skew greater than 20 degrees received a star.

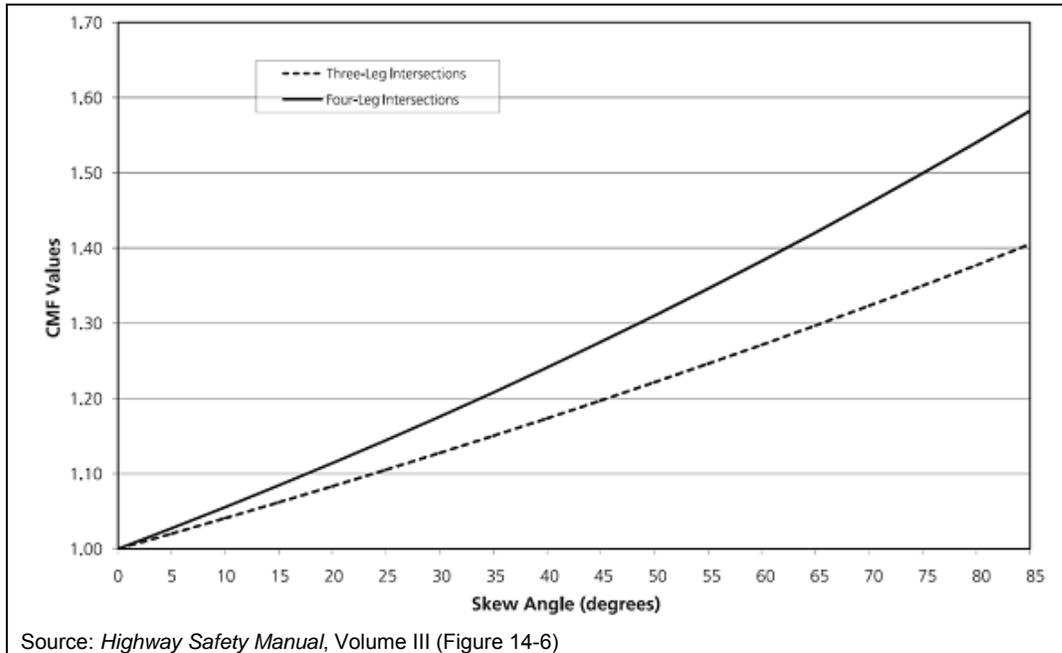


FIGURE 2-13
 Intersection Skew Risk

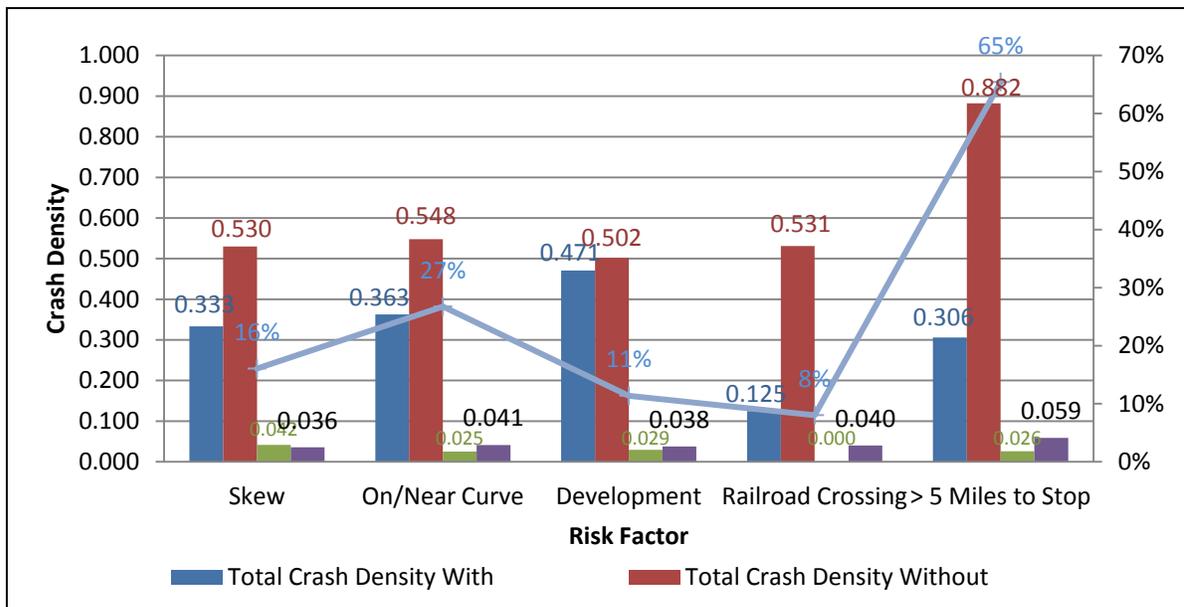


FIGURE 2-14
 Rural Intersection Risk Factors for the Phase I Counties (2008 to 2012)

3. **On or Near a Curve** – Research has shown that intersections located on or near a horizontal curve are subject to a higher level of risk. In this analysis, intersections located on or near a horizontal curve received a star.
4. **Development Present** – Research has shown that intersections with commercial development in one or more quadrants have a higher level of risk, possibly due to vehicles entering or exiting the development. Private residences or farms were not included as development. Burleigh County intersections with development present had more severe crash rates (Figure 2-14) and therefore received a star.
5. **Railroad Crossing** – Intersections on or near a railroad crossing are subject to increased risk because drivers must navigate the railroad tracks while approaching the intersection. National data were used for this risk factor due to the small number of severe crashes in the county. An intersection with a railroad crossing on one of the approaches received a star.
6. **Previous STOP More than 5 Miles Before the Intersection** – When traveling longer distances without encountering a STOP sign, drivers lose attention, and research has shown those intersections to be at higher risk (Figure 2-14). National data were used to confirm this risk factor. Intersections without a STOP sign within 5 miles received a star.
7. **Total Crashes** – If an intersection had any type of crash from 2008 to 2012, the intersection received a star.

Burleigh County had 108 total intersection crashes from 2008 to 2012, and only 6 of those crashes are severe. Due to the small number of severe crashes, some of the data and risk factors may be misleading based on the county data alone. National data were frequently used to confirm intersection risk factors.

Detailed intersection analysis and results for the county is provided in Chapter 4. Due to the large number of intersections, each intersection was prioritized using the seven risk factors by giving stars to each risk factor present. The highest-priority intersections received the most stars. In cases where intersections received the same number of stars, crash costs were used to break the tie and determine priority.

2.3.4 Urban Roadway Segments – Cities with Populations Greater than 5,000 (Bismarck)

Approximately 95 miles of urban local roads were reviewed, where 8,764 total and 67 severe crashes occurred from 2008 to 2012. Nationally, research has shown that rear-end and head-on crashes are most common on urban local roads. In Bismarck, 2,327 rear-end crashes and 151 head-on crashes occurred from 2008 to 2012.

Although a variety of data was collected for each local segment, only the following four risk factors were identified for Bismarck:

1. **Average Daily Traffic (ADT)** – Both rear-end and head-on crashes were overrepresented in road corridors with ADT volumes greater than 4,500 vehicles per day (Figure 2-15). (Note: This ADT volume includes data from Minot and Devils Lake.) Corridors with an ADT greater than 4,500 vehicles per day received a star.

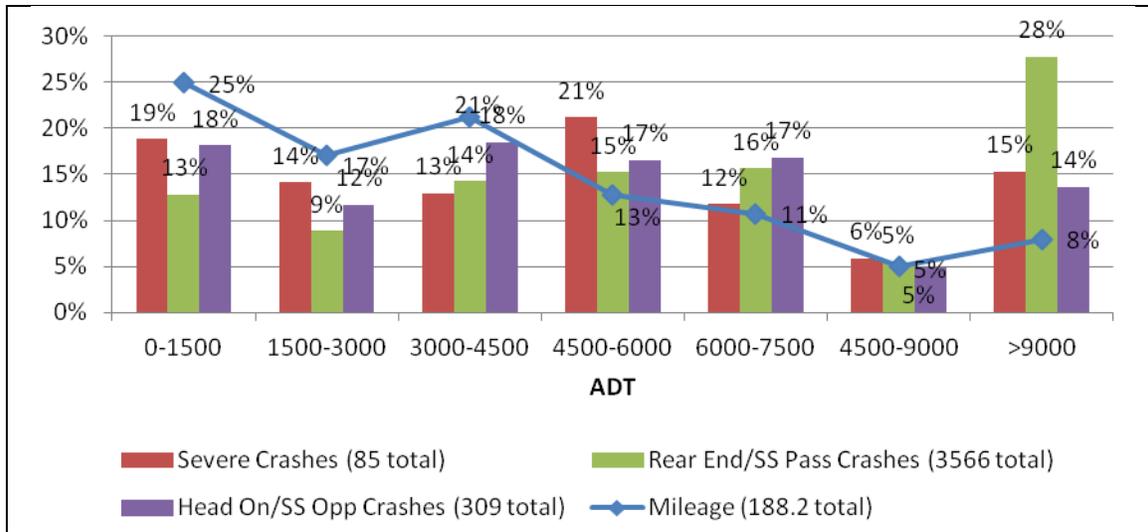


FIGURE 2-15
 Phase I Urban Segment Average Daily Traffic (ADT) (2008 to 2012)

- Access Density** - Rear-end and head-on crashes are overrepresented in Bismarck along corridors with access densities greater than or equal to 30 access points per mile (Figure 2-16), and therefore received a star.

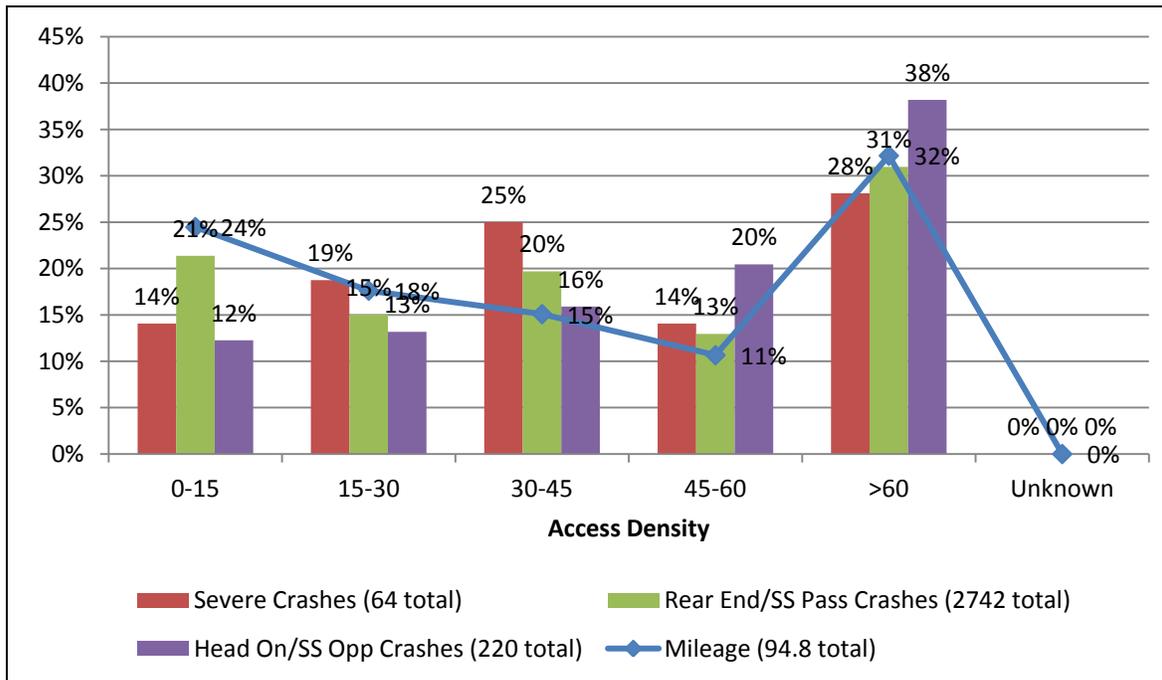


FIGURE 2-16
 Bismarck Urban Roadway Segment Access Density (2008 to 2012)

- Road Geometry** - Crashes are overrepresented per corridor mile on roadways with three or more lanes (Figure 2-17), and were given a star.

4. **Speed Limit** –Severe rear-end and head-on crashes were overrepresented in low-speed corridors (40 mph or less) (Figure 2-18), and therefore received a star.

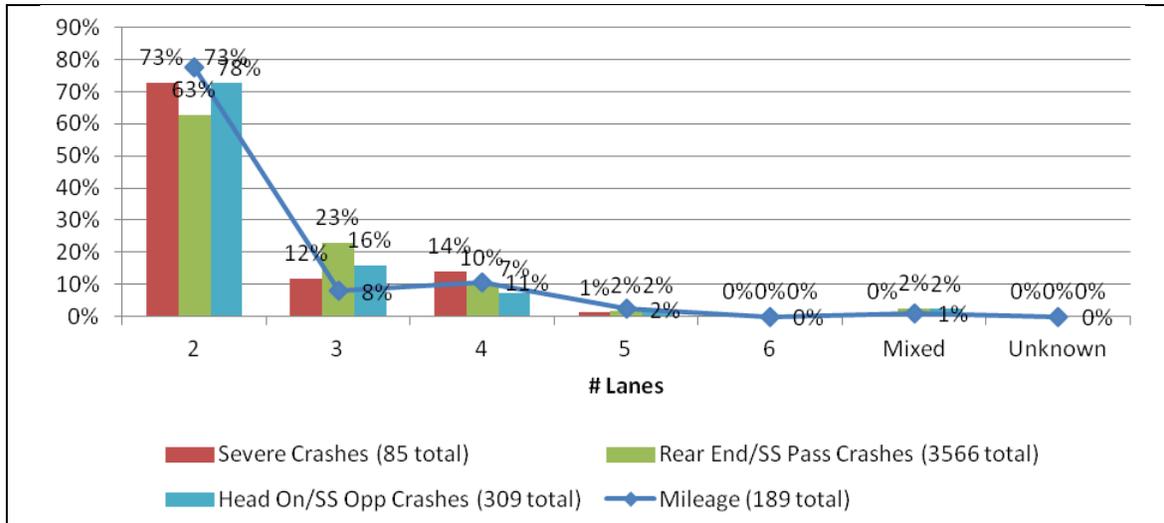


FIGURE 2-17
 Phase I Urban Road Geometry (2008 to 2012)

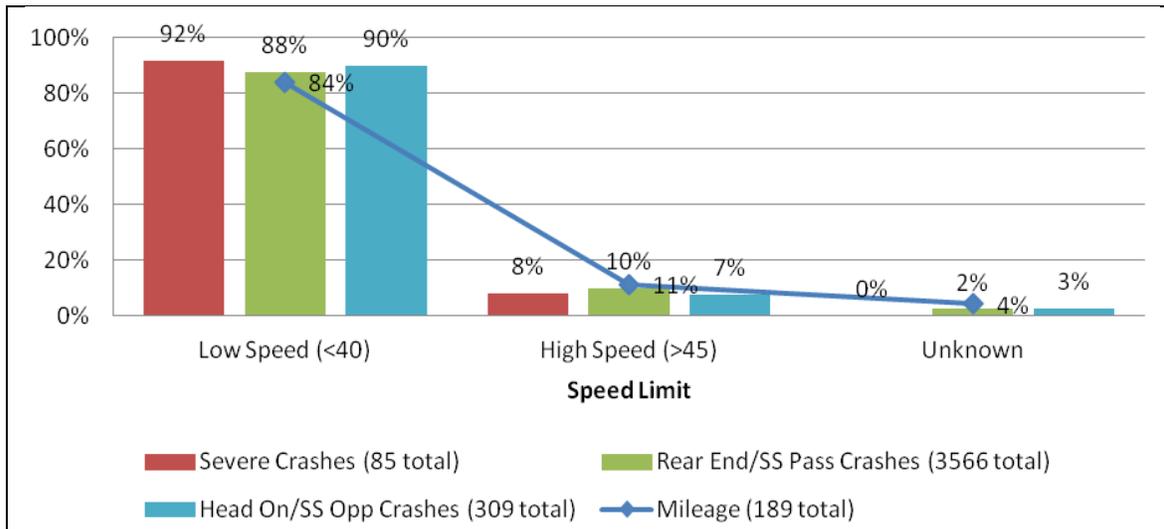


FIGURE 2-18
 Phase I Urban Roadway Segment Crashes by Speed (2008 to 2012)

Detailed urban segment analysis and results for Bismarck is provided in Chapter 4. The four risk factors were used to prioritize roadway segments, with the highest-priority segments receiving the most stars. High-priority roadway segments were also reviewed from a corridor perspective so that suggested safety improvement projects create a consistent corridor throughout the urban area.

2.3.5 Urban Intersections – Right-Angle Crashes, Cities with Populations Greater than 5,000 (Bismarck)

In Bismarck, 157 intersections including 72 signalized intersections were analyzed. Of the over 3,000 total crashes, only 26 severe crashes occurred at the Bismarck urban intersections analyzed. These data support assessing an intersection’s risk based on the characteristics of locations with severe crashes. A variety of information was collected on each intersection and from that, four risk factors for right angle crashes were chosen:

1. **Traffic Control Device** – Severe crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-19). Therefore, signalized intersections received a star.

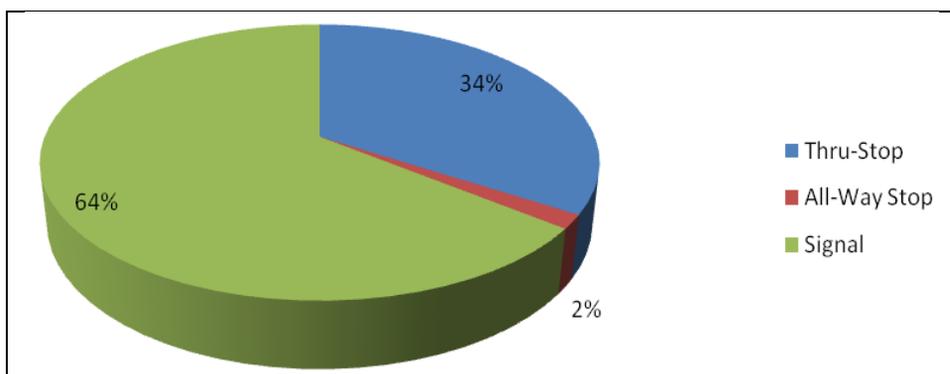


FIGURE 2-19
Phase I Urban Severe Crashes by Intersection Traffic Control Device (2008 to 2012)

2. **Entering ADT** – Higher volumes of vehicles entering intersections was considered a risk factor. Approximately 67% of right angle crashes at signalized intersections in Bismarck occurred at intersections with an entering vehicles ADT between 15,000 and 30,000 vehicles per day (Figure 2-20). Therefore, any intersection with an entering vehicles ADT between 15,000 and 30,000 vehicles per day received a star.

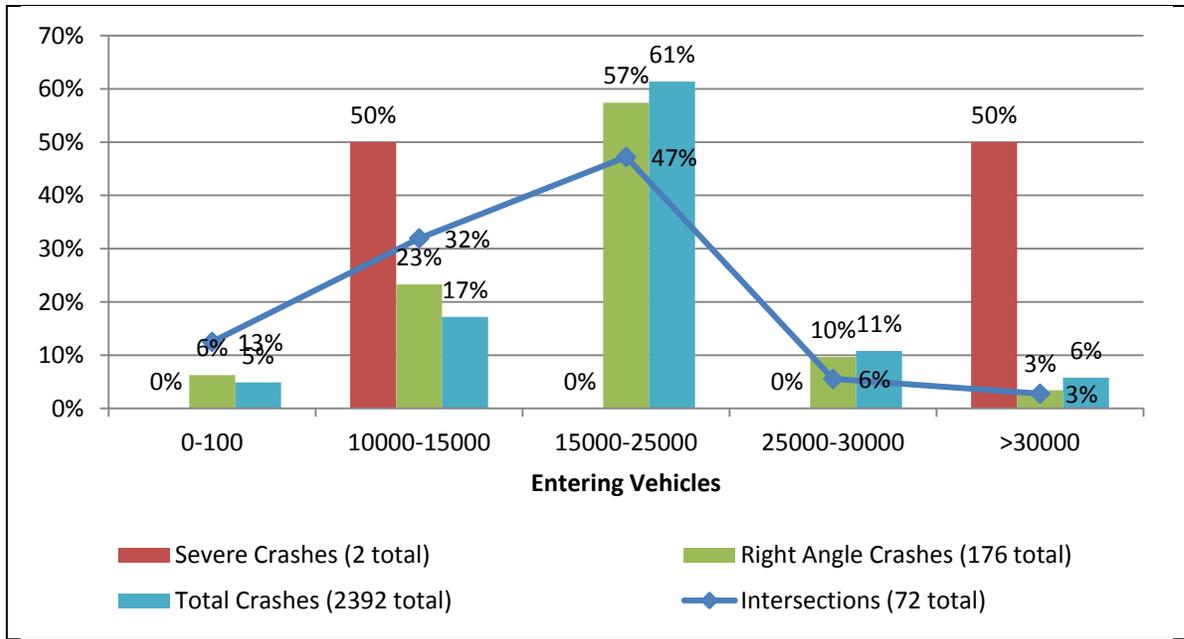


FIGURE 2-20
Bismarck Urban Crashes by Intersection Entering Vehicles Average Daily Traffic (ADT)

- Road Geometry** - Severe and right-angle crashes were overrepresented on divided roadways with signalized intersections (Figure 2-21). Therefore, intersections on divided roadways received a star.
- Severe Crashes** - Any intersection where one or more severe crashes had occurred received a star.

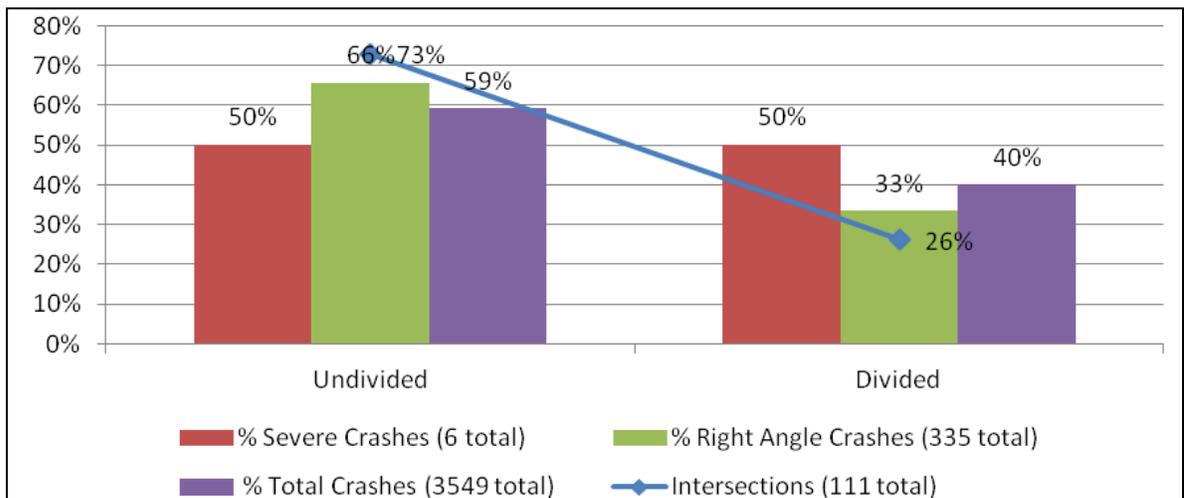


FIGURE 2-21
Phase I Urban Crashes by Intersection Configuration

Detailed urban intersection right angle analysis and results for Bismarck is in Chapter 4. The four risk factors previously listed were used to help prioritize intersections with the highest priority intersections receiving the most stars. Right angle crash intersections were reviewed as

urban corridors to create a consistent corridor throughout the urban area and to discourage implementing strategies at just one or two high priority intersections along a corridor if the remaining intersections have the same characteristics.

2.3.6 Urban Intersections – Pedestrian/Bicycle Crashes, Cities with Populations Greater than 5,000 (Bismarck)

Similar analysis was completed for pedestrian and bicycle crashes at intersections. Only 4 severe pedestrian and bicycle crashes occurred at Bismarck intersections from 2008 to 2012, therefore the data has been combined with all of the Phase I urban intersection analysis. Four risk factors were identified based on the analysis:

1. **Traffic Control Device** - Severe pedestrian and bicycle crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-22). Therefore, signalized intersections received a star.

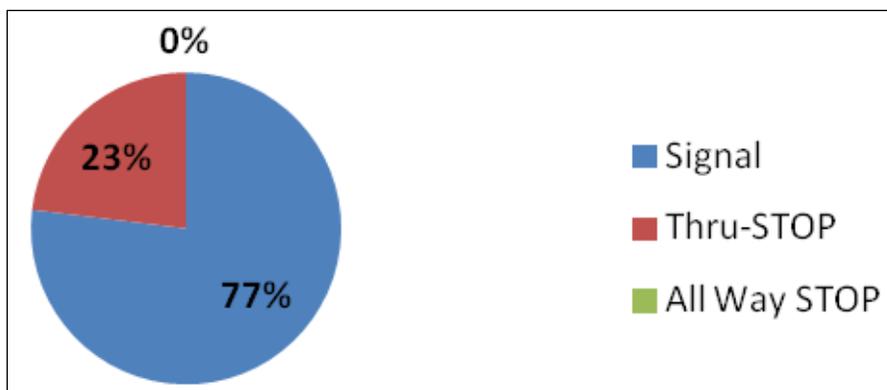


FIGURE 2-22
Phase I Urban Pedestrian/Bike Crashes by Intersection Traffic Control Devices

2. **Entering Vehicles ADT** - A high volume of vehicles entering an intersection was considered a risk factor. Over 70% of the severe pedestrian and bicycle crashes occurred at intersections with an entering vehicles ADT greater than 15,000 vehicles per day. Therefore, any intersection with an entering vehicles ADT greater than 15,000 vehicles per day or greater received a star.
3. **Pedestrian Generator** - Intersections with adjacent land uses likely to generate pedestrian traffic (such as a bar or gas station) had a higher pedestrian and bicycle crash risk than other intersections (Figure 2-23). Therefore, an intersection with a pedestrian generator present received a star.
4. **Pedestrian and Bicycle Crashes** - Any intersections that had any bicycle or pedestrian crash from 2008 to 2012 received a star.

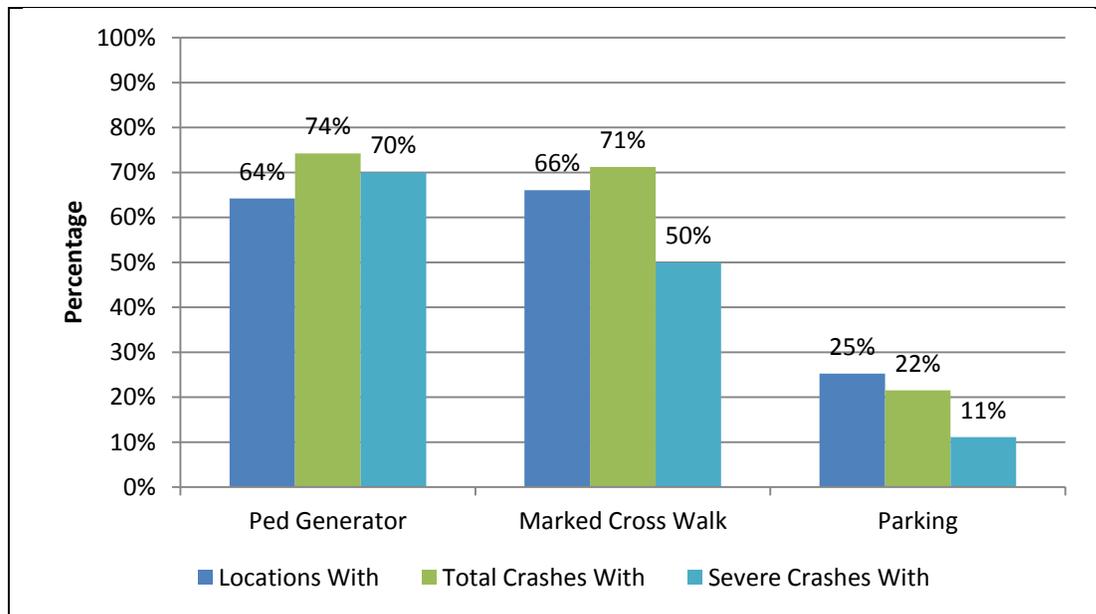


FIGURE 2-23
Phase I Pedestrian and Bicycle Crashes at Urban Signalized Intersection with a Pedestrian Generator

Detailed urban intersection pedestrian and bicycle analysis and results for Bismarck are provided in Chapter 4. The four risk factors were used to prioritize intersections with the highest-priority intersections receiving the most stars. Pedestrian and bicycle crash intersections were reviewed as urban corridors to create a consistent corridor throughout the urban area.

2.4 Burleigh County Risk Summary

Table 2-3 summarizes the risk factors, ranges, and sources used in the county’s systemic analysis.

TABLE 2-3
Burleigh County Risk Summary

Risk Factors	Burleigh County		
	Minimum	Maximum	Source
Rural Segments			
ADT Range	650	Unlimited	Burleigh County
Lane Departure Density	0.23	Unlimited	Average Burleigh County
Access Density	10	Unlimited	Burleigh County
Curve Critical Radius Density	0.09	Unlimited	Average Burleigh County
ERA	2	3	Burleigh County
Rural Curves			
Radius	500	1200	Northeast Region, Burleigh County, Ward County
ADT Range	250	650	Northeast Region, Burleigh County, Ward County
Intersection on Curve	Present		National
Visual Trap	Present		National
Severe Crashes	1	Unlimited	Burleigh County

TABLE 2-3
 Burleigh County Risk Summary

Risk Factors	Burleigh County		
	Minimum	Maximum	Source
Rural Intersections			
ADT Cross Product	100000	Unlimited	Northeast Region, Burleigh County, Ward County
Skew	Present		National
On/Near Curve	Present		National
Development	Present		National
Railroad Crossing	Present		National
Previous STOP >5 Miles	Present		National
Total Crashes	1	Unlimited	Burleigh County
Urban Segments			
ADT	4500	Unlimited	Northeast Region, Burleigh County, Ward County
Road Geometry	Multi-Lane		Northeast Region, Burleigh County, Ward County
Access Density	30	Unlimited	Northeast Region, Burleigh County, Ward County
Corridor Speeds	Low		Northeast Region, Burleigh County, Ward County
Urban Right Angle Crash Corridors			
Entering ADT	7500	Unlimited	Burleigh County
Traffic Control	Signal		Burleigh County
Road Geometry	Divided		Burleigh County
Severe Crashes	1	Unlimited	Burleigh County
Urban Ped/Bike Crash Corridors			
Traffic Control	Signal		Northeast Region, Burleigh County, Ward County
Entering ADT	15,000	Unlimited	Northeast Region, Burleigh County, Ward County
Pedestrian Generator	Yes		Northeast Region, Burleigh County, Ward County
Pedestrian/Bicycle Crashes	1	Unlimited	Northeast Region, Burleigh County, Ward County



3.0 Priority Safety Strategies

3.1 Background

A variety of strategies are available to address each safety emphasis area. The implementation of high priority strategies will assist state and local agencies in reducing traffic-related fatalities and serious injuries. The primary sources of these strategies are the National Cooperative Highway Research Program (NCHRP) *Report 500* series and the National Highway Traffic Safety Administration's (NHTSA's) *Countermeasures That Work*. Each guide includes a description of the problem, strategies, and model implementation processes. In addition, to assist practitioners in assessing the safety strategies, the guides document the expected effectiveness of each strategy by assigning them to one of the following categories:

- **Proven:** These strategies have been used in multiple locations with multiple studies, and have been demonstrated to be effective.
- **Tried:** These strategies have been implemented in many locations; however, no rigorous evaluations have been completed to determine their effectiveness.
- **Experimental:** These strategies represent ideas that are considered to be effective; however, the ideas have not been widely implemented or evaluated.

3.2 Initial/Comprehensive List of Potential Strategies

NCHRP safety strategies were the basis for identifying safety strategies for the LRSP. For the LRSP process, NDDOT team members sought to identify viable safety strategies for the top safety emphasis areas (see Tables 3-1 through 3-9). The LRSP team reviewed the full range of safety strategies, and did an initial screening based on cost and effectiveness. For example, the NCHRP report lists over 70 potential strategies to address intersection safety. The screening conducted by the LRSP team narrowed the list of strategies for all safety emphasis areas down to strategies considered to be the most applicable in North Dakota.

Behavioral strategies include information on the expected impact of the strategy based on current practice and results. Strategies with high impact have been shown to have influence on driver behavior.

Each infrastructure strategy includes information on the relative cost to implement or operate, along with the typical timeframe for implementation. Relative costs were separated into three categories:

- Low = less than \$10,000 (per mile or location)
- Medium = between \$10,000 and \$100,000 (per mile or location)
- High = more than \$100,000 per mile or location

The typical timeframe to implement the strategy was also separated into three categories:

- Short = less than 1 year to implement
- Medium = between 1 and 2 years to implement
- Long = more than 2 years to implement

TABLE 3-1
Impaired Driving Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics	Impact
A – Eliminate Drinking and Driving	A1 – Require responsible beverage service policies for alcohol servers and retailers	Proven	Advocate for responsible alcohol server and retailer training	Medium
	A2 – Employ screening and brief interventions regarding impaired driving risks	Tried	Enforcement or health care provider conducts brief intervention with crash victim after an alcohol-related crash (traumatic event) on risks and consequences of drinking and driving. Develop fact sheets and materials to be used. North Dakota Impaired Driver Safety Facts: http://www.ugpti.org/rtssc/briefs/downloads/2012_Impaired.pdf	Medium
	A3 – Support community programs for alternative transportation	Tried	Employ “Safe Cab” initiatives via partnership among beer distributors, bar owners, and county/city community programs. Conduct public outreach on accessible safe-ride alternatives.	Medium
	A4 – Promote sobriety initiatives for driving-under-the-influence (DUI) offenders	Proven	Promote 24/7 and ignition interlock programs through educating local judicial and legal counsel members, probation officers, and counseling and treatment providers, as well as the general public.	Medium
B – Enforce DUI Laws	B1 – Conduct regular high-visibility DUI enforcement saturations	Proven	A saturation is a multi-agency, multi-squad car enforcement effort. Agencies work in collaboration to provide high-visibility enforcement for high-risk roadways. High visibility enforcement includes multiple jurisdictions and/or multiple squads that are out at the same time patrolling in brightly colored vests, using signage about the enforcement and engaging the media for public outreach about the enforcement effort.	High
	B2 – Conduct enforcement, education and awareness campaign of the targeted enforcement of zero tolerance laws for drivers under age 21	Tried	Publicizing is best done through community events for the local media and a public education campaign in the community about the high visibility enforcement effort.	Low
	B3 – Expand use of DUI sobriety checkpoints	Proven	Local law enforcement to expand the use of multi-jurisdictional sobriety checkpoints that include public outreach/media campaigns about the checkpoints.	High
	B4 – Monitor convicted DUI offenders closely	Proven	Monitor judicial sentencing of local DUI courts or intensive supervision programs	High

TABLE 3-2
 Seat Belt Use Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics	Impact
A – Enforce seat belt use laws	A1 – Conduct highly publicized enforcement campaigns to maximize restraint use. Specifically, nighttime belt enforcement saturation.	Proven	Publicizing is best done through community events for the local media and a public education campaign in the community about the enforcement. Methods for nighttime enforcement include having multi-agency and multiple squad cars in well-lit areas where slow-moving vehicles are passing and conducting seat belt observations for a limited time.	High
	A2 – Pursue local ordinances for primary enforcement of seat belt laws.	Proven	Under tribal and/or local ordinance, pursue primary seat belt enforcement for occupants in all seating positions. <i>White Earth Tribal Council passes primary seat belt law.</i> http://staging.dl-online.com/content/white-earth-council-passes-seat-belt-law	High
B – Maximize use of occupant restraints by all vehicle occupants	B1 – Encourage employers to 1) offer education programs to employees, and 2) enact traffic safety policies with clear consequences for failure to comply.	Tried	Utilize materials and policy statements designed for employers by Network of Employers for Traffic Safety. For example, seat belt use employer polices and resources: http://www.mnsafetycouncil.org/nets/EducationMaterials.cfm	Medium
	B2 – Brief intervention regarding unbelted risks	Tried	Enforcement or health care provider conducts brief intervention with crash victim after an unbelted crash (traumatic event) on unbelted risks and consequences. Develop fact sheets and materials to be used. North Dakota Seat Belt Fact Sheet: http://www.ugpti.org/rtssc/briefs/downloads/2012_SeatBelts.pdf	Medium

TABLE 3-3
Motorcycle Safety Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics	Impact
A – Reduce the number of motorcycle crashes due to rider impairment	A1 – Publicize and conduct a high-visibility enforcement of all laws pertaining to motorcycle riding.	Proven	Publicizing is best done through community events for the local media and a public education campaign in the community about the enforcement. High-visibility enforcement is when multiple jurisdictions and/or multiple squads are out at the same time patrolling in brightly colored vests, signage, and media outreach about the enforcement. Methods for nighttime enforcement include having multi-agency and multiple squad cars in well lit areas where slow-moving riders are passing.	High
	A2 – Support law enforcement to identify specific motorcycle rider impairment behaviors that have been shown to contribute to crashes.	Proven	Provide enforcement with motorcycle rider DUI detection resources. National Highway Traffic Safety Administration (NHTSA) Motorcycle rider DUI Detection Guide: http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/610DWIMotorcyWeb/pages/	Medium
B – Reduce the number of motorcycle crashes due to unlicensed or untrained motorcycle riders	B1 – Ensure that licensing and rider training programs adequately teach and measure skills and behaviors required for crash avoidance.	Tried	Host local motorcycle safety training courses to provide greater access to riders.	Medium
	B2 – Identify and remove barriers to obtaining a motorcycle endorsement.	Tried	Host local motorcycle skills testing programs to enhance rider safety and prepare and encourage riders to obtain motorcycle endorsement.	Medium
C – Increase visibility of riders	C1 – Increase the awareness of the benefit of high-visibility clothing and rider conspicuity.	Experimental	Publicizing is best done through the local media and a public education campaign in the community.	Low
D – Reduce the severity of motorcycle crashes	D1 – Increase the use of FMVSS 218-compliant helmets.	Proven	Conduct local public outreach on the benefits of motorcycle helmet use.	Low

TABLE 3-4
Speed and Aggressive Driving Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics	Impact
A – Deter aggressive driving in specific populations, including those with a history of such behavior, and at specific locations	A1 – Review crash data	Proven	Analyze crash data to define high-risk speed locations for enhanced enforcement and public outreach efforts.	High
	A2 – Conduct high-visibility targeted enforcement of speeding and aggressive driving	Proven	Agencies work in collaboration to provide high-visibility enforcement for high-risk roadways. High-visibility enforcement includes multiple jurisdictions and/or multiple squads that are out at the same time patrolling in brightly colored vests, using signage about the enforcement, and engaging the media for public outreach about the enforcement effort.	High
	A3 – Pursue local ordinances to utilize automated enforcement in high-risk areas.	Proven	Under local ordinance, pursue the use of automated enforcement (speed and red-light running cameras) in high-risk highway work zones and school crossing zones. Ohio Law Enforcement Liaison Coordinator for example local ordinances using automated enforcement: http://ohiohighwaysafetyoffice.ohio.gov/doc/2013LELMap.pdf	High
B – Maximize driver compliance and awareness	B1 —Brief intervention regarding speed	Tried	Enforcement or health care provider conducts brief intervention with crash victim after crash due to excessive speed (traumatic event) on speed-related risks and consequences. Develop fact sheets and materials to be used. ND Speed Fact Sheet: http://www.ugpti.org/rtssc/briefs/	Medium
	B2 – Increase driver awareness of speed using speed reader boards or driver feedback signs	Proven	Speed reader boards provide feedback to drivers on their actual speed. Some flash warnings when speeds reach a pre-set limit. Most effective in slowing traffic on residential streets, near school zones, and around playgrounds.	Medium

TABLE 3-5
Young Driver Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics	Impact
A – Publicize, enforce, and adjudicate laws pertaining to young drivers	A1 – Publicize and conduct a high-visibility enforcement graduated drivers license (GDL) restrictions; cell and texting laws; underage drinking and driving; and seatbelt laws	Proven	Publicizing is best done through community events for the local media and a public education campaign in the community about the applicable laws, parental involvement and the enforcement. High-visibility enforcement is when multiple jurisdictions and/or multiple squads are out at the same time patrolling in areas frequented by teen drivers, with brightly colored vests, signage, and media outreach about the enforcement.	High
B – Actively engage parents in managing teen driving skill development	B1 – Encourage driver education providers (local schools and private providers) to require parent education component	Tried	Local driver education providers including local schools and private providers require 2-hour parent education program to educate parents about teen driving risks, Graduated driving license (GDL) provisions and their protections, parental role in supervising teen driving skill development, encourage selection of safer vehicles for teen driver, and to facilitate Parent/Teen Driving Agreements. <i>Teendriversource: Research Put into Action</i> for PowerPoint presentations, parent/teen activities and other tools to be adopted for driver education providers. www.teendriversource.org <i>Teen Driving Parents/Alive at 25</i> for 1-hour parent, 4-hour teen driving program including comprehensive publication, <i>Teen Driver; A Family Guide to Teen Safe Driving</i> : http://www.nsc.org/products_training/Products/MotorVehicleSafety/Pages/TeenDriving.aspx	Medium
	B2 – Promote use of in-vehicle teen safety technology	Experimental	To help reduce and eliminate teen driving distractions and high-risk driving maneuvers (excessive speed, hard acceleration, deceleration, and swerves) promote the use of in-vehicle monitoring devices for parental monitoring and coaching.	High
	B3 – Develop safe teen driving outreach materials for parents	Tried	Encourage driver education, local insurance, and public health organizations to provide parents of teen drivers with brochures, guides, and web resources to help parents understand risks, GDL provisions, their role, and how to develop a Parent/Teen Driving Agreement, and online driving logs. <i>Parents are the Key</i> for free downloadable resources (can be customized): www.cdcgov/ParentsAreTheKey/ <i>Teen Driving Parents/Alive at 25</i> for the comprehensive guide: <i>Teen Driver; A Family Guide to Teen Safe Driving</i> : http://www.nsc.org/products_training/Products/MotorVehicleSafety/Pages/TeenDriving.aspx	Medium
	B4 – Provide information on insurance provider parent-teen safe driving programs	Tried	Inform parents of local insurance programs providing policy discounts for parents and their teen enrolling in parent-teen safe driving programs.	Medium
C – Educate Young Drivers	C1 – Brief interventions regarding driving risks and consequences	Tried	When teen driver receives a moving violation or is involved in a crash, enforcement or health care provider conducts brief intervention with crash victim after crash (traumatic event) on driving risks and consequences.	Medium

TABLE 3-6
 Speeding Strategies (Infrastructure Strategies)

Objectives	Strategies	Cost to Implement and Operate ¹	Effectiveness	Timeframe for Implementation ²
A – Set appropriate speed limits	A1 – Install speed signage using variable message signs in school zones	Low	Tried	Medium
B – Communicate appropriate speeds through use of traffic control devices	B1 – Implement active speed warning signs, including dynamic message boards at rural to urban transitions	Low	Tried	Medium
	B2 – Use in-pavement measures to communicate the need to reduce speeds	Moderate	Tried	Short
C – Ensure that roadway design and traffic control elements support appropriate and safe speeds	C1 – Effect safe speed transitions through design elements and on approaches to lower-speed areas	High	Tried	Long
Notes: ¹ Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection ² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years Source: NCHRP <i>Report 500</i> Series, 2004				

TABLE 3-7
Lane Departure Strategies (Infrastructure Strategies)

Objectives	Strategies	Cost to Implement and Operate ¹	Effectiveness	Timeframe for Implementation ²
A – Keep vehicles from encroaching on the roadside	A1 – Install shoulder rumble strips	Low	Proven	Short
	A2 – Install enhanced pavement markings, edge line rumble strips, modified shoulder rumble strips, 6-inch edge line, or embedded wet-reflective pavement markings on sections with narrow or no paved shoulders	Low	Experimental / Tried	Short
	A3 – Provide enhanced shoulders, lighting, delineation (for example, Chevrons), or pavement markings for sharp horizontal curves	Low	Tried / Proven	Short
	A4 – Provide skid-resistance pavement surfaces	Moderate	Proven	Medium
	A5 – Apply shoulder treatments * Eliminate shoulder drop-offs from paved road to unpaved shoulder * Safety edge * Widen and/or pave shoulders	Moderate	Experimental / Proven	Medium
B – Minimize the likelihood of crashing into an object or overturning if the vehicle travels off the shoulder	B1 – Design safer slopes and ditches to prevent rollovers	Moderate to High	Proven	Medium
	B2 – Remove/relocate objects in hazardous locations	Moderate to High	Proven	Medium
C – Reduce the severity of the crash	C1 – Improve design and application of barrier and attenuation systems	Moderate to High	Tried	Medium
D – Keep vehicles from encroaching into opposite lane	D1 – Install centerline rumble strips for two-lane roads	Low	Tried	Short
	D2 – Reallocate total two-lane roadway width (lane and shoulder) to include a "buffer median"	Low	Tried	Medium
E – Minimize the likelihood of crashing into an oncoming vehicle	E1 – Use alternating passing lanes or four-lane sections at key locations (Swedish "2+1")	Moderate to High	Tried	Medium
	E2 – Install cable median barriers for medians on multilane roads	Moderate	Tried	Medium
<p>Notes: ¹ Cost: Low = <\$10,000 per mile; Moderate = \$10,000 to \$100,000 per mile; High = >\$100,000 per mile ² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years Source: NCHRP <i>Report 500 Series</i>, 2003</p>				

TABLE 3-8
Signalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Cost to Implement and Operate ¹	Effectiveness	Timeframe for Implementation ²
A – Reduce frequency and severity of intersection conflicts through traffic control and operational improvements	A1 – Optimize signal operation (phasing/timing, etc.)	Low	Tried / Proven	Short
	A2 – Optimize clearance intervals	Low	Proven	Short
	A3 – Employ signal coordination along a corridor or route	Low	Proven	Medium
	A4 – Employ emergency vehicle preemption	Moderate	Proven	Medium
	A5 – Provide countdown timers, advanced walk phase, and other low-cost pedestrian/bicycle facility improvements	Low	Tried / Proven	Short
B – Reduce frequency and severity of intersection conflicts through geometric improvements	B1 – Provide/improve left-turn channelization	Moderate	Proven	Long
C – Improve pedestrian safety with signal improvements	C1 – Install countdown timers	Low	Tried	Short
	C2 – Re-time signals to provide a leading pedestrian interval (advanced walk)	Low	Tried	Short
D – Improve driver awareness of intersections and signal control	D2 – Improve visibility of signals (overhead indications, 12-inch lenses, background shields, LEDs) and signs (mast arm mounted street names) and signs (mast arm mounted street names) at intersections	Low	Tried	Short
E – Improve driver compliance with traffic control devices	E1 – Supplement conventional enforcement of red-light running with confirmation lights; include a public information campaign to increase awareness and compliance	Low	Tried	Short
F – Improve access management near signalized intersections	F1 – Restrict access to properties using driveway closures or turn restrictions	Low	Tried	Short
	F2 – Restrict cross-median access near intersections	Low	Tried	Short
G – Improve safety through other infrastructure treatments	G1 – Restrict or eliminate parking on intersection approaches	Low	Proven	Short
Notes: ¹ Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection ² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years Source: NCHRP Report 500 Series, 2004)				

TABLE 3-9
Unsignalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Cost to Implement and Operate ¹	Effectiveness	Timeframe for Implementation ²
A – Improve management of access near unsignalized intersections	A1 – Implement driveway closure/relocations	Moderate	Tried	Medium
	A2 – Implement driveway turn restrictions	Low	Tried	Short
B – Reduce the frequency and severity of intersection conflicts through geometric design improvements	B1 – Provide left-turn lanes at intersections	Moderate	Proven	Medium
	B2 -- Provide offset left-turn lanes at intersections	Moderate to High	Tried	Medium
	B3 – Provide offset right-turn lanes at intersections	Moderate to High	Tried	Medium
	B4 – Restrict or eliminate turning maneuvers by providing channelization or closing median openings	Low	Tried	Short
	B5 – Realign intersection approaches to reduce or eliminate intersection skew	High	Proven	Medium
	B6 – Improve pedestrian and bicycle facilities to reduce conflicts between motorists and nonmotorists	Moderate	Varies	Medium
	B7 – Use indirect left-turn treatments to minimize conflicts at divided highway intersections	Moderate	Tried	Medium
C – Improve sight distance at unsignalized intersections	C1 – Clear sight triangle on approaches and in medians by clearing grub, eliminating parking, etc.	Low	Tried	Short
D – Improve driver awareness of intersections as viewed from the intersection approach	D1 – Improve visibility of intersections by providing enhanced signing, delineation or pavement markings/messages (stop bar, larger regulatory signs, LED stop signs, etc.)	Low	Tried	Short
	D2 – Improve visibility of intersections by providing appropriate street lighting	Low to Moderate	Proven	Medium
	D3 – Install larger regulatory and warning signs at intersections, including the use of dynamic warning signs at appropriate intersections	Low	Tried	Short

TABLE 3-9
 Unsignalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Cost to Implement and Operate ¹	Effectiveness	Timeframe for Implementation ²
	D4 – Call attention to the intersection by installing rumble strips or splitter islands on intersection approaches	Low to Moderate	Tried	Medium
E – Appropriate intersection traffic control to minimize crash frequency and severity	E1 – Construct roundabouts at appropriate locations	High	Proven	Long
F – Reduce operating speeds on specific intersection approaches	F1 – Install dynamic speed feedback signs	Low	Proven	Short
Notes: ¹ Cost: Low = <\$50,000 per intersection; Moderate = \$50,000 to \$500,000 per intersection; High = >\$500,000 per intersection ² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years Source: NCHRP <i>Report 500 Series</i> , 2003				

3.3 Safety Strategies Workshop

A Safety Planning Workshop was held with Burleigh County in the City of Bismarck on June 4, 2013. Two additional workshops were held in Ward County and Devils Lake (northeast region) as part of the LRSP Phase I analysis. The primary focus of the safety workshop was to discuss and prioritize the safety strategies.

The basic workshop structure included introductions and an overview of the current NDDOT safety program. This was followed by local speakers:

- Marcus Hall, Burleigh County Engineer
- Lt Jeff Solemsaas, Bismarck PD
- Deputy Steve Hall, Burleigh County
- Tom Regan, KAT Communications (*Mandan Crash Documentary*)

These speakers shared information on local safety initiatives and programs. The morning was concluded with a review of the latest crash data on the local roadway system. In the afternoon, the workshop participants separated into two groups to discuss potential safety strategies and begin the process of prioritizing the strategies. The groups included one that reviewed and discussed driver-behavior strategies and another for roadway infrastructure strategies. The final agenda item was a voting exercise where each participant voted for their preferred strategies to focus efforts on in the future local roadway program in their regions.

Workshop participants included county and city representatives, county commissioners, enforcement representatives, and NDDOT staff in order to include a variety of backgrounds and experiences to enable valuable interaction and discussions during the workshop.

3.4 Prioritizing Safety Strategies

Through the group (infrastructure and driver behavior) discussion and voting exercise, the top safety strategies for Burleigh County are:

- Behavioral strategies
 - Conduct regular high-visibility driving-under-the-influence (DUI) enforcement saturations
 - Conduct high-visibility targeted enforcement of speeding and aggressive driving
 - Conduct high-visibility targeted enforcement to maximize seat belt use
 - Encourage driver education providers to require parent education component
- Infrastructure strategies
 - Rumble strips and enhance edge line (modified shoulder rumbles strip, 6-inch edge line)
 - Design safer slopes and ditches to prevent rollovers if a vehicle leaves the roadway
 - Intersection lighting
 - Provide enhanced shoulders, delineation, or pavement markings for sharp horizontal curves

Safety projects that are developed as part of this LRSP are considered eligible for funding through the state’s Highway Safety Improvement Program (HSIP). The managers of this program have identified implementation cost and effectiveness as priorities in their evaluation process of selecting projects for funding. Low-cost projects allow the limited funding to support a wider deployment and the use of proven effective strategies provides the highest level of confidence that a given project will result in an overall crash reduction.

The ability of the selected strategies to reduce crashes is based on information in FHWA’s CMF [Crash Modification Factors] Clearinghouse. Table 3-10 provides a summary of the crash reduction factors that were found in the CMF Clearinghouse for safety strategies considered and/or suggested for Burleigh County, along with an estimated unit cost for each strategy. Most factors reported are based on research that was assigned with higher-quality ratings.

TABLE 3-10
Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor ^a	Typical Installation Costs
Impaired Driving		
Conduct regular high-visibility DUI enforcement saturations	3%	Up to \$50 per hour of officer overtime
Speed and Aggressive Driving		
Conduct high-visibility targeted enforcement of speeding and aggressive driving	3%	Up to \$50 per hour of officer overtime
Seat Belt Use		
Conduct highly publicized enforcement campaigns to maximize restraint use. Specifically, night time belt enforcement saturation	3%	Up to \$50 per hour of officer overtime
Young Drivers		
Publicize and conduct a high visibility enforcement of graduated drivers license (GDL) restrictions, cell and texting laws, underage drinking and driving and seat belt laws	3%	Depends on duration
Encourage driver education providers to require parent education component	2%	\$1,500 per school district
Brief interventions by health care providers following a crash regarding driving risks and consequences	N/A	Low to Moderate
Rural Segments		
4-inch latex edge line		\$400 per mile
6-inch latex edge line	10% to 45% all rural serious crashes	\$650 per mile
Shoulder or edge line rumble strip	20% run off road crashes	\$3,000 per mile [shoulder] \$3,500 per mile [edge]
Ground in wet-reflective markings		\$8,500 per mile
Centerline rumble strip	40% head-on/sideswipe-crashes	\$3,000 per mile
6-inch centerline		\$650 per mile
Rural Curves		
Chevrons	20% to 30%	\$3,300 per curve
Arrow board only		\$500 per curve
Advance warning sign and advisory speed plaque		\$800 per curve

TABLE 3-10
Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor ^a	Typical Installation Costs
2-foot paved shoulder and shoulder rumble strips	20% to 30% run-off-the-road crashes	\$37,000 per mile + \$3,000 per mile
Rural Intersections		
Roundabout	20% to 50% all crashes/ 60% to 90% right-angle crashes	\$1,000,000 per intersection
Directional median (RCI or J-Turn)	17% all crashes/ 100% angle crashes	\$750,000 per intersection
Mainline dynamic warning sign	50% all crashes/ 75% severe right-angle crashes	\$50,000 per intersection
Close median		\$25,000 per intersection
Intersection lighting	25% to 40% nighttime crashes	\$6,000 per street light
Upgrade signs and pavement markings	40% upgrade of all signs and pavement marking/ 15% for STOP AHEAD pavement marking	\$1,850 per approach ^b
Clear sight triangle	37% serious injury crashes	\$2,450 per intersection ^d
Urban		
Conversions (three-lane/five-lane)	30% to 50%	\$17,000 per mile [3-lane] \$22,000 per mile [5-lane] + \$25,000 per signalized intersection for updates (for example, loop and signal head placement)
Access management	5% to 31%	\$300,000 per mile ^e
Signal – confirmation lights	25% to 84% reduction in violations	\$1,000 per two approaches
Pedestrian/bicycle – advanced walk	Up to 60% pedestrian/vehicle crashes	\$0 per intersection
Pedestrian/bicycle – countdown timers	25% vehicle/pedestrian crashes	\$10,000 per intersection
Pedestrian/bicycle – curb extensions	Increase in vehicles yielding to pedestrians	\$15,000 per corner
Pedestrian/bicycle – median refuge island	46% in vehicle/pedestrian crashes	\$10,000 per approach
<p>Notes:</p> <p>^a Crash reduction factors based on review of CMF Clearinghouse and other published research</p> <p>^b Includes \$350 per STOP sign, \$350 per junction sign assembly, \$450 per STOP AHEAD sign, \$450 per STOP AHEAD pavement marking message, and \$250 per stop bar</p> <p>^c Reduction based on increasing sight distance triangle</p> <p>^d Inclusive of sign upgrades identified and materials and labor for clearing of sight triangle.</p> <p>^e For management of unsignalized intersection movements within a corridor that has a divided median. Typical project may include minor street diverters, signed turn restrictions, and median closings.</p> <p>N/A = not applicable</p>		



4.0 Burleigh County Infrastructure Safety Projects

4.1 Burleigh County Proactive Project Decision Process

The primary objectives of the LRSP effort are to identify low-cost, safety-related infrastructure projects focused on each county's documented safety emphasis areas and target crash types. These emphasis areas account for the greatest number of severe crashes occurring on the local road system. Mitigating the factors that contribute to these crashes will assist each county in reducing severe crashes on the local road system.

Projects were developed that include identifying a specific improvement at a specific location based on risk factors described in Chapter 2 and the high-priority safety strategies described in Chapter 3. Improvement strategies are consistent with NDDOT's SHSP with a focus on proven effectiveness at reducing the target type of crash and low cost. Proven effective strategies give safety program managers the highest level of confidence that the deployment will result in a reduction of crashes. Low-cost strategies allow improvements to be widely deployed across a system to address the low density of crashes and are less expensive than complete reconstruction of high-risk locations. Project development and mitigation focused on the following improvements:

- Rural
 - Lane-departure crashes along roadway segments and in curves
 - Intersection-related crashes
- Urban
 - Rear-end and head-on crashes in segments
 - Angle crashes and pedestrian and bicycle crashes at intersections

For consistency across the northeast region, project decision trees were created so that locations with similar characteristics across the region received the same suggested mitigation treatment. Projects were chosen based on the identification of at-risk locations and the availability of proven strategies for crash reduction. This resulted in a systemic focus on rural paved segments, horizontal paved curves, and rural intersections. In cities with populations over 5,000, the focus was on arterial and collector roadway segments and intersections along these segments. Projects were originally suggested based on the technical analysis and then were revised in accordance with input by the local agencies and NDDOT.

High-priority rural roadway segment projects focused on addressing the most common type of severe segment related crash – a single-vehicle, lane-departure crash – by implementing road edge improvements to alert drivers when they are drifting too far to the edge of the road (Figure 4-1).

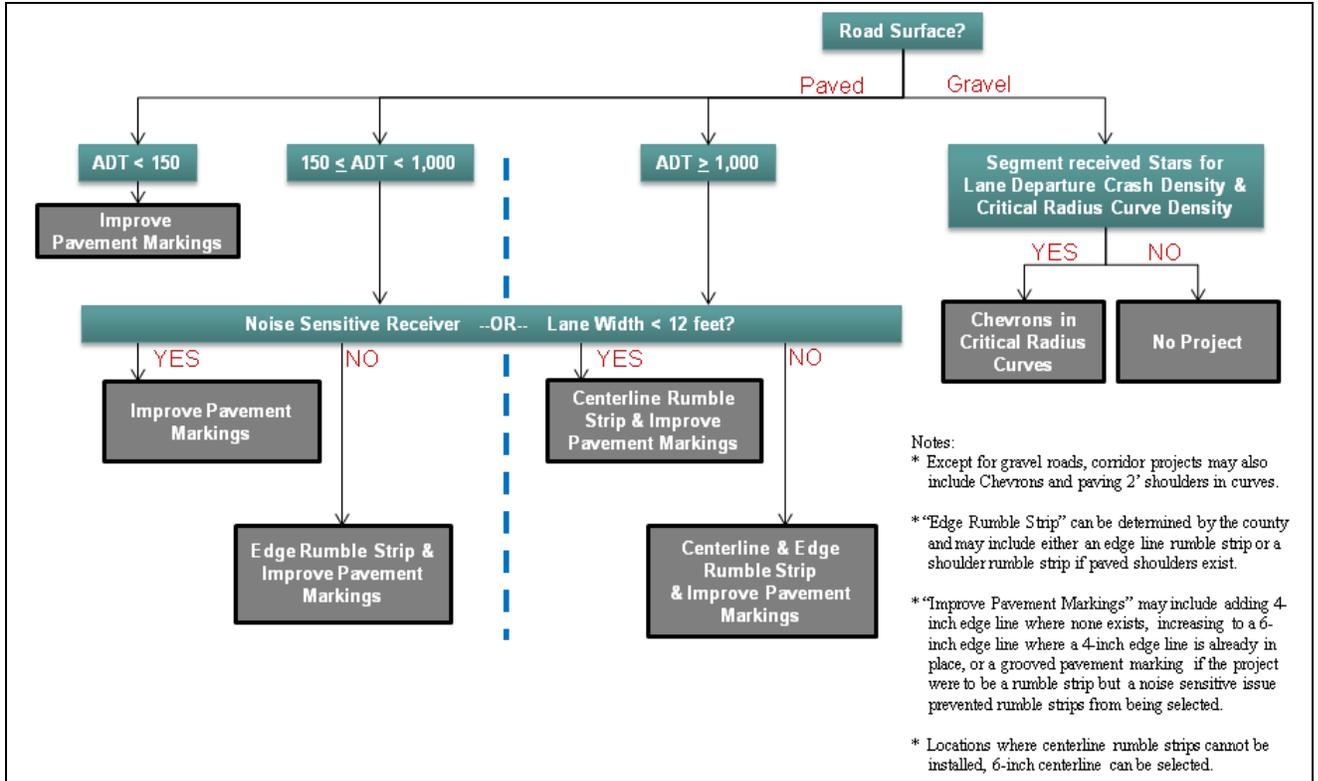


FIGURE 4-1
 High-Priority Rural Roadway Segment Project Decision Tree

High-priority rural curve projects focused on enhancing the curve delineation to improve driver's ability to successfully navigate the curves (Figure 4-2). As shown in the figure, there are three ways in which a curve is eligible for a safety improvement project.

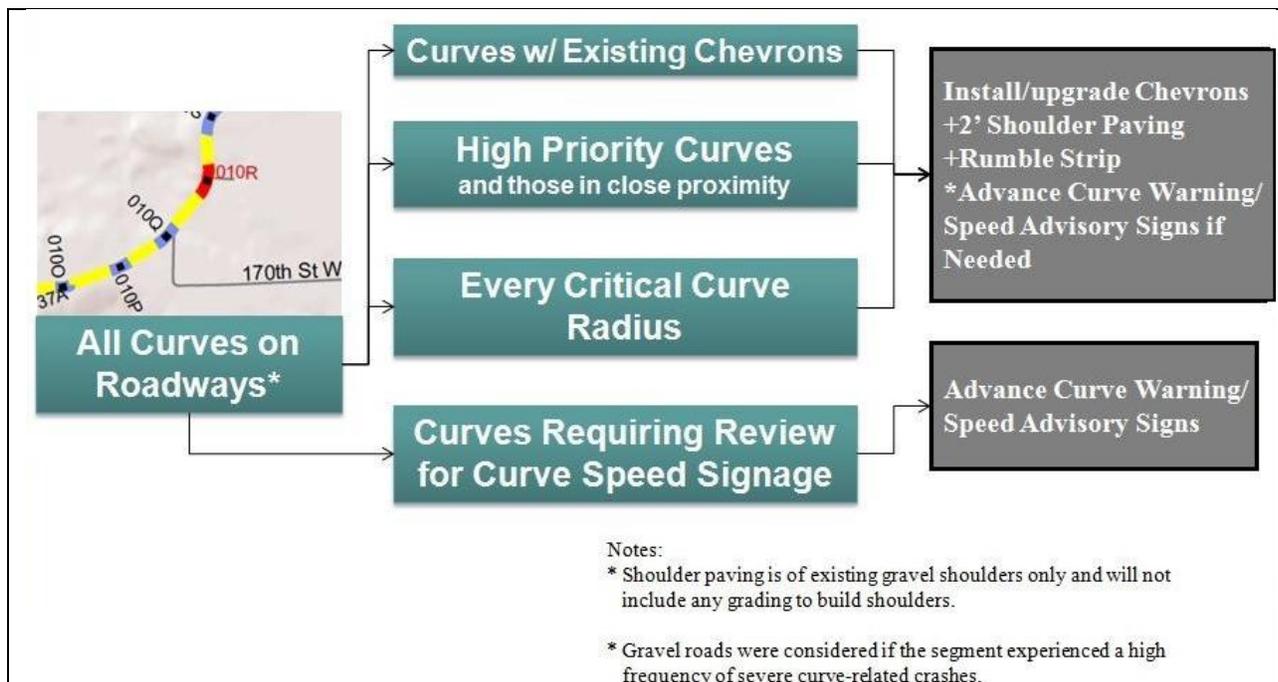


FIGURE 4-2
 High-Priority Rural Curve Project Decision Tree

High-priority rural intersection projects (Figure 4-3) focused on addressing the most common type of severe intersection crash – a right-angle collision – by making the intersection more visible to drivers and by reducing the number of intersection conflicts. Examples of suggested projects are shown in Figure 4-4.

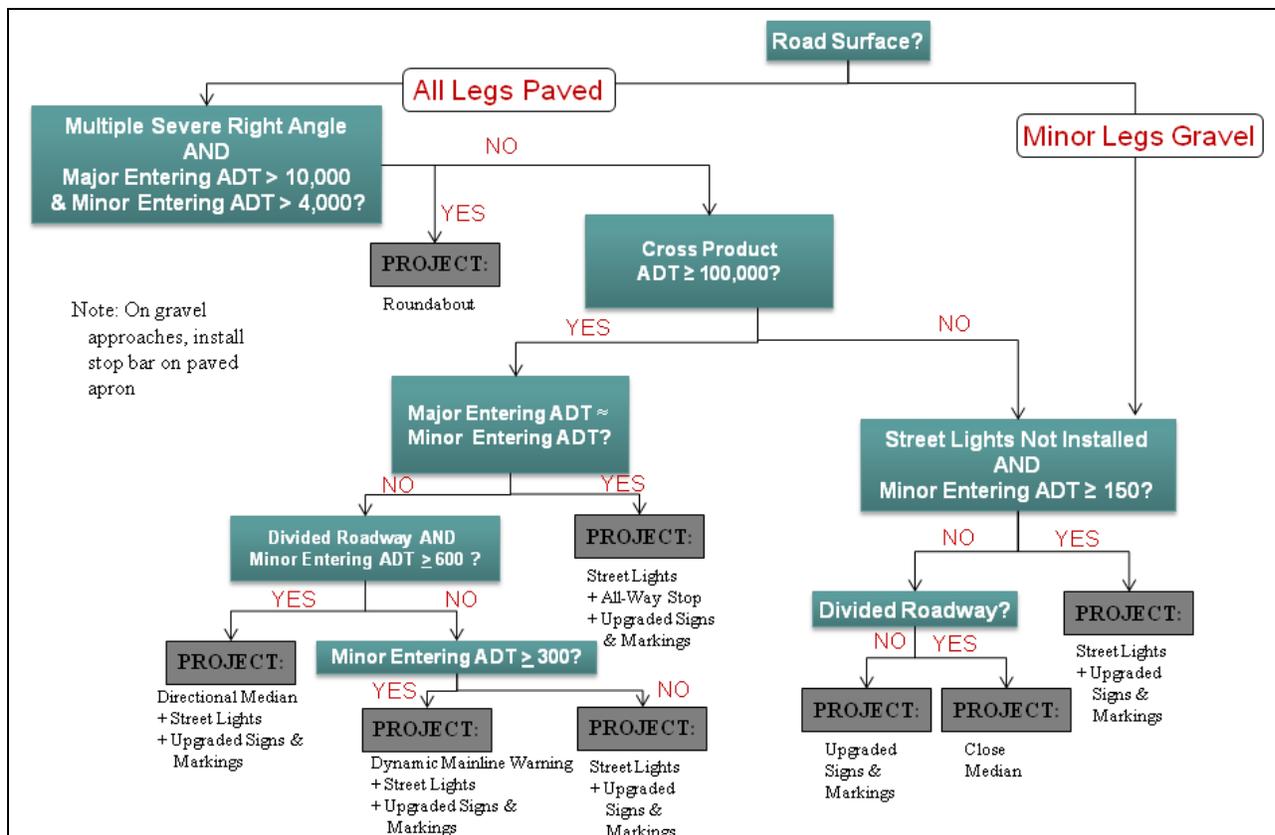


FIGURE 4-3
 High-Priority Rural Intersection Project Decision Tree

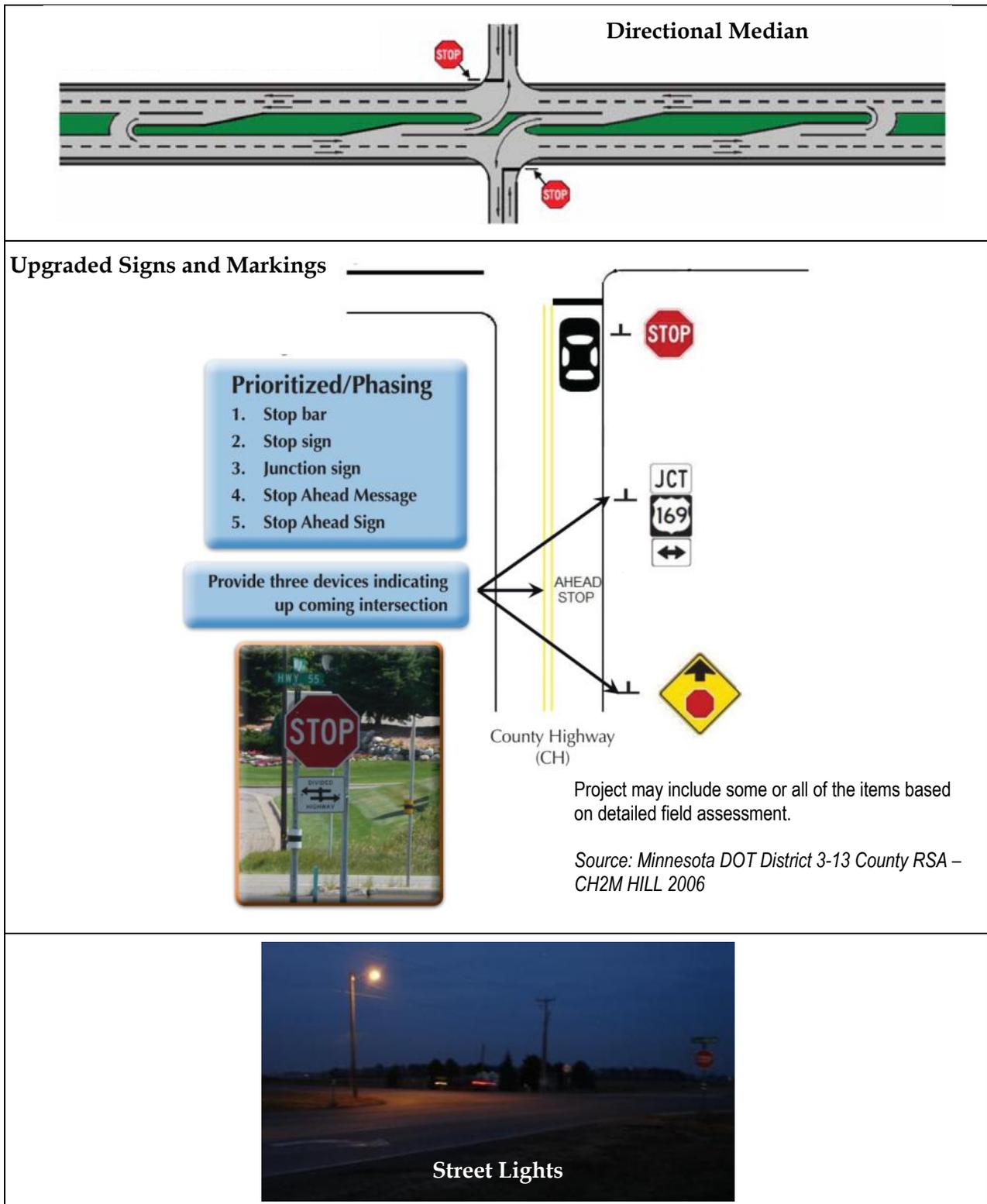


FIGURE 4-4
Intersection Safety Strategies Considered for Deployment

High-priority urban roadway segment projects focused on reducing rear-end and head-on crashes by creating buffer space in the middle of the roadway by converting to a three-lane or five-lane roadway and by better managing access along divided arterials (Figure 4-5).

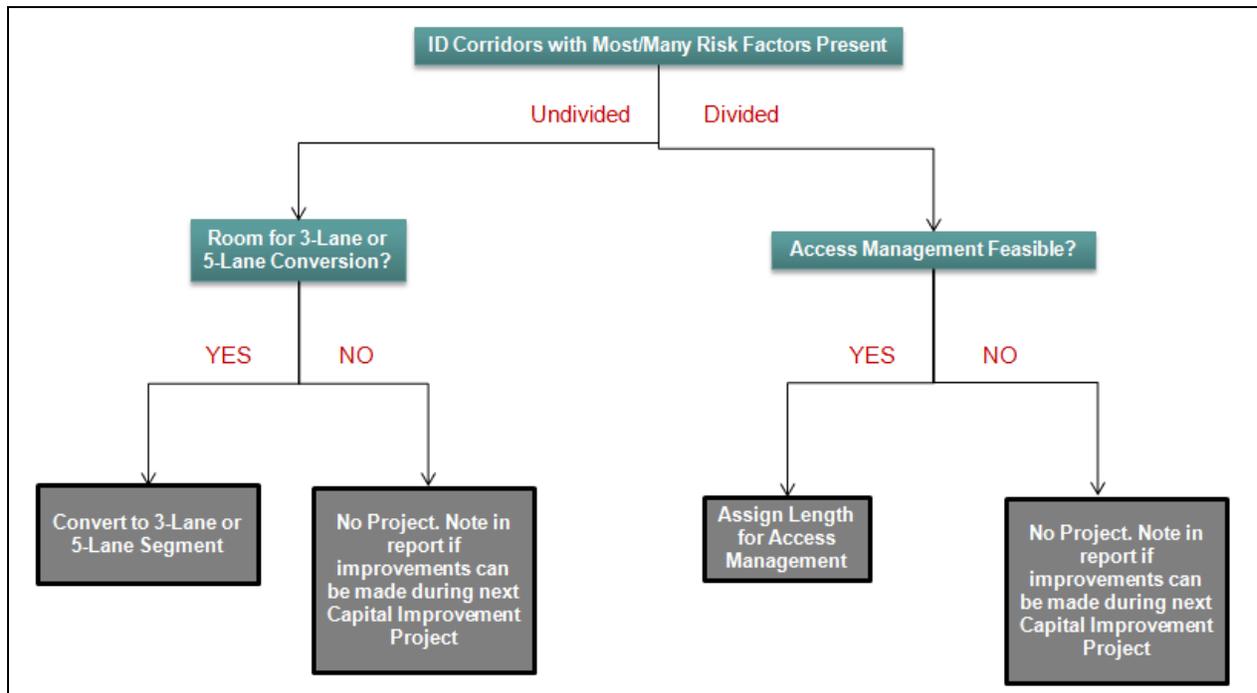


FIGURE 4-5
High-Priority Urban Roadway Segment (Turning) Project Decision Process

High-priority urban right-angle intersection projects focused on reducing right-angle crashes by reducing red-light running and access management to reduce the number of conflict points along a corridor, particularly at signalized intersections (Figure 4-6).

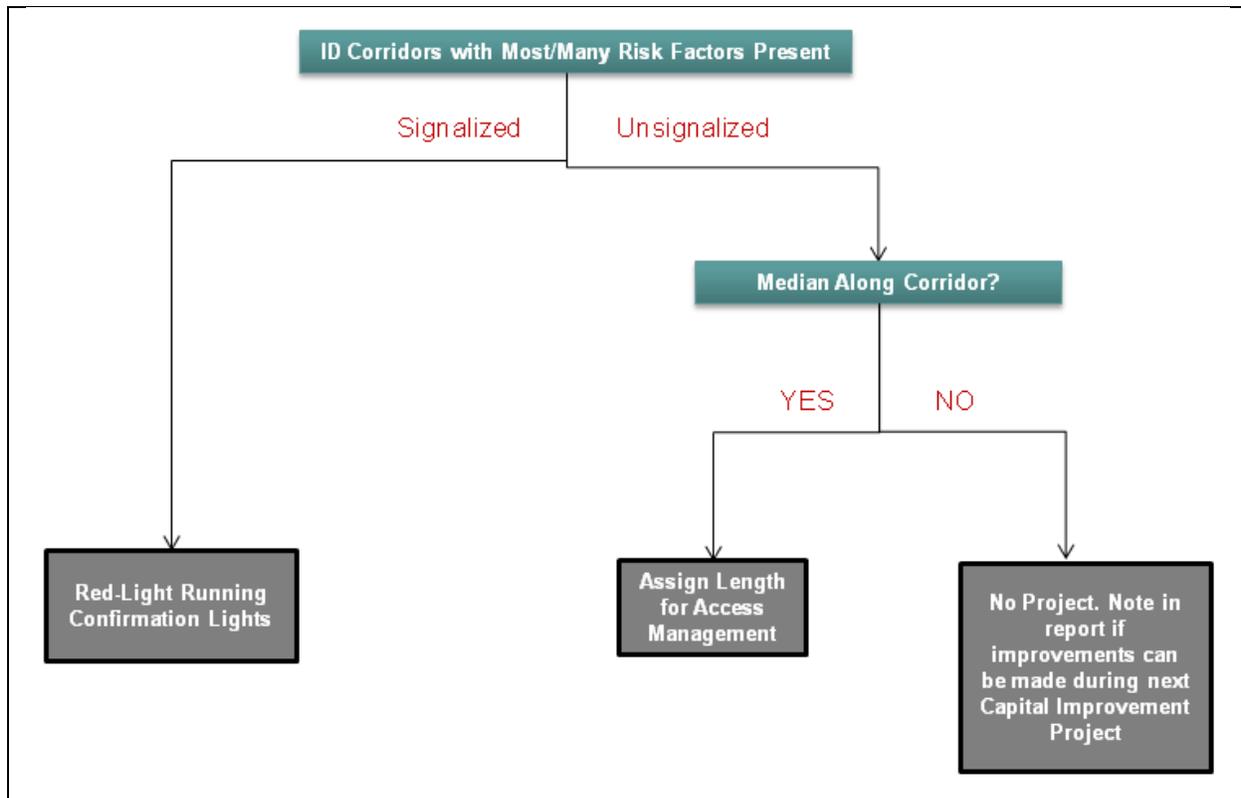


FIGURE 4-6
High-Priority Urban Right-Angle Intersection (Signalized) Project Decision Process

High-priority urban pedestrian and bicycle intersection projects focused on reducing pedestrian and bicycle crashes by providing with shorter crossing distances or median refuge islands, as well as advanced walk intervals and countdown timers at signalized intersections (Figure 4-7).

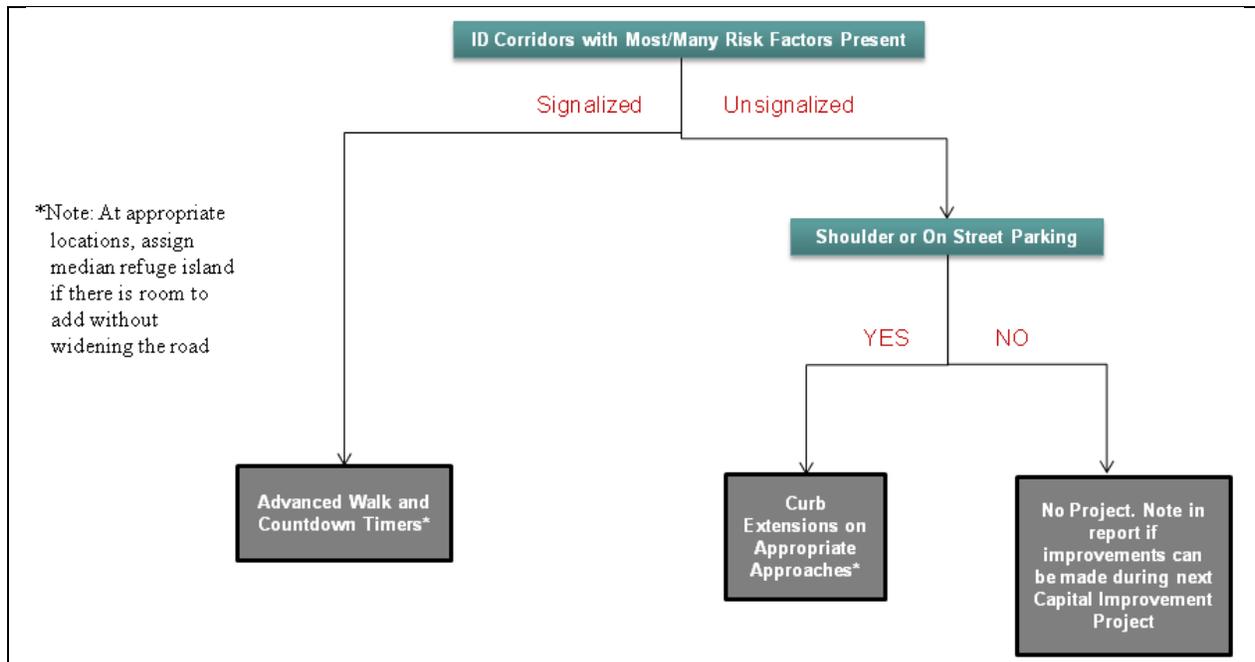


FIGURE 4-7
 High-Priority Urban Pedestrian and Bicyclist Intersection Project Decision Process

Project forms were completed for each high-priority intersection, curve, and roadway segment, including a description of the location, brief crash history, ranking factors, a picture from the LRSP process of the location (if needed), and the identified safety strategy. These forms were formatted so they could be submitted directly through the HSIP process, but may require supplemental information for the evaluation and scoring process.

The suggested low-cost safety projects for the counties and the City of Bismarck are described in the following sections. The costs assigned to each project are planning level estimates and do not include right-of-way or some other supplemental costs such as signal revisions or replacement for three-lane conversion projects. Because of funding limitations, all potential projects would not be completed in 1 year. The actual schedule for implementing individual projects will necessitate securing funding from the state’s HSIP. The safety planning process followed for Burleigh County is consistent with the North Dakota SHSP. In addition, several of the high-priority safety strategies are among those recommended for the state road system in the state’s Strategic Plan.

It is not expected or required that each county pursue safety projects in the suggested ranking order. The ranking suggests general priorities, given that actual project development decisions will be made by each county staff based on economic, social, and political issues and in coordination with other pavement and reconstruction projects that are part of the county’s Capital Improvement Program.

Many project details are still undetermined, including general project termini. Each county will determine specific project details (such as termini and exceptions) as decisions regarding implementation of specific projects are made. These decisions may require that the county coordinate with various municipal departments, the public, and other county transportation departments.

The total cost of projects suggested for Burleigh County is \$1,714,814. A cost breakout by project type is provided in Table 4-1.

TABLE 4-1
Burleigh County Total Project Costs

Rural Projects	Intersections	Segments	Curves	Total
Burleigh County	\$525,950	\$207,690	\$119,024	\$852,664
Urban Projects	Segments	Right Angle Intersections	Pedestrian and Bicyclist Intersections	Total
City of Bismarck	\$288,150	\$44,000	\$530,000	\$862,150
TOTAL				\$1,714,814

Burleigh County

The total project cost suggested for Burleigh County is \$ 852,664. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-2. High-priority locations that received a project are shown in Figure 4-8 and Tables 4-3 through 4-5. These locations are described in further detail in Appendix A along with priority rankings and suggested project sheets.

TABLE 4-2
Burleigh County Project Costs

Project Type	Cost
Intersections	\$ 525,950
Roadway Segments	\$ 207,690
Curves	\$ 119,024
Total	\$ 852,664

TABLE 4-3
Burleigh County – Rural Intersection Projects

Inter. ID	Description	Risk Ranking	Close Median	Mainline Dynamic Warning Sign	Install Street Lights	Signs & Markings	Review Signs & Clearing/Grubbing	Project Cost (\$)
531.01	North Dakota Hwy 1804 & NW 15th St	★★★★	-	-	x	x	x	\$11,700
521.01	US Hwy 83 & 149th Ave NW	★★★★	x	-	x	x	x	\$37,150
532.05	North Dakota Hwy 1804 & Burnt Creek Rd	★★★	-	-	x	x	x	\$12,150
507.02	NE 158th St & County Hwy 10	★★★	-	x	x	x	x	\$62,150
508.03	SE 93rd St & Apple Creek Rd SE	★★★	-	-	x	x	x	\$10,300
510.03	NE 41st ST & 71st Ave NE (WEST)	★★★	-	x	x	x	x	\$62,150
515.01	US Hwy 83 & 201st Ave NE	★★★	x	-	x	x	x	\$36,700
500.03	NE 405th St & Burleigh County Hwy 1	★★★	-	-	x	x	x	\$12,150
502.02	US Hwy 83 & 266th Ave NE	★★★	-	-	x	x	x	\$12,150
513.01	US Hwy 83 & County Hwy 10	★★★	-	x	x	x	x	\$62,150
523.01	North Dakota Hwy 1804 & SE Desert Rd	★★★	-	x	x	x	x	\$60,300
532.04	NW River Rd & Burnt Creek Rd (NORTH)	★★★	-	-	x	x	x	\$10,300
507.01	NE 158th St & Apple Creek Rd SE	★★★	-	-	-	x	x	\$6,150
527.01	North Dakota Hwy 1804 & N Washington St	★★	-	x	x	x	x	\$62,150
518.01	North Dakota Hwy 14 & 214th Ave NE	★★	-	-	-	x	x	\$6,150
511.01	SE 66th St & Apple Creek Rd	★★	-	x	x	x	x	\$62,150
		TOTALS	2	6	14	16	16	\$525,950

TABLE 4-4
Burleigh County – Rural Segment Projects

Corrid or ID	Local Street Name	Start	End	4" Edge Line	Shoulder Rumble Strip	Edge Line Rumble Strip	Center Line Rumble	Project Cost (\$)
528.01	12th St	Oahe Bend	1/4 mile north of Burleigh Ave	0.0	0.0	2.2	2.2	\$14,300
530.01	Sibley Dr	12th St	Hester Dr	0.0	2.0	0.0	0.0	\$6,000
527.01	Washington St	Mile south of 48th Ave	Burleigh Ave	0.0	0.0	1.8	0.0	\$6,300
530.02	Sibley Dr	Hester Dr	48th Ave	0.0	0.0	1.7	0.0	\$5,950
532.01	River Rd	1/4 mile north of Burnt Boat Dr	Burnt Creek Loop	0.0	3.9	0.0	3.9	\$23,400
535.01	Burnt Creek Loop	River Rd	State Route 1804	0.0	0.0	3.4	0.0	\$11,900
525.01	41st St	US Hwy 83	26th St	0.0	2.0	0.0	2.0	\$12,000
510.01	71st St	US Hwy 83	106th St	0.0	0.0	7.1	7.1	\$46,150
526.01	48th Ave	England St	State Route 1804	0.0	0.0	3.0	0.0	\$10,500
529.01	Oahe Bend	12th St	Apple Creek Dr	0.0	0.0	0.8	0.0	\$2,800
534.01	Sandy River Rd	West of Wildwood St	River Rd	0.0	0.0	0.9	0.0	\$3,150
533.01	Wilderness Cove	1/4 mile west of River Rd	River Rd	0.0	0.0	0.3	0.0	\$1,050
522.01	52nd St	Woodrow Dr	Lincoln Rd	2.6	0.0	0.0	0.0	\$1,040
500.02	405th St	30th Ave	Interstate 94	0.0	0.0	1.9	0.0	\$6,650
535.02	Burnt Creek Loop	State Route 1804	State Route 1804	0.0	0.0	1.6	0.0	\$5,600
512.02	66th St	Lincoln Rd	County Hwy 10	0.0	3.0	0.0	3.0	\$18,000
511.01	Apple Creek Rd	Yegan Rd	158th St	0.0	0.0	9.4	0.0	\$32,900
TOTALS				2.6	10.9	34.1	18.2	\$207,690

TABLE 4-5
Burleigh County – Rural Segment Projects

Corrid or ID	Local Street Name	Start	End	No. of Curves	Project Cost (\$)
500.02	405th St	30th Ave	Interstate 94	4	\$ 28,364
500.05	392nd St	240th Ave	State Route 36	5	\$ 19,952
503.01	Moffit Rd	185th St	US Hwy 83	2	\$ 8,452
510.01	71st St	US Hwy 83	106th St	1	\$ 4,453
511.01	Apple Creek Rd	Yegan Rd	158th St	1	\$ 6,466
523.01	Desert Rd	115th Ave	State Route 1804	1	\$ 8,543
525.01	41st St	US Hwy 83	26th St	1	\$ 3,437
535.01	Burnt Creek Loop	River Rd	State Route 1804	3	\$ 20,309
536.01	106th St	54th St	State Route 1804	4	\$ 19,048
TOTALS				22	\$ 119,024

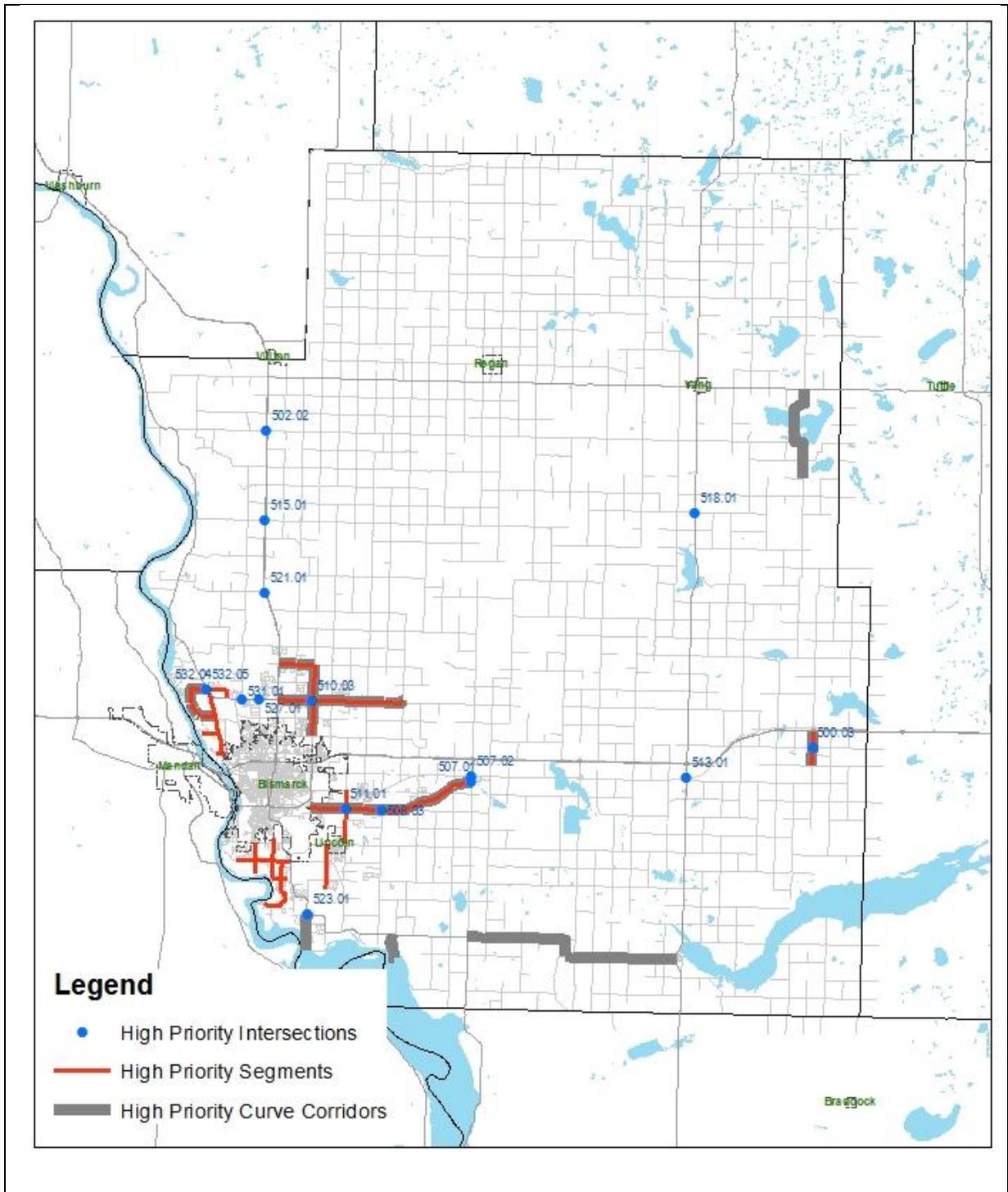


FIGURE 4-8
High-Priority Rural Locations

City of Bismarck

The total project cost suggested for the City of Bismarck is \$862,150. The project cost breakout for roadway segment, right-angle intersection, and pedestrian/bicyclist intersection projects are listed in Table 4-2. High-priority locations that received a project are shown in Figure 4-8 and Tables 4-3 through 4-5. These locations are described in further detail in Appendix A along with priority rankings and suggested project sheets.

TABLE 4-2
City of Bismarck Project Costs

Project Type	Cost
Roadway Segments	\$288,150
Right-Angle Intersections	\$44,000
Pedestrian and Bicyclist Intersections	\$530,000
Total	\$862,150

TABLE 4-3
City of Bismarck – Urban Segment Projects

Corridor ID	Local Street Name	Risk Ranking	2-Lane to 3-Lane Conver. (miles)	Project Cost (\$)	Notes
803.01	Calgary Ave	★★★	0.8	\$12,750	10th Street to 19th Street
808.01	Burnt Boat Dr	★★★★	0.27	\$ 4,624	Tyler Parkway to Broadview Lane
810.01	Interstate Ave	★★★★	0.7	\$11,832	Century Ave to Springfield (0.4 mi), 9th St to State St (0.3 mi)
810.02	Interstate Ave	★★★	0.6	\$10,200	
813.01	College Dr	★★★★	0.5	\$ 8,500	
825.01	N 4th St	★★★★	2.8	\$ 47,600	
826.01	N 19th St	★★★	2.1	\$ 35,700	
830.02	Divide Ave	★★★	2	\$ 34,680	4-lane divided between 94 and Century Ave
830.03	Divide Ave	★★★★	1.3	\$ 22,440	State St to Volk Dr
833.01	Memorial Hwy / Front Ave	★★★	1	\$ 17,204	Washington to 12th Street
836.01	Rosser Ave	★★★	3	\$ 50,575	Turn lanes in downtown between 1st and 7th
846.01	S 3rd St	★★★★	1.9	\$ 32,045	Hwy 810 to Rosser Ave already 5-lane
		TOTALS	15.2	\$ 288,150	

TABLE 4-4
 City of Bismarck – Urban Segment Projects

Corridor ID	Local Street Name	Access Management (mi)	Confirmation Lights	Project Cost (\$)
194.01	Bismarck Exp	0	9	\$18,000
809.01	Century Ave	0	6	\$10,000
810.01	Interstate Ave	0	2	\$4,000
810.02	Interstate Ave	0	2	\$4,000
815.01	Capital Ave	0	2	\$4,000
845.01	Washington St	0	2	\$4,000
TOTALS		0	23	\$ 44,000

TABLE 4-5
 City of Bismarck – Urban Pedestrian and Bicycle Projects

Corridor ID	Local Street Name	Countdown Timers	Project Cost (\$)
83.01	US 83 (State St)	3	\$ 30,000
83.03	N 7th St	5	\$ 50,000
83.04	N 9th St	5	\$ 50,000
194.01	Bismarck Exp	8	\$ 80,000
809.01	Century Ave	5	\$ 50,000
815.01	E Capital Ave	8	\$ 80,000
833.01	Front Ave	2	\$ 20,000
834.01	E Broadway Ave	3	\$ 30,000
836.01	Rosser Ave	5	\$ 50,000
845.01	Washington St	2	\$ 20,000
845.02	Washington St	7	\$ 70,000
		53	\$ 530,000

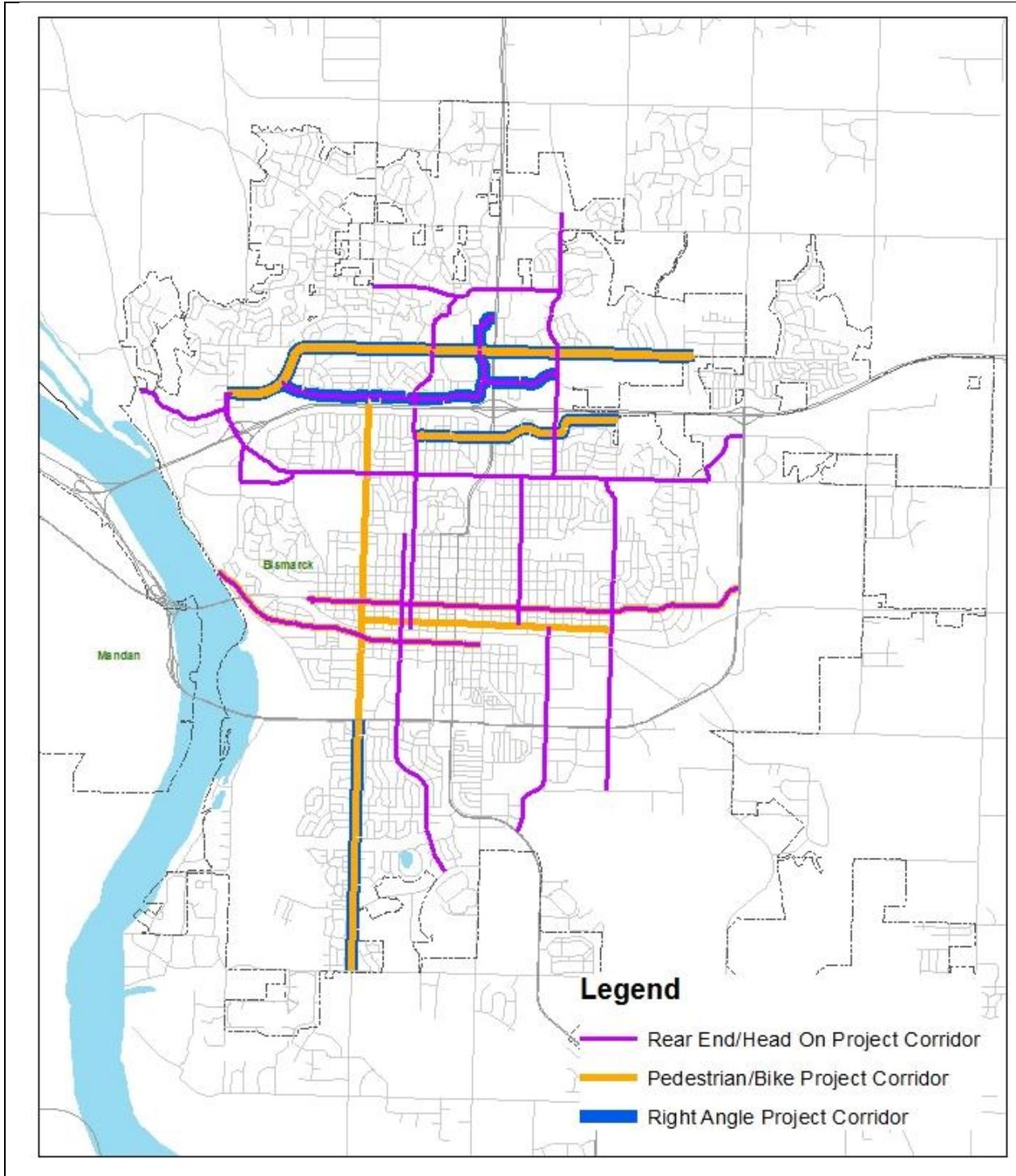


FIGURE 4-8
High-Priority Urban Corridors

23 USC 409
NDDOT Reserves All Objections

Burleigh County Project

Projects		Total Costs
Rural Intersections	16 intersections	\$ 525,950
Rural Segments	48 miles	\$ 207,690
Rural Curves	22 curves	\$ 119,024
	Total Rural Projects	\$ 852,664
Urban Segments (Rear End/Head On)	18 miles	\$ 288,150
Urban Intersections (Right Angle Crashes)	23 intersections	\$ 44,000
Urban Intersections (Ped/Bike Crashes)	49 intersections	\$ 530,000
	Total Urban Projects	\$ 862,150
	Total Burleigh County	\$ 1,714,814

Burleigh County Rural Intersection Projects

Intersection ID	Description	Risk Ranking	Close Median	Dynamic Warning Sign	Install Street Lights	Signs & Markings	Signs & Clearing/G rubbing	Project Cost (\$)
531.01	North Dakota Hwy 1804 & NW 15th St	★★★★	-	-	X	X	X	\$11,700
521.01	US Hwy 83 & 149th Ave NW	★★★★	X	-	X	X	X	\$37,150
532.05	North Dakota Hwy 1804 & Burnt Creek Rd	★★★	-	-	X	X	X	\$12,150
507.02	NE 158th St & County Hwy 10	★★★	-	X	X	X	X	\$62,150
508.03	SE 93rd St & Apple Creek Rd SE	★★★	-	-	X	X	X	\$10,300
510.03	NE 41st ST & 71st Ave NE (WEST)	★★★	-	X	X	X	X	\$62,150
515.01	US Hwy 83 & 201st Ave NE	★★★	X	-	X	X	X	\$36,700
500.03	NE 405th St & Burleigh County Hwy 1	★★★	-	-	X	X	X	\$12,150
502.02	US Hwy 83 & 266th Ave NE	★★★	-	-	X	X	X	\$12,150
513.01	US Hwy 83 & County Hwy 10	★★★	-	X	X	X	X	\$62,150
523.01	North Dakota Hwy 1804 & SE Desert Rd	★★★	-	X	X	X	X	\$60,300
532.04	NW River Rd & Burnt Creek Rd (NORTH)	★★★	-	-	X	X	X	\$10,300
507.01	NE 158th St & Apple Creek Rd SE	★★★	-	-	-	X	X	\$6,150
527.01	North Dakota Hwy 1804 & N Washington St	★★	-	X	X	X	X	\$62,150
518.01	North Dakota Hwy 14 & 214th Ave NE	★★	-	-	-	X	X	\$6,150
511.01	SE 66th St & Apple Creek Rd	★★	-	X	X	X	X	\$62,150
			2	6	14	16	16	\$525,950

Detailed Intersection Information

Burleigh County Rural Intersection List

Int #	Intersection Description	Config	Analysts											ADT	Traffic Control			Previous STOP (>5mi)	
			Config(2)	Total Entering ADT	Source	Skew	On/Near Curve	Development	RR Xing	Major Surface		Minor Leg Approach Apron Type (if gravel)	Notes		Device	Street Lights	Flashers		
										Type	Minor Surface Type								
500.01	SE 392nd St & 48th Ave SE	T	Undivided	53	Estimate	No	Yes	No	No	No	Gravel	Gravel			53	Thru-Stop	No	No	No
500.02	SE 392nd St & 34th Ave SE	T	Undivided	53	Count	No	No	No	No	No	Gravel	Gravel			53	Thru-Stop	No	No	Yes
500.03	NE 405th St & Burleigh County Hwy 1	X	Undivided	605	Count	No	No	Yes	No	Paved	Paved			605	Thru-Stop	No	No	Yes	
500.04	NE 405th St & Interstate 94 EB Ramps	X	Undivided	213	Count	No	No	No	No	Paved	Paved		Interstate 94 EB Ramps	213	Thru-Stop	No	No	Yes	
500.05	NE 392nd St & 227th Ave NE	X	Undivided	155	Count/Estimate	No	No	No	No	Gravel	Gravel			155	Thru-Stop	No	No	No	
500.06	NE 392nd St & North Dakota Hwy 36	X	Undivided	368	Count	No	No	No	No	Paved	Paved			368	Thru-Stop	No	No	No	
501.01	12th Ave SW & 435th Ave NE	X	Undivided	745	Count	No	No	No	No	Paved	Paved		On Burleigh/McLean county line	745	Thru-Stop	No	No	Yes	
501.02	NE 145th St & 435th Ave NE	X	Undivided	68	Count	No	Yes	No	No	Gravel	Gravel			68	Thru-Stop	No	No	Yes	
502.01	North Dakota Hwy 1804 & 266th Ave NE	T	Undivided	305	Count	No	Yes	No	No	Paved	Gravel	Paved		305	Thru-Stop	No	No	Yes	
502.02	US Hwy 83 & 266th Ave NE	X	Undivided	3,853	Count	No	No	No	No	Paved	E - Paved, W - Gravel	Paved		3,853	Thru-Stop	No	No	Yes	
502.03	NE 184th St & NE 266th St	T	Undivided	50	Count	No	No	No	No	Gravel	Gravel			50	Thru-Stop	No	No	No	
502.04	NE 197th St & 266th Ave NE	X	Undivided	55	Count	No	No	No	No	Gravel	Gravel			55	Thru-Stop	No	No	Yes	
503.01	SE Moffit Rd & SE 158th St	X	Undivided	570	Count	No	No	No	No	Paved	Paved			570	Thru-Stop	No	No	No	
504.01	US Hwy 83 & 89th Ave SE	X	Undivided	1,065	Count	No	No	No	No	Paved	Gravel	Paved		1,065	Thru-Stop	No	No	Yes	
505.01	SE 66th St & Lincoln Rd SE	T	Undivided	3,085	Count	No	No	Yes	No	Paved	Paved			41,465	Thru-Stop	No	No	No	
505.02	SE 93rd St & Lincoln Rd SE	X	Undivided	480	Count	No	No	No	No	Paved	W - Paved, E - Gravel	Gravel		480	Thru-Stop	No	No	No	
505.03	SE 158th St & Lincoln Rd SE	X	Undivided	333	Count	No	No	No	No	Paved	Gravel	Paved		333	Thru-Stop	No	No	No	
505.04	US Hwy 83 & 34th Ave SE	X	Undivided	1,485	Count	No	No	No	No	Paved	Gravel	Paved		1,485	Thru-Stop	No	No	Yes	
505.05	US Hwy 83 & 48th Ave SE	T	Undivided	1,480	Count	No	No	No	No	Paved	Gravel	Paved		1,480	Thru-Stop	No	No	Yes	
506.01	NE 236th St & County Hwy 1	X	Undivided	838	Count	No	Yes	No	No	Paved	N - Paved, S - Gravel	Paved		838	Thru-Stop	No	No	No	
506.03	NE 249th St & 214th Ave NE	X	Undivided	70	Count	No	No	No	No	Gravel	Gravel			70	Thru-Stop	No	No	No	
506.04	NE 249th St & 227th Ave NE	T	Undivided	53	Count	No	No	No	No	Gravel	Gravel			53	Thru-Stop	No	No	No	
507.01	NE 158th St & Apple Creek Rd SE	X	Undivided	603	Count	No	Yes	No	Yes	Paved	Paved			603	Thru-Stop	No	No	Yes	
507.02	NE 158th St & County Hwy 10	X	Undivided	1,560	Count	No	No	No	No	Paved	Paved			1,560	Thru-Stop	No	No	Yes	
508.01	North Dakota Hwy 1804 & SE 106th St	T	Undivided	610	Count/Model	Yes	No	No	No	Paved	Paved			610	Thru-Stop	No	No	No	
508.02	North Dakota Hwy 1804 & SE 93rd St	X	Undivided	735	Count	No	No	No	No	Paved	N - Paved, S - Gravel	Paved		735	Thru-Stop	No	No	No	
508.03	SE 93rd St & Apple Creek Rd SE	T	Undivided	805	Count	No	No	No	No	Paved	Paved			805	Thru-Stop	No	No	Yes	
509.01	NE 106th St & County Hwy 10	T	Undivided	1,583	Count	Yes	No	No	No	Paved	Gravel	Paved		1,583	Thru-Stop	No	No	No	
509.03	NE 106th St & 71st Ave NE	X	Undivided	133	Count	No	Yes	No	No	Gravel	Gravel			133	Uncontrolled	No	No	No	
509.04	NE 119th St & 201st Ave NE	X	Undivided	125	Count	No	No	No	No	Paved	Gravel	Gravel		125	Thru-Yield	No	No	No	
510.01	US Hwy 83 & 71st Ave NE	X	Divided	9,618	Count	No	No	No	No	Paved	Paved			9,618	Signal	No	No	No	
510.02	NE 26th St & 71st Ave NE	X	Undivided	4,198	Count	No	No	No	No	Paved	Paved			4,198	Thru-Stop	No	No	No	
510.03	NE 41st St & 71st Ave NE (WEST)	X	Undivided	5,460	Count	No	Yes	No	No	Paved	Paved			5,460	Thru-Stop	No	No	No	
510.04	NE 41st St & 71st Ave NE (EAST)	T	Undivided	1,833	Count	No	Yes	No	No	Paved	Paved			1,833	Thru-Yield	No	No	No	
510.05	NE 66th St & 71st Ave NE	X	Undivided	350	Count	No	No	No	No	Paved	Paved			350	Thru-Stop	No	No	No	
511.01	SE 66th St & Apple Creek Rd	X	Undivided	3,990	Count	No	No	No	No	Paved	Paved			3,990	Thru-Stop	No	No	No	
512.01	SE 66th St & County Hwy 10	X	Undivided	6,998	Count	No	No	No	No	Paved	Paved			6,998	Thru-Stop	No	No	No	
513.01	US Hwy 83 & County Hwy 10	X	Undivided	2,235	Count	No	No	No	No	Paved	Paved			2,235	Thru-Stop	No	No	Yes	
514.01	North Dakota Hwy 1804 & 175th Ave NE	T	Undivided	348	Count	No	Yes	No	No	Paved	Gravel	Paved		348	Thru-Stop	No	No	No	
514.02	US Hwy 83 & 175th Ave NE	X	Divided	4,290	Count	No	No	No	No	Paved	Gravel	Paved		4,290	Thru-Stop	No	No	No	
515.01	US Hwy 83 & 201st Ave NE	X	Divided	3,328	Count	No	No	No	No	Paved	E - Paved, W - Gravel	Gravel		3,328	Thru-Stop	No	No	Yes	
515.02	NE 197th St & 201st Ave NE	X	Undivided	70	Count	No	No	No	No	Gravel	Gravel			70	Unknown	No	No	No	
516.01	NE 197th St & 227th Ave NE	X	Undivided	70	Count	No	No	No	No	Gravel	Gravel			70	Unknown	No	No	No	
517.01	North Dakota Hwy 36 & NE 171st St	X	Undivided	875	Count	No	No	No	No	Paved	Gravel	Paved		875	Thru-Stop	No	No	No	
518.01	North Dakota Hwy 14 & 214th Ave NE	X	Undivided	485	Count	No	No	No	No	Paved	Gravel	Gravel		485	Thru-Stop	No	No	Yes	
519.01	North Dakota Hwy 36 & Main St S	T	Undivided	768	Count	No	No	No	No	Paved	Paved			768	Thru-Stop	No	No	No	
519.02	Main St & Railroad St	X	Undivided	230	Count	No	No	Yes	No	Paved	Paved			230	Thru-Stop	No	No	No	
519.03	NE 145th St & New Johns Lake Rd	X	Undivided	30	Count	No	Yes	No	No	Gravel	Gravel			30	Unknown	No	No	No	
521.01	US Hwy 83 & 149th Ave NW	X	Divided	4,408	Count	No	Yes	No	No	Paved	W - Paved, E - Gravel	Paved		4,408	Thru-Stop	No	No	Yes	
522.01	SE 52nd St & 48th Ave SE	T	Undivided	1,043	Count	No	No	No	No	Paved	Gravel	Paved		1,043	Thru-Stop	No	No	No	
523.01	North Dakota Hwy 1804 & SE Desert Rd	T	Undivided	1,038	Count	No	Yes	No	No	Paved	Paved	Paved		1,038	Thru-Stop	No	No	No	
524.01	NE 26th St & 97th Ave NE	X	Undivided	590	Count	No	No	No	No	Paved	Paved			590	Thru-Stop	No	No	Yes	
526.01	S Washington St & 48th Ave SW	X	Undivided	900	Count	No	No	No	No	Paved	Paved			900	Thru-Stop	No	No	No	
526.02	SE 12th St & 48th Ave SE	X	Undivided	1,388	Count	No	No	No	No	Paved	Paved			1,388	Thru-Stop	No	No	No	
526.03	US Hwy 83 & 48th Ave SE	X	Undivided	3,268	Count	No	No	No	No	Paved	W - Paved, E - Gravel	Paved		3,268	Thru-Stop	No	No	No	
527.01	North Dakota Hwy 1804 & N Washington St	X	Undivided	4,428	Count	No	No	No	No	Paved	Paved			4,428	Thru-Stop	No	No	No	
531.01	North Dakota Hwy 1804 & NW 15th St	X	Undivided	2,833	Count	No	No	Yes	No	Paved	N - Paved, S - Gravel	Gravel		2,833	Thru-Stop	No	No	Yes	
532.01	NW River Rd & Wilderness Cove Rd	T	Undivided	2,013	Count	No	No	No	No	Paved	Paved			2,013	Thru-Stop	No	No	No	
532.02	NW River Rd & Sandy River Rd NW	T	Undivided	1,890	Count	No	No	No	No	Paved	Paved			1,890	Thru-Stop	No	No	No	
532.03	NW River Rd & Burnt Creek Rd (SOUTH)	T	Undivided	1,940	Count	No	No	No	No	Paved	Paved			1,940	Thru-Stop	No	No	No	
532.04	NW River Rd & Burnt Creek Rd (NORTH)	T	Undivided	633	Count	No	Yes	No	No	Paved	Paved			633	Thru-Stop	No	No	Yes	
532.05	North Dakota Hwy 1804 & Burnt Creek Rd	X	Undivided	1,305	Count	Yes	No	No	No	Paved	Paved			1,305	Thru-Stop	No	No	No	
535.01	North Dakota Hwy 1804 & NW 28th St	T	Undivided	1,465	Count	No	No	No	No	Paved	Paved			1,465	Thru-Stop	No	No	No	

**Burleigh County
Rural Intersection Listing**

Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Crash Cost
500.01	SE 392nd St & 48th Ave SE	No	Yes	No	No	53	No	0	No	\$ -
500.02	SE 392nd St & 34th Ave SE	No	No	No	No	53	Yes	0	No	\$ -
500.03	NE 405th St & Burleigh County Hwy 1	No	No	Yes	No	605	Yes	1	No	\$ 12,000
500.04	NE 405th St & Interstate 94 EB Ramps	No	No	No	No	213	Yes	0	No	\$ -
500.05	NE 392nd St & 227th Ave NE	No	No	No	No	155	No	0	No	\$ -
500.06	NE 392nd St & North Dakota Hwy 36	No	No	No	No	368	No	0	No	\$ -
501.01	12th Ave SW & 435th Ave NE	No	No	No	No	745	Yes	0	No	\$ -
501.02	NE 145th St & 435th Ave NE	No	Yes	No	No	68	Yes	0	No	\$ -
502.01	North Dakota Hwy 1804 & 266th Ave NE	No	Yes	No	No	305	Yes	0	No	\$ -
502.02	US Hwy 83 & 266th Ave NE	No	No	No	No	3853	Yes	1	Yes	\$ 12,000
502.03	NE 184th St & NE 266th St	No	No	No	No	50	No	0	No	\$ -
502.04	NE 197th St & 266th Ave NE	No	No	No	No	55	Yes	0	No	\$ -
503.01	SE Moffit Rd & SE 158th St	No	No	No	No	570	No	1	No	\$ 824,000
504.01	US Hwy 83 & 89th Ave SE	No	No	No	No	1065	Yes	0	No	\$ -
505.01	SE 66th St & Lincoln Rd SE	No	No	Yes	No	41465	No	0	Yes	\$ -
505.02	SE 93rd St & Lincoln Rd SE	No	No	No	No	480	No	1	No	\$ 12,000
505.03	SE 158th St & Lincoln Rd SE	No	No	No	No	333	No	0	No	\$ -
505.04	US Hwy 83 & 34th Ave SE	No	No	No	No	1485	Yes	0	No	\$ -
505.05	US Hwy 83 & 48th Ave SE	No	No	No	No	1480	Yes	0	No	\$ -
506.01	NE 236th St & County Hwy 1	No	Yes	No	No	838	No	0	No	\$ -
506.03	NE 249th St & 214th Ave NE	No	No	No	No	70	No	0	No	\$ -
506.04	NE 249th St & 227th Ave NE	No	No	No	No	53	No	0	No	\$ -
507.01	NE 158th St & Apple Creek Rd SE	No	Yes	No	Yes	603	Yes	0	No	\$ -
507.02	NE 158th St & County Hwy 10	No	No	No	No	1560	Yes	5	Yes	\$ 308,000
508.01	North Dakota Hwy 1804 & SE 106th St	Yes	No	No	No	610	No	1	No	\$ 12,000
508.02	North Dakota Hwy 1804 & SE 93rd St	No	No	No	No	735	No	1	Yes	\$ 91,000
508.03	SE 93rd St & Apple Creek Rd SE	No	No	No	No	805	Yes	1	Yes	\$ 91,000
509.01	NE 106th St & County Hwy 10	Yes	No	No	No	1583	No	1	No	\$ 136,000
509.03	NE 106th St & 71st Ave NE	No	Yes	No	No	133	No	1	No	\$ 12,000
509.04	NE 119th St & 201st Ave NE	No	No	No	No	125	No	0	No	\$ -
510.01	US Hwy 83 & 71st Ave NE	No	No	No	No	9618	No	16	Yes	\$ 519,000
510.02	NE 26th St & 71st Ave NE	No	No	No	No	4198	No	6	Yes	\$ 320,000
510.03	NE 41st St & 71st Ave NE (WEST)	No	Yes	No	No	5460	No	2	Yes	\$ 24,000
510.04	NE 41st St & 71st Ave NE (EAST)	No	Yes	No	No	1833	No	1	No	\$ 12,000
510.05	NE 66th St & 71st Ave NE	No	No	No	No	350	No	0	No	\$ -
511.01	SE 66th St & Apple Creek Rd	No	No	No	No	3990	No	10	Yes	\$ 571,000
512.01	SE 66th St & County Hwy 10	No	No	No	No	6998	No	8	Yes	\$ 496,000
513.01	US Hwy 83 & County Hwy 10	No	No	No	No	2235	Yes	1	Yes	\$ 12,000
514.01	North Dakota Hwy 1804 & 175th Ave NE	No	Yes	No	No	348	No	1	No	\$ 12,000
514.02	US Hwy 83 & 175th Ave NE	No	No	No	No	4290	No	1	Yes	\$ 136,000
515.01	US Hwy 83 & 201st Ave NE	No	No	No	No	3328	Yes	2	Yes	\$ 24,000
515.02	NE 197th St & 201st Ave NE	No	No	No	No	70	No	0	No	\$ -
516.01	NE 197th St & 227th Ave NE	No	No	No	No	70	No	0	No	\$ -
517.01	North Dakota Hwy 36 & NE 171st St	No	No	No	No	875	No	1	No	\$ 12,000
518.01	North Dakota Hwy 14 & 214th Ave NE	No	No	No	No	485	Yes	2	No	\$ 836,000
519.01	North Dakota Hwy 36 & Main St S	No	No	No	No	768	No	0	No	\$ -
519.02	Main St & Railroad St	No	No	Yes	No	230	No	0	No	\$ -
519.03	NE 145th St & New Johns Lake Rd	No	Yes	No	No	30	No	0	No	\$ -
521.01	US Hwy 83 & 149th Ave NW	No	Yes	No	No	4408	Yes	1	Yes	\$ 12,000
522.01	SE 52nd St & 48th Ave SE	No	No	No	No	1043	No	1	No	\$ 12,000
523.01	North Dakota Hwy 1804 & SE Desert Rd	No	Yes	No	No	1038	No	1	Yes	\$ 12,000
524.01	NE 26th St & 97th Ave NE	No	No	No	No	590	Yes	1	No	\$ 12,000
526.01	S Washington St & 48th Ave SW	No	No	No	No	900	No	3	Yes	\$ 160,000
526.02	SE 12th St & 48th Ave SE	No	No	No	No	1388	No	1	Yes	\$ 91,000
526.03	US Hwy 83 & 48th Ave SE	No	No	No	No	3268	No	2	Yes	\$ 24,000
527.01	North Dakota Hwy 1804 & N Washington St	No	No	No	No	4428	No	5	Yes	\$ 872,000
531.01	North Dakota Hwy 1804 & NW 15th St	No	No	Yes	No	2833	Yes	6	Yes	\$ 72,000
532.01	NW River Rd & Wilderness Cove Rd	No	No	No	No	2013	No	3	No	\$ 36,000
532.02	NW River Rd & Sandy River Rd NW	No	No	No	No	1890	No	4	Yes	\$ 48,000
532.03	NW River Rd & Burnt Creek Rd (SOUTH)	No	No	No	No	1940	No	9	Yes	\$ 108,000
532.04	NW River Rd & Burnt Creek Rd (NORTH)	No	Yes	No	No	633	Yes	1	No	\$ 12,000
532.05	North Dakota Hwy 1804 & Burnt Creek Rd	Yes	No	No	No	1305	No	4	Yes	\$ 572,000
535.01	North Dakota Hwy 1804 & NW 28th St	No	No	No	No	1465	No	1	Yes	\$ 12,000

**Burleigh County
Rural Intersection Prioritization**

Rank	Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Priority	Crash Cost
1	531.01	North Dakota Hwy 1804 & NW 15th St			*		*	*	*	★★★★	\$ 72,000
2	521.01	US Hwy 83 & 149th Ave NW		*			*	*	*	★★★★	\$ 12,000
3	532.05	North Dakota Hwy 1804 & Burnt Creek Rd	*					*	*	★★★	\$ 572,000
4	507.02	NE 158th St & County Hwy 10					*	*	*	★★★	\$ 308,000
5	508.03	SE 93rd St & Apple Creek Rd SE					*	*	*	★★★	\$ 91,000
6	510.03	NE 41st St & 71st Ave NE (WEST)		*				*	*	★★★	\$ 24,000
7	515.01	US Hwy 83 & 201st Ave NE					*	*	*	★★★	\$ 24,000
8	500.03	NE 405th St & Burleigh County Hwy 1			*		*	*	*	★★★	\$ 12,000
9	502.02	US Hwy 83 & 266th Ave NE					*	*	*	★★★	\$ 12,000
10	513.01	US Hwy 83 & County Hwy 10					*	*	*	★★★	\$ 12,000
11	523.01	North Dakota Hwy 1804 & SE Desert Rd		*				*	*	★★★	\$ 12,000
12	532.04	NW River Rd & Burnt Creek Rd (NORTH)		*			*	*	*	★★★	\$ 12,000
13	507.01	NE 158th St & Apple Creek Rd SE		*		*	*	*	*	★★★	\$ -
14	527.01	North Dakota Hwy 1804 & N Washington St						*	*	★★	\$ 872,000
15	518.01	North Dakota Hwy 14 & 214th Ave NE					*	*	*	★★	\$ 836,000
16	511.01	SE 66th St & Apple Creek Rd						*	*	★★	\$ 571,000
17	510.01	US Hwy 83 & 71st Ave NE						*	*	★★	\$ 519,000
18	512.01	SE 66th St & County Hwy 10						*	*	★★	\$ 496,000
19	510.02	NE 26th St & 71st Ave NE						*	*	★★	\$ 320,000
20	526.01	S Washington St & 48th Ave SW						*	*	★★	\$ 160,000
21	509.01	NE 106th St & County Hwy 10	*					*	*	★★	\$ 136,000
22	514.02	US Hwy 83 & 175th Ave NE						*	*	★★	\$ 136,000
23	532.03	NW River Rd & Burnt Creek Rd (SOUTH)						*	*	★★	\$ 108,000
24	508.02	North Dakota Hwy 1804 & SE 93rd St						*	*	★★	\$ 91,000
25	526.02	SE 12th St & 48th Ave SE						*	*	★★	\$ 91,000
26	532.02	NW River Rd & Sandy River Rd NW						*	*	★★	\$ 48,000
27	526.03	US Hwy 83 & 48th Ave SE						*	*	★★	\$ 24,000
28	508.01	North Dakota Hwy 1804 & SE 106th St	*					*	*	★★	\$ 12,000
29	509.03	NE 106th St & 71st Ave NE		*				*	*	★★	\$ 12,000
30	510.04	NE 41st St & 71st Ave NE (EAST)		*				*	*	★★	\$ 12,000
31	514.01	North Dakota Hwy 1804 & 175th Ave NE		*				*	*	★★	\$ 12,000
32	524.01	NE 26th St & 97th Ave NE					*	*	*	★★	\$ 12,000
33	535.01	North Dakota Hwy 1804 & NW 28th St						*	*	★★	\$ 12,000
34	501.02	NE 145th St & 435th Ave NE		*			*	*	*	★★	\$ -
35	502.01	North Dakota Hwy 1804 & 266th Ave NE		*			*	*	*	★★	\$ -
36	505.01	SE 66th St & Lincoln Rd SE			*			*	*	★★	\$ -
37	503.01	SE Moffit Rd & SE 158th St						*	*	★	\$ 824,000
38	532.01	NW River Rd & Wilderness Cove Rd						*	*	★	\$ 36,000
39	505.02	SE 93rd St & Lincoln Rd SE						*	*	★	\$ 12,000
40	517.01	North Dakota Hwy 36 & NE 171st St						*	*	★	\$ 12,000
41	522.01	SE 52nd St & 48th Ave SE						*	*	★	\$ 12,000
42	500.01	SE 392nd St & 48th Ave SE		*				*	*	★	\$ -
43	500.02	SE 392nd St & 34th Ave SE					*	*	*	★	\$ -
44	500.04	NE 405th St & Interstate 94 EB Ramps					*	*	*	★	\$ -
45	501.01	12th Ave SW & 435th Ave NE					*	*	*	★	\$ -
46	502.04	NE 197th St & 266th Ave NE					*	*	*	★	\$ -
47	504.01	US Hwy 83 & 89th Ave SE					*	*	*	★	\$ -
48	505.04	US Hwy 83 & 34th Ave SE					*	*	*	★	\$ -
49	505.05	US Hwy 83 & 48th Ave SE					*	*	*	★	\$ -
50	506.01	NE 236th St & County Hwy 1		*				*	*	★	\$ -
51	519.02	Main St & Railroad St			*			*	*	★	\$ -
52	519.03	NE 145th St & New Johns Lake Rd		*				*	*	★	\$ -
53	500.05	NE 392nd St & 227th Ave NE						*	*	★	\$ -
54	500.06	NE 392nd St & North Dakota Hwy 36						*	*	★	\$ -
55	502.03	NE 184th St & NE 266th St						*	*	★	\$ -
56	505.03	SE 158th St & Lincoln Rd SE						*	*	★	\$ -
57	506.03	NE 249th St & 214th Ave NE						*	*	★	\$ -
58	506.04	NE 249th St & 227th Ave NE						*	*	★	\$ -
59	509.04	NE 119th St & 201st Ave NE						*	*	★	\$ -
60	510.05	NE 66th St & 71st Ave NE						*	*	★	\$ -
61	515.02	NE 197th St & 201st Ave NE						*	*	★	\$ -
62	516.01	NE 197th St & 227th Ave NE						*	*	★	\$ -
63	519.01	North Dakota Hwy 36 & Main St S						*	*	★	\$ -

Totals Total Stars -- 3 13 4 1 21 37 24
5% 21% 6% 2% 33% 59% 38%

#	%
★★★★★★	0 0%
★★★★★	0 0%
★★★★	0 0%
★★★	2 3%
★★	11 17%
★	23 37%
*	16 25%
-	11 17%
	63 100%

- Stars**
- Skew - If intersection is skewed at an angle of 15 degrees or greater.
 - On/Near Curve - If intersection is on or within 1,000 feet of curve.
 - Development - If intersection aerial shows a commercial development with access near intersection.
 - RR Xing - If intersection has a railroad crossing on any approach within 500 feet.
 - Previous STOP (>5 mi) - If vehicles approaching the stop control have not had a previous stop along the roadway within 5 miles
 - Total Crashes - If intersection has at least 1 crash.
 - Ratio (Min/Maj) - If intersection has an ADT ratio in the range of 0.2 to 0.8.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

North Dakota Hwy 1804 & NW 15th St

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 1435
Entering ADT: 2833 Minor ADT: 35

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	6	0	0.00
Rate (per MVM)	1.2	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	Yes	Yes	★
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	6	>0	★

★★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$11,700.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,530
Local Match (10% of Total project cost)	\$1,170
Total Project Cost	\$11,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

US Hwy 83 & 149th Ave NW

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Divided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 2248
Entering ADT: 4408 Minor ADT: 35

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.1	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	Yes	Yes	★
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	1	>0	★

★★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	1	\$25,000.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$37,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$33,435
Local Match (10% of Total project cost)	\$3,715
Total Project Cost	\$37,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

North Dakota Hwy 1804 & Burnt Creek Rd

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 528
Entering ADT: 1305 Minor ADT: 180

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	4	3	1.00
Rate (per MVM)	1.7	1.3	0.4

	Value	Critical	Risk Ranking
Skew	Yes	Yes	★
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	No	Yes	
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	4	>0	★
			★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$12,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,935
Local Match (10% of Total project cost)	\$1,215
Total Project Cost	\$12,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

NE 158th St & County Hwy 10

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 913
Entering ADT: 1560 Minor ADT: 648

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	5	0	0.00
Rate (per MVM)	1.8	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	5	>0	★
			★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$62,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$55,935
Local Match (10% of Total project cost)	\$6,215
Total Project Cost	\$62,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

SE 93rd St & Apple Creek Rd SE

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: T Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 575
Entering ADT: 805 Minor ADT: 460

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.7	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	1	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	1	\$350.00	
Upgrade Junction Sign	\$350 per sign	1	\$350.00	
Upgrade Stop Ahead Sign	\$450 per sign	1	\$450.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$10,300.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$9,270
Local Match (10% of Total project cost)	\$1,030
Total Project Cost	\$10,300

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

NE 41st ST & 71st Ave NE (WEST)

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 4535
Entering ADT: 5460 Minor ADT: 925

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	2	0	0.00
Rate (per MVM)	0.2	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	Yes	Yes	★
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	No	Yes	
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	2	>0	★
			★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$62,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$55,935
Local Match (10% of Total project cost)	\$6,215
Total Project Cost	\$62,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

US Hwy 83 & 201st Ave NE

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Divided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 3150
Entering ADT: 3328 Minor ADT: 178

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	2	0	0.00
Rate (per MVM)	0.3	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	2	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	1	\$25,000.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$36,700.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$33,030
Local Match (10% of Total project cost)	\$3,670
Total Project Cost	\$36,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

NE 405th St & Burleigh County Hwy 1

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 310
Entering ADT: 605 Minor ADT: 295

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.9	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	Yes	Yes	★
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	No	≥ 100,000	
Total Crashes	1	>0	★
			★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$12,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,935
Local Match (10% of Total project cost)	\$1,215
Total Project Cost	\$12,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

US Hwy 83 & 266th Ave NE

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Divided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 3800
Entering ADT: 3853 Minor ADT: 53

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.1	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	1	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$12,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,935
Local Match (10% of Total project cost)	\$1,215
Total Project Cost	\$12,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

US Hwy 83 & County Hwy 10

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 1865
Entering ADT: 2235 Minor ADT: 370

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.2	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	1	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$62,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$55,935
Local Match (10% of Total project cost)	\$6,215
Total Project Cost	\$62,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

North Dakota Hwy 1804 & SE Desert Rd

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: T Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: #DIV/0!
Entering ADT: 1038 Minor ADT: #DIV/0!

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.5	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	Yes	Yes	★
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	No	Yes	
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	1	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	1	\$350.00	
Upgrade Junction Sign	\$350 per sign	1	\$350.00	
Upgrade Stop Ahead Sign	\$450 per sign	1	\$450.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$60,300.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$54,270
Local Match (10% of Total project cost)	\$6,030
Total Project Cost	\$60,300

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

NW River Rd & Burnt Creek Rd (NORTH)

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: T Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 180
Entering ADT: 633 Minor ADT: 180

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.9	0.0	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	Yes	Yes	★
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	No	≥ 100,000	
Total Crashes	1	>0	★
			★★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	1	\$350.00	
Upgrade Junction Sign	\$350 per sign	1	\$350.00	
Upgrade Stop Ahead Sign	\$450 per sign	1	\$450.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$10,300.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$9,270
Local Match (10% of Total project cost)	\$1,030
Total Project Cost	\$10,300

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

NE 158th St & Apple Creek Rd SE

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 468
Entering ADT: 603 Minor ADT: 135

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	0	0	0.00
Rate (per MVM)	0.0	0.0	0.0

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	Yes	Yes	★
Development	No	Yes	
Near RR Crossing	Yes	Yes	★
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	No	≥ 100,000	
Total Crashes	0	>0	

★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - .
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$6,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,535
Local Match (10% of Total project cost)	\$615
Total Project Cost	\$6,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

North Dakota Hwy 1804 & N Washington St

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 2828
Entering ADT: 4428 Minor ADT: 35

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	5	0	1.00
Rate (per MVM)	0.6	0.0	0.1

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	No	Yes	
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	5	>0	★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$62,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$55,935
Local Match (10% of Total project cost)	\$6,215
Total Project Cost	\$62,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

North Dakota Hwy 14 & 214th Ave NE

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 450
Entering ADT: 485 Minor ADT: 35

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	2	1	1.00
Rate (per MVM)	2.3	1.1	1.1

	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	Yes	Yes	★
Volume Cross Product	No	≥ 100,000	
Total Crashes	2	>0	★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$6,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,535
Local Match (10% of Total project cost)	\$615
Total Project Cost	\$6,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

SE 66th St & Apple Creek Rd

Agency Name: Burleigh County
Contact Name: Marcus Hall
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ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description

Configuration: X Traffic Control Device: Thru-Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Burleigh Major ADT: 3115
Entering ADT: 3990 Minor ADT: 875

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	10	5	0.00
Rate (per MVM)	1.4	0.7	0.0



	Value	Critical	Risk Ranking
Skew	No	Yes	
On/Near Curve	No	Yes	
Development	No	Yes	
Near RR Crossing	No	Yes	
Distance from previous STOP	No	Yes	
Volume Cross Product	Yes	≥ 100,000	★
Total Crashes	10	>0	★★

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	1	\$2,450.00	
			\$62,150.00	

Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$55,935
Local Match (10% of Total project cost)	\$6,215
Total Project Cost	\$62,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Burleigh County Rural Segment Projects

Corridor ID	Local Street Name	Start	End	Length	Risk Ranking	4" Edge Line	Shoulder Rumble Strip	Edge Line Rumble Strip	Center Line Rumble	Project Cost (\$)
528.01	12th St	Oahe Bend	1/4 mile north of Burleigh Ave	2.2	*****	0.0	0.0	2.2	2.2	\$14,300
530.01	Sibley Dr	12th St	Hester Dr	2.0	*****	0.0	2.0	0.0	0.0	\$6,000
527.01	Washington St	Mile south of 48th Ave	Burleigh Ave	1.8	*****	0.0	0.0	1.8	0.0	\$6,300
530.02	Sibley Dr	Hester Dr	48th Ave	1.7	****	0.0	0.0	1.7	0.0	\$5,950
532.01	River Rd	1/4 mile north of Burnt Boat Dr	Burnt Creek Loop	3.9	****	0.0	3.9	0.0	3.9	\$23,400
535.01	Burnt Creek Loop	River Rd	State Route 1804	3.4	****	0.0	0.0	3.4	0.0	\$11,900
525.01	41st St	US Hwy 83	26th St	2.0	****	0.0	2.0	0.0	2.0	\$12,000
510.01	71st St	US Hwy 83	106th St	7.1	****	0.0	0.0	7.1	7.1	\$46,150
526.01	48th Ave	England St	State Route 1804	3.0	***	0.0	0.0	3.0	0.0	\$10,500
529.01	Oahe Bend	12th St	Apple Creek Dr	0.8	***	0.0	0.0	0.8	0.0	\$2,800
534.01	Sandy River Rd	West of Wildwood St	River Rd	0.9	***	0.0	0.0	0.9	0.0	\$3,150
533.01	Wilderness Cove	1/4 mile west of River Rd	River Rd	0.3	***	0.0	0.0	0.3	0.0	\$1,050
522.01	52nd St	Woodrow Dr	Lincoln Rd	2.6	***	2.6	0.0	0.0	0.0	\$1,040
500.02	405th St	30th Ave	Interstate 94	1.9	***	0.0	0.0	1.9	0.0	\$6,650
535.02	Burnt Creek Loop	State Route 1804	State Route 1804	1.6	***	0.0	0.0	1.6	0.0	\$5,600
512.02	66th St	Lincoln Rd	County Hwy 10	3.0	***	0.0	3.0	0.0	3.0	\$18,000
511.01	Apple Creek Rd	Yegan Rd	158th St	9.4	***	0.0	0.0	9.4	0.0	\$32,900
						2.6	10.9	34.1	18.2	\$207,690

Detailed Corridor Information

Burleigh County Corridors														Access		Weighted ADT
≥ 45 MPH OR ≤ 40 MPH														Total	Access/Mile	
Corridor	Local Name	Start	End	Road Type	Speed Limit	Length	Edge Risk Assessment	ERA 2	Lane Width	Paved Shoulder Width	Gravel Shoulder Width	Curb & Gutter?	Shoulder Type	Total	Access/Mile	Weighted ADT
500.01	392nd St	Intersection with 48th Ave	Intersection with 30th Ave	Rural CMC Gravel		6.78	no photo						None	36	5.3	130
500.02	405th St	Intersection with 30th Ave	Intersection with Interstate 94	Rural Paved	Low	1.90	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	41	21.5	375
500.03	405th St	Intersection with Interstate 94	Intersection with 110th Ave	Rural Paved	High	4.12	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	28	6.8	145
500.04	392nd St	Intersection with 110th Ave	Intersection with 240th Ave	Rural CMC Gravel		11.08	no photo						None	38	3.4	140
500.05	392nd St	Intersection with 240th Ave	Intersection with state route 36	Rural Paved	High	5.70	1		12	4	0	No	Paved	30	5.3	155
500.06	392nd St	Intersection with state route 36	About a mile north of state route 36	Rural Paved	High	1.00	1		12	2	0	No	Paved	8	8.0	190
500.07	392nd St	About a mile north of state route 36	Intersection with 20th Ave	Rural CMC Gravel		13.62	no photo						None	48	3.5	133
501.01	435th Ave	Intersection with state route 9	Intersection with 145th St	Rural CMC Gravel		7.96	no photo						None	49	6.2	40
502.01	266th Ave	Intersection with state route 1804	Intersection with US Hwy 83	Rural CMC Gravel		5.15	no photo						None	29	5.6	190
502.02	266th Ave	Intersection with US Hwy 83	Intersection with 26th St	Rural Paved	High	2.01	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	15	7.5	160
502.03	266th Ave	Intersection with 26th St	Intersection with 197th St	Rural CMC Gravel		12.98	no photo						None	73	5.6	125
503.01	Moffit Rd	Intersection with 185th St	Intersection with US Hwy 83	Rural Paved	High	12.55	1		12	6	0	No	Paved	61	4.9	140
504.01	102nd Ave	Intersection with US Hwy 83	Border of Burleigh about a mile east of 353rd St	Rural CMC Gravel		10.88	no photo						None	36	3.3	170
505.01	Lincoln Rd	Intersection with 6th St	Intersection with 93rd St	Rural Paved		1.99	no photo						None	23	11.5	413
505.02	Lincoln Rd	Intersection with 93rd St	Intersection with 236th St	Rural CMC Gravel		10.83	no photo						None	10	0.9	69
505.03	34th Ave	Intersection with 236th St	Intersection with US Hwy 83	Rural CMC Gravel		5.98	no photo						None	20	3.3	170
505.04	48th Ave	Intersection with US Hwy 83	Intersection with 392nd St	Rural CMC Gravel		5.92	no photo						None	23	3.9	200
505.05	34th Ave	Intersection with 392nd St	Intersection with 18th Ave	Rural CMC Gravel		3.98	no photo						None	12	3.0	35
506.01	236th St	Intersection with County Hwy 10	Intersection with Interstate 94	Rural Paved	High	0.95	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	15	15.8	270
506.02	294th St	Intersection with Interstate 94	Intersection with 227th Ave	Rural CMC Gravel		16.06	no photo						None	80	5.0	140
507.01	158th St	Intersection with Moffit Rd	Intersection with Lincoln Rd	Rural Paved	High	4.99	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	17	3.4	320
507.02	158th St	Intersection with Lincoln Rd	Intersection with Interstate 94	Rural Paved	High	4.87	1		12	2	0	No	Paved	43	8.8	461
507.03	158th St	Intersection with Interstate 94	Intersection with 57th Ave	Rural Paved	High	1.97	1		12	2	1	No	Composite	15	7.6	160
508.01	93rd St	Intersection with state route 1804	Intersection with Lincoln Rd	Rural Paved	High	4.93	1		12	2	1	No	Composite	34	6.9	205
508.02	93rd St	Intersection with Lincoln Rd	Intersection with Apple Creek Rd	Rural Paved	High	2.00	1		12	2	0	No	Paved	24	12.0	460
509.02	106th St	Intersection with Interstate 94	Intersection with 123rd Ave	Rural CMC Gravel		6.99	no photo						None	33	4.7	130
509.03	119th St	Intersection with 123rd Ave	Intersection with 201st Ave	Rural CMC Gravel		6.94	no photo						None	33	4.8	130
510.01	71st St	Intersection with US Hwy 83	Intersection with 106th St	Rural Paved	High	7.06	1		12	2	1	No	Composite	80	11.3	1850
511.01	Apple Creek Rd	Intersection with Yegan Rd	Intersection with 158th St	Rural Paved	High	9.40	1		12	2	0	No	Paved	53	5.6	697
512.01	66th St	Intersection with 48th Ave	About a quarter of a mile south of Humbert Dr	Rural CMC Gravel		0.50	no photo						None	20	40.0	1025
512.02	66th St	Intersection with Lincoln Rd	Intersection with County Hwy 10	Rural Paved	High	3.00	1		12	4	1	No	Composite	31	10.3	2421
512.03	66th St	About a mile South of 43rd Ave	Intersection with 43rd Ave	Rural CMC Gravel		0.85	no photo						None	5	5.9	120
512.04	66th St	About a quarter of a mile south of Rocky Rd	About a mile South of 71st Ave	Rural CMC Gravel		0.74	no photo						None	10	13.6	120
513.01	County Hwy 10	Intersection with Lincoln Rd	Intersection with 158th St	Rural Paved	High	7.20	1		12	8	1	No	Composite	54	7.5	1611
513.02	County Hwy 10	Intersection with 158th St	Intersection with 236th St	Rural Paved	High	6.00	1		12	8	0	No	Paved	25	4.2	800
513.03	County Hwy 10	Intersection with 236th St	Intersection with Interstate 94	Rural Paved	High	5.99	1		12	8	0	No	Paved	44	7.3	715
513.04	County Hwy 10	Intersection with Interstate 94	Intersection with 18th Ave	Rural Paved	High	10.54	1		12	8	0	No	Paved	56	5.3	185
514.01	175th Ave	Intersection with state route 1804	Intersection with US Hwy 83	Rural CMC Gravel		4.29	no photo						None	20	4.7	150
515.01	201st Ave	Intersection with US Hwy 83	Intersection with 119th St	Rural Paved	High	9.00	1		12	3	1	No	Composite	60	6.7	212
515.02	201st Ave	Intersection with 119th St	Intersection with 197th St	Rural CMC Gravel		5.98	no photo						None	22	3.7	120
516.01	197th St	Intersection with 201st Ave	Intersection with 266th Ave	Rural CMC Gravel		5.01	no photo						None	17	3.4	120
517.01	184th St	Intersection with 266th Ave	Intersection with state route 36	Rural CMC Gravel		3.02	no photo						None	13	4.3	190
518.01	227th Ave	Intersection with 197th St	Intersection with 249th St	Rural CMC Gravel		4.01	no photo						None	16	4.0	120
518.02	214th Ave	Intersection with 249th St	Intersection with state route 14	Rural CMC Gravel		4.99	no photo						None	23	4.6	120
518.03	214th Ave	Intersection with state route 14	Intersection with 392nd St	Rural CMC Gravel		6.99	no photo						None	28	4.0	120
519.01	Main St	Intersection with state route 36	Intersection with Charles St	Rural Paved	High	1.08	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	10	9.2	190
519.02	145th St	Intersection with Charles St	Intersection with 435th Ave	Rural CMC Gravel		10.27	no photo						None	43	4.2	30
519.03	145th St	Intersection with 435th Ave	Intersection with 5th St	Rural CMC Gravel		2.87	no photo						None	18	6.3	15
520.01	461st Ave	Intersection with 145th St	Intersection with 6th Ave	Rural CMC Gravel		7.48	no photo						None	32	4.3	140
521.01	149th Ave	Intersection with 34th St	Intersection with US Hwy 83	Rural Paved	High	2.46	1		12	3	0	No	Paved	24	9.8	155
522.01	52nd St	Intersection with Woodrow Dr	Intersection with Lincoln Rd	Rural Paved	Low	2.57	3		12	0	0	No	None	26	10.1	120
523.01	Desert Rd	Intersection with 115th Ave	Intersection with state route 1804	Rural Paved	High	2.06	3		12	0	0	No	None	14	6.8	140
524.01	26th St	Intersection with 71st St	Intersection with 123rd Ave	Rural Paved	High	4.01	1		12	4	1	No	Composite	47	11.7	339
525.01	41st St	Intersection with US Hwy 83	Intersection with 26th St	Rural Paved	High	1.99	1		12	8	0	No	Paved	20	10.1	5283
526.01	48th Ave	Intersection with England St	Intersection with state route 1804	Rural Paved	Low	2.99	3		12	0	0	No	None	51	17.0	659
526.02	48th Ave	Intersection with 552nd St	Intersection with Pinewood Loop	Rural CMC Gravel		0.50	no photo						None	11	22.0	120
527.01	Washington St	About a mile south of 48th Ave	Intersection with Burleigh Ave	Rural Paved	Low	1.75	3		12	0	0	No	None	23	13.1	765
527.02	Washington St	About a half a mile south of 57th Ave	Intersection with state route 1804	Rural Paved	High	1.36	1		12	4	0	No	Paved	13	9.6	2895
528.01	12th St	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	Rural Paved	Low	2.25	3		12	0	0	No	None	29	12.9	1298
529.01	Oahe Bend	Intersection with 12th St	Intersection with Apple Creek Dr	Rural Paved	Low	0.84	3		12	0	0	No	None	11	13.0	450
530.01	Sibley Dr	Intersection with 12th St	Intersection with Hester Dr	Rural Paved	Low	2.04	2	Useable shoulder, no reasonable clear zone	12	0	2	No	Gravel	35	17.1	725
530.02	Sibley Dr	Intersection with Hester Dr	Intersection with 48th Ave	Rural Paved	Low	1.73	3		12	0	0	No	None	22	12.7	663
531.01	15th St	Intersection with state route 1804	Intersection with Welle Loop	Rural Paved	High	1.33	1		12	4	0	No	Paved	12	9.0	125
532.01	River Rd	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	Rural Paved	Low	3.94	2	Useable shoulder, no reasonable clear zone	12	2	0	No	Paved	24	6.1	1516
533.01	Wilderness Cove	About a quarter mile west of River Rd	Intersection with River Rd	Rural Paved	Low	0.34	3		14	0	0	No	None	7	20.7	160
534.01	Sandy River Rd	Just west of Wildwood St	Intersection with River Rd	Rural Paved	Low	0.95	3		12	0	0	No	None	19	20.1	350
535.01	Burnt Creek Loop	Intersection with River Rd	Intersection with state route 1804	Rural Paved	Low	3.43	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	38	11.1	315
535.02	Burnt Creek Loop	Intersection with state route 1804	Intersection with state route 1804	Rural Paved	High	1.59	2	Reasonable clearzone, no useable shoulder	12	0	0	No	None	16	10.0	130
536.01	106th St	Intersection with 54th St	Intersection with state route 1804	Rural Paved	High	1.75	1		12	2	0	No	Paved	8	4.6	150

Detailed Corridor Information

Burleigh County Corridors				Years of Data	AADT	Total Crashes	Severe Crashes	Intersection Crashes	Severity					Diagram - SEVERE Only															
Corridor	Local Name	Start	End						K	A	B	C	PDO	Rear End	Sideswipe Passing	Angle (Opp Dir)	Singe Veh	Right Angle	Angle (Same Dir)	Angle (Not Specific)	Head On	Sideswipe Opposing	Rear-to-Rear	Rear-to-Side					
500.01	392nd St	Intersection with 48th Ave	Intersection with 30th Ave	5	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
500.02	405th St	Intersection with 30th Ave	Intersection with Interstate 94	5	375	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
500.03	405th St	Intersection with Interstate 94	Intersection with 110th Ave	5	145	4	-	1	-	-	1	-	3	-	-	-	-	-	-	-									
500.04	392nd St	Intersection with 110th Ave	Intersection with 240th Ave	5	140	2	-	-	-	1	-	1	-	-	-	-	-	-	-	-									
500.05	392nd St	Intersection with 240th Ave	Intersection with state route 36	5	155	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
500.06	392nd St	Intersection with state route 36	About a mile north of state route 36	5	190	2	-	-	-	-	1	1	-	-	-	-	-	-	-	-									
500.07	392nd St	About a mile north of state route 36	Intersection with 20th Ave	5	133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
501.01	435th Ave	Intersection with state route 9	Intersection with 145th St	5	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
502.01	266th Ave	Intersection with state route 1804	Intersection with US Hwy 83	5	190	2	-	-	-	1	-	1	-	-	-	-	-	-	-	-									
502.02	266th Ave	Intersection with US Hwy 83	Intersection with 26th St	5	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
502.03	266th Ave	Intersection with 26th St	Intersection with 197th St	5	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
503.01	Moffit Rd	Intersection with 185th St	Intersection with US Hwy 83	5	140	23	1	-	-	1	2	2	18	-	-	-	1	-	-	-									
504.01	102nd Ave	Intersection with US Hwy 83	Border of Burleigh about a mile east of 353rd St	5	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
505.01	Lincoln Rd	Intersection with 6th St	Intersection with 93rd St	5	413	5	-	-	-	1	-	4	-	-	-	-	-	-	-	-									
505.02	Lincoln Rd	Intersection with 93rd St	Intersection with 236th St	5	69	5	1	-	1	-	1	-	3	-	-	-	1	-	-	-									
505.03	34th Ave	Intersection with 236th St	Intersection with US Hwy 83	5	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
505.04	48th Ave	Intersection with US Hwy 83	Intersection with 392nd St	5	200	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-									
505.05	34th Ave	Intersection with 392nd St	Intersection with 18th Ave	5	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
506.01	236th St	Intersection with County Hwy 10	Intersection with Interstate 94	5	270	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-									
506.02	294th St	Intersection with Interstate 94	Intersection with 227th Ave	5	140	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-									
507.01	158th St	Intersection with Moffit Rd	Intersection with Lincoln Rd	5	320	7	1	-	-	1	-	-	6	-	-	-	1	-	-	-									
507.02	158th St	Intersection with Lincoln Rd	Intersection with Interstate 94	5	461	11	-	4	-	-	2	-	9	-	-	-	-	-	-	-									
507.03	158th St	Intersection with Interstate 94	Intersection with 57th Ave	5	160	3	-	-	-	-	-	-	3	-	-	-	-	-	-	-									
508.01	93rd St	Intersection with state route 1804	Intersection with Lincoln Rd	5	205	6	-	1	-	-	-	-	6	-	-	-	-	-	-	-									
508.02	93rd St	Intersection with Lincoln Rd	Intersection with Apple Creek Rd	5	460	8	-	-	-	2	1	5	-	-	-	-	-	-	-	-									
509.02	106th St	Intersection with Interstate 94	Intersection with 123rd Ave	5	130	3	-	1	-	-	-	-	3	-	-	-	-	-	-	-									
509.03	119th St	Intersection with 123rd Ave	Intersection with 201st Ave	5	130	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-									
510.01	71st St	Intersection with US Hwy 83	Intersection with 106th St	5	1,850	30	1	1	-	1	3	-	26	-	-	-	1	-	-	-									
511.01	Apple Creek Rd	Intersection with Yegan Rd	Intersection with 158th St	5	697	29	2	4	2	-	2	2	23	-	-	-	2	-	-	-									
512.01	66th St	Intersection with 48th Ave	About a quarter of a mile south of Humbert Dr	5	1,025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
512.02	66th St	Intersection with Lincoln Rd	Intersection with County Hwy 10	5	2,421	50	1	15	-	1	9	2	38	-	-	-	1	-	-	-									
512.03	66th St	About a mile South of 43rd Ave	Intersection with 43rd Ave	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
512.04	66th St	About a quarter of a mile south of Rocky Rd	About a mile South of 71st Ave	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
513.01	County Hwy 10	Intersection with Lincoln Rd	Intersection with 158th St	5	1,611	42	-	2	-	-	3	-	39	-	-	-	-	-	-	-									
513.02	County Hwy 10	Intersection with 158th St	Intersection with 236th St	5	800	6	-	-	-	-	2	-	4	-	-	-	-	-	-	-									
513.03	County Hwy 10	Intersection with 236th St	Intersection with Interstate 94	5	715	10	-	-	-	-	1	-	9	-	-	-	-	-	-	-									
513.04	County Hwy 10	Intersection with Interstate 94	Intersection with 18th Ave	5	185	14	-	-	-	-	3	1	10	-	-	-	-	-	-	-									
514.01	175th Ave	Intersection with state route 1804	Intersection with US Hwy 83	5	150	3	-	-	-	-	-	-	3	-	-	-	-	-	-	-									
515.01	201st Ave	Intersection with US Hwy 83	Intersection with 119th St	5	212	3	-	-	-	-	1	-	2	-	-	-	-	-	-	-									
515.02	201st Ave	Intersection with 119th St	Intersection with 197th St	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
516.01	197th St	Intersection with 201st Ave	Intersection with 266th Ave	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
517.01	184th St	Intersection with 266th Ave	Intersection with state route 36	5	190	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-									
518.01	227th Ave	Intersection with 197th St	Intersection with 249th St	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
518.02	214th Ave	Intersection with 249th St	Intersection with state route 14	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
518.03	214th Ave	Intersection with state route 14	Intersection with 392nd St	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
519.01	Main St	Intersection with state route 36	Intersection with Charles St	5	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
519.02	145th St	Intersection with Charles St	Intersection with 435th Ave	5	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
519.03	145th St	Intersection with 435th Ave	Intersection with 5th St	5	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
520.01	461st Ave	Intersection with 145th St	Intersection with 6th Ave	5	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
521.01	149th Ave	Intersection with 34th St	Intersection with US Hwy 83	5	155	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-									
522.01	52nd St	Intersection with Woodrow Dr	Intersection with Lincoln Rd	5	120	15	-	8	-	-	2	2	11	-	-	-	-	-	-	-									
523.01	Desert Rd	Intersection with 115th Ave	Intersection with state route 1804	5	140	8	-	1	-	-	-	-	8	-	-	-	-	-	-	-									
524.01	26th St	Intersection with 71st St	Intersection with 123rd Ave	5	339	9	-	2	-	-	1	-	8	-	-	-	-	-	-	-									
525.01	41st St	Intersection with US Hwy 83	Intersection with 26th St	5	5,283	9	-	1	-	-	-	1	8	-	-	-	-	-	-	-									
526.01	48th Ave	Intersection with England St	Intersection with state route 1804	5	659	6	-	-	-	-	1	-	5	-	-	-	-	-	-	-									
526.02	48th Ave	Intersection with 552nd St	Intersection with Pinewood Loop	5	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
527.01	Washington St	About a mile south of 48th Ave	Intersection with Burleigh Ave	5	765	12	-	5	-	-	2	2	8	-	-	-	-	-	-	-									
527.02	Washington St	About a half a mile south of 57th Ave	Intersection with state route 1804	5	2,895	10	1	3	1	-	-	-	9	-	-	-	1	-	-	-									
528.01	12th St	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	5	1,298	26	2	16	1	1	5	5	14	-	-	-	2	-	-	-									
529.01	Oahe Bend	Intersection with 12th St	Intersection with Apple Creek Dr	5	450	4	-	-	-	-	-	-	4	-	-	-	-	-	-	-									
530.01	Sibley Dr	Intersection with 12th St	Intersection with Hester Dr	5	725	9	-	-	-	-	2	-	7	-	-	-	-	-	-	-									
530.02	Sibley Dr	Intersection with Hester Dr	Intersection with 48th Ave	5	663	12	1	2	-	1	-	-	11	1	-	-	-	-	-	-									
531.01	15th St	Intersection with state route 1804	Intersection with Welle Loop	5	125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
532.01	River Rd	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	5	1,516	52	1	-	-	1	8	-	43	-	-	-	1	-	-	-									
533.01	Wilderness Cove	About a quarter mile west of River Rd	Intersection with River Rd	5	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
534.01	Sandy River Rd	Just west of Wildwood St	Intersection with River Rd	5	350	8	-	2	-	-	1	-	7	-	-	-	-	-	-	-									
535.01	Burnt Creek Loop	Intersection with River Rd	Intersection with state route 1804	5	315	28	-	3	-	-	4	1	23	-	-	-	-	-	-	-									
535.02	Burnt Creek Loop	Intersection with state route 1804	Intersection with state route 1804	5	130	5	1	3	-	1	2	-	2	-	-	-	-	-	1	-									
536.01	106th St	Intersection with 54th St	Intersection with state route 1804	5	150	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-									
						501	13	75	5	8	65	20	403	1	-	-	10	-	-	1	8%	1	8%	1	0%	-	0%	-	0%
									1%	2%	###	4%	80%	8%	0%	0%	77%	0%	0%	8%	8%	0%	0%	0%	0%	0%	0%	0%	

Detailed Corridor Information

Burleigh County Corridors				Light Conditions - SEVERE Only					Road Condition - SEVERE Only				Road Characteristics		
Corridor	Local Name	Start	End	Day	Dawn/ Dusk	Dark with Streetlights	Dark	Other/ Unknown	Dry	Wet	Snow/ Slush	Other	Straight	On Curve	Other
				500.01	392nd St	Intersection with 48th Ave	Intersection with 30th Ave	-	-	-	-	-	-	-	-
500.02	405th St	Intersection with 30th Ave	Intersection with Interstate 94	-	-	-	-	-	-	-	-	-	-	-	-
500.03	405th St	Intersection with Interstate 94	Intersection with 110th Ave	-	-	-	-	-	-	-	-	-	-	-	-
500.04	392nd St	Intersection with 110th Ave	Intersection with 240th Ave	-	-	-	-	-	-	-	-	-	-	-	-
500.05	392nd St	Intersection with 240th Ave	Intersection with state route 36	-	-	-	-	-	-	-	-	-	-	-	-
500.06	392nd St	Intersection with state route 36	About a mile north of state route 36	-	-	-	-	-	-	-	-	-	-	-	-
500.07	392nd St	About a mile north of state route 36	Intersection with 20th Ave	-	-	-	-	-	-	-	-	-	-	-	-
501.01	435th Ave	Intersection with state route 9	Intersection with 145th St	-	-	-	-	-	-	-	-	-	-	-	-
502.01	266th Ave	Intersection with state route 1804	Intersection with US Hwy 83	-	-	-	-	-	-	-	-	-	-	-	-
502.02	266th Ave	Intersection with US Hwy 83	Intersection with 26th St	-	-	-	-	-	-	-	-	-	-	-	-
502.03	266th Ave	Intersection with 26th St	Intersection with 197th St	-	-	-	-	-	-	-	-	-	-	-	-
503.01	Moffit Rd	Intersection with 185th St	Intersection with US Hwy 83	1	-	-	-	-	1	-	-	-	1	-	-
504.01	102nd Ave	Intersection with US Hwy 83	Border of Burleigh about a mile east of 353rd St	-	-	-	-	-	-	-	-	-	-	-	-
505.01	Lincoln Rd	Intersection with 6th St	Intersection with 93rd St	-	-	-	-	-	-	-	-	-	-	-	-
505.02	Lincoln Rd	Intersection with 93rd St	Intersection with 236th St	-	-	-	1	-	-	-	-	1	-	1	-
505.03	34th Ave	Intersection with 236th St	Intersection with US Hwy 83	-	-	-	-	-	-	-	-	-	-	-	-
505.04	48th Ave	Intersection with US Hwy 83	Intersection with 392nd St	-	-	-	-	-	-	-	-	-	-	-	-
505.05	34th Ave	Intersection with 392nd St	Intersection with 18th Ave	-	-	-	-	-	-	-	-	-	-	-	-
506.01	236th St	Intersection with County Hwy 10	Intersection with Interstate 94	-	-	-	-	-	-	-	-	-	-	-	-
506.02	294th St	Intersection with Interstate 94	Intersection with 227th Ave	-	-	-	-	-	-	-	-	-	-	-	-
507.01	158th St	Intersection with Moffit Rd	Intersection with Lincoln Rd	-	-	-	1	-	1	-	-	-	1	-	-
507.02	158th St	Intersection with Lincoln Rd	Intersection with Interstate 94	-	-	-	-	-	-	-	-	-	-	-	-
507.03	158th St	Intersection with Interstate 94	Intersection with 57th Ave	-	-	-	-	-	-	-	-	-	-	-	-
508.01	93rd St	Intersection with state route 1804	Intersection with Lincoln Rd	-	-	-	-	-	-	-	-	-	-	-	-
508.02	93rd St	Intersection with Lincoln Rd	Intersection with Apple Creek Rd	-	-	-	-	-	-	-	-	-	-	-	-
509.02	106th St	Intersection with Interstate 94	Intersection with 123rd Ave	-	-	-	-	-	-	-	-	-	-	-	-
509.03	119th St	Intersection with 123rd Ave	Intersection with 201st Ave	-	-	-	-	-	-	-	-	-	-	-	-
510.01	71st St	Intersection with US Hwy 83	Intersection with 106th St	-	-	-	1	-	1	-	-	-	1	-	-
511.01	Apple Creek Rd	Intersection with Yegan Rd	Intersection with 158th St	1	-	-	1	-	2	-	-	-	2	-	-
512.01	66th St	Intersection with 48th Ave	About a quarter of a mile south of Humbert Dr	-	-	-	-	-	-	-	-	-	-	-	-
512.02	66th St	Intersection with Lincoln Rd	Intersection with County Hwy 10	1	-	-	-	-	1	-	-	-	1	-	-
512.03	66th St	About a mile South of 43rd Ave	Intersection with 43rd Ave	-	-	-	-	-	-	-	-	-	-	-	-
512.04	66th St	About a quarter of a mile south of Rocky Rd	About a mile South of 71st Ave	-	-	-	-	-	-	-	-	-	-	-	-
513.01	County Hwy 10	Intersection with Lincoln Rd	Intersection with 158th St	-	-	-	-	-	-	-	-	-	-	-	-
513.02	County Hwy 10	Intersection with 158th St	Intersection with 236th St	-	-	-	-	-	-	-	-	-	-	-	-
513.03	County Hwy 10	Intersection with 236th St	Intersection with Interstate 94	-	-	-	-	-	-	-	-	-	-	-	-
513.04	County Hwy 10	Intersection with Interstate 94	Intersection with 18th Ave	-	-	-	-	-	-	-	-	-	-	-	-
514.01	175th Ave	Intersection with state route 1804	Intersection with US Hwy 83	-	-	-	-	-	-	-	-	-	-	-	-
515.01	201st Ave	Intersection with US Hwy 83	Intersection with 119th St	-	-	-	-	-	-	-	-	-	-	-	-
515.02	201st Ave	Intersection with 119th St	Intersection with 197th St	-	-	-	-	-	-	-	-	-	-	-	-
516.01	197th St	Intersection with 201st Ave	Intersection with 266th Ave	-	-	-	-	-	-	-	-	-	-	-	-
517.01	184th St	Intersection with 266th Ave	Intersection with state route 36	-	-	-	-	-	-	-	-	-	-	-	-
518.01	227th Ave	Intersection with 197th St	Intersection with 249th St	-	-	-	-	-	-	-	-	-	-	-	-
518.02	214th Ave	Intersection with 249th St	Intersection with state route 14	-	-	-	-	-	-	-	-	-	-	-	-
518.03	214th Ave	Intersection with state route 14	Intersection with 392nd St	-	-	-	-	-	-	-	-	-	-	-	-
519.01	Main St	Intersection with state route 36	Intersection with Charles St	-	-	-	-	-	-	-	-	-	-	-	-
519.02	145th St	Intersection with Charles St	Intersection with 435th Ave	-	-	-	-	-	-	-	-	-	-	-	-
519.03	145th St	Intersection with 435th Ave	Intersection with 5th St	-	-	-	-	-	-	-	-	-	-	-	-
520.01	461st Ave	Intersection with 145th St	Intersection with 6th Ave	-	-	-	-	-	-	-	-	-	-	-	-
521.01	149th Ave	Intersection with 34th St	Intersection with US Hwy 83	-	-	-	-	-	-	-	-	-	-	-	-
522.01	52nd St	Intersection with Woodrow Dr	Intersection with Lincoln Rd	-	-	-	-	-	-	-	-	-	-	-	-
523.01	Desert Rd	Intersection with 115th Ave	Intersection with state route 1804	-	-	-	-	-	-	-	-	-	-	-	-
524.01	26th St	Intersection with 71st St	Intersection with 123rd Ave	-	-	-	-	-	-	-	-	-	-	-	-
525.01	41st St	Intersection with US Hwy 83	Intersection with 26th St	-	-	-	-	-	-	-	-	-	-	-	-
526.01	48th Ave	Intersection with England St	Intersection with state route 1804	-	-	-	-	-	-	-	-	-	-	-	-
526.02	48th Ave	Intersection with 552nd St	Intersection with Pinewood Loop	-	-	-	-	-	-	-	-	-	-	-	-
527.01	Washington St	About a mile south of 48th Ave	Intersection with Burleigh Ave	-	-	-	-	-	-	-	-	-	-	-	-
527.02	Washington St	About a half a mile south of 57th Ave	Intersection with state route 1804	-	-	-	1	-	-	1	-	-	1	-	-
528.01	12th St	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	-	-	-	2	-	2	-	-	-	2	-	-
529.01	Oahe Bend	Intersection with 12th St	Intersection with Apple Creek Dr	-	-	-	-	-	-	-	-	-	-	-	-
530.01	Sibley Dr	Intersection with 12th St	Intersection with Hester Dr	-	-	-	-	-	-	-	-	-	-	-	-
530.02	Sibley Dr	Intersection with Hester Dr	Intersection with 48th Ave	1	-	-	-	-	1	-	-	-	1	-	-
531.01	15th St	Intersection with state route 1804	Intersection with Welle Loop	-	-	-	-	-	-	-	-	-	-	-	-
532.01	River Rd	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	-	1	-	-	-	1	-	-	-	1	-	-
533.01	Wilderness Cove	About a quarter mile west of River Rd	Intersection with River Rd	-	-	-	-	-	-	-	-	-	-	-	-
534.01	Sandy River Rd	Just west of Wildwood St	Intersection with River Rd	-	-	-	-	-	-	-	-	-	-	-	-
535.01	Burnt Creek Loop	Intersection with River Rd	Intersection with state route 1804	-	-	-	-	-	-	-	-	-	-	-	-
535.02	Burnt Creek Loop	Intersection with state route 1804	Intersection with state route 1804	1	-	-	-	-	-	1	-	-	1	-	-
536.01	106th St	Intersection with 54th St	Intersection with state route 1804	-	-	-	-	-	-	-	-	-	-	-	-

5 1 7 10 2 1 12 1 -
38% 8% 0% 54% 0% 77% 15% 0% 8% 92% 8% 0%

**Burleigh County
Rural Segment Listing**

*High Priority Segments Project Sheet Page Number

Project Sheet Page*	Corridor	Route	Start	End	Length (miles)	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assessment
	500.02	0	Intersection with 30th Ave	Intersection with Interstate 94	1.9	0	375	0.00	21.5	2.10	2
	500.03	0	Intersection with Interstate 94	Intersection with 110th Ave	4.1	2	145	0.10	6.8	0.00	2
	500.05	0	Intersection with 240th Ave	Intersection with state route 36	5.7	0	155	0.00	5.3	0.88	1
	500.06	0	Intersection with state route 36	About a mile north of state route 36	1.0	2	190	0.40	8.0	0.00	1
	502.02	0	Intersection with US Hwy 83	Intersection with 26th St	2.0	0	160	0.00	7.5	0.00	2
	503.01	0	Intersection with 185th St	Intersection with US Hwy 83	12.5	6	140	0.10	4.9	0.16	1
	505.01	0	Intersection with 6th St	Intersection with 93rd St	2.0	2	413	0.20	11.5	0.00	0
	506.01	0	Intersection with County Hwy 10	Intersection with Interstate 94	1.0	1	270	0.21	15.8	0.00	2
	507.01	0	Intersection with Moffit Rd	Intersection with Lincoln Rd	5.0	1	320	0.04	3.4	0.00	2
	507.02	0	Intersection with Lincoln Rd	Intersection with Interstate 94	4.9	1	461	0.04	8.8	0.00	1
	507.03	0	Intersection with Interstate 94	Intersection with 57th Ave	2.0	0	160	0.00	7.6	0.00	1
	508.01	0	Intersection with state route 1804	Intersection with Lincoln Rd	4.9	3	205	0.12	6.9	0.00	1
	508.02	0	Intersection with Lincoln Rd	Intersection with Apple Creek Rd	2.0	3	460	0.30	12.0	0.00	1
	510.01	0	Intersection with US Hwy 83	Intersection with 106th St	7.1	15	1,850	0.43	11.3	0.14	1
	511.01	0	Intersection with Yegan Rd	Intersection with 158th St	9.4	14	697	0.30	5.6	0.43	1
	512.02	0	Intersection with Lincoln Rd	Intersection with County Hwy 10	3.0	14	2,421	0.93	10.3	0.00	1
	513.01	0	Intersection with Lincoln Rd	Intersection with 158th St	7.2	6	1,611	0.17	7.5	0.00	1
	513.02	0	Intersection with 158th St	Intersection with 236th St	6.0	4	800	0.13	4.2	0.33	1
	513.03	0	Intersection with 236th St	Intersection with Interstate 94	6.0	2	715	0.07	7.3	0.00	1
	513.04	0	Intersection with Interstate 94	Intersection with 18th Ave	10.5	8	185	0.15	5.3	0.19	1
	515.01	0	Intersection with US Hwy 83	Intersection with 119th St	9.0	2	212	0.04	6.7	0.00	1
	519.01	0	Intersection with state route 36	Intersection with Charles St	1.1	0	190	0.00	9.2	0.00	2
	521.01	0	Intersection with 34th St	Intersection with US Hwy 83	2.5	0	155	0.00	9.8	0.00	1
	522.01	0	Intersection with Woodrow Dr	Intersection with Lincoln Rd	2.6	6	120	0.47	10.1	0.00	3
	523.01	0	Intersection with 115th Ave	Intersection with state route 1804	2.1	2	140	0.19	6.8	0.49	3
	524.01	0	Intersection with 71st St	Intersection with 123rd Ave	4.0	3	339	0.15	11.7	0.00	1
	525.01	0	Intersection with US Hwy 83	Intersection with 26th St	2.0	4	5,283	0.40	10.1	0.50	1
	526.01	0	Intersection with England St	Intersection with state route 1804	3.0	2	659	0.13	17.0	0.00	3
	527.01	0	About a mile south of 48th Ave	Intersection with Burleigh Ave	1.8	4	765	0.46	13.1	0.00	3
	527.02	0	About a half a mile south of 57th Ave	Intersection with state route 1804	1.4	4	2,895	0.59	9.6	0.00	1
	528.01	0	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	2.2	8	1,298	0.71	12.9	0.44	3
	529.01	0	Intersection with 12th St	Intersection with Apple Creek Dr	0.8	3	450	0.71	13.0	0.00	3
	530.01	0	Intersection with 12th St	Intersection with Hester Dr	2.0	5	725	0.49	17.1	4.40	2
	530.02	0	Intersection with Hester Dr	Intersection with 48th Ave	1.7	3	663	0.35	12.7	0.00	3
	531.01	0	Intersection with state route 1804	Intersection with Welle Loop	1.3	0	125	0.00	9.0	0.00	1
	532.01	0	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	3.9	25	1,516	1.27	6.1	0.51	2
	533.01	0	About a quarter mile west of River Rd	Intersection with River Rd	0.3	0	160	0.00	20.7	5.90	3
	534.01	0	Just west of Wildwood St	Intersection with River Rd	0.9	4	350	0.85	20.1	0.00	3
	535.01	0	Intersection with River Rd	Intersection with state route 1804	3.4	11	315	0.64	11.1	0.87	2
	535.02	0	Intersection with state route 1804	Intersection with state route 1804	1.6	2	130	0.25	10.0	0.00	2
	536.01	0	Intersection with 54th St	Intersection with state route 1804	1.7	1	150	0.11	4.6	2.29	1

147.5 173

Edge Risk Legend

- 3 Risky - NEITHER shoulder or good clear zone
- 2 Either a shoulder OR good clear zone
- 1 BOTH shoulder and a good clear zone

Critical ADT Range - Lane Departure

650
8,000

	Access	Lane Departure	Critical Radius Curves
Total	2412	173	14
Total Mileage	147.5	147.5	147.5
Years			
Average Density (Total/Mile)	16.4	0.23	0.09

Burleigh County
Rural Segment Prioritization - Lane Departure Priority

#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Tiebreakers		
													Totals	Edge Risk	ADT
1	528.01	0	528	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	2.2	1,298	*	*	*	*	*	*****	3	1,298
2	530.01	0	530	Intersection with 12th St	Intersection with Hester Dr	2.0	725	*	*	*	*	*	*****	2	725
3	527.01	0	527	About a mile south of 48th Ave	Intersection with Burleigh Ave	1.8	765	*	*	*	*	*	****	3	765
4	530.02	0	530	Intersection with Hester Dr	Intersection with 48th Ave	1.7	663	*	*	*	*	*	****	3	663
5	532.01	0	532	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	3.9	1,516	*	*	*	*	*	****	2	1,516
6	535.01	0	535	Intersection with River Rd	Intersection with state route 1804	3.4	315	*	*	*	*	*	****	2	315
7	525.01	0	525	Intersection with US Hwy 83	Intersection with 26th St	2.0	5,283	*	*	*	*	*	****	1	5,283
8	510.01	0	510	Intersection with US Hwy 83	Intersection with 106th St	7.1	1,850	*	*	*	*	*	****	1	1,850
9	526.01	0	526	Intersection with England St	Intersection with state route 1804	3.0	659	*	*	*	*	*	****	3	659
10	529.01	0	529	Intersection with 12th St	Intersection with Apple Creek Dr	0.8	450	*	*	*	*	*	***	3	450
11	534.01	0	534	Just west of Wildwood St	Intersection with River Rd	0.9	350	*	*	*	*	*	***	3	350
12	533.01	0	533	About a quarter mile west of River Rd	Intersection with River Rd	0.3	160	*	*	*	*	*	***	3	160
13	522.01	0	522	Intersection with Woodrow Dr	Intersection with Lincoln Rd	2.6	120	*	*	*	*	*	***	3	120
14	500.02	0	500	Intersection with 30th Ave	Intersection with Interstate 94	1.9	375	*	*	*	*	*	***	2	375
15	535.02	0	535	Intersection with state route 1804	Intersection with state route 1804	1.6	130	*	*	*	*	*	***	2	130
16	512.02	0	512	Intersection with Lincoln Rd	Intersection with County Hwy 10	3.0	2,421	*	*	*	*	*	***	1	2,421
17	511.01	0	511	Intersection with Yegan Rd	Intersection with 158th St	9.4	697	*	*	*	*	*	***	1	697
18	523.01	0	523	Intersection with 115th Ave	Intersection with state route 1804	2.1	140	*	*	*	*	*	**	3	140
19	506.01	0	506	Intersection with County Hwy 10	Intersection with Interstate 94	1.0	270	*	*	*	*	*	**	2	270
20	527.02	0	527	About a half a mile south of 57th Ave	Intersection with state route 1804	1.4	2,895	*	*	*	*	*	**	1	2,895
21	513.02	0	513	Intersection with 158th St	Intersection with 236th St	6.0	800	*	*	*	*	*	**	1	800
22	508.02	0	508	Intersection with Lincoln Rd	Intersection with Apple Creek Rd	2.0	460	*	*	*	*	*	**	1	460
23	507.01	0	507	Intersection with Moffit Rd	Intersection with Lincoln Rd	5.0	320	*	*	*	*	*	*	2	320
24	519.01	0	519	Intersection with state route 36	Intersection with Charles St	1.1	190	*	*	*	*	*	*	2	190
25	502.02	0	502	Intersection with US Hwy 83	Intersection with 26th St	2.0	160	*	*	*	*	*	*	2	160
26	500.03	0	500	Intersection with Interstate 94	Intersection with 110th Ave	4.1	145	*	*	*	*	*	*	2	145
27	513.01	0	513	Intersection with Lincoln Rd	Intersection with 158th St	7.2	1,611	*	*	*	*	*	*	1	1,611
28	513.03	0	513	Intersection with 236th St	Intersection with Interstate 94	6.0	715	*	*	*	*	*	*	1	715
29	524.01	0	524	Intersection with 71st St	Intersection with 123rd Ave	4.0	339	*	*	*	*	*	*	1	339
30	500.06	0	500	Intersection with state route 36	About a mile north of state route 36	1.0	190	*	*	*	*	*	*	1	190
31	513.04	0	513	Intersection with Interstate 94	Intersection with 18th Ave	10.5	185	*	*	*	*	*	*	1	185
32	500.05	0	500	Intersection with 240th Ave	Intersection with state route 36	5.7	155	*	*	*	*	*	*	1	155
33	536.01	0	536	Intersection with 54th St	Intersection with state route 1804	1.7	150	*	*	*	*	*	*	1	150
34	503.01	0	503	Intersection with 185th St	Intersection with US Hwy 83	12.5	140	*	*	*	*	*	*	1	140
35	505.01	0	505	Intersection with 6th St	Intersection with 93rd St	2.0	413	*	*	*	*	*	*	0	413
36	507.02	0	507	Intersection with Lincoln Rd	Intersection with Interstate 94	4.9	461	*	*	*	*	*	*	1	461
37	515.01	0	515	Intersection with US Hwy 83	Intersection with 119th St	9.0	212	*	*	*	*	*	*	1	212
38	508.01	0	508	Intersection with state route 1804	Intersection with Lincoln Rd	4.9	205	*	*	*	*	*	*	1	205
39	507.03	0	507	Intersection with Interstate 94	Intersection with 57th Ave	2.0	160	*	*	*	*	*	*	1	160
40	521.01	0	521	Intersection with 34th St	Intersection with US Hwy 83	2.5	155	*	*	*	*	*	*	1	155
41	531.01	0	531	Intersection with state route 1804	Intersection with Welle Loop	1.3	125	*	*	*	*	*	*	1	125

Total Stars -- 14
 % That Gets Star -- 34%

Stars	#	%	Mileage	%
*****	2	5%	4.2	3%
****	6	15%	19.9	13%
***	9	22%	23.5	16%
**	5	12%	12.5	8%
*	13	32%	62.8	43%
	6	15%	24.6	17%
	41	100%	147.5	100%

Stars
 ADT Range - If segment has an ADT in the range of most at risk ADT based on ATP totals. (> 650)
 Lane Departure Density - If segment has higher lane departure density than the county average (0.23).
 Access Density - If segment has access density than the county average (16.4).
 Curve Critical Radius Density - If segment has higher density of curves with critical radius than the county average (0.09).
 Edge Risk Assessment - Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 528 (12th St) from Oahe Bend to 1/4 mile north of Burleigh Ave

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 12th St
 Start: Oahe Bend Lane Width: 12'
 End: 1/4 mile north of Burleigh Ave Speed Limit: Low
 Facility Type: 0 Shoulder Width: 0'
 ADT: 1298 Shoulder Type: None
 Road Type Rural Paved Length (miles): 2.2
 County Road 528 Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	26	8	2
Density (per mile per year)	2.36	0.73	0.18
Rate (per MVM)	4.99	1.54	0.38

	Value	Critical	Departure
ADT Range	1,298	650≤ADT≤8000	★
RD Density	0.712	0.230	★
Access Density	12.9	10.0	★
Curve Critical Radius Density	0.445	0.090	★
Edge Risk	3	2 or 3	★

★★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	2.2	\$7,700	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	2.2	\$6,600	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$12,870
Local Match (10% of Total project cost)	\$1,430
Total Project Cost	\$14,300

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 1
 Segment ID: 528.01
 Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 530 (Sibley Dr) from 12th St to Hester Dr

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Sibley Dr
Start: 12th St
End: Hester Dr
Facility Type: 0
ADT: 725
Road Type Rural Paved
County Road 530

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 2'
Shoulder Type: Gravel
Length (miles): 2.0
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	9	5	0
Density (per mile per year)	0.90	0.50	0.00
Rate (per MVM)	3.40	1.89	0.00

	Value	Critical	Departure
ADT Range	725	650≤ADT≤8000	★
RD Density	0.489	0.230	★
Access Density	17.1	10.0	★
Curve Critical Radius Density	4.403	0.090	★
Edge Risk	2	2 or 3	★

★★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	2.0	\$6,000	
Edge Line Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,400
Local Match (10% of Total project cost)	\$600
Total Project Cost	\$6,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 2
Segment ID: 530.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 527 (Washington St) from Mile south of 48th Ave to Burleigh Ave

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Washington St
Start: Mile south of 48th Ave
End: Burleigh Ave
Facility Type: 0
ADT: 765
Road Type Rural Paved
County Road 527

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 1.8
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	12	3	0
Density (per mile per year)	1.33	0.33	0.00
Rate (per MVM)	4.78	1.19	0.00

	Value	Critical	Departure
ADT Range	765	650≤ADT≤8000	★
RD Density	0.457	0.230	★
Access Density	13.1	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	1.8	\$6,300	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,670
Local Match (10% of Total project cost)	\$630
Total Project Cost	\$6,300

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 3
Segment ID: 527.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 530 (Sibley Dr) from Hester Dr to 48th Ave

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Sibley Dr
Start: Hester Dr
End: 48th Ave
Facility Type: 0
ADT: 663
Road Type Rural Paved
County Road 530

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 1.7
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	12	3	1
Density (per mile per year)	1.41	0.35	0.12
Rate (per MVM)	5.84	1.46	0.49

	Value	Critical	Departure
ADT Range	663	650≤ADT≤8000	★
RD Density	0.347	0.230	★
Access Density	12.7	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	1.7	\$5,950	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,355
Local Match (10% of Total project cost)	\$595
Total Project Cost	\$5,950

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 4
Segment ID: 530.02
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 532 (River Rd) from 1/4 mile north of Burnt Boat Dr to Burnt Creek Loop

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: River Rd
Start: 1/4 mile north of Burnt Boat Dr
End: Burnt Creek Loop
Facility Type: 0
ADT: 1516
Road Type Rural Paved
County Road 532

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 2'
Shoulder Type: Paved
Length (miles): 3.9
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	52	25	1
Density (per mile per year)	2.67	1.28	0.05
Rate (per MVM)	4.82	2.32	0.09

	Value	Critical	Departure
ADT Range	1,516	650≤ADT≤8000	★
RD Density	1.270	0.230	★
Access Density	6.1	10.0	
Curve Critical Radius Density	0.508	0.090	★
Edge Risk	2	2 or 3	★

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	3.9	\$11,700	
Edge Line Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	3.9	\$11,700	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$21,060
Local Match (10% of Total project cost)	\$2,340
Total Project Cost	\$23,400

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 5
Segment ID: 532.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 535 (Burnt Creek Loop) from River Rd to State Route 1804

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Burnt Creek Loop
Start: River Rd
End: State Route 1804
Facility Type: 0
ADT: 315
Road Type Rural Paved
County Road 535

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 3.4
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	28	11	0
Density (per mile per year)	1.65	0.65	0.00
Rate (per MVM)	14.33	5.63	0.00

	Value	Critical	Departure
ADT Range	315	650≤ADT≤8000	
RD Density	0.642	0.230	★
Access Density	11.1	10.0	★
Curve Critical Radius Density	0.875	0.090	★
Edge Risk	2	2 or 3	★

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	3.4	\$11,900	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,710
Local Match (10% of Total project cost)	\$1,190
Total Project Cost	\$11,900

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 6
Segment ID: 535.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 525 (41st St) from US Hwy 83 to 26th St

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 41st St
Start: US Hwy 83
End: 26th St
Facility Type: 0
ADT: 5283
Road Type Rural Paved
County Road 525

Lane Width: 12'
Speed Limit: High
Shoulder Width: 8'
Shoulder Type: Paved
Length (miles): 2.0
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	9	3	0
Density (per mile per year)	0.90	0.30	0.00
Rate (per MVM)	0.47	0.16	0.00

	Value	Critical	Departure
ADT Range	5,283	650≤ADT≤8000	★
RD Density	0.402	0.230	★
Access Density	10.1	10.0	★
Curve Critical Radius Density	0.503	0.090	★
Edge Risk	1	2 or 3	

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	2.0	\$6,000	
Edge Line Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	2.0	\$6,000	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,800
Local Match (10% of Total project cost)	\$1,200
Total Project Cost	\$12,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 7
Segment ID: 525.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 510 (71st St) from US Hwy 83 to 106th St

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 71st St
Start: US Hwy 83
End: 106th St
Facility Type: 0
ADT: 1850
Road Type Rural Paved
County Road 510

Lane Width: 12'
Speed Limit: High
Shoulder Width: 3'
Shoulder Type: Composite
Length (miles): 7.1
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	30	14	1
Density (per mile per year)	0.85	0.39	0.03
Rate (per MVM)	1.25	0.58	0.04

	Value	Critical	Departure
ADT Range	1,850	650≤ADT≤8000	★
RD Density	0.425	0.230	★
Access Density	11.3	10.0	★
Curve Critical Radius Density	0.142	0.090	★
Edge Risk	1	2 or 3	

★★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	7.1	\$24,850	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	7.1	\$21,300	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$41,535
Local Match (10% of Total project cost)	\$4,615
Total Project Cost	\$46,150

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 8
Segment ID: 510.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 526 (48th Ave) from England St to State Route 1804

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 48th Ave
Start: England St
End: State Route 1804
Facility Type: 0
ADT: 659
Road Type Rural Paved
County Road 526

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 3.0
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	6	1	0
Density (per mile per year)	0.40	0.07	0.00
Rate (per MVM)	1.66	0.28	0.00

	Value	Critical	Departure
ADT Range	659	650≤ADT≤8000	★
RD Density	0.134	0.230	
Access Density	17.0	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	3.0	\$10,500	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$9,450
Local Match (10% of Total project cost)	\$1,050
Total Project Cost	\$10,500

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 526.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 529 (Oahe Bend) from 12th St to Apple Creek Dr

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Oahe Bend
Start: 12th St
End: Apple Creek Dr
Facility Type: 0
ADT: 450
Road Type Rural Paved
County Road 529

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.8
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	4	3	0
Density (per mile per year)	1.00	0.75	0.00
Rate (per MVM)	6.09	4.57	0.00

	Value	Critical	Departure
ADT Range	450	650≤ADT≤8000	
RD Density	0.712	0.230	★
Access Density	13.0	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	0.8	\$2,800	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$2,520
Local Match (10% of Total project cost)	\$280
Total Project Cost	\$2,800

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 529.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 534 (Sandy River Rd) from West of Wildwood St to River Rd

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Sandy River Rd
Start: West of Wildwood St
End: River Rd
Facility Type: 0
ADT: 350
Road Type Rural Paved
County Road 534

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.9
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	8	3	0
Density (per mile per year)	1.78	0.67	0.00
Rate (per MVM)	13.92	5.22	0.00



	Value	Critical	Departure
ADT Range	350	650≤ADT≤8000	
RD Density	0.846	0.230	★
Access Density	20.1	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	0.9	\$3,150	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$2,835
Local Match (10% of Total project cost)	\$315
Total Project Cost	\$3,150

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
Notes			

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Segment ID: 534.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 533 (Wilderness Cove) from 1/4 mile west of River Rd to River Rd

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Wilderness Cove
Start: 1/4 mile west of River Rd
End: River Rd
Facility Type: 0
ADT: 160
Road Type Rural Paved
County Road 533

Lane Width: 14'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.3
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	0	0	0
Density (per mile per year)	0.00	0.00	0.00
Rate (per MVM)	0.00	0.00	0.00

	Value	Critical	Departure
ADT Range	160	650≤ADT≤8000	
RD Density	0.000	0.230	
Access Density	20.7	10.0	★
Curve Critical Radius Density	5.903	0.090	★
Edge Risk	3	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	0.3	\$1,050	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$945
Local Match (10% of Total project cost)	\$105
Total Project Cost	\$1,050

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 533.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 522 (52nd St) from Woodrow Dr to Lincoln Rd

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 52nd St
Start: Woodrow Dr
End: Lincoln Rd
Facility Type: 0
ADT: 120
Road Type Rural Paved
County Road 522

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 2.6
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	15	5	0
Density (per mile per year)	1.15	0.38	0.00
Rate (per MVM)	26.34	8.78	0.00

	Value	Critical	Departure
ADT Range	120	650≤ADT≤8000	
RD Density	0.466	0.230	★
Access Density	10.1	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	3	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	2.6	\$1,040	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$936
Local Match (10% of Total project cost)	\$104
Total Project Cost	\$1,040

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 522.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 500 (405th St) from 30th Ave to Interstate 94

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 405th St
Start: 30th Ave
End: Interstate 94
Facility Type: 0
ADT: 375
Road Type Rural Paved
County Road 500

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 1.9
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	2	0	0
Density (per mile per year)	0.21	0.00	0.00
Rate (per MVM)	1.54	0.00	0.00

	Value	Critical	Departure
ADT Range	375	650≤ADT≤8000	
RD Density	0.000	0.230	
Access Density	21.5	10.0	★
Curve Critical Radius Density	2.102	0.090	★
Edge Risk	2	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	1.9	\$6,650	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,985
Local Match (10% of Total project cost)	\$665
Total Project Cost	\$6,650

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 14
Segment ID: 500.02
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 535 (Burnt Creek Loop) from State Route 1804 to State Route 1804

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Burnt Creek Loop
Start: State Route 1804
End: State Route 1804
Facility Type: 0
ADT: 130
Road Type Rural Paved
County Road 535

Lane Width: 12'
Speed Limit: High
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 1.6
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	5	1	1
Density (per mile per year)	0.63	0.13	0.13
Rate (per MVM)	13.17	2.63	2.63

	Value	Critical	Departure
ADT Range	130	650≤ADT≤8000	
RD Density	0.251	0.230	★
Access Density	10.0	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	2	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	1.6	\$5,600	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,040
Local Match (10% of Total project cost)	\$560
Total Project Cost	\$5,600

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 15
Segment ID: 535.02
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 512 (66th St) from Lincoln Rd to County Hwy 10

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: 66th St
Start: Lincoln Rd
End: County Hwy 10
Facility Type: 0
ADT: 2421
Road Type Rural Paved
County Road 512

Lane Width: 12'
Speed Limit: High
Shoulder Width: 5'
Shoulder Type: Composite
Length (miles): 3.0
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	50	14	1
Density (per mile per year)	3.33	0.93	0.07
Rate (per MVM)	3.77	1.06	0.08

	Value	Critical	Departure
ADT Range	2,421	650≤ADT≤8000	★
RD Density	0.932	0.230	★
Access Density	10.3	10.0	★
Curve Critical Radius Density	0.000	0.090	
Edge Risk	1	2 or 3	

★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	3.0	\$9,000	
Edge Line Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	3.0	\$9,000	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$16,200
Local Match (10% of Total project cost)	\$1,800
Total Project Cost	\$18,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 16
Segment ID: 512.02
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

County Road 511 (Apple Creek Rd) from Yegan Rd to 158th St

Agency Name: Burleigh County

ND DOT District: 1

Contact Name: Marcus Hall

Telephone Number: 701-221-6870

Email Address: mahall@nd.gov

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

Location Description

Roadway: Apple Creek Rd
Start: Yegan Rd
End: 158th St
Facility Type: 0
ADT: 697
Road Type Rural Paved
County Road 511

Lane Width: 12'
Speed Limit: High
Shoulder Width: 2'
Shoulder Type: Paved
Length (miles): 9.4
Rumble Installed: 0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase Survivability
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	29	13	3
Density (per mile per year)	0.62	0.28	0.06
Rate (per MVM)	2.43	1.09	0.25



	Value	Critical	Departure
ADT Range	697	650≤ADT≤8000	★
RD Density	0.298	0.230	★
Access Density	5.6	10.0	
Curve Critical Radius Density	0.425	0.090	★
Edge Risk	1	2 or 3	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Shoulder Rumble Strip	Proactive	\$3,000	0.0	\$0	
Edge Line Rumble Strip	Proactive	\$3,500	9.4	\$32,900	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$29,610
Local Match (10% of Total project cost)	\$3,290
Total Project Cost	\$32,900

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 511.01
Date: 8/14/2013

Burleigh County Rural Curve Projects

Corridor	Local Street Name	Start	End	# of Curves	Cost	NOTES
500.02	405th St	30th Ave	Interstate 94	4	\$ 28,364	
500.05	392nd St	240th Ave	State Route 36	5	\$ 19,952	
503.01	Moffit Rd	185th St	US Hwy 83	2	\$ 8,452	
510.01	71st St	US Hwy 83	106th St	1	\$ 4,453	
511.01	Apple Creek Rd	Yegan Rd	158th St	1	\$ 6,466	
523.01	Desert Rd	115th Ave	State Route 1804	1	\$ 8,543	
525.01	41st St	US Hwy 83	26th St	1	\$ 3,437	
535.01	Burnt Creek Loop	River Rd	State Route 1804	3	\$ 20,309	
536.01	106th St	54th St	State Route 1804	4	\$ 19,048	
				22	\$ 119,024	

Burleigh County Curves

Curve Count	ID	Corridor	Segment	Start	End	Inside				Outside				Crashes						Risk Criteria				Speed Limit	Risk Ranking	
						Paved Shoulder Width	Gravel Shoulder Width	Curb & Gutter	Shoulder Type	Paved Shoulder Width	Gravel Shoulder Width	Curb & Gutter	Shoulder Type	Total	Total Severe	K	A	B	C	PDO	Radius (ft)	Severe Crash	ADT			Intersection on Curve
1	500E	500.05	0	Intersection with 240th Ave	Intersection with state route 36	4	0	No	Paved	4	0	No	Paved	-	-	-	-	-	-	850	No	155	No	No	High	*
2	503A	503.01	0	Intersection with 185th St	Intersection with US Hwy 83	6	0	No	Paved	6	0	No	Paved	-	-	-	-	-	-	550	No	140	Yes	Yes	High	***
3	503B	503.01	0	Intersection with 185th St	Intersection with US Hwy 83	6	0	No	Paved	6	0	No	Paved	-	-	-	-	-	-	640	No	140	Yes	Yes	High	***
4	536A	536.01	0	Intersection with 54th St	Intersection with state route 1804	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	960	No	150	No	No	High	*
5	536B	536.01	0	Intersection with 54th St	Intersection with state route 1804	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	500	No	150	No	No	High	*
6	536C	536.01	0	Intersection with 54th St	Intersection with state route 1804	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	630	No	150	No	No	High	*
7	536D	536.01	0	Intersection with 54th St	Intersection with state route 1804	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	690	No	150	No	No	High	*
8	523A	523.01	0	Intersection with 115th Ave	Intersection with state route 1804	0	0	No	None	0	0	No	None	1	-	-	-	-	1	1090	No	140	Yes	No	High	**
9	530A	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	280	No	725	Yes	No	Low	*
10	530B	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	420	No	725	No	No	Low	*
11	530C	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	120	No	725	Yes	Yes	Low	**
12	530D	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	250	No	725	Yes	No	Low	*
13	530E	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	280	No	725	Yes	No	Low	*
14	530F	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	3	-	-	-	-	3	440	No	725	Yes	No	Low	*
15	530G	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	480	No	725	No	No	Low	*
16	530H	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	1	-	-	-	-	1	150	No	725	No	No	Low	*
17	530I	530.01	0	Intersection with 12th St	Intersection with Hester Dr	0	2	No	Gravel	0	2	No	Gravel	-	-	-	-	-	-	140	No	725	Yes	Yes	Low	**
18	528A	528.01	0	Intersection with Oahe Bend	A quarter of a mile north of Burleigh Ave	0	0	No	None	0	0	No	None	2	-	-	-	-	2	120	No	1298	No	No	Low	*
19	511A	511.01	0	Intersection with Yegan Rd	Intersection with 158th St	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	1010	No	697	No	No	High	*
20	511B	511.01	0	Intersection with Yegan Rd	Intersection with 158th St	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	3030	No	697	No	No	High	*
21	511C	511.01	0	Intersection with Yegan Rd	Intersection with 158th St	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	2750	No	697	No	No	High	*
22	511D	511.01	0	Intersection with Yegan Rd	Intersection with 158th St	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	4050	No	697	Yes	No	High	*
23	525A	525.01	0	Intersection with US Hwy 83	Intersection with 26th St	8	0	No	Paved	8	0	No	Paved	4	-	-	-	-	4	1150	No	5283	Yes	Yes	High	***
24	510A	510.01	0	Intersection with US Hwy 83	Intersection with 106th St	2	1	No	Composite	2	1	No	Composite	1	-	-	-	-	1	610	No	1850	Yes	Yes	High	***
25	513A	513.02	0	Intersection with 158th St	Intersection with 236th St	8	0	No	Paved	8	0	No	Paved	-	-	-	-	-	-	4200	No	800	No	No	High	*
26	513B	513.02	0	Intersection with 158th St	Intersection with 236th St	8	0	No	Paved	8	0	No	Paved	1	-	-	-	-	1	5600	No	800	No	No	High	*
27	513C	513.04	0	Intersection with Interstate 94	Intersection with 18th Ave	8	0	No	Paved	8	0	No	Paved	-	-	-	-	-	-	5200	No	185	No	No	High	*
28	513D	513.04	0	Intersection with Interstate 94	Intersection with 18th Ave	8	0	No	Paved	8	0	No	Paved	-	-	-	-	-	-	5500	No	185	No	No	High	*
29	500A	500.02	0	Intersection with 30th Ave	Intersection with Interstate 94	0	0	No	None	0	0	No	None	-	-	-	-	-	-	100	No	375	Yes	Yes	Low	***
30	500B	500.02	0	Intersection with 30th Ave	Intersection with Interstate 94	0	0	No	None	0	0	No	None	-	-	-	-	-	-	110	No	375	No	No	Low	*
31	500C	500.02	0	Intersection with 30th Ave	Intersection with Interstate 94	0	0	No	None	0	0	No	None	-	-	-	-	-	-	330	No	375	Yes	Yes	Low	***
32	500D	500.02	0	Intersection with 30th Ave	Intersection with Interstate 94	0	0	No	None	0	0	No	None	-	-	-	-	-	-	390	No	375	Yes	Yes	Low	***
33	500F	500.05	0	Intersection with 240th Ave	Intersection with state route 36	4	0	No	Paved	4	0	No	Paved	-	-	-	-	-	-	920	No	155	Yes	Yes	High	***
34	500G	500.05	0	Intersection with 240th Ave	Intersection with state route 36	4	0	No	Paved	4	0	No	Paved	-	-	-	-	-	-	590	No	155	Yes	No	High	**
35	500H	500.05	0	Intersection with 240th Ave	Intersection with state route 36	4	0	No	Paved	4	0	No	Paved	-	-	-	-	-	-	1330	No	155	Yes	No	High	*
36	500I	500.05	0	Intersection with 240th Ave	Intersection with state route 36	4	0	No	Paved	4	0	No	Paved	-	-	-	-	-	-	610	No	155	Yes	Yes	High	***
37	535A	535.01	0	Intersection with River Rd	Intersection with state route 1804	0	0	No	None	0	0	No	None	1	-	-	-	-	1	380	No	315	Yes	Yes	Low	***
38	535B	535.01	0	Intersection with River Rd	Intersection with state route 1804	0	0	No	None	0	0	No	None	-	-	-	-	-	-	280	No	315	No	No	Low	*
39	535C	535.01	0	Intersection with River Rd	Intersection with state route 1804	0	0	No	None	0	0	No	None	3	-	-	-	-	1	90	No	315	Yes	Yes	Low	***
40	532A	532.01	0	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	2	0	No	Paved	2	0	No	Paved	3	-	-	-	-	3	1410	No	1516	No	No	Low	*
41	532B	532.01	0	About a quarter mile north of Burnt Boat Dr	Intersection with Burnt Creek Loop	2	0	No	Paved	2	0	No	Paved	-	-	-	-	-	-	230	No	1516	No	No	Low	*
42	533A	533.01	0	About a quarter mile west of River Rd	Intersection with River Rd	0	0	No	None	0	0	No	None	-	-	-	-	-	-	350	No	160	Yes	No	Low	*
43	533B	533.01	0	About a quarter mile west of River Rd	Intersection with River Rd	0	0	No	None	0	0	No	None	-	-	-	-	-	-	440	No	160	No	No	Low	*

Stars	Total		Chevroned (% of Stars)	
	#	%	#	%
*****	0	0%	0	0%
****	0	0%	0	0%
***	11	26%	0	0%
**	4	9%	0	0%
*	15	35%	0	0%
	13	30%	0	0%
	43	100%	0	0%

Critical Ranges	Min	Max
Radius	500	1200
ADT	250	650

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on 405th St from 30th Ave to Interstate 94

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: 405th St Start: 30th Ave End: Interstate 94 Facility Type: 0 ADT: 375 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: Low Shoulder Width: 0' Shoulder Type: None Length (miles): 1.9 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
500A	0	0	100	375	Yes	Yes	***	-	-	Chevron	Inside/Outside	Inside/Outside	x	Inspect Curve
500B	0	0	110	375	No	No	*	x	-	Chevron	Inside/Outside	Inside/Outside	x	Inspect Curve
500C	0	0	330	375	Yes	Yes	***	-	-	Chevron	Inside/Outside	Inside/Outside	x	35
500D	0	0	390	375	Yes	Yes	***	-	-	Chevron	Inside/Outside	Inside/Outside	x	35

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	4	\$13,200
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	4	\$3,200
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.3 miles	\$897
Shoulder Paving	Proactive	\$37,000 per mile	.3 miles	\$11,067
				\$28,364

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$25,528
Local Match (10% of Total project cost)	\$2,836
Total Project Cost	\$28,364

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on 392nd St from 240th Ave to State Route 36

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: 392nd St Start: 240th Ave End: State Route 36 Facility Type: 0 ADT: 155 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 4' Shoulder Type: Paved Length (miles): 5.7 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
500E	0	0	850	155	No	No	★	-	-	Chevron	-	Inside/Outside	-	-
500F	0	0	920	155	Yes	Yes	★★★	-	-	Chevron	-	Inside/Outside	x	50
500G	0	0	590	155	Yes	No	★★	0	-	Chevron	-	Inside/Outside	-	-
500H	0	0	1330	155	Yes	No	★	x	-	Chevron	-	Inside/Outside	x	-
500I	0	0	610	155	Yes	Yes	★★★	-	-	Chevron	-	Inside/Outside	x	40

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more ★s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	5	\$16,500
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	3	\$2,400
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.4 miles	\$1,052
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$19,952

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$17,957
Local Match (10% of Total project cost)	\$1,995
Total Project Cost	\$19,952

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on Moffit Rd from 185th St to US Hwy 83

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: Moffit Rd Start: 185th St End: US Hwy 83 Facility Type: 0 ADT: 140 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 6' Shoulder Type: Paved Length (miles): 12.5 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
503A	0	0	550	140	Yes	Yes	★★★	-	x	Chevron	-	Inside/Outside	x	40
503B	0	0	640	140	Yes	Yes	★★★	-	x	Chevron	-	Inside/Outside	x	40

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more ★s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	2	\$6,600
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	2	\$1,600
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.1 miles	\$252
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$8,452

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$7,607
Local Match (10% of Total project cost)	\$845
Total Project Cost	\$8,452

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on 71st St from US Hwy 83 to 106th St

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: 71st St Start: US Hwy 83 End: 106th St Facility Type: 0 ADT: 1850 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 3' Shoulder Type: Composite Length (miles): 7.1 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
510A	0	0	610	1850	Yes	Yes	***	-	x	Chevron	-	Inside/Outside	x	40

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	1	\$3,300
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.1 miles	\$353
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$4,453

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$4,007
Local Match (10% of Total project cost)	\$445
Total Project Cost	\$4,453

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on Apple Creek Rd from Yegan Rd to 158th St

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: Apple Creek Rd Start: Yegan Rd End: 158th St Facility Type: 0 ADT: 697 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 2' Shoulder Type: Paved Length (miles): 9.4 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
511A	0	0	1010	697	No	No	*	-	x	Chevron	-	Inside/Outside	x	50
511B	0	0	3030	697	No	No	-	-	-	-	-	-	-	-
511C	0	0	2750	697	No	No	-	-	-	-	-	-	-	-
511D	0	0	4050	697	Yes	No	*	-	-	-	-	-	-	-

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	1	\$3,300
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.8 miles	\$2,366
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$6,466

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$5,819
Local Match (10% of Total project cost)	\$647
Total Project Cost	\$6,466

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on Desert Rd from 115th Ave to State Route 1804

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: Desert Rd Start: 115th Ave End: State Route 1804 Facility Type: 0 ADT: 140 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 9' Shoulder Type: None Length (miles): 2.1 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
523A	0	0	1090	140	Yes	No	★★	-	x	Chevron	Inside/Outside	Inside/Outside	x	50

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more ★s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	1	\$3,300
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.1 miles	\$333
Shoulder Paving	Proactive	\$37,000 per mile	.1 miles	\$4,110
				\$8,543

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$7,689
Local Match (10% of Total project cost)	\$854
Total Project Cost	\$8,543

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on 41st St from US Hwy 83 to 26th St

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: 41st St Start: US Hwy 83 End: 26th St Facility Type: 0 ADT: 5283 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: High Shoulder Width: 9' Shoulder Type: Paved Length (miles): 2.0 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
525A	0	0	1150	5283	Yes	Yes	***	-	x	Chevron	-	Inside/Outside	-	-

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	1	\$3,300
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	0	\$0
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$137
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$3,437

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,094
Local Match (10% of Total project cost)	\$344
Total Project Cost	\$3,437

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on Burnt Creek Loop from River Rd to State Route 1804

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: Burnt Creek Loop Start: River Rd End: State Route 1804 Facility Type: 0 ADT: 315 Road Type Rural Paved County Road 0	Lane Width: 12' Speed Limit: Low Shoulder Width: 9' Shoulder Type: None Length (miles): 3.4 Rumble Installed: 0	SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
535A	0	0	380	315	Yes	Yes	★★★	-	-	Chevron	Inside/Outside	Inside/Outside	x	35
535B	0	0	280	315	No	No	★	x	-	Chevron	Inside/Outside	Inside/Outside	x	Inspect Curve
535C	0	0	90	315	Yes	Yes	★★★	-	-	Chevron	Inside/Outside	Inside/Outside	x	Inspect Curve

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more ★s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	3	\$9,900
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	3	\$2,400
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.2 miles	\$601
Shoulder Paving	Proactive	\$37,000 per mile	.2 miles	\$7,409
				\$20,309

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$18,278
Local Match (10% of Total project cost)	\$2,031
Total Project Cost	\$20,309

NDDOT Central Office Only

Project Accepted?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reference Number	ID Number
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Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Curves on 106th St from Intersection with 54th St to State Route 1804

Agency Name: Burleigh County
Contact Name: Marcus Hall
Email Address: mahall@nd.gov

ND DOT District: 1
Telephone Number: 701-221-6870

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

Location Description (Corridor Containing Curves)

Roadway: 106th St
Start: Intersection with 54th St
End: State Route 1804
Facility Type: 0
ADT: 150
Road Type Rural Paved
County Road 0

Lane Width: 12'
Speed Limit: High
Shoulder Width: 9'
Shoulder Type: Paved
Length (miles): 1.7
Rumble Installed: 0

- SHSP Emphasis Area (check all that apply)
- Reduce Alcohol Impaired Driving
 - Increase the Use of Safety Restraints for all Occupants
 - Younger Driver/Older Driver Safety
 - Curb Aggressive Driving
 - Improvements to Address Lane Departure Crashes
 - Enhancing Emergency Medical Capabilities to Increase Survivability
 - Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
536A	0	0	960	150	No	No	★	-	x	Chevron	-	Inside/Outside	x	50
536B	0	0	500	150	No	No	★	-	x	Chevron	-	Inside/Outside	x	40
536C	0	0	630	150	No	No	★	-	x	Chevron	-	Inside/Outside	x	40
536D	0	0	690	150	No	No	★	-	x	Chevron	-	Inside/Outside	x	40

*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more ★s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 250 to 650	- x in High Priority Segment + Critical Radius column
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost
Chevrons	Proactive	\$3,300 per curve	4	\$13,200
Arrow Board Only	Proactive	\$500 per curve	0	\$0
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	4	\$3,200
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.9 miles	\$2,648
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0
				\$19,048

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$17,144
Local Match (10% of Total project cost)	\$1,905
Total Project Cost	\$19,048

NDDOT Central Office Only

Project Accepted? Yes No Reference Number _____ ID Number _____

Notes

23 USC 409
NDDOT Reserves All Objections

Burleigh County Project

Projects		Total Costs
Rural Intersections	16 intersections	\$ 525,950
Rural Segments	48 miles	\$ 207,690
Rural Curves	22 curves	\$ 119,024
	Total Rural Projects	\$ 852,664
Urban Segments (Rear End/Head On)	18 miles	\$ 288,150
Urban Intersections (Right Angle Crashes)	23 intersections	\$ 44,000
Urban Intersections (Ped/Bike Crashes)	49 intersections	\$ 530,000
	Total Urban Projects	\$ 862,150
	Total Burleigh County	\$ 1,714,814

Burleigh County Urban Segment Projects - Rear End/Head On

Corridor ID	Route #	Local Street Name	Start	End	Length	Risk Ranking	2-Lane to 3-Lane Conv	Project Cost (\$)	Notes
803.01	803	Calgary Ave	N Washington St	N 19th St	1.5	***	0.8	\$ 12,750	10th Street to 19th Street
808.01	808	Burnt Boat Dr	River Rd	Tyler Pkwy	0.8	****	0.27	\$ 4,624	Tyler Parkway to Broadview Lane
810.01	810	Interstate Ave	Century Ave	State St	2.4	****	0.7	\$ 11,832	Century Ave to Springfield (0.4 mi), 9th St to State St
810.02	810	Interstate Ave	Interstate Ave	N 19th St	0.6	***	0.6	\$ 10,200	
813.01	813	College Dr	Schafer	Divide Ave	0.8	****	0.5	\$ 8,500	
825.01	825	N 4th St	E Main Ave	Calgary Ave	2.8	****	2.8	\$ 47,600	
826.01	826	N 19th St	E Divide Ave	End	2.1	***	2.1	\$ 35,700	
830.02	830	Divide Ave	W Century Ave	State St	2.4	***	2	\$ 34,680	4-lane divided between 94 and Century Ave
830.03	830	Divide Ave	State St	E Bismarck Expy	2.4	****	1.3	\$ 22,440	State St to Volk Dr
833.01	833	Memorial Hwy / Front Ave	River Rd	S 12th St	2.3	***	1	\$ 17,204	Washington to 12th Street
836.01	836	Rosser Ave	W Main Ave	E Bismarck Expy	3.5	***	3	\$ 50,575	Turn lanes in downtown between 1st and 7th
846.01	846	S 3rd St	Santa Fe Ave	E Boulevard Ave	2.9	****	1.9	\$ 32,045	Hwy 810 to Rosser Ave already 5-lane
					19.8		15.2	\$ 288,150	

Detailed Corridor Information

Burleigh Urban County Corridors							Volume	General						Ped Bike					Access							
Corridor	#	Local Name	Start	End	Road Type	City	Weighted ADT	Length	Speed Limit	# Lanes	Median	Paved Shoulder Width	Gravel Shoulder Width	Curb & Gutter?	Shoulder Type	Transit Route	Ped Generator	Description	Sidewalk / Bikeway	Description	Designated Mid Block Crossings	On Street Bike Lane	Primary Land Use	Total	Access/ Mile	Access Rating
800.01	800	Lasalle Dr	Canada Ave	Highway 83	Urban Collector	Bismarck	625	0.5	Low	2	No	1	2	Yes	Composite	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	21	42.0	Edge
801.01	801	Ash Coulee Dr	Cornice Dr	N Washington St	Urban Minor Arterial	Bismarck	3,135	1.1	Low	2	No	2	1	No	Composite	No	Yes	Middle School	Yes	10 ft Path	No	No	Residential	20	18.2	Edge
801.02	801	43rd Ave NE	N Washington St	N 52nd St	Urban Principal / Minor Arterial	Bismarck	2,785	4.0	High	2	No	2	1	No	Composite	No	No	No	No	No	No	No	Residential	47	11.8	None
802.01	802	No Name	12th St NE	43rd Ave NE	Urban Collector	Bismarck	385	0.3	Low	2	No	8	0	Yes	Paved	No	No	No	No	No	No	No	Industrial	14	46.7	Edge
803.01	803	Calgary Ave	N Washington St	N 19th St	Urban Collector	Bismarck	3,228	1.5	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	84	56.0	Edge
804.01	804	Daytona Dr	Country West Rd	Valley Dr	Urban Collector	Bismarck	643	0.7	Low	2	No	8	0	Yes	Paved	No	No	No	No	6 ft Sidewalk	No	No	Residential	60	85.7	Edge
805.01	805	Country West Rd	Tyler Pkwy	W Century Ave	Urban Collector	Bismarck	1,445	0.5	Low	2	No	2	0	Yes	Paved	No	Yes	Church	Yes	6 ft Sidewalk	No	No	Residential	14	28.0	Edge
806.01	806	Valley Dr	Tyler Pkwy	Ash Coulee Dr	Urban Collector	Bismarck	2,038	1.3	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	10 ft Path	Yes	No	Residential	35	26.9	Edge
807.01	807	Clairmont Rd	Burnt Boat Dr	Powder Ridge Dr	Urban Collector	Bismarck	1,265	0.8	Low	2	No	8	0	Yes	Paved	No	No	No	No	6 ft Sidewalk	No	No	Residential	29	36.3	Edge
808.01	808	Burnt Boat Dr	River Rd	Tyler Pkwy	Urban Collector	Bismarck	4,770	0.8	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Commercial	28	35.0	Edge
809.01	809	Century Ave	Tyler Pkwy	Hamilton St	Urban Principal	Bismarck	11,033	3.8	High	4	Yes	2	0	Yes	Paved	No	Yes	Mall	Yes	8 ft Sidewalk	No	No	Commercial	70	18.4	Median/Edge
809.02	809	Century Ave	Hamilton St	Sumter Dr	Urban Collector / Principal	Bismarck	5,250	1.2	Low	2	No	2	0	No	Paved	No	No	No	No	No	No	No	Residential	10	8.3	Edge
810.01	810	Interstate Ave	Century Ave	State St	Urban Collector	Bismarck	5,817	2.4	Low	3	No	2	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	171	71.3	Edge
810.02	810	Interstate Ave	Interstate Ave	N 19th St	Urban Collector	Bismarck	27,319	0.6	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	Yes	No	Commercial	30	50.0	Edge
811.01	811	No Name	Interstate Ave	12th St NE	Urban Collector	Bismarck	1,680	0.1	Low	2	Yes	6	0	Yes	Paved	No	Yes	Mall	No	No	No	No	Commercial	4	40.0	Median/Edge
812.01	812	Nebraska Dr	Century Ave	End	Urban Collector	Bismarck	860	0.3	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	15	50.0	Edge
813.01	813	College Dr	Divide Ave	Divide Ave	Urban Collector	Bismarck	5,280	0.8	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	Yes	No	Commercial	34	42.5	Edge
814.01	814	Turnpike Ave	Divide Ave	N 4th St	Urban Collector	Bismarck	2,511	1.4	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	119	85.0	None
815.01	815	Capitol Ave	N 4th St	End	Urban Collector	Bismarck	3,128	1.7	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	157	92.4	None
816.01	816	N 12th St	State St	Capitol Ave	Urban Collector	Bismarck	575	0.3	Low	2	No	0	0	Yes	None	No	Yes	Trailer Park	Yes	12 ft Path	No	No	Commercial	14	46.7	None
816.02	816	N 12th St	Capitol Ave	State St	Urban Collector	Bismarck	675	0.1	Low	2	No	0	0	Yes	None	No	No	No	Yes	12 ft Path	No	No	Commercial	8	80.0	None
816.03	816	N 12th St	End	End	Urban Collector	Bismarck	50	0.1	Low	2	No	0	0	Yes	None	No	No	No	Yes	6 ft Sidewalk	No	No	Commercial	5	50.0	Edge
817.01	817	N 26th St	Divide Ave	Grant Dr	Urban Collector	Bismarck	690	0.3	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	24	80.0	None
818.01	818	N 22nd St	Boulevard Ave	Divide Ave	Urban Collector	Bismarck	1,283	0.4	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	48	120.0	None
819.01	819	Valleyview / Crocus Ave	N 26th St	N 35th St	Urban Collector	Bismarck	840	0.8	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	72	90.0	None
820.01	820	Ward Rd	W Ave C	College Dr	Urban Collector	Bismarck	6,494	0.8	Low	2	No	6	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	No	No	Residential	19	23.8	Edge
821.01	821	N 16th St	Broadway Ave	Divide Ave	Urban Minor Arterial	Bismarck	5,123	1.2	Low	2	No	8	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	No	No	Residential	143	119.2	None
822.01	822	N 6th St	E Main Ave	E Ave A	Urban Collector	Bismarck	2,814	0.3	Low	2	No	8	0	Yes	Paved	No	Yes	Hospital	Yes	6 ft Sidewalk	No	No	Commercial	22	73.3	Edge
823.01	823	N Bell St	W Rosser Ave	W Ave C	Urban Collector	Bismarck	1,370	0.2	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	28	140.0	None
824.01	824	N Griffin St / W Boulevard Ave	W Ave C	N 7th St	Urban Principal / Collector / Minor Arte	Bismarck	4,406	1.2	Low	2	Yes	8	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	No	No	Residential	102	85.0	None
824.02	824	E Boulevard Ave	State St	N 26th St	Urban Collector / Minor Arterial	Bismarck	2,888	1.8	Low	2	No	8	0	Yes	Paved	No	Yes	School	Yes	6 ft Sidewalk	No	No	Residential	107	59.4	None
825.01	825	N 4th St	E Main Ave	Calgary Ave	Urban Collector / Minor Arterial	Bismarck	5,236	2.8	Low	2	No	8	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	Yes	No	Residential	224	80.0	None
826.01	826	N 19th St	E Divide Ave	End	Urban Collector / Minor Arterial	Bismarck	6,424	2.1	Low	2	No	8	0	Yes	Paved	No	Yes	School	Yes	6 ft Sidewalk	No	No	Residential	95	45.2	Edge
827.01	827	Centennial Rd	I-94	43rd Ave NE	Urban Principal	Bismarck	10,394	1.4	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	16	11.4	Edge
828.01	828	N 35th St	E Rosser Ave	E Divide Ave	Urban Collector	Bismarck	1,268	1.0	Low	2	No	10	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	91	91.0	None
829.01	829	River Rd / Riverside Park Rd	Burnt Boat Dr	S Washington St	Urban Collector	Bismarck	1,483	3.2	High	2	No	2	0	Yes	Paved	No	No	No	Yes	10 ft Path	No	No	Residential	80	25.0	Edge
830.01	830	Tyler Pkwy	Valley Dr	W Century Ave	Urban Minor Arterial	Bismarck	3,608	0.7	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	62	88.6	None
830.02	830	Divide Ave	W Century Ave	State St	Urban Principal / Minor Arterial	Bismarck	10,139	2.4	Low	2	No	8	0	Yes	Paved	No	Yes	State Capitol	Yes	6 ft Sidewalk	No	No	Residential	106	44.2	Median/Edge
830.03	830	Divide Ave	State St	E Bismarck Expy	Urban Minor Arterial	Bismarck	8,684	2.4	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	101	42.1	Edge
830.04	830	Divide Ave	E Bismarck Expy	N 52nd St	Urban Minor Arterial	Bismarck	5,250	1.0	High	2	No	2	0	No	Composite	No	No	No	No	No	No	No	Commercial	23	23.0	Edge
831.01	831	Ave C	N Bell St	N 16th St	Urban Collector	Bismarck	4,439	1.6	Low	2	No	10	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	No	No	Residential	154	96.3	None
832.01	832	E Ave D	N 16th St	N 26th St	Urban Collector	Bismarck	1,020	0.7	Low	2	No	8	0	Yes	Paved	No	Yes	School	Yes	6 ft Sidewalk	No	No	Residential	73	104.3	None
833.01	833	Memorial Hwy / Front Ave	River Rd	S 12th St	Urban Collector / Minor Arterial	Bismarck	7,497	2.3	Low	2	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Commercial	82	35.7	Edge
834.01	834	E Memorial Dr	N Washington St	N 26th St	Urban Collector / Minor Arterial	Bismarck	3,670	2	Low	3	No	8	0	Yes	Paved	No	No	Hospital	Yes	6 ft Sidewalk	No	No	Commercial	125	62.5	None
835.01	835	E Thayer Ave	N Washington St	N 6th St	Urban Collector	Bismarck	1,248	0.5	Low	2	No	10	0	Yes	Paved	No	Yes	Hospital	Yes	10 ft Sidewalk	No	No	Commercial	35	70.0	None
836.01	836	Rosser Ave	W Main Ave	E Bismarck Expy	Urban Minor Arterial	Bismarck	7,286	3.5	Low	2	No	10	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Residential	275	78.6	None
837.01	837	26th St	Airway Ave	E Divide Ave	Urban Minor Arterial	Bismarck	6,614	2.5	Low	2	No	8	0	Yes	Paved	No	Yes	School	Yes	6 ft Sidewalk	No	No	Commercial	92	36.8	Edge
838.01	838	Eastdale Dr	E Main Ave	E Rosser Ave	Urban Collector	Bismarck	1,135	0.3	Low	2	No	12	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Commercial	23	76.7	None
839.01	839	52nd St	Apple Creek Rd	Divide Ave	Urban Collector	Bismarck	1,191	2.2	Low	2	No	0	2	No	Gravel	No	No	No	No	No	No	No	Undeveloped	28	12.7	Edge
843.01	843	E Bowen Ave	S Washington Ave	Airport Rd	Urban Collector / Minor Arterial	Bismarck	2,510	1.5	Low	2	No	12	0	Yes	Paved	No	Yes	Park	Yes	6 ft Sidewalk	Yes	No	Residential	120	80.0	None
844.01	844	N 5th St	E Bowen Ave	E Ave C	Urban Minor Arterial	Bismarck	2,890	0.7	Low	2	No	12	0	Yes	Paved	No	No	No	No	6 ft Sidewalk	No	No	Commercial	47	67.1	Edge
845.01	845	S Washington Ave	34th Ave SW	Bismarck Expy	Urban Principal	Bismarck	5,196	2	Low	2	No	2	0	No	Paved	No	No	No	Yes	10 ft Path	No	No	Residential	46	23.0	Edge
845.02	845	N Washington Ave	Bismarck Expy	I-94	Urban Principal / Minor Arterial	Bismarck	13,778	2.5	Low	3	No	8	0	Yes	Paved	No	No	No	Yes	6 ft Sidewalk	No	No	Commercial	25	10.0	Edge
845.03	845	N Washington Ave	City Limit	I-94	Urban Principal	Bismarck	9,620	2.1	High	No	No	2	0	No	Paved	No	No	No	Yes	10 ft Path	No					

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Calgary Ave from N Washington St to N 19th St Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 803.01
Roadway: Calgary Ave
Start: N Washington St
End: N 19th St
City/Rural: Urban
County: Burleigh

ADT: 3228
Lanes: 2
Access Density: 56
Speed Limit: Low
Length (miles): 1.5

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	0
Sideswipe Passing	0
Head On	1
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	3,228	≥ 10,000	
Major Approach Lanes:	2	≥ 4	★
Access Density:	56	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	★
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - 3-Lane Conversion
3-Lane Conversion	Proactive	\$17,000	0.8	\$12,750	from 10th Street to 19th
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	Street N.
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				No	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$11,475
Local Match (10% of Total project cost)	\$1,275
Total Project Cost	\$12,750

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Burnt Boat Dr from River Rd to Tyler Pkwy Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 808.01
Roadway: Burnt Boat Dr
Start: River Rd
End: Tyler Pkwy
City/Rural: Urban
County: Burleigh

ADT: 4770
Lanes: 2
Access Density: 35
Speed Limit: Low
Length (miles): 0.8

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	0
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	0

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	4,770	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	35	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	0	≥ 1	★
			★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - 3-Lane Conversion
3-Lane Conversion	Proactive	\$17,000	0.3	\$4,624	from Tyler Parkway to
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	Broadview Lane
Signal Revisions	Proactive	\$25,000	0	\$0	
		Consider access management in future		Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$4,162
Local Match (10% of Total project cost)	\$462
Total Project Cost	\$4,624

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Interstate Ave from Century Ave to State St Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 810.01
Roadway: Interstate Ave
Start: Century Ave
End: State St
City/Rural: Urban
County: Burleigh

ADT: 5817
Lanes: 3
Access Density: 71.3
Speed Limit: Low
Length (miles): 2.4

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	0
Sideswipe Passing	0
Head On	1
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	5,817	≥ 10,000	★
Major Approach Lanes:	3	≥ 4	★
Access Density:	71.3	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	★
			★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - 3-Lane Conversion
3-Lane Conversion	Proactive	\$17,000	0.7	\$11,832	from Century Ave to
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	Springfield St (.4 miles) and
Signal Revisions	Proactive	\$25,000	0	\$0	between 9th Street to State
	Consider access management in future			Yes	Street (0.3 miles)

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$10,649
Local Match (10% of Total project cost)	\$1,183
Total Project Cost	\$11,832

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Interstate Ave from State St to N 19th St Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 810.02
Roadway: Interstate Ave
Start: State St
End: N 19th St
City/Rural: Urban
County: Burleigh

ADT: 27319
Lanes: 2
Access Density: 50
Speed Limit: Low
Length (miles): 0.6

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	1
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	27,319	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	50	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes -
3-Lane Conversion	Proactive	\$17,000	0.6	\$10,200	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$9,180
Local Match (10% of Total project cost)	\$1,020
Total Project Cost	\$10,200

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

College Dr from Schafer to Divide Ave Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 813.01
Roadway: College Dr
Start: Schafer
End: Divide Ave
City/Rural: Urban
County: Burleigh

ADT: 5280
Lanes: 2
Access Density: 68
Speed Limit: Low
Length (miles): 0.5

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	2
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	2

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	5,280	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	68	15 - 60	★
Speed Limit:	Low	≤ 40	★
Severe Rear End / Sideswipe / Head On Crashes:	2	≥ 1	★
			★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes -
3-Lane Conversion	Proactive	\$17,000	0.5	\$8,500	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$7,650
Local Match (10% of Total project cost)	\$850
Total Project Cost	\$8,500

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

N 4th St from E Main Ave to Calgary Ave Project

Agency Name: City of Bismarck

ND DOT District: 10

Contact Name: Mark Berg

Telephone Number: 701-355-1529

Email Address: maberg@nd.gov

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

Location Description

Number: 825.01
Roadway: N 4th St
Start: E Main Ave
End: Calgary Ave
City/Rural: Urban
County: Burleigh

ADT: 5236
Lanes: 2
Access Density: 80
Speed Limit: Low
Length (miles): 2.8

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	1
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	5,236	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	80	15 - 60	★
Speed Limit:	Low	≤ 40	★
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	★
			★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes -
3-Lane Conversion	Proactive	\$17,000	2.8	\$47,600	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$42,840
Local Match (10% of Total project cost)	\$4,760
Total Project Cost	\$47,600

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

N 19th St from E Divide Ave to End Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 826.01
Roadway: N 19th St
Start: E Divide Ave
End: End
City/Rural: Urban
County: Burleigh

ADT: 6424
Lanes: 2
Access Density 45.3
Speed Limit: Low
Length (miles): 2.1

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	0
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	0

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	6,424	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	45.3	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	0	≥ 1	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes -
3-Lane Conversion	Proactive	\$17,000	2.1	\$35,700	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$32,130
Local Match (10% of Total project cost)	\$3,570
Total Project Cost	\$35,700

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Divide Ave from Schafer St to State St Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 830.02
Roadway: Divide Ave
Start: Schafer St
End: State St
City/Rural: Urban
County: Burleigh

ADT: 10139
Lanes: 2
Access Density 44.2
Speed Limit: Low
Length (miles): 2.4

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	1
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	10,139	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	44.2	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - 4-lane divided between 94 and Century Ave
3-Lane Conversion	Proactive	\$17,000	2.0	\$34,680	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$31,212
Local Match (10% of Total project cost)	\$3,468
Total Project Cost	\$34,680

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Divide Ave from State St to E Bismarck Expy Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 830.03
Roadway: Divide Ave
Start: State St
End: E Bismarck Expy
City/Rural: Urban
County: Burleigh

ADT: 8684
Lanes: 2
Access Density: 42.1
Speed Limit: Low
Length (miles): 2.4

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	0
Sideswipe Passing	1
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	8,684	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	42.1	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	★
			★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - 3-Lane Conversion between State St and Volk Drive
3-Lane Conversion	Proactive	\$17,000	1.3	\$22,440	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$20,196
Local Match (10% of Total project cost)	\$2,244
Total Project Cost	\$22,440

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Memorial Hwy / Front Ave from River Rd to S 12th St Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 833.01
Roadway: Memorial Hwy / Front Ave
Start: River Rd
End: S 12th St
City/Rural: Urban
County: Burleigh

ADT: 7497
Lanes: 2
Access Density: 35.7
Speed Limit: Low
Length (miles): 2.3

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	1
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	7,497	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	35.7	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - Washington to 12th Street
3-Lane Conversion	Proactive	\$17,000	1.0	\$17,204	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$15,484
Local Match (10% of Total project cost)	\$1,720
Total Project Cost	\$17,204

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Rosser Ave from W Main Ave to E Bismarck Expy Project

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 10
Telephone Number: 701-355-1529

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

Location Description

Number: 836.01
Roadway: Rosser Ave
Start: W Main Ave
End: E Bismarck Expy
City/Rural: Urban
County: Burleigh

ADT: 7286
Lanes: 2
Access Density: 78.6
Speed Limit: Low
Length (miles): 3.5

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012

5 years

	K+A
Rear End	1
Sideswipe Passing	0
Head On	0
Sideswipe Opposing	0
	1

Describe Current Safety Issues & Systemic Ranking Review

	Value	Critical	Star Ranking
ADT:	7,286	≥ 10,000	★
Major Approach Lanes:	2	≥ 4	★
Access Density:	78.6	15 - 60	★
Speed Limit:	Low	≤ 40	
Severe Rear End / Sideswipe / Head On Crashes:	1	≥ 1	
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage / #	Cost	Notes - Turn lanes in
3-Lane Conversion	Proactive	\$17,000	3.0	\$50,575	downtown between 1st and
5-Lane Conversion	Proactive	\$22,000	0.0	\$0	7th
Signal Revisions	Proactive	\$25,000	0	\$0	
Consider access management in future				Yes	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$45,518
Local Match (10% of Total project cost)	\$5,058
Total Project Cost	\$50,575

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Detailed Intersection Information

Burleigh County Urban Intersection List

Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Street Lights	Config	Volume		General													Ped/Bike						
								ADT	Source	Major Config	Overhead Signal	Major Speed	Major Approach Lanes	Major Left Signal	Minor Approach	Minor Left Signal	Parking	Skew	On/Near Curve	Development / Ped Generator	RR Xing	Notes	Bus Stop	Marked Crosswalk	Major Median	Minor Median			
800.01	800.01	Ottawa St	US 5000 (State St)	Bismarck	Thru-STOP	No	T	9,360	Count	Divided		Low	TTR	LTT		T		No	No	Yes	No	No		No	No	Yes	No		
801.01	801.01	Ash Coulee Dr	Valley Dr	Bismarck	Thru-STOP	Yes	T	3,810	Count	Undivided		Low	T	T		Unmarked		Yes	No	Yes	No	No		No	No	Yes	No		
801.02	801.01	43rd Ave NE	3rd St NW	Bismarck	Thru-STOP	Yes	X	9,685	Count	Undivided		Low	TL	TL		TR		No	No	No	Yes	No		No	No	No	No		
801.03	801.02	43rd Ave NE	US 5000 (State St)	Bismarck	Signal	Yes	X	13,725	Count	Divided	Yes	Low	LTTT	LTTT	Protected	LT	LT	Permitted	No	No	No	No	No		Approaches include buffer lanes	No	No	Yes	No
801.04	801.02	43rd Ave NE	Frontage Rd	Bismarck	Yield	No	T	4,310	Count	Undivided		High	T	T		Unmarked		Yes	No	No	No	No		No	No	No	No		
801.05	801.02	43rd Ave NE	N 19th St	Bismarck	Thru-STOP	No	X	6,740	Count	Undivided		High	TL	TL		TL	T	No	No	No	No	No		No	No	No	No		
801.06	801.02	43rd Ave NE	Centennial Rd	Bismarck	Thru-STOP	No	X	7,593	Count	Undivided		High	LTR	LTR		LTR	LTR	No	No	No	No	No		No	No	No	No		
802.01	802.01	No Name	US 5000 (State St)	Bismarck	Thru-STOP	Yes	T	7,808	Count	Divided		Low	LTT	TT		Unmarked		No	No	No	No	No		No	No	Yes	No		
803.01	803.01	Calgary Ave	N Washington St	Bismarck	Thru-STOP	Yes	T	10,315	Count	Undivided		Low	T	TT		Unmarked		Yes	No	No	No	No		No	Yes	No	No		
803.02	803.01	Calgary Ave	No Name	Bismarck	Uncontrolled	Yes	T	4,680	Count	Undivided		Low	Unmarked	Unmarked		Unmarked		Yes	No	Yes	No	No		No	No	No	No		
803.03	803.01	Calgary Ave	US 5000 (State St)	Bismarck	Signal	Yes	X	12,535	Count	Divided	Yes	Low	LTTT	LTTT	Protected	LT	LT	Permitted	No	No	No	No	No		No	Yes	No		
803.04	803.01	Calgary Ave	N 19th St	Bismarck	Thru-STOP	Yes	X	5,873	Count	Undivided		Low	TT	TT		Unmarked	Unmarked	Yes	No	Yes	No	No		No	No	No	No		
804.01	804.01	Daytona Dr	Country West Rd	Bismarck	Thru-STOP	No	T	2,330	Count	Undivided		Low	T	T		Unmarked		Yes	No	No	No	No		No	No	No	No		
804.02	804.01	Daytona Dr	Valley Dr	Bismarck	Yield	Yes	X	2,250	Count	Undivided		Low	T	T		Unmarked		Yes	No	Yes	No	No		No	No	No	No		
805.01	805.01	Country West Rd	Tyler Pkwy	Bismarck	Thru-STOP	Yes	X	4,343	Count	Undivided		Low	T	T		T	T	Yes	No	Yes	No	No		No	No	No	No		
805.02	805.01	Country West Rd	W Century Ave	Bismarck	Thru-STOP	Yes	T	12,123	Count	Divided		Low	TT	LTT		RL		No	No	Yes	No	No		No	Yes	Yes	No		
806.01	806.01	Valley Dr	Tyler Pkwy	Bismarck	Yield	Yes	T	2,253	Count	Undivided		Low	LT	Unmarked		Unmarked	Unmarked	Yes	No	Yes	No	No		No	No	No	No		
807.01	807.01	Clairmont Rd	Burnt Boat Dr	Bismarck	Thru-STOP	Yes	T	5,403	Count	Undivided		Low	LT	T		Unmarked		No	No	Yes	No	No		No	No	No	No		
808.01	808.01	Burnt Boat Dr	River Rd	Bismarck	Thru-STOP	Yes	T	3,415	Count	Undivided		Low	T	T		T		No	Yes	Yes	Yes	No		No	Yes	No	No		
808.02	808.01	Burnt Boat Dr	Tyler Pkwy	Bismarck	Signal	Yes	X	22,280	Count	Divided	Yes	Low	LTT	LTT	PP	LTT	LTT	PP	No	No	Yes	Yes	No		No	Yes	Yes		
809.01	809.01	W Century Ave	Tyler Pkwy	Bismarck	Thru-STOP	Yes	T	13,685	Count	Divided		Low	LTT	TR		LLR		No	No	No	Yes	No		No	Yes	Yes	Yes		
809.02	809.01	W Century Ave	W Interstate Ave	Bismarck	Signal	Yes	X	13,670	Count	Divided	Yes	Low	LTT	LTT	Permitted	LT	LT	Permitted	No	No	Yes	Yes	No		No	Yes	Yes		
809.03	809.01	W Century Ave	N Washington St	Bismarck	Signal	Yes	X	24,535	Count	Divided	Yes	Low	LTT	LTT	PP	LTT	LTT	Protected	No	No	No	Yes	No		A bench... maybe bus stop?	Yes	Yes		
809.04	809.01	E Century Ave	N 4th St	Bismarck	Signal	Yes	X	19,765	Count	Divided	Yes	Low	LTT	LTT	PP	LT	LT	Permitted	No	No	No	Yes	No		A bench... maybe bus stop?	Yes	Yes		
809.05	809.01	E Century Ave	N 11th St	Bismarck	Signal	Yes	X	22,255	Count	Divided	Yes	Low	LTT	LTT	PP	Unmarked	LTR	PP	No	No	Yes	Yes	No		crosswalk faded	No	Yes		
809.06	809.01	E Century Ave	US 5000 (State St)	Bismarck	Signal	Yes	X	28,650	Count	Divided	Yes	Low	LTTT	LTTT	PP	LLTTT	LLTTT	Protected	No	No	No	Yes	No		No	Yes	Yes		
809.07	809.01	E Century Ave	N 19th St	Bismarck	Signal	Yes	X	9,674	Count	Divided	Yes	Low	LTTT	LTT	Protected	LTR	LTTT	PP	No	No	Yes	Yes	No		No	Yes	Yes		
809.08	809.01	E Century Ave	Nebraska Dr	Bismarck	Thru-STOP	Yes	T	4,998	Count	Divided		Low	LTT	TT		Unmarked		Yes	No	Yes	No	No		No	Yes	No	No		
809.09	809.02	E Century Ave	Centennial Rd	Bismarck	Signal		X	18,668	Count	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Only photos during major construction; parameters unknown	
810.01	810.01	W Interstate Ave	N Washington St	Bismarck	Signal	Yes	X	17,980	Count	Undivided	Yes	Low	LT	LTR	Permitted	LTR	LT	Permitted	No	Yes	Yes	Yes	No		No	Yes	No		
810.02	810.01	E Interstate Ave	N 4th St	Bismarck	Signal	Yes	X	11,968	Count	Undivided	Yes	Low	LT	LT	Permitted	LT	LT	Permitted	Yes	No	Yes	No	No		No	Yes	No		
810.03	810.01	E Interstate Ave	Gateway Ave	Bismarck	Thru-STOP	Yes	X	12,225	Count	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Only photos during major construction; parameters unknown	
810.05	810.01	N 11th St	Weiss Ave	Bismarck	Yield	Yes	T	8,118	Count	Undivided		Low	LT	Unmarked		Unmarked		No	No	Yes	Yes	No		No	No	No	No		
810.07	810.01	Weiss Ave	US 5000 (State St)	Bismarck	Signal	Yes	X	17,003	Count	Divided	Yes	Low	LTTT	LTTT	Protected	LTR	LTR	PP	No	No	No	Yes	No		No	Yes	No		
810.08	810.02	E Interstate Ave	US 5000 (State St)	Bismarck	Signal	Yes	X	24,580	Count	Divided	Yes	Low	LLTTT	LTTT	Protected	LTT	LTT	PP	No	No	No	Yes	No		No	Yes	Yes		
810.09	810.02	E Interstate Ave	N 19th St	Bismarck	Thru-STOP	Yes	T	12,210	Count	Undivided		Low	LT	LT		T		No	No	Yes	Yes	No		No	Yes	No	No		
811.01	811.01	Frontage Rd	US 5000 (State St)	Bismarck	Thru-STOP	Yes	X	15,785	Count	Divided		Low	LTTT	LTTT		R	R	No	No	No	Yes	No		No	Yes	Yes	Yes		
813.01	813.01	Schafer St	W Divide Ave	Bismarck	Signal	Yes	X	24,758	Count	Div/Undiv	Yes	Low	LTTT	LTTT	Permitted	LT	TR	Permitted	No	No	Yes	No	No		No	Yes	Yes		
813.02	813.01	Schafer St	College Dr	Bismarck	All-way STOP	Yes	X	7,530	Count	Undivided		Low	T	T		TR	T	No	No	No	Yes	No		Yes	Yes	No	No		
813.03	813.01	College Dr	Ward Rd	Bismarck	Thru-STOP	Yes	T	8,190	Count	Undivided		Low	LT	LT		T		No	No	Yes	Yes	No		No	Yes	No	No		
813.04	813.01	College Dr	W Divide Ave	Bismarck	Signal	Yes	T	14,738	Count	Undivided	Yes	Low	T	LT	PP	LR		Permitted	No	No	Yes	Yes	No		No	Yes	No		
814.01	814.01	W Turnpike Ave	W Divide Ave	Bismarck	Thru-STOP	Yes	T	13,998	Count	Undivided		Low	LT	LT		T		No	No	Yes	Yes	No		No	Yes	No	No		
814.02	814.01	W Turnpike Ave	N Washington St	Bismarck	Thru-STOP	Yes	X	16,563	Count	Undivided		Low	T	T		Unmarked	Unmarked	Yes	No	No	No	No		No	No	No	No		
814.03	814.01	E Turnpike Ave	N 4th St	Bismarck	Thru-STOP	Yes	X	10,218	Count	Undivided		Low	T	T		Unmarked	Unmarked	Yes	No	No	No	No		No	No	No	No		
815.01	815.01	E Capitol Ave	N 4th St	Bismarck	Thru-STOP	Yes	X	9,285	Count	Undivided		Low	T	T		Unmarked	Unmarked	Yes	No	No	No	No		No	Yes	No	No		
815.02	815.01	E Capitol Ave	N 12th St (West)	Bismarck	Thru-STOP	No	T	5,060	Count	Undivided		Low	T	T		Unmarked		No	No	Yes	Yes	No		No	No	No	No		
815.03	815.01	E Capitol Ave	N 12th St (East)	Bismarck	Thru-STOP	Yes	T	5,110	Count	Undivided		Low	T	LT		Unmarked		No	No	No	Yes	No		No	Yes	No	No		
815.04	815.01	E Capitol Ave	State St	Bismarck	Signal	Yes	X	17,925	Count	Divided	Yes	Low	LTTT	LTTT	Protected	LT	LT	Permitted	No	No	No	Yes	No		No	Yes	No		
815.05	815.01	E Capitol Ave	N 19th St	Bismarck	Signal	Yes	X	12,125	Count	Undivided	Yes	Low	LT	LT	Permitted	T	T	Permitted	Yes	No	Yes	Yes	No		No	Yes	No		
816.01	816.01	N 12th St	State St (South)	Bismarck	Thru-STOP	Yes	T	13,033	Count	Divided		Low	LTTT	LTTT		T	T	No	No	Yes	Yes	No		No	Yes	Yes	No		
816.02	816.02	N 12th St	State St (North)	Bismarck	Thru-STOP	Yes	X	15,433	Count	Divided		Low	LTTT	LTTT		Unmarked	Unmarked	No	No	No	Yes	No		No	No	Yes	No		
817.01	817.01	N 26th St	E Divide Ave	Bismarck	Thru-STOP	Yes	T	4,830	Count	Undivided		Low	T	T		Unmarked		Yes	No	No	No	No		No	Yes	No	No		
818.01	818.01	N 22nd St	E Boulevard Ave	Bismarck	Thru-STOP	Yes	T	2,490	Count	Undivided		Low	T	T		T		Yes	No	Yes	No	No		No	No	No	No		
818.02	818.01	N 22nd St	E Divide Ave	Bismarck	Thru-STOP	Yes	T	11,895	Count	Undivided		Low	T	T		T		Yes	No	No	No	No		No	No	No	No		
819.01	819.01	Valleyview Ave	N 26th St	Bismarck	Thru-STOP	No	T	8,713	Count	Undivided		Low	T	T		Unmarked		No	No	No	Yes	No		No	Yes	No	No		
819.02																													

Detailed Intersection Information

Burleigh County Urban Intersection List

Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Street Lights	Config	Volume		General													Ped/Bike															
								ADT	Source	Major Config	Overhead Signal	Major Speed	Major Approach Lanes	Major Left Signal	Minor Approach	Minor Left Signal	Parking	Skew	On/Near Curve	Development / Ped Generator	RR Xing	Notes	Bus Stop	Marked Crosswalk	Major Median	Minor Median												
826.01	826.01	N 19th St	E Divide Ave	Bismarck	Signal	Yes	T	15,285	Count	Undivided	Yes	Low	LT	TR	Protected	LR	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No			
828.01	828.01	N 35th St	E Rosser Ave	Bismarck	Thru-STOP	No	X	4,698	Count	Undivided	Yes	Low	T	T	Unmarked	Unmarked	Permitted	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No				
828.02	828.01	N 35th St	E Divide Ave	Bismarck	Thru-STOP	Yes	T	4,540	Count	Undivided	Yes	Low	T	T	Unmarked	Unmarked	Permitted	Yes	No	Yes	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No			
829.01	829.01	W Arbor Ave	S Washington St	Bismarck	Signal	Yes	X	16,508	Count	Undivided	Yes	Low	LTT	LTT	Permitted	LT	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No			
829.02	829.01	River Rd	Fraine Barracks Rd	Bismarck	Thru-STOP	No	T	2,298	Count	Undivided	Yes	Low	T	T	Permitted	T	Permitted	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No			
830.01	830.02	W Divide Ave	N Washington St	Bismarck	Signal	Yes	X	25,898	Count	Undivided	Yes	Low	LT	LT	PP	LT	LT	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
830.02	830.02	E Divide Ave	State St	Bismarck	Signal	Yes	X	22,765	Count	Undivided	Yes	Low	LTTT	LTTT	Protected	LTTT	LTTT	Protected	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No		
830.03	830.03	E Divide Ave	N 26th St	Bismarck	Signal	Yes	T	11,545	Count	Undivided	Yes	Low	TR	LT	Permitted	LR	Permitted	Yes	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
830.04	830.03	E Divide Ave	E Bismarck Expy	Bismarck	Signal	Yes	X	14,418	Count	Div/Undiv	Yes	Low	LTR	LTR	Permitted	LT	LTR	Permitted	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No		
830.05	830.03	Divide Ave	N 52nd St	Bismarck	Thru-STOP	No	T	2,228	Count	Undivided	Yes	Low	T	T	Permitted	T	Permitted	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
831.01	831.01	W Ave C	N Washington St	Bismarck	Signal	Yes	X	18,685	Count	Undivided	Yes	Low	LT	LT	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
831.02	831.01	E Ave C	N 3rd St	Bismarck	Signal	Yes	X	12,245	Count	Undivided	Yes	Low	LT	T	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
831.03	831.01	E Ave C	N 5th St	Bismarck	Thru-STOP	No	X	7,858	Count	Undivided	Yes	Low	T	T	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
831.04	831.01	E Ave C	N 7th St	Bismarck	Signal	Yes	X	16,288	Count	Undivided	Yes	Low	TR	LT	Permitted	TT	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
831.05	831.01	E Ave C	N 9th St	Bismarck	Signal	Yes	X	17,033	Count	Undivided	Yes	Low	LTR	Permitted	T	LT	Permitted	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
832.01	832.01	N 26th St	E Ave D	Bismarck	Thru-STOP	Yes	T	8,283	Count	Undivided	Yes	Low	T	T	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
833.01	833.01	W Front Ave	S Washington St	Bismarck	Signal	Yes	X	16,355	Count	Undivided	Yes	Low	LTR	LTR	Permitted	LT	LT	Permitted	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
833.02	833.01	E Front Ave	S 3rd St	Bismarck	Signal	Yes	X	16,088	Count	Undivided	Yes	Low	LTT	LTT	Permitted	Unmarked	Unmarked	Permitted	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	
833.03	833.01	E Front Ave	S 5th St	Bismarck	Signal	Yes	X	8,288	Count	Undivided	Yes	Low	TT	TT	Permitted	LT	LT	Permitted	No	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	
833.04	833.01	E Front Ave	S 7th St	Bismarck	Signal	Yes	X	17,380	Count	Undivided	Yes	Low	TTTT	Permitted	T	LT	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
833.05	833.01	E Front Ave	S 9th St	Bismarck	Signal	Yes	X	14,928	Count	Undivided	Yes	Low	TTTT	Permitted	LT	T	Permitted	No	No	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	
833.06	833.01	E Front Ave	S 12th St	Bismarck	Thru-STOP	Yes	X	8,795	Count	Undivided	Yes	Low	T	T	Permitted	T	T	Permitted	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.01	834.01	W Broadway Ave	N Washington St	Bismarck	Signal	Yes	X	23,583	Count	Undivided	Yes	Low	LTT	LTT	Permitted	T	T	Permitted	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.02	834.01	E Broadway Ave	N 3rd St	Bismarck	Signal	Yes	X	11,480	Count	Undivided	Yes	Low	LTR	LT	Permitted	T	T	Permitted	Yes	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.03	834.01	E Broadway Ave	N 5th St	Bismarck	Signal	No	X	6,810	Count	Undivided	No	Low	TT	Permitted	LT	T	Permitted	Yes	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.04	834.01	E Broadway Ave	N 7th St	Bismarck	Signal	Yes	X	17,593	Count	Undivided	Yes	Low	TTTT	Permitted	LT	TR	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.05	834.01	E Broadway Ave	N 9th St	Bismarck	Signal	Yes	X	17,413	Count	Undivided	Yes	?	LTR	No	Permitted	LT	TR	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.06	834.01	E Broadway Ave	S 12th St	Bismarck	Thru-STOP	Yes	X	8,953	Count	Undivided	No	Low	LT	LT	No	T	T	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.07	834.01	E Broadway Ave	N 17th St	Bismarck	Thru-STOP	Yes	X	7,315	Count	Undivided	No	Low	LT	LT	No	T	T	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.08	834.01	E Broadway Ave	Airport Rd	Bismarck	Signal	Yes	T	8,523	Count	Undivided	Yes	Low	LT	LT	Permitted	LR	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
834.09	834.01	E Broadway Ave	N 26th St	Bismarck	Thru-STOP	Yes	X	11,458	Count	Undivided	No	Low	T	T	Permitted	T	T	Permitted	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
835.01	835.01	W Thayer Ave	N Washington St	Bismarck	Thru-STOP	Yes	X	15,800	Count	Undivided	No	Low	TT	TT	Permitted	T	T	Permitted	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
835.02	835.01	W Thayer Ave	N 3rd St	Bismarck	Signal	Yes	X	9,283	Count	Undivided	Yes	Low	LT	LT	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
835.03	835.01	W Thayer Ave	N 5th St	Bismarck	Signal	Yes	X	5,055	Count	Undivided	No	Low	LT	T	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.01	836.01	W Rosser Ave	N Washington St	Bismarck	Signal	Yes	X	22,408	Count	Undivided	Yes	Low	LTR	LT	Permitted	LT	LT	Permitted	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
836.02	836.01	E Rosser Ave	N 3rd St	Bismarck	Signal	Yes	X	16,545	Count	Undivided	Yes	Low	LT	LT	Permitted	LT	LT	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
836.03	836.01	E Rosser Ave	N 5th St	Bismarck	Signal	Yes	X	13,525	Count	Undivided	Yes	Low	LT	LT	Permitted	T	T	Permitted	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
836.04	836.01	E Rosser Ave	N 7th St	Bismarck	Signal	Yes	X	22,598	Count	Undivided	Yes	?	LTR	Permitted	LT	TR	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.05	836.01	E Rosser Ave	N 9th St	Bismarck	Signal	Yes	X	20,910	Count	Undivided	Yes	?	LTR	Permitted	LT	TR	Permitted	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.06	836.01	E Rosser Ave	N 12th St	Bismarck	Thru-STOP	Yes	X	7,915	Count	Undivided	Yes	Low	T	T	Permitted	T	T	Permitted	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.07	836.01	E Rosser Ave	N 26th St	Bismarck	Signal	Yes	X	13,960	Count	Undivided	Yes	Low	LT	LT	Permitted	LT	LT	Permitted	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.08	836.01	E Rosser Ave	Eastdale Dr	Bismarck	Thru-STOP	Yes	X	5,465	Count	Undivided	Yes	Low	T	T	Permitted	T	T	Permitted	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
836.09	836.01	E Rosser Ave	E Bismarck Expy	Bismarck	Signal	Yes	X	11,085	Count	Undivided	Yes	?	LTT	LTT	Permitted	LT	T	Permitted	No	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
837.01	837.01	S 26th St	Airway Ave	Bismarck																																		

Burleigh County Urban Pedestrian/Bike Project Corridors

Corridor	Local Roadway	Adv Walk	Countdown	Cost
83.01	US 5000 (State St)	5	3	\$ 30,000
83.03	N 7th St	5	5	\$ 50,000
83.04	N 9th St	5	5	\$ 50,000
194.01	Bismarck Exp	8	8	\$ 80,000
809.01	Century Ave	5	5	\$ 50,000
815.01	E Capital Ave	2	8	\$ 80,000
833.01	Front Ave	2	2	\$ 20,000
834.01	E Broadway Ave	3	3	\$ 30,000
836.01	Rosser Ave	5	5	\$ 50,000
845.01	Washington St	2	2	\$ 20,000
845.02	Washington St	7	7	\$ 70,000
		49	53	\$ 530,000

Burleigh County Ped/Bike Corridor Analysis						Criteria				Ped/Bike	Major Speed	High Priority Corridor Candidate
						Signal	Greater than 15,000	Yes	Greater than 0			
Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Entering ADT	Development / Ped Generator	Total	Severe			
800.01	800.01	Ottawa St	US 5000 (State St)	Bismarck	Thru-STOP	9360	No	0	0	Low		
801.01	801.01	Ash Coulee Dr	Valley Dr	Bismarck	Thru-STOP	3810	No	0	0	Low		
801.02	801.01	43rd Ave NE	3rd St NW	Bismarck	Thru-STOP	9685	Yes	0	0	Low		
801.03	801.02	43rd Ave NE	US 5000 (State St)	Bismarck	Signal	13725	No	0	0	Low		
801.04	801.02	43rd Ave NE	Frontage Rd	Bismarck	Yield	4310	No	0	0	High		
801.05	801.02	43rd Ave NE	N 19th St	Bismarck	Thru-STOP	6740	No	0	0	High		
801.06	801.02	43rd Ave NE	Centennial Rd	Bismarck	Thru-STOP	7593	No	0	0	High		
802.01	802.01	No Name	US 5000 (State St)	Bismarck	Thru-STOP	7808	No	0	0	Low		
803.01	803.01	Calgary Ave	N Washington St	Bismarck	Thru-STOP	10315	No	1	0	Low		
803.02	803.01	Calgary Ave	No Name	Bismarck	Uncontrolled	4680	No	0	0	Low		
803.03	803.01	Calgary Ave	US 5000 (State St)	Bismarck	Signal	12535	No	0	0	Low		
803.04	803.01	Calgary Ave	N 19th St	Bismarck	Thru-STOP	5873	No	0	0	Low		
804.01	804.01	Daytona Dr	Country West Rd	Bismarck	Thru-STOP	2330	No	0	0	Low		
804.02	804.01	Daytona Dr	Valley Dr	Bismarck	Yield	2250	No	0	0	Low		
805.01	805.01	Country West Rd	Tyler Pkwy	Bismarck	Thru-STOP	4343	No	0	0	Low		
805.02	805.01	Country West Rd	W Century Ave	Bismarck	Thru-STOP	12123	No	0	0	Low		
806.01	806.01	Valley Dr	Tyler Pkwy	Bismarck	Yield	2253	No	0	0	Low		
807.01	807.01	Clairmont Rd	Burnt Boat Dr	Bismarck	Thru-STOP	5403	No	0	0	Low		
808.01	808.01	Burnt Boat Dr	River Rd	Bismarck	Thru-STOP	3415	Yes	0	0	Low		
808.02	808.01	Burnt Boat Dr	Tyler Pkwy	Bismarck	Signal	22280	Yes	1	0	Low		
809.01	809.01	W Century Ave	Tyler Pkwy	Bismarck	Thru-STOP	13685	Yes	1	0	Low		
809.02	809.01	W Century Ave	W Interstate Ave	Bismarck	Signal	13670	Yes	0	0	Low		
809.03	809.01	W Century Ave	N Washington St	Bismarck	Signal	24535	Yes	2	0	Low		
809.04	809.01	E Century Ave	N 4th St	Bismarck	Signal	19765	Yes	1	0	Low		
809.05	809.01	E Century Ave	N 11th St	Bismarck	Signal	22255	Yes	0	0	Low		
809.06	809.01	E Century Ave	US 5000 (State St)	Bismarck	Signal	28650	Yes	0	0	Low		
809.07	809.01	E Century Ave	N 19th St	Bismarck	Signal	9674	Yes	0	0	Low		
809.08	809.01	E Century Ave	Nebraska Dr	Bismarck	Thru-STOP	4998	No	0	0	Low		
809.09	809.02	E Century Ave	Centennial Rd	Bismarck	Signal	18668	Unknown	1	0	Unknown		
810.01	810.01	W Interstate Ave	N Washington St	Bismarck	Signal	17980	Yes	0	0	Low		
810.02	810.01	E Interstate Ave	N 4th St	Bismarck	Signal	11968	No	1	0	Low		
810.03	810.01	E Interstate Ave	Gateway Ave	Bismarck	Thru-STOP	12225	Unknown	0	0	Unknown		
810.05	810.01	N 11th St	Weiss Ave	Bismarck	Yield	8118	Yes	0	0	Low		
810.07	810.01	Weiss Ave	US 5000 (State St)	Bismarck	Signal	17003	Yes	0	0	Low		
810.08	810.02	E Interstate Ave	US 5000 (State St)	Bismarck	Signal	24580	Yes	2	0	Low		
810.09	810.02	E Interstate Ave	N 19th St	Bismarck	Thru-STOP	12210	Yes	0	0	Low		
811.01	811.01	Frontage Rd	US 5000 (State St)	Bismarck	Thru-STOP	15785	Yes	0	0	Low		
813.01	813.01	Schafer St	W Divide Ave	Bismarck	Signal	24758	No	0	0	Low		
813.02	813.01	Schafer St	College Dr	Bismarck	All-way STOP	7530	Yes	0	0	Low		
813.03	813.01	College Dr	Ward Rd	Bismarck	Thru-STOP	8190	Yes	0	0	Low		
813.04	813.01	College Dr	W Divide Ave	Bismarck	Signal	14738	Yes	2	0	Low		
814.01	814.01	W Turnpike Ave	W Divide Ave	Bismarck	Thru-STOP	13998	Yes	0	0	Low		
814.02	814.01	W Turnpike Ave	N Washington St	Bismarck	Thru-STOP	16563	No	0	0	Low		
814.03	814.01	E Turnpike Ave	N 4th St	Bismarck	Thru-STOP	10218	No	0	0	Low		
815.01	815.01	E Capitol Ave	N 4th St	Bismarck	Thru-STOP	9285	No	0	0	Low		
815.02	815.01	E Capitol Ave	N 12th St (West)	Bismarck	Thru-STOP	5060	Yes	0	0	Low		
815.03	815.01	E Capitol Ave	N 12th St (East)	Bismarck	Thru-STOP	5110	Yes	0	0	Low		
815.04	815.01	E Capitol Ave	State St	Bismarck	Signal	17925	Yes	1	0	Low		
815.05	815.01	E Capitol Ave	N 19th St	Bismarck	Signal	12125	Yes	0	0	Low		
816.01	816.01	N 12th St	State St (South)	Bismarck	Thru-STOP	13033	Yes	0	0	Low		
816.02	816.02	N 12th St	State St (North)	Bismarck	Thru-STOP	15433	Yes	1	0	Low		
817.01	817.01	N 26th St	E Divide Ave	Bismarck	Thru-STOP	4830	No	0	0	Low		
818.01	818.01	N 22nd St	E Boulevard Ave	Bismarck	Thru-STOP	2490	No	0	0	Low		
818.02	818.01	N 22nd St	E Divide Ave	Bismarck	Thru-STOP	11895	No	0	0	Low		
819.01	819.01	Valleyview Ave	N 26th St	Bismarck	Thru-STOP	8713	Yes	0	0	Low		
819.02	819.01	N 31st Ave	Crocus Ave	Bismarck	Uncontrolled	1785	No	0	0	Low		
819.03	819.01	Crocus Ave	N 35th St	Bismarck	Uncontrolled	1350	No	0	0	Low		
820.01	820.01	Ward Rd	W Ave C / N Griffin St	Bismarck	Signal	8970	No	0	0	Low		
821.01	821.01	N 16th St	E Broadway Ave	Bismarck	Thru-STOP	8260	Yes	1	0	Low		
821.02	821.01	N 16th St	E Rosser Ave	Bismarck	All-way STOP	10633	No	1	0	Low		
821.03	821.01	N 16th St	E Ave C	Bismarck	All-way STOP	8013	No	1	0	Low		
821.04	821.01	N 16th St	E Ave D	Bismarck	Thru-STOP	7053	No	0	0	Low		
821.05	821.01	N 16th St	E Boulevard Ave	Bismarck	All-way STOP	8578	No	0	0	Low		
821.06	821.01	N 16th St	E Divide Ave	Bismarck	Thru-STOP	11363	No	1	0	Low		
822.01	822.01	N 6th St	E Broadway Ave	Bismarck	All-way STOP	5875	Yes	0	0	Low		
822.02	822.01	N 6th St	E Thayer Ave	Bismarck	Unknown	3128	Yes	0	0	Low		
822.03	822.01	N 6th St	E Rosser Ave	Bismarck	Signal	11415	Yes	3	1	Low		
823.01	823.01	N Bell St	W Rosser Ave	Bismarck	Thru-STOP	6108	No	0	0	Low		
823.02	823.01	N Bell St	W Ave C	Bismarck	Thru-STOP	2400	No	0	0	Low		
824.01	824.01	W Boulevard Ave	N Washington St	Bismarck	Signal	17543	No	0	0	Low		
824.02	824.01	W Boulevard Ave	N 3rd St	Bismarck	Signal	10600	Yes	0	0	Low		
824.03	824.01	E Boulevard Ave	N 4th St	Bismarck	Signal	0	No	0	0	Low		
824.04	824.01	E Boulevard Ave	N 7th St	Bismarck	Signal	19203	No	0	0	Low		
824.05	824.01	E Boulevard Ave	N 9th St	Bismarck	Signal	19840	Yes	3	0	Low		
824.06	824.02	E Boulevard Ave	State St	Bismarck	Thru-STOP	16910	Yes	0	0	Low		
824.07	824.02	E Boulevard Ave	N 26th St	Bismarck	Thru-STOP	8163	Yes	0	0	Low		
825.01	825.01	N 4th St	E Broadway Ave	Bismarck	All-way STOP	5688	Yes	0	0	Low		
825.02	825.01	N 4th St	E Thayer Ave	Bismarck	All-way STOP	4328	Yes	0	0	Low		
825.03	825.01	N 4th St	E Rosser Ave	Bismarck	Signal	12410	Yes	2	0	Low		
825.04	825.01	N 4th St	E Ave C	Bismarck	Signal	11375	No	0	0	Low		
825.05	825.01	N 4th St	E Divide Ave	Bismarck	Signal	15333	No	0	0	Low		
825.06	825.01	Dominion St	Dominion St	Bismarck	Uncontrolled	2610	No	0	0	Low		
826.01	826.01	N 19th St	E Divide Ave	Bismarck	Signal	15285	No	0	0	Low		
828.01	828.01	N 35th St	E Rosser Ave	Bismarck	Thru-STOP	4698	No	0	0	Low		
828.02	828.01	N 35th St	E Divide Ave	Bismarck	Thru-STOP	4540	No	0	0	Low		
829.01	829.01	W Arbor Ave	S Washington St	Bismarck	Signal	16508	Yes	2	0	Low		
829.02	829.01	River Rd	Fraine Barracks Rd	Bismarck	Thru-STOP	2298	No	0	0	Low		
830.01	830.02	W Divide Ave	N Washington St	Bismarck	Signal	25898	Yes	0	0	Low		
830.02	830.02	E Divide Ave	State St	Bismarck	Signal	22765	Yes	0	0	Low		
830.03	830.03	E Divide Ave	N 26th St	Bismarck	Signal	11545	Yes	0	0	Low		
830.04	830.03	E Divide Ave	E Bismarck Expy	Bismarck	Signal	14418	Yes	0	0	Low		
830.05	830.03	Divide Ave	N 52nd St	Bismarck	Thru-STOP	2228	No	0	0	Low		

Burleigh County Ped/Bike Corridor Analysis					Criteria				Ped/Bike			High Priority Corridor Candidate
					Signal	Greater than 15,000	Yes	Greater than 0				
Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Entering ADT	Development / Ped Generator	Total	Severe	Major Speed		
831.01	831.01	W Ave C	N Washington St	Bismarck	Signal	18685	No	0	0	Low		
831.02	831.01	E Ave C	N 3rd St	Bismarck	Signal	12245	No	0	0	Low		
831.03	831.01	E Ave C	N 5th St	Bismarck	Thru-STOP	7858	No	1	0	Low		
831.04	831.01	E Ave C	N 7th St	Bismarck	Signal	16288	No	0	0	Low		
831.05	831.01	E Ave C	N 9th St	Bismarck	Signal	17033	Yes	0	0	Low		
832.01	832.01	N 26th St	E Ave D	Bismarck	Thru-STOP	8283	No	0	0	Low		
833.01	833.01	W Front Ave	S Washington St	Bismarck	Signal	16355	Yes	1	0	Low		
833.02	833.01	E Front Ave	S 3rd St	Bismarck	Signal	16088	Yes	1	0	Low		
833.03	833.01	E Front Ave	S 5th St	Bismarck	Signal	8288	Yes	0	0	Low		
833.04	833.01	E Front Ave	S 7th St	Bismarck	Signal	17380	Yes	0	0	Low		
833.05	833.01	E Front Ave	S 9th St	Bismarck	Signal	14928	Yes	1	1	Low		
833.06	833.01	E Front Ave	S 12th St	Bismarck	Thru-STOP	8795	Yes	0	0	Low		
834.01	834.01	W Broadway Ave	N Washington St	Bismarck	Signal	23583	Yes	0	0	Low		
834.02	834.01	E Broadway Ave	N 3rd St	Bismarck	Signal	11480	Yes	1	0	Low		
834.03	834.01	E Broadway Ave	N 5th St	Bismarck	Signal	6810	Yes	1	0	Low		
834.04	834.01	E Broadway Ave	N 7th St	Bismarck	Signal	17593	Yes	1	1	Low		
834.05	834.01	E Broadway Ave	N 9th St	Bismarck	Signal	17413	Yes	0	0	Unknown		
834.06	834.01	E Broadway Ave	S 12th St	Bismarck	Thru-STOP	8953	No	0	0	Low		
834.07	834.01	E Broadway Ave	N 17th St	Bismarck	Thru-STOP	7315	No	0	0	Low		
834.08	834.01	E Broadway Ave	Airport Rd	Bismarck	Signal	8523	No	0	0	Low		
834.09	834.01	E Broadway Ave	N 26th St	Bismarck	Thru-STOP	11458	No	1	0	Low		
835.01	835.01	W Thayer Ave	N Washington St	Bismarck	Thru-STOP	15800	No	0	0	Low		
835.02	835.01	W Thayer Ave	N 3rd St	Bismarck	Signal	9283	No	0	0	Low		
835.03	835.01	W Thayer Ave	N 5th St	Bismarck	Signal	5055	No	1	0	Low		
836.01	836.01	W Rosser Ave	N Washington St	Bismarck	Signal	22408	No	1	0	Low		
836.02	836.01	E Rosser Ave	N 3rd St	Bismarck	Signal	16545	No	4	0	Low		
836.03	836.01	E Rosser Ave	N 5th St	Bismarck	Signal	13525	No	0	0	Low		
836.04	836.01	E Rosser Ave	N 7th St	Bismarck	Signal	22598	Yes	1	0	Unknown		
836.05	836.01	E Rosser Ave	N 9th St	Bismarck	Signal	20910	Yes	2	0	Unknown		
836.06	836.01	E Rosser Ave	N 12th St	Bismarck	Thru-STOP	7915	No	1	0	Low		
836.07	836.01	E Rosser Ave	N 26th St	Bismarck	Signal	13960	Yes	0	0	Low		
836.08	836.01	E Rosser Ave	Eastdale Dr	Bismarck	Thru-STOP	5465	No	0	0	Low		
836.09	836.01	E Rosser Ave	E Bismarck Expy	Bismarck	Signal	11085	Yes	0	0	Unknown		
837.01	837.01	S 26th St	Airway Ave	Bismarck	Thru-STOP	2528	No	0	0	Low		
837.02	837.01	S 26th St	E Bismarck Expy	Bismarck	Signal	16495	Yes	0	0	Low		
837.03	837.01	S 26th St	Railroad Ave	Bismarck	Thru-STOP	9135	No	0	0	Low		
843.01	843.01	W Bowen Ave	S Washington St	Bismarck	Signal	16615	Yes	1	0	Low		
843.02	843.01	E Bowen Ave	S 3rd St	Bismarck	Signal	14665	Yes	0	0	Low		
843.03	843.01	E Bowen Ave	S 5th St	Bismarck	All-way STOP	6430	No	0	0	Low		
843.04	843.01	E Bowen Ave	S 7th St	Bismarck	Thru-STOP	15120	No	1	0	Low		
843.05	843.01	E Bowen Ave	S 9th St	Bismarck	Thru-STOP	11813	Yes	0	0	Low		
843.06	843.01	E Bowen Ave	S 12th St	Bismarck	Thru-STOP	7725	No	1	0	Low		
843.07	843.01	E Bowen Ave	Airport Rd	Bismarck	Thru-STOP	8315	Yes	0	0	Low		
845.01	845.01	S Washington St	34th Ave SW	Bismarck	All-way STOP	3833	No	0	0	Unknown		
845.02	845.01	S Washington St	Wachter Ave	Bismarck	Signal	9845	Yes	0	0	Low		
845.03	845.01	S Washington St	Riverwood Dr / Denver Ave	Bismarck	Signal	17118	Yes	1	1	Low		
845.04	845.01	S Washington St	E Bismarck Expy	Bismarck	Signal	37418	Yes	2	0	Low		
846.01	846.01	S 3rd St	Santa Fe Ave	Bismarck	Thru-STOP	1198	No	0	0	Low		
846.02	846.01	S 3rd St	E Wachter Ave	Bismarck	Thru-STOP	6718	Yes	0	0	Low		
846.03	846.01	S 3rd St	E Denver Ave	Bismarck	Thru-STOP	7898	Yes	0	0	Low		
846.04	846.01	S 3rd St	E Bismarck Expy	Bismarck	Signal	31830	Yes	1	0	Low		
847.01	847.01	Mills Ave	Langer Ln	Bismarck	Roundabout	0	0	0	0	Unknown		
847.02	847.02	E Denver Ave	University Dr	Bismarck	Signal	14630	No	0	0	Unknown		
848.01	848.01	Airport Rd	University Dr	Bismarck	Signal	14860	No	0	0	High		
848.02	848.01	Airport Rd	Airwave Ave	Bismarck	Thru-STOP	8908	No	0	0	Low		
848.03	848.01	Airport Rd	E Bismarck Expy	Bismarck	Signal	26465	No	0	0	Unknown		
849.01	849.01	S 12th St	Santa Fe Ave	Bismarck	Thru-STOP	4220	No	0	0	Low		
849.02	849.01	S 12th St	University Dr	Bismarck	Signal	15398	No	0	0	Low		
849.03	849.01	S 12th St	E Bismarck Expy	Bismarck	Signal	27070	Yes	3	0	High		
850.01	850.01	E Wachter Ave	University Dr	Bismarck	Signal	13218	Yes	1	0	Low		
853.01	853.01	Burleigh Ave	University Dr	Bismarck	Thru-STOP	10623	No	0	0	High		
855.01	855.01	Airway Ave	University Dr	Bismarck	Thru-STOP	10008	No	0	0	High		
855.02	855.01	Airway Ave	Lincoln Rd	Bismarck	Thru-STOP	5018	No	0	0	High		
855.04	855.01	Yegen Rd	E Bismarck Expy	Bismarck	Signal	14433	No	0	0	High		
856.01	856.01	Lincoln Rd	Quail St	Bismarck	Thru-STOP	3724	No	0	0	High		

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on US 83 (State St) from Interstate Ave to Ottawa St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 83.01
Street Name: US 83 (State St)
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
810.08	US 83 (State St)	E Interstate Ave	Signal	24,580	Yes	2	0	1	0	0	-
811.01	US 83 (State St)	Frontage Rd	Thru-STOP	15,785	Yes	0	0	0	0	0	-
809.06	US 83 (State St)	E Century Ave	Signal	28,650	Yes	0	0	1	0	0	-
810.07	US 83 (State St)	Weiss Ave	Signal	17,003	Yes	0	0	1	0	0	-
803.03	US 83 (State St)	Calgary Ave	Signal	12,535	No	0	0	0	0	0	-
802.01	US 83 (State St)	No Name	Thru-STOP	7,808	No	0	0	0	0	0	-
801.03	US 83 (State St)	43rd Ave NE	Signal	13,725	No	0	0	0	0	0	-
800.01	US 83 (State St)	Ottawa St	Thru-STOP	9,360	No	0	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost	
Traffic Control Device	Signal				
Entering ADT	>15,000	Advanced Walk	\$0 per intersection	0	\$0
Development / Ped Generator	Yes	Countdown Timers	\$10,000 per intersection	3	\$30,000
Total Ped/Bike Crashes	>0	Curb Extensions	\$15,000 per corner	0	\$0
		Median Refuge Island	\$10,000 per side	0	\$0
					\$30,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$27,000
Local Match (10% of Total project cost)	\$3,000
Total Project Cost	\$30,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on N 7th St from E Boulevard Ave to Bowen Ave

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 83.03
Street Name: N 7th St
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
824.04	N 7th St	E Boulevard Ave	Signal	19,203	No	0	0	1	0	0	-
831.04	N 7th St	E Ave C	Signal	16,288	No	0	0	1	0	0	-
836.04	N 7th St	E Rosser Ave	Signal	22,598	Yes	1	0	1	0	0	-
834.04	N 7th St	E Broadway Ave	Signal	17,593	Yes	1	0	1	0	0	-
833.04	S 7th St	E Front Ave	Signal	17,380	Yes	0	0	1	0	0	-
843.04	S 7th St	E Bowen Ave	Thru-STOP	15,120	No	1	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	5	\$50,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$50,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$45,000
Local Match (10% of Total project cost)	\$5,000
Total Project Cost	\$50,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on N 9th St from E Boulevard Avenue to Front Ave

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 83.04
Street Name: N 9th St
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
824.05	N 9th St	E Boulevard Ave	Signal	19,840	Yes	3	0	1	0	0	-
831.05	N 9th St	E Ave C	Signal	17,033	Yes	0	0	1	0	0	-
836.05	N 9th St	E Rosser Ave	Signal	20,910	Yes	2	0	1	0	0	-
834.05	N 9th St	E Broadway Ave	Signal	17,413	Yes	0	0	1	0	0	-
833.05	S 9th St	E Front Ave	Signal	14,928	Yes	1	0	1	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	5	\$50,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$50,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$45,000
Local Match (10% of Total project cost)	\$5,000
Total Project Cost	\$50,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on E Bismarck Expressway from Washington St to Divide Ave

Agency Name: City of Bismarck

ND DOT District: 1

Contact Name: Mark Berg

Telephone Number: 701-355-1529

Email Address: maberg@nd.gov

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

Location Description

Corridor 194.01
Street Name E Bismarck Expressway
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
845.04	E Bismarck Expressway	S Washington St	Signal	37,418	Yes	2	0	1	0	0	-
846.04	E Bismarck Expressway	S 3rd St	Signal	31,830	Yes	1	0	1	0	0	-
849.03	E Bismarck Expressway	S 12th St	Signal	27,070	Yes	3	0	1	0	0	-
848.03	E Bismarck Expressway	Airport Rd	Signal	26,465	No	0	0	1	0	0	-
837.02	E Bismarck Expressway	S 26th St	Signal	16,495	Yes	0	0	1	0	0	-
855.04	E Bismarck Expressway	Yegen Rd	Signal	14,433	No	0	0	1	0	0	-
836.09	E Bismarck Expressway	E Rosser Ave	Signal	11,085	Yes	0	0	1	0	0	-
830.04	E Bismarck Expressway	E Divide Ave	Signal	14,418	Yes	0	0	1	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	8	\$80,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$80,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$72,000
Local Match (10% of Total project cost)	\$8,000
Total Project Cost	\$80,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on W Century Ave from Tyler Pkwy to Nebraska Dr

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 809.01
Street Name: W Century Ave
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
809.01	W Century Ave	Tyler Pkwy	Thru-STOP	13,685	Yes	1	0	0	0	0	-
809.02	W Century Ave	W Interstate Ave	Signal	13,670	Yes	0	0	1	0	0	-
805.02	Country West Rd	W Century Ave	Thru-STOP	12,123	No	0	0	0	0	0	-
809.03	W Century Ave	N Washington St	Signal	24,535	Yes	2	0	1	0	0	-
809.04	E Century Ave	N 4th St	Signal	19,765	Yes	1	0	1	0	0	-
809.05	E Century Ave	N 11th St	Signal	22,255	Yes	0	0	1	0	0	-
809.07	E Century Ave	N 19th St	Signal	9,674	Yes	0	0	1	0	0	-
809.08	E Century Ave	Nebraska Dr	Thru-STOP	4,998	No	0	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	5	\$50,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$50,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$45,000
Local Match (10% of Total project cost)	\$5,000
Total Project Cost	\$50,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on E Capitol Ave from N 4th St to N 19th St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 815.01
Street Name: E Capitol Ave
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
815.01	E Capitol Ave	N 4th St	Thru-STOP	9,285	No	0	0	0	4	0	-
815.03	E Capitol Ave	N 12th St (East)	Thru-STOP	5,110	Yes	0	0	0	0	0	-
815.04	E Capitol Ave	State St	Signal	17,925	Yes	1	0	1	0	0	-
815.05	E Capitol Ave	N 19th St	Signal	12,125	Yes	0	0	1	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost	
Traffic Control Device	Signal				
Entering ADT	>15,000	Advanced Walk	\$0 per intersection	0	\$0
Development / Ped Generator	Yes	Countdown Timers	\$10,000 per intersection	2	\$20,000
Total Ped/Bike Crashes	>0	Curb Extensions	\$15,000 per corner	4	\$60,000
		Median Refuge Island	\$10,000 per side	0	\$0
					\$80,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$72,000
Local Match (10% of Total project cost)	\$8,000
Total Project Cost	\$80,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on E Front Ave from S 3rd St to S 12th St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 833.01
Street Name: E Front Ave
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
833.02	E Front Ave	S 3rd St	Signal	16,088	Yes	1	0	1	0	0	-
833.03	E Front Ave	S 5th St	Signal	8,288	Yes	0	0	1	0	0	-
833.06	E Front Ave	S 12th St	Thru-STOP	8,795	Yes	0	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	2	\$20,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$20,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$18,000
Local Match (10% of Total project cost)	\$2,000
Total Project Cost	\$20,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on E Broadway Ave from N 3rd St to N 26th St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 834.01
Street Name: E Broadway Ave
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
834.02	E Broadway Ave	N 3rd St	Signal	11,480	Yes	1	0	1	0	0	-
825.01	N 4th St	E Broadway Ave	All-way STOP	5,688	Yes	0	0	0	0	0	-
834.03	E Broadway Ave	N 5th St	Signal	6,810	Yes	1	0	1	0	0	-
822.01	N 6th St	E Broadway Ave	All-way STOP	5,875	Yes	0	0	0	0	0	-
834.06	E Broadway Ave	S 12th St	Thru-STOP	8,953	No	0	0	0	0	0	-
821.01	N 16th St	E Broadway Ave	Thru-STOP	8,260	Yes	1	0	0	0	0	-
834.07	E Broadway Ave	N 17th St	Thru-STOP	7,315	No	0	0	0	0	0	-
834.08	E Broadway Ave	Airport Rd	Signal	8,523	No	0	0	1	0	0	-
834.09	E Broadway Ave	N 26th St	Thru-STOP	11,458	No	1	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	3	\$30,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$30,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$27,000
Local Match (10% of Total project cost)	\$3,000
Total Project Cost	\$30,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on E Rosser Ave from N 3rd St to 35th St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 836.01
Street Name: E Rosser Ave
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
836.02	E Rosser Ave	N 3rd St	Signal	16,545	No	4	0	1	0	0	-
825.03	N 4th St	E Rosser Ave	Signal	12,410	Yes	2	0	1	0	0	-
836.03	E Rosser Ave	N 5th St	Signal	13,525	No	0	0	1	0	0	-
822.03	N 6th St	E Rosser Ave	Signal	11,415	Yes	3	0	1	0	0	-
836.06	E Rosser Ave	N 12th St	Thru-STOP	7,915	No	1	0	0	0	0	-
821.02	N 16th St	E Rosser Ave	All-way STOP	10,633	No	1	0	0	0	0	-
836.07	E Rosser Ave	N 26th St	Signal	13,960	Yes	0	0	1	0	0	-
836.08	E Rosser Ave	Eastdale Dr	Thru-STOP	5,465	No	0	0	0	0	0	-
828.01	N 35th St	E Rosser Ave	Thru-STOP	4,698	No	0	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost
Traffic Control Device Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT >15,000	Countdown Timers	\$10,000 per intersection	5	\$50,000
Development / Ped Generator Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes >0	Median Refuge Island	\$10,000 per side	0	\$0
				\$50,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$45,000
Local Match (10% of Total project cost)	\$5,000
Total Project Cost	\$50,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on S Washington St from 34th Ave to Riverwood Dr

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 845.01
Street Name: S Washington St
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Traffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
845.01	S Washington St	34th Ave SW	All-way STOP	3,833	No	0	0	0	0	0	-
845.02	S Washington St	Wachter Ave	Signal	9,845	Yes	0	0	1	0	0	-
845.03	S Washington St	Riverwood Dr / Denver Ave	Signal	17,118	Yes	1	0	1	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria	Description	Unit Cost	Quantity	Total Cost	
Traffic Control Device	Signal				
Entering ADT	>15,000	Advanced Walk	\$0 per intersection	0	\$0
Development / Ped Generator	Yes	Countdown Timers	\$10,000 per intersection	2	\$20,000
Total Ped/Bike Crashes	>0	Curb Extensions	\$15,000 per corner	0	\$0
		Median Refuge Island	\$10,000 per side	0	\$0
					\$20,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$18,000
Local Match (10% of Total project cost)	\$2,000
Total Project Cost	\$20,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Pedestrian and Bicycle Intersection Improvements

Intersections on S Washington St from Arbor Ave to Turnpike Ave

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor: 845.02
Street Name: S Washington St
Urban/Rural: Urban
County: Burleigh

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Taffic Control	Entering ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Exntensions	Median Refuge Island	Notes
829.01	S Washington St	W Arbor Ave	Signal	16,508	Yes	2	0	1	0	0	-
843.01	S Washington St	W Bowen Ave	Signal	16,615	Yes	1	0	1	0	0	-
833.01	S Washington St	W Front Ave	Signal	16,355	Yes	1	0	1	0	0	-
834.01	N Washington St	W Broadway Ave	Signal	23,583	Yes	0	0	1	0	0	-
835.01	N Washington St	W Thayer Ave	Thru-STOP	15,800	No	0	0	0	0	0	-
836.01	N Washington St	W Rosser Ave	Signal	22,408	No	1	0	1	0	0	-
831.01	N Washington St	W Ave C	Signal	18,685	No	0	0	1	0	0	-
830.01	N Washington St	W Divide Ave	Signal	25,898	Yes	0	0	1	0	0	-
814.02	N Washington St	W Turnpike Ave	Thru-STOP	16,563	No	0	0	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Advanced Walk	\$0 per intersection	0	\$0
Entering ADT	>15,000	Countdown Timers	\$10,000 per intersection	7	\$70,000
Development / Ped Generator	Yes	Curb Extensions	\$15,000 per corner	0	\$0
Total Ped/Bike Crashes	>0	Median Refuge Island	\$10,000 per side	0	\$0
					\$70,000

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$63,000
Local Match (10% of Total project cost)	\$7,000
Total Project Cost	\$70,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Burleigh County Urban Right Angle Crash Project Corridors

Corridor	Local Street Name	Access Mgmt (miles)	Confirmation Lights	Cost
194.01	Bismarck Exp	0	9	\$ 18,000
809.01	Century Ave	3.9	6	\$ 1,180,000
810.01	Interstate Ave	0	2	\$ 4,000
810.02	Interstate Ave	0	2	\$ 4,000
815.01	Capital Ave	0	2	\$ 4,000
845.01	Washington St	0	2	\$ 4,000
		3.9	23	\$ 1,214,000

						Criteria				Severe Right Angle	High Priority Corridor Candidate
						Signal	15,000 25,000	Divided	Greater than 0		
Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Entering ADT	General Major Config	Severe Crashes			
800.01	800.01	Ottawa St	US 5000 (State St)	Bismarck	Thru-STOP	9360	Divided	0	0		
801.01	801.01	Ash Coulee Dr	Valley Dr	Bismarck	Thru-STOP	3810	Undivided	0	0		
801.02	801.01	43rd Ave NE	3rd St NW	Bismarck	Thru-STOP	9685	Undivided	0	0		
801.03	801.02	43rd Ave NE	US 5000 (State St)	Bismarck	Signal	13725	Divided	0	0		
801.04	801.02	43rd Ave NE	Frontage Rd	Bismarck	Yield	4310	Undivided	0	0		
801.05	801.02	43rd Ave NE	N 19th St	Bismarck	Thru-STOP	6740	Undivided	0	0		
801.06	801.02	43rd Ave NE	Centennial Rd	Bismarck	Thru-STOP	7593	Undivided	2	2		
802.01	802.01	No Name	US 5000 (State St)	Bismarck	Thru-STOP	7808	Divided	0	0		
803.01	803.01	Calgary Ave	N Washington St	Bismarck	Thru-STOP	10315	Undivided	0	0		
803.02	803.01	Calgary Ave	No Name	Bismarck	Uncontrolled	4680	Undivided	0	0		
803.03	803.01	Calgary Ave	US 5000 (State St)	Bismarck	Signal	12535	Divided	0	0		
803.04	803.01	Calgary Ave	N 19th St	Bismarck	Thru-STOP	5873	Undivided	0	0		
804.01	804.01	Daytona Dr	Country West Rd	Bismarck	Thru-STOP	2330	Undivided	0	0		
804.02	804.01	Daytona Dr	Valley Dr	Bismarck	Yield	2250	Undivided	0	0		
805.01	805.01	Country West Rd	Tyler Pkwy	Bismarck	Thru-STOP	4343	Undivided	0	0		
805.02	805.01	Country West Rd	W Century Ave	Bismarck	Thru-STOP	12123	Divided	1	0		
806.01	806.01	Valley Dr	Tyler Pkwy	Bismarck	Yield	2253	Undivided	0	0		
807.01	807.01	Clairmont Rd	Burnt Boat Dr	Bismarck	Thru-STOP	5403	Undivided	0	0		
808.01	808.01	Burnt Boat Dr	River Rd	Bismarck	Thru-STOP	3415	Undivided	0	0		
808.02	808.01	Burnt Boat Dr	Tyler Pkwy	Bismarck	Signal	22280	Divided	1	0	YES	
809.01	809.01	W Century Ave	Tyler Pkwy	Bismarck	Thru-STOP	13685	Divided	1	0		
809.02	809.01	W Century Ave	W Interstate Ave	Bismarck	Signal	13670	Divided	0	0		
809.03	809.01	W Century Ave	N Washington St	Bismarck	Signal	24535	Divided	0	0		
809.04	809.01	E Century Ave	N 4th St	Bismarck	Signal	19765	Divided	1	0	YES	
809.05	809.01	E Century Ave	N 11th St	Bismarck	Signal	22255	Divided	0	0		
809.06	809.01	E Century Ave	US 5000 (State St)	Bismarck	Signal	28650	Divided	0	0		
809.07	809.01	E Century Ave	N 19th St	Bismarck	Signal	9674	Divided	0	0		
809.08	809.01	E Century Ave	Nebraska Dr	Bismarck	Thru-STOP	4998	Divided	0	0		
809.09	809.02	E Century Ave	Centennial Rd	Bismarck	Signal	18668	Unknown	2	0		
810.01	810.01	W Interstate Ave	N Washington St	Bismarck	Signal	17980	Undivided	0	0		
810.02	810.01	E Interstate Ave	N 4th St	Bismarck	Signal	11968	Undivided	0	0		
810.03	810.01	E Interstate Ave	Gateway Ave	Bismarck	Thru-STOP	12225	Unknown	0	0	YES	
810.05	810.01	N 11th St	Weiss Ave	Bismarck	Yield	8118	Undivided	0	0		
810.07	810.01	Weiss Ave	US 5000 (State St)	Bismarck	Signal	17003	Divided	1	0		
810.08	810.02	E Interstate Ave	US 5000 (State St)	Bismarck	Signal	24580	Divided	1	0		
810.09	810.02	E Interstate Ave	N 19th St	Bismarck	Thru-STOP	12210	Undivided	0	0	YES	
811.01	811.01	Frontage Rd	US 5000 (State St)	Bismarck	Thru-STOP	15785	Divided	0	0		
813.01	813.01	Schafer St	W Divide Ave	Bismarck	Signal	24758	Div/Undiv	2	0		
813.02	813.01	Schafer St	College Dr	Bismarck	All-way STOP	7530	Undivided	0	0		
813.03	813.01	College Dr	Ward Rd	Bismarck	Thru-STOP	8190	Undivided	0	0		
813.04	813.01	College Dr	W Divide Ave	Bismarck	Signal	14738	Undivided	0	0		
814.01	814.01	W Turnpike Ave	W Divide Ave	Bismarck	Thru-STOP	13998	Undivided	0	0		
814.02	814.01	W Turnpike Ave	N Washington St	Bismarck	Thru-STOP	16563	Undivided	0	0		
814.03	814.01	E Turnpike Ave	N 4th St	Bismarck	Thru-STOP	10218	Undivided	0	0		
815.01	815.01	E Capitol Ave	N 4th St	Bismarck	Thru-STOP	9285	Undivided	0	0		
815.02	815.01	E Capitol Ave	N 12th St (West)	Bismarck	Thru-STOP	5060	Undivided	0	0		
815.03	815.01	E Capitol Ave	N 12th St (East)	Bismarck	Thru-STOP	5110	Undivided	1	0	YES	
815.04	815.01	E Capitol Ave	State St	Bismarck	Signal	17925	Divided	3	0		
815.05	815.01	E Capitol Ave	N 19th St	Bismarck	Signal	12125	Undivided	0	0		
816.01	816.01	N 12th St	State St (South)	Bismarck	Thru-STOP	13033	Divided	0	0		
816.02	816.02	N 12th St	State St (North)	Bismarck	Thru-STOP	15433	Divided	0	0		
817.01	817.01	N 26th St	E Divide Ave	Bismarck	Thru-STOP	4830	Undivided	0	0		
818.01	818.01	N 22nd St	E Boulevard Ave	Bismarck	Thru-STOP	2490	Undivided	0	0		
818.02	818.01	N 22nd St	E Divide Ave	Bismarck	Thru-STOP	11895	Undivided	0	0		
819.01	819.01	Valleyview Ave	N 26th St	Bismarck	Thru-STOP	8713	Undivided	0	0		
819.02	819.01	N 31st Ave	Crocus Ave	Bismarck	Uncontrolled	1785	Undivided	0	0		
819.03	819.01	Crocus Ave	N 35th St	Bismarck	Uncontrolled	1350	Undivided	0	0		
820.01	820.01	Ward Rd	W Ave C / N Griffin St	Bismarck	Signal	8970	Undivided	0	0		
821.01	821.01	N 16th St	E Broadway Ave	Bismarck	Thru-STOP	8260	Undivided	0	0		
821.02	821.01	N 16th St	E Rosser Ave	Bismarck	All-way STOP	10633	Undivided	1	0		
821.03	821.01	N 16th St	E Ave C	Bismarck	All-way STOP	8013	Undivided	0	0		
821.04	821.01	N 16th St	E Ave D	Bismarck	Thru-STOP	7053	Undivided	0	0		
821.05	821.01	N 16th St	E Boulevard Ave	Bismarck	All-way STOP	8578	Undivided	0	0		
821.06	821.01	N 16th St	E Divide Ave	Bismarck	Thru-STOP	11363	Undivided	1	0		
822.01	822.01	N 6th St	E Broadway Ave	Bismarck	All-way STOP	5875	Undivided	0	0		
822.02	822.01	N 6th St	E Thayer Ave	Bismarck	Unknown	3128	Undivided	0	0		
822.03	822.01	N 6th St	E Rosser Ave	Bismarck	Signal	11415	Undivided	1	0		
823.01	823.01	N Bell St	W Rosser Ave	Bismarck	Thru-STOP	6108	Undivided	0	0		
823.02	823.01	N Bell St	W Ave C	Bismarck	Thru-STOP	2400	Undivided	0	0		
824.01	824.01	W Boulevard Ave	N Washington St	Bismarck	Signal	17543	Undivided	0	0		
824.02	824.01	W Boulevard Ave	N 3rd St	Bismarck	Signal	10600	Undivided	0	0		
824.03	824.01	E Boulevard Ave	N 4th St	Bismarck	Signal	0	Undivided	0	0		
824.04	824.01	E Boulevard Ave	N 7th St	Bismarck	Signal	19203	Divided	0	0		
824.05	824.01	E Boulevard Ave	N 9th St	Bismarck	Signal	19840	Divided	0	0		
824.06	824.02	E Boulevard Ave	State St	Bismarck	Thru-STOP	16910	Divided	1	1		
824.07	824.02	E Boulevard Ave	N 26th St	Bismarck	Thru-STOP	8163	Undivided	0	0		
825.01	825.01	N 4th St	E Broadway Ave	Bismarck	All-way STOP	5688	Undivided	0	0		
825.02	825.01	N 4th St	E Thayer Ave	Bismarck	All-way STOP	4328	Undivided	0	0		
825.03	825.01	N 4th St	E Rosser Ave	Bismarck	Signal	12410	Undivided	0	0		
825.04	825.01	N 4th St	E Ave C	Bismarck	Signal	11375	Undivided	0	0		
825.05	825.01	N 4th St	E Divide Ave	Bismarck	Signal	15333	Undivided	0	0		
825.06	825.01	Dominion St	Dominion St	Bismarck	Uncontrolled	2610	Undivided	0	0		
826.01	826.01	N 19th St	E Divide Ave	Bismarck	Signal	15285	Undivided	0	0		
828.01	828.01	N 35th St	E Rosser Ave	Bismarck	Thru-STOP	4698	Undivided	0	0		
828.02	828.01	N 35th St	E Divide Ave	Bismarck	Thru-STOP	4540	Undivided	0	0		
829.01	829.01	W Arbor Ave	S Washington St	Bismarck	Signal	16508	Undivided	0	0		
829.02	829.01	River Rd	Fraine Barracks Rd	Bismarck	Thru-STOP	2298	Undivided	0	0		
830.01	830.02	W Divide Ave	N Washington St	Bismarck	Signal	25898	Undivided	0	0		
830.02	830.02	E Divide Ave	State St	Bismarck	Signal	22765	Undivided	0	0		

						Criteria				Severe Right Angle	High Priority Corridor Candidate
						Signal	15,000 25,000	Divided	Greater than 0		
Int #	Segment #	Local Name	Cross Street	City	Traffic Control Device	Entering ADT	General Major Config	Severe Crashes			
830.03	830.03	E Divide Ave	N 26th St	Bismarck	Signal	11545	Undivided	0	0		
830.04	830.03	E Divide Ave	E Bismarck Expy	Bismarck	Signal	14418	Div/Undiv	2	1		
830.05	830.03	Divide Ave	N 52nd St	Bismarck	Thru-STOP	2228	Undivided	0	0		
831.01	831.01	W Ave C	N Washington St	Bismarck	Signal	18685	Undivided	0	0		
831.02	831.01	E Ave C	N 3rd St	Bismarck	Signal	12245	Undivided	0	0		
831.03	831.01	E Ave C	N 5th St	Bismarck	Thru-STOP	7858	Undivided	0	0		
831.04	831.01	E Ave C	N 7th St	Bismarck	Signal	16288	Undivided	0	0		
831.05	831.01	E Ave C	N 9th St	Bismarck	Signal	17033	Undivided	0	0		
832.01	832.01	N 26th St	E Ave D	Bismarck	Thru-STOP	8283	Undivided	0	0		
833.01	833.01	W Front Ave	S Washington St	Bismarck	Signal	16355	Undivided	1	0		
833.02	833.01	E Front Ave	S 3rd St	Bismarck	Signal	16088	Undivided	0	0		
833.03	833.01	E Front Ave	S 5th St	Bismarck	Signal	8288	Undivided	0	0		
833.04	833.01	E Front Ave	S 7th St	Bismarck	Signal	17380	Undivided	0	0		
833.05	833.01	E Front Ave	S 9th St	Bismarck	Signal	14928	Undivided	3	0		
833.06	833.01	E Front Ave	S 12th St	Bismarck	Thru-STOP	8795	Undivided	1	1		
834.01	834.01	W Broadway Ave	N Washington St	Bismarck	Signal	23583	Undivided	0	0		
834.02	834.01	E Broadway Ave	N 3rd St	Bismarck	Signal	11480	Undivided	0	0		
834.03	834.01	E Broadway Ave	N 5th St	Bismarck	Signal	6810	Undivided	0	0		
834.04	834.01	E Broadway Ave	N 7th St	Bismarck	Signal	17593	Undivided	2	0		
834.05	834.01	E Broadway Ave	N 9th St	Bismarck	Signal	17413	Undivided	0	0		
834.06	834.01	E Broadway Ave	S 12th St	Bismarck	Thru-STOP	8953	Undivided	0	0		
834.07	834.01	E Broadway Ave	N 17th St	Bismarck	Thru-STOP	7315	Undivided	0	0		
834.08	834.01	E Broadway Ave	Airport Rd	Bismarck	Signal	8523	Undivided	0	0		
834.09	834.01	E Broadway Ave	N 26th St	Bismarck	Thru-STOP	11458	Undivided	0	0		
835.01	835.01	W Thayer Ave	N Washington St	Bismarck	Thru-STOP	15800	Undivided	0	0		
835.02	835.01	W Thayer Ave	N 3rd St	Bismarck	Signal	9283	Undivided	0	0		
835.03	835.01	W Thayer Ave	N 5th St	Bismarck	Signal	5055	Undivided	0	0		
836.01	836.01	W Rosser Ave	N Washington St	Bismarck	Signal	22408	Undivided	0	0		
836.02	836.01	E Rosser Ave	N 3rd St	Bismarck	Signal	16545	Undivided	0	0		
836.03	836.01	E Rosser Ave	N 5th St	Bismarck	Signal	13525	Undivided	0	0		
836.04	836.01	E Rosser Ave	N 7th St	Bismarck	Signal	22598	Undivided	0	0		
836.05	836.01	E Rosser Ave	N 9th St	Bismarck	Signal	20910	Undivided	0	0		
836.06	836.01	E Rosser Ave	N 12th St	Bismarck	Thru-STOP	7915	Undivided	0	0		
836.07	836.01	E Rosser Ave	N 26th St	Bismarck	Signal	13960	Undivided	0	0		
836.08	836.01	E Rosser Ave	Eastdale Dr	Bismarck	Thru-STOP	5465	Undivided	0	0		
836.09	836.01	E Rosser Ave	E Bismarck Expy	Bismarck	Signal	11085	Undivided	0	0		
837.01	837.01	S 26th St	Airway Ave	Bismarck	Thru-STOP	2528	Undivided	0	0		
837.02	837.01	S 26th St	E Bismarck Expy	Bismarck	Signal	16495	Undivided	0	0		
837.03	837.01	S 26th St	Railroad Ave	Bismarck	Thru-STOP	9135	Undivided	0	0		
843.01	843.01	W Bowen Ave	S Washington St	Bismarck	Signal	16615	Undivided	0	0		
843.02	843.01	E Bowen Ave	S 3rd St	Bismarck	Signal	14665	Undivided	0	0		
843.03	843.01	E Bowen Ave	S 5th St	Bismarck	All-way STOP	6430	Undivided	0	0		
843.04	843.01	E Bowen Ave	S 7th St	Bismarck	Thru-STOP	15120	Undivided	1	0		
843.05	843.01	E Bowen Ave	S 9th St	Bismarck	Thru-STOP	11813	Undivided	0	0		
843.06	843.01	E Bowen Ave	S 12th St	Bismarck	Thru-STOP	7725	Undivided	0	0		
843.07	843.01	E Bowen Ave	Airport Rd	Bismarck	Thru-STOP	8315	Undivided	0	0		
845.01	845.01	S Washington St	34th Ave SW	Bismarck	All-way STOP	3833	Undivided	0	0		
845.02	845.01	S Washington St	Wachter Ave	Bismarck	Signal	9845	Undivided	0	0		
845.03	845.01	S Washington St	Riverwood Dr / Denver Ave	Bismarck	Signal	17118	Divided	2	0	YES	
845.04	845.01	S Washington St	E Bismarck Expy	Bismarck	Signal	37418	Divided	1	0		
846.01	846.01	S 3rd St	Santa Fe Ave	Bismarck	Thru-STOP	1198	Undivided	0	0		
846.02	846.01	S 3rd St	E Wachter Ave	Bismarck	Thru-STOP	6718	Undivided	0	0		
846.03	846.01	S 3rd St	E Denver Ave	Bismarck	Thru-STOP	7898	Undivided	0	0		
846.04	846.01	S 3rd St	E Bismarck Expy	Bismarck	Signal	31830	Undivided	0	0		
847.01	847.01	Mills Ave	Langer Ln	Bismarck	Roundabout	0	0	0	0		
847.02	847.02	E Denver Ave	University Dr	Bismarck	Signal	14630	Undivided	0	0		
848.01	848.01	Airport Rd	University Dr	Bismarck	Signal	14860	Undivided	1	0		
848.02	848.01	Airport Rd	Airwave Ave	Bismarck	Thru-STOP	8908	Undivided	0	0		
848.03	848.01	Airport Rd	E Bismarck Expy	Bismarck	Signal	26465	Undivided	0	0		
849.01	849.01	S 12th St	Santa Fe Ave	Bismarck	Thru-STOP	4220	Undivided	0	0		
849.02	849.01	S 12th St	University Dr	Bismarck	Signal	15398	Undivided	0	0		
849.03	849.01	S 12th St	E Bismarck Expy	Bismarck	Signal	27070	Undivided	0	0		
850.01	850.01	E Wachter Ave	University Dr	Bismarck	Signal	13218	Undivided	0	0		
853.01	853.01	Burleigh Ave	University Dr	Bismarck	Thru-STOP	10623	Undivided	0	0		
855.01	855.01	Airway Ave	University Dr	Bismarck	Thru-STOP	10008	Undivided	0	0		
855.02	855.01	Airway Ave	Lincoln Rd	Bismarck	Thru-STOP	5018	Undivided	0	0		
855.04	855.01	Yegen Rd	E Bismarck Expy	Bismarck	Signal	14433	Undivided	0	0		
856.01	856.01	Lincoln Rd	Quail St	Bismarck	Thru-STOP	3724	Undivided	0	0		

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on Bismarck Expressway from S Washington St to Century Ave

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 194.01
Street Name Bismarck Expressway
Urban/Rural: Urban
County: Burleigh
Length 0.0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
845.04	S Washington St	E Bismarck Expy	X	Signal	37,418	Divided	2	1	1	-
846.04	S 3rd St	E Bismarck Expy	X	Signal	31,830	Undivided	0	0	1	-
849.03	S 12th St	E Bismarck Expy	X	Signal	27,070	Undivided	0	0	1	-
848.03	Airport Rd	E Bismarck Expy	X	Signal	26,465	Undivided	0	0	1	-
837.02	S 26th St	E Bismarck Expy	X	Signal	16,495	Undivided	0	0	1	-
855.04	Yegen Rd	E Bismarck Expy	X	Signal	14,433	Undivided	0	0	1	-
836.09	E Rosser Ave	E Bismarck Expy	X	Signal	11,085	Undivided	0	0	1	-
830.04	E Divide Ave	E Bismarck Expy	X	Signal	14,418	Div/Undiv	1	1	1	-
809.09	E Century Ave	Centennial Rd	X	Signal	18,668	Unknown	1	0	1	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	9	\$18,000
Entering ADT	>15,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	Yes				\$18,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$16,200
Local Match (10% of Total project cost)	\$1,800
Total Project Cost	\$18,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on W Century Ave from Tyler Pkwy to Hamilton St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 809.01
Street Name W Century Ave
Urban/Rural: Urban
County: Burleigh
Length 3.9

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
809.01	W Century Ave	Tyler Pkwy	T	Thru-STOP	13,685	Divided	0	0	0	-
809.02	W Century Ave	W Interstate Ave	X	Signal	13,670	Divided	0	0	1	-
805.02	Country West Rd	W Century Ave	T	Thru-STOP	12,123	Divided	1	0	0	-
809.03	W Century Ave	N Washington St	X	Signal	24,535	Divided	0	0	1	-
809.04	E Century Ave	N 4th St	X	Signal	19,765	Divided	1	0	1	-
809.05	E Century Ave	N 11th St	X	Signal	22,255	Divided	0	0	1	-
809.07	E Century Ave	N 19th St	X	Signal	9,674	Divided	0	0	1	-
809.08	E Century Ave	Nebraska Dr	T	Thru-STOP	4,998	Divided	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	5	\$10,000
Entering ADT	>15,000	Unsignalized and Divided Access Management	\$300,000 per mile	3.9	\$1,170,000
	<30,000				
Development / Ped Generator	Yes				\$1,180,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$1,062,000
Local Match (10% of Total project cost)	\$118,000
Total Project Cost	\$1,180,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on W Interstate Ave from Century Ave to State St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 810.01
Street Name W Interstate Ave
Urban/Rural: Urban
County: Burleigh
Length 2.4

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
810.01	W Interstate Ave	N Washington St	X	Signal	17,980	Undivided	0	0	1	-
810.02	E Interstate Ave	N 4th St	X	Signal	11,968	Undivided	0	0	1	-
810.03	E Interstate Ave	Gateway Ave	X	Thru-STOP	12,225	Unknown	0	0	0	-
810.05	N 11th St	Weiss Ave	T	Yield	8,118	Undivided	0	0	0	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	2	\$4,000
Entering ADT	>15,000 <30,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	Yes				\$4,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,600
Local Match (10% of Total project cost)	\$400
Total Project Cost	\$4,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on E Interstate Ave from US 83 (State Street) to N 19th St

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 810.02
Street Name E Interstate Ave
Urban/Rural: Urban
County: Burleigh
Length 0.6

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
810.07	E Interstate Ave	US 83 (State St)	X	Signal	11,968	Undivided	0	0	1	-
810.09	E Interstate Ave	N 19th St	X	Signal	11,968	Undivided	0	0	1	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	2	\$4,000
Entering ADT	>15,000 <30,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	Yes				\$4,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,600
Local Match (10% of Total project cost)	\$400
Total Project Cost	\$4,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Page: 4
Intersection ID: 810.02
Date: 9/26/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on E Capitol Ave from N 4th St to End

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 815.01
Street Name E Capitol Ave
Urban/Rural: Urban
County: Burleigh
Length 1.7

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
815.01	E Capitol Ave	N 4th St	X	Thru-STOP	9,285	Undivided	0	0	0	-
815.02	E Capitol Ave	N 12th St (West)	T	Thru-STOP	5,060	Undivided	0	0	0	-
815.03	E Capitol Ave	N 12th St (East)	T	Thru-STOP	5,110	Undivided	1	0	0	-
815.04	E Capitol Ave	State St	X	Signal	17,925	Divided	1	0	1	-
815.05	E Capitol Ave	N 19th St	X	Signal	12,125	Undivided	0	0	1	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	2	\$4,000
Entering ADT	>15,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	<30,000				\$4,000
	Yes				
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,600
Local Match (10% of Total project cost)	\$400
Total Project Cost	\$4,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Page: 5
Intersection ID: 815.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on S Washington St from 34th Ave SW to Bismarck Expy

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 845.01
Street Name S Washington St
Urban/Rural: Urban
County: Burleigh
Length 2.0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
845.01	S Washington St	34th Ave SW	X	All-way STOP	3,833	Undivided	0	0	0	-
845.02	S Washington St	Wachter Ave	X	Signal	9,845	Undivided	0	0	1	-
845.03	S Washington St	verwood Dr / Denver A	X	Signal	17,118	Divided	3	0	1	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	2	\$4,000
Entering ADT	>15,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	<30,000				
	Yes				\$4,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,600
Local Match (10% of Total project cost)	\$400
Total Project Cost	\$4,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Page: 6
Intersection ID: 845.01
Date: 8/14/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

North Dakota Department of Transportation Programming
SFN 59959 (06-2011)

Right Angle Crashes @ Signals Intersection Improvements

Intersections on S Washington St from 34th Ave SW to Bismarck Expy

Agency Name: City of Bismarck
Contact Name: Mark Berg
Email Address: maberg@nd.gov

ND DOT District: 1
Telephone Number: 701-355-1529

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

Location Description

Corridor 845.01
Street Name S Washington St
Urban/Rural: Urban
County: Burleigh
Length 2.0

SHSP Emphasis Area (check all that apply)

- Reduce Alcohol Impaired Driving
- Increase the Use of Safety Restraints for all Occupants
- Younger Driver/Older Driver Safety
- Curb Aggressive Driving
- Improvements to Address Lane Departure Crashes
- Enhancing Emergency Medical Capabilities to Increase
- Improve Intersection Safety

Describe Proposed Safety Improvements

Intersection ID	Street Name	Cross Street	Config	Taffic Control	Entering ADT	Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes
845.01	S Washington St	34th Ave SW	X	All-way STOP	3,833	Undivided	0	0	0	-
845.02	S Washington St	Wachter Ave	X	Signal	9,845	Undivided	0	0	1	-
845.03	S Washington St	verwood Dr / Denver A	X	Signal	17,118	Divided	3	0	1	-

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes 2008 - 2012 5 years

Intersection Criteria		Description	Unit Cost	Quantity	Total Cost
Traffic Control Device	Signal	Confirmation Lights	\$2,000 per intersection	2	\$4,000
Entering ADT	>15,000	Unsignalized and Divided Access Management	\$300,000 per mile	0.0	\$0
Development / Ped Generator	<30,000				
	Yes				\$4,000
Total Ped/Bike Crashe	>0				

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,600
Local Match (10% of Total project cost)	\$400
Total Project Cost	\$4,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number - ID Number -
Notes --

Page: 6
Intersection ID: 845.01
Date: 8/14/2013



5.0 Behavioral Safety Strategies

5.1 Purpose of Driver Behavior Safety Strategies

North Dakota’s Local Road Safety Program (LRSP) recognizes that driver behavior is a significant factor contributing to a majority of the severe crashes on North Dakota’s local roads. Traffic crashes may result from any combination of overlapping crash factors, such as the roadway, the vehicle, and driver behavior. Research supports and experts agree that in most cases driver behavior – risky decisions, driver error, lapses of attention, and driver limitations – is a chief factor contributing to traffic crashes (Lerner et al., 2010). Severe traffic crashes in North Dakota’s Burleigh County can be largely prevented and reduced if motorists were persuaded to engage in key safe driving practices to buckle up, drive at safe speeds, pay attention, and plan ahead to avoid impaired driving. For maximum safety benefit, these measures should be undertaken in addition to adopting infrastructure safety strategies to help ensure the safest and most forgiving roadway possible.

5.2 Overview of Behavioral Crash Data for Burleigh County

Unbelted Vehicle Occupants: Traffic safety research demonstrates that a motorist’s seat belt is the most effective defense in the event of a crash. When lap and shoulder seat belts are used, the risk of fatal injury to front-seat passenger car occupants is reduced by 45 percent and the risk of moderate-to-critical injury is reduced by 50 percent (NHTSA, 2001). Safety benefits are even greater for light-truck occupants, with seat belts reducing fatalities by 60 percent and moderate-to-critical injury by 65 percent (NHTSA, 2009). North Dakota’s 2013 statewide seat belt use is 77.7 percent; lower than the nationwide use of 86 percent. Unbelted severe crashes are Burleigh County’s greatest opportunity to strengthen road safety through improving driver behavior. The trend of severe unbelted crashes is increasing statewide. Burleigh County exceeds the statewide-unbelted severe crashes with 53 percent of the county’s severe crashes involving unbelted motorists.

Alcohol-Related Crashes: Nationally, although impaired driving fatalities have decreased since 2007, the percentage of alcohol-impaired fatalities in the U.S. has remained essentially unchanged (NHTSA, 2012a). Similarly, over the last decade, each year nearly half of motor vehicle fatalities statewide in North Dakota continue to be alcohol-related. In the Burleigh County, 34 percent of the county’s severe crashes are alcohol-related – higher than the statewide 30 percent. From statewide crash data, nearly half of these preventable severe crashes are on the local road system.

Young Driver-Involved: Young drivers have the highest involvement in fatal crashes of any age group. The fatal crash involvement of drivers age 16 to 20 is nearly twice that of drivers’ age 21 and older (NHTSA, 2012b). Key underlying factors to their high crash risk are the developmental and behavioral issues of adolescence coupled with driving inexperience. Young drivers too often immaturely take risks while driving without thinking through the potential consequences of their life-threatening decisions (Keating, 2007). Such high-risk behaviors typically include lack of seat belt use, aggressive driving/speeding, and distractions while driving. Although severe injury crashes involving young drivers have gradually declined statewide, young drivers under the age of 21 continue to be overrepresented in crashes with 67 percent occurring on local roads. In Burleigh County, 22 percent of severe crashes involve young drivers, which is similar to the statewide crash data.

Excessive Speed or Aggressive Driving: Speeding is common and is a tough nut to crack nationally and in North Dakota. Although drivers generally acknowledge that speeding is an unsafe behavior, speeding remains common because the perceived risk of injury is low relative to the perceived benefits of driving fast such as saving time and driving pleasure (Lerner et al., 2010). Consequently, the percentage of speeding-related fatal crashes has remained essentially unchanged over the years and remains a contributing factor in 31 percent of traffic fatalities in the U.S. (NHTSA, 2012c). Speeding and aggressive driving continue to account for approximately 26 percent of all severe crashes in North Dakota with 62 percent of these crashes occurring on the local road system. In Burleigh County, 22 percent of its severe crashes involve speed or aggressive driving – lower than the statewide percentage of 26 percent.

5.3 Importance of Traffic Safety Culture Change

5.3.1 The Influence of Traffic Safety Culture

In adopting North Dakota’s long-term vision of zero fatalities, the 2013 North Dakota SHSP establishes a collective goal to reduce the 3-year average of traffic fatalities to 100 or fewer by 2020. To accomplish this interim goal, Burleigh County, together with its traffic safety partners, seeks to develop and implement its LRSP safety strategies within the broader societal context of motorists’ behavior and North Dakota’s traffic safety culture. Traffic safety culture can be defined as the implicit shared values, beliefs, and perceptions that shape motorists’ behavior.

5.3.2 Social Norms Inhibiting a Strong Traffic Safety Culture

At the core of the nation’s and North Dakota’s traffic safety challenge is a complacency toward risk-taking by drivers and a tolerance for traffic crashes and the resulting deaths and serious injuries. Contributing factors include a sense of individual driver invulnerability, perceived driving skills and vehicle control, and a sense of anonymity and entitlement on the road. The latest data from the *2012 Traffic Safety Culture Index Survey* reports that, as in previous years, the safety culture in the United States surrounding distracted driving can best be described as “do as I say, not as I do” – due to the high numbers of people who object to certain behaviors, yet will admit that they, themselves, engage in them (AAA, 2012). Real progress in traffic safety depends largely on addressing and changing this culture of indifference to effectively implement and see results of both SHSP and LRSP safety strategies.

5.3.3 Social Levels Influencing Safety Culture

Efforts to change individual driver and motorist behaviors should be planned and executed from an ecological viewpoint – one that examines the driving public and their interaction with their social environments. Traffic safety culture and its influence operate at different levels within society. Therefore, a broader definition of traffic safety culture includes the values, beliefs, and perceptions of not only the individual driver, but of those shared by the various communities of which the driver is a part (Figure 5-1). The individual driver exists within a system that includes the following levels, each embodying factors that influence driving culture and crash risk (Ward et al., 2010; Dahlberg and Krug, 2002):

- Individual level – Factors such as driver age, driving experience, self-esteem, income, and substance abuse
- Relationship level – Factors such as relationships with peers, co-workers, supervisors, and family members

- Community level – Factors include the settings or environments in which relationships occur such as school, church, workplaces, and neighborhoods
- Societal level – Large-scale factors such as safety, health, economic, and educational policies, as well as government commitments and priorities

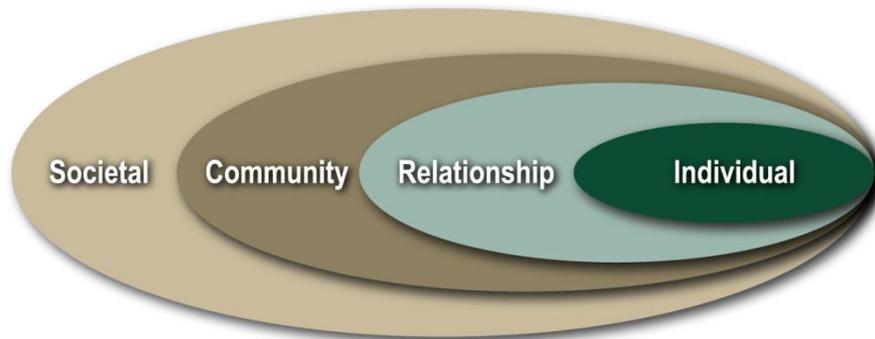


FIGURE 5-1

Social Ecological Perspective of Culture

Source: "Violence – A Global Public Health Problem" by L.L. Dahlberg and E.G. Krug, in *World Report on Violence and Health* (World Health Organization)

Social norms at each level and within each group point to what behaviors are perceived as important. Norms create conformity to expectations that allows people (that is, drivers) to successfully socialize to the subcultures in which they belong. These norms create a climate in which unsafe driving behavior is either encouraged or discouraged. Perceived social norms condoning high-risk driving behaviors provide the case for drivers to rationalize their own high-risk behaviors. To accomplish the culture change, traffic safety behavioral strategies seek to make safe-driving behaviors the accepted norm across all social ecological levels.

The implication of the social ecological model for LRSP efforts is that the implementation plans of LRSP strategies plans should attempt to:

- Increase perceived social pressure to comply with traffic safety laws and practices, thereby, producing safety behavioral norms (Ward et al., 2010)
- Shift the social acceptance of high-risk behaviors to one of perceived unacceptance by significant others and one’s peers.

5.4 Behavioral Safety Strategies

5.4.1 Role of Policy, Education, and Enforcement

Techniques or strategies to change driver behavior essentially fall into one of three categories: 1) *policy change* or laws, local ordinances, regulations, sanctions and penalties; 2) *enforcement* of the laws; and 3) *education* or public information, media, and training. These three categories of behavioral safety strategies work together to have the greatest impact on changing risky driver behavior. The degree of effectiveness of any one strategy on behavioral change depends not only on how effectively the strategy is implemented, but also on how these three categories of policy, enforcement, and education are working together.

For example, a state or local agency that is seeking to increase motorists’ seat belt use and decides to use a “buckle up” public information campaign (behavioral change strategy). The effectiveness of the campaign not only depends on the quality of the education or public

information campaign (relevance to target group, duration, saturation of the messaging), but also the strength of the law in place (primary vs. secondary seat belt law, all passengers vs. front seat only, higher penalty/fee vs. low penalty/fee) and, most important, the degree of seat belt use enforcement (coverage, intensity, visible by the public).

Consequently, the strength of driver safety policy, enforcement, and education surrounding a behavioral strategy selected greatly impact its effectiveness. Therefore, when selecting and implementing a behavioral strategy, an agency must examine the policy, enforcement, and educational context of the strategy and explore ways to strengthen each, as appropriate, to gain the most from a selected strategy.

Finally, it is critically important that traffic safety enforcement is viewed as a priority within local law enforcement agencies and that agency leaders and administrators advocate for strong local enforcement of traffic laws. It is imperative that agency leaders actively address political and public resistance and provide a pathway to deploy the leading strategy to save lives on North Dakota roadways – effective traffic enforcement coupled with public outreach. By advocating for enforcement, educating local elected officials, and equipping officers to effectively enforce traffic safety laws, North Dakota will reap far greater life-saving outcomes from its local safety initiatives.

5.4.2 Effective Use of Public Information Strategies

Public information (education) strategies are often popular among communities seeking to change risky driving behaviors. Education or public information campaigns can range from brochures and mailings to peer-to-peer safety messaging. Brochures and mailings are a passive approach, while peer-to-peer messaging provides a more effective behavioral change approach. In general, a key challenge in influencing driver behavior is that most drivers know what they are supposed to do to drive safely, yet due to successfully driving with risky patterns with no incidence of crash, drivers underestimate the risk of their choices. For this reason, research supports that education, coupled with enforcement, will have the strongest impact in changing driver behavior (NHTSA, 2013).

Following are key characteristics of impactful public information/education campaigns (Williams, 2007):

- Implemented in support of a high-visibility enforcement program
- Focused messaging for a target group
- Longer-term programs delivering messages of sufficient intensity over time
- Messages communicating new information not previously well known
- Messages that are part of a broader-based, longer-term community program with similar messaging coming from multiple sources
- Using behavior change models including interactive methods teaching skills to resist social pressure (such as role playing, group discussion)

5.4.3 LRSP Phase 1 Priority Strategies

During the LRSP workshop, participants reviewed Burleigh County's behavioral crash data and discussed behavioral safety strategy alternatives that could be implemented at the local level. Out of the strategy review discussions, participants engaged in a prioritization process with six strategies emerging as the preferred local behavioral safety strategies for the four behavioral

critical emphasis areas. Table 5-1 reflects the LRSP Phase 1 results of the strategy prioritization, as well as each strategy’s alignment with the North Dakota SHSP (indicated by an “X” if included in the SHSP).

TABLE 5-1

North Dakota Phase 1 LRSP Workshop Priority Behavioral Strategies and Relationship with the North Dakota SHSP

Phase 1 LRSP Workshop Priority Behavioral Strategies and Their Relationship with the North Dakota SHSP	Northeast Region	Burleigh County (Region 10)	Ward County (Region 14)	ND SHSP
Impaired Driving				
• Conduct regular high-visibility DUI enforcement saturations	X	X	X	X
Speeding and Aggressive Driving				
• Conduct high-visibility targeted enforcement of speeding and aggressive driving	X	X	X	X
Young Drivers				
• Publicize and conduct a high-visibility enforcement of GDL restrictions, cell and texting laws, underage drinking and driving, and seatbelt laws			X	X
• Encourage driver education providers (local schools and private providers) to require parent education component	X	X		X
• Brief interventions by health care providers following a crash regarding driving risks and consequences			X	X
Unbelted Occupants				
• Conduct highly publicized enforcement campaigns to maximize restraint use.	X	X	X	X
Note: DUI = driving under the influence GDL = graduated driver’s license				

The following subsections provide a more complete description of each priority strategy, suggested steps to launch local agency efforts, recommended implementation resources, and potential future considerations for expanded local agency and community-based support for the SHSP safety strategies. It is important to note that multidisciplinary SHSP implementation teams will be formed to support the implementation of priority strategies for each of the six SHSP priority emphasis areas including: lane departure, unbelted vehicle occupants, alcohol-related, speed or aggressive drivers, young drivers, and intersections. Therefore, local agencies seeking to leverage local-level safety initiatives described in the following subsections are encouraged to coordinate with and/or engage in the statewide SHSP implementation teams.

5.4.4 Impaired Driving

Burleigh County Priority Strategy – Conduct regular high-visibility DUI enforcement saturation patrols (includes expanding DUI sobriety checkpoints)

Description: High-visibility DUI enforcement is a high-priority, proven safety strategy to reduce alcohol-impaired severe crashes in North Dakota and across the nation. The most effective way to deter impaired driving is through a highly visible enforcement effort to reinforce the driving public’s belief that impaired drivers are at high risk of being arrested,

prosecuted, and adjudicated. High-visibility enforcement consists of multiple jurisdictions and/or multiple squads patrolling a segment of roadway at the same time, often using brightly colored vests and signs. Planned enforcement is publicized extensively through community kickoff events involving the local media and public education campaigns about the enforcement. High visibility also includes enforcement agencies reporting to news media the outcome or arrests made during the saturation or checkpoint campaign. In addition to deterring driving after drinking by increasing the perceived risk of arrest, high-visibility enforcement extends the safety impact of the enforcement campaign for a longer period following the campaign.

What are saturation patrols?

Saturation patrols, also known as “dedicated DUI patrols,” are stepped-up enforcement involving a greater number of law enforcement officers patrolling a specific area for a set time to identify and arrest impaired drivers. Multiple agencies often combine and concentrate their resources to conduct saturation patrols.

What are sobriety checkpoints?

At sobriety checkpoints, law enforcement officials evaluate drivers for signs of alcohol or drug impairment at certain points on the roadway. Vehicles are stopped in a specific sequence, such as every other vehicle or every fourth, fifth, etc. The frequency of which vehicles are stopped depends on the traffic conditions and the number of enforcement personnel available to staff the checkpoint.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.
- Assist local law enforcement agencies and Regional DUI Task Forces with identifying locations with high crash involvement for high-visibility enforcement.
- With local law enforcement, attend county board/city council meetings to speak on the importance of reducing impaired driving and the important role of both enforcement and engineering safety strategies.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO DUI campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus DUI enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- To learn about Regional DUI Task Forces and other local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.

- For statewide impaired driving enforcement mobilizations, the TSO distributes media outreach materials to local enforcement agencies which may include: press releases, talking points, camera-ready artwork and posters, impaired driving fact sheets, handouts for the public at checkpoints, a print public service announcement (PSA), and live-read radio PSAs. (Note: TSO to assemble available information resources.)
- For guidance on planning and publicizing saturation patrols and sobriety checkpoints:
 - Saturation Patrols & Sobriety Checkpoints: A How-to Guide for Planning and Publicizing Impaired Driving Enforcement Efforts*, NHTSA, Report No. DOT HS 809 063, revised October 2002.
http://www.nhtsa.gov/people/injury/alcohol/saturation_patrols/
 - Low-Staffing Sobriety Checkpoints*. NHTSA, Report No. DOT HS 810 590, 2006.
http://www.nhtsa.gov/people/injury/enforce/LowStaffing_Checkpoints/
- Other impaired-driving safety resources:
 - National Highway Traffic Safety Administration: <http://www.nhtsa.gov/Impaired>
 - Governor's Highway Safety Administration:
<http://www.ghsa.org/html/issues/impaireddriving/index.html>
 - Insurance Institute for Highway Safety:
http://www.iihs.org/research/topics/alcohol_drugs.html

Potential future considerations for expanded local agency and community-based support of SHSP impaired-driving safety strategies:

- Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving [MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council, community health provider, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency impaired-driving legislative initiatives resulting from the state's comprehensive assessment of North Dakota impaired-driving laws.
- Conduct community-wide and sustained public information outreach to educate and create cultural awareness of the risks associated with excessive alcohol use.
- Develop and conduct local public outreach on accessible safe-ride alternative transportation services.
- Conduct highly publicized compliance checks and training for local alcohol retailers and merchants to reduce sales to underage persons.

Other high-impact, proven strategies for local agency consideration:

- Monitor judicial sentencing of local DUI courts or intensive supervision programs.

5.4.5 Young Drivers

Burleigh County Priority Strategy – Encourage driver education providers (local schools and private providers) to require a parent education component

Description: Effective parental monitoring of teen driving can go a long way in helping to keep novice drivers safe on the roadway. Programs offering teen driver safety materials together with facilitated guidance help parents make the important connection between teen driving restrictions and teen driving risks. Without a required parent component for teen driver

education, parents lack awareness of graduated driver's license (GDL) safety provisions, don't fully recognize teen driving risks, are often anxious to be relieved of shuttling their teens, may be reluctant to invest the necessary time to instruct and supervise their teen's driving, and often believe their teen is the exception and is a good and safe driver. To help overcome these parent challenges and more effectively engage parents, incorporating a parent education component into driver education programs is demonstrating promising results.

Key components of a good parent education program include:

- Discusses risks for novice teen drivers
- Explains how and why GDL works to address risks
- Reviews the critical role parents play in teaching, supporting and managing their novice drivers
- Explains the importance of and provides an opportunity to try out a parent/teen driving agreement
- Delivery by trained, educated facilitators
- Emphasizes parents and teens working together for safety

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.
- Learn about education providers in your local community by contacting the Traffic Safety Office at (701) 328-4692.
- Explore county-mandated parent training through examining Virginia's Planning District 8 (includes four counties and four cities) 90-minute driving safety program for parents and teens as part of the in-classroom portion of the state's driver education curriculum. Contact Ben Swecker (703) 791-7328 or Tim TeWalt (703) 791-7353 at Prince William County Schools.
- With local law enforcement and driver educators, attend county board/city council meetings to inform them of the local initiative to incorporate parent education into driver's education programs to more fully engage parents and reduce teen driver severe crashes.
- Post information on teen driving laws on local school websites or request school resource officer to send information to parents highlighting driving risks for teens and existing North Dakota teen driver laws.
- Consider linking parent-teen participation in a teen driving program to school parking privileges.

Implementation Resources:

- See Section 5.5, Traffic Safety Office Supporting Resources.
- For educational materials for parents of teen drivers including guidelines to ensure teen drivers are educated on safe driving practices as well as *The North Dakota Parent Guide to Teen Driving* and the *Parent Teen Driver Agreement*, see the Teen Drivers & Parents section of the NDDOT website:

<http://www.dot.nd.gov/divisions/safety/teens-parents.htm>

- For an example parent-teen class outline and discussion guide, download the Minnesota Department of Public Safety, Office of Traffic Safety's *Teen Drivers: The Parent's Role* at: <https://dps.mn.gov/divisions/ots/teen-driving/Documents/Parent-class-leaders-guide-july-2013.doc>
- The Minnesota Office of Traffic Safety developed "Point of Impact: Teen Driver Safety Parent Awareness Program" as a community-based class for parents and their soon-to-be teen drivers. The Point of Impact Leader's Guide is a resource for implementing the class. The Point of Impact video is an important component of the program. A PowerPoint presentation and other information are available by contacting Gordy Pehrson at gordy.pehrson@state.mn.us.
- For information on the nationally recognized University of Michigan's *Checkpoints* program offering facilitated parent education: <http://youngdriverparenting.org/> and <http://www.saferdrivingforteens.org/>
- For a comprehensive guide to strengthen parental roles in teen safe driving, see the Governors Highway Safety Association's (GHSA's) *Promoting Parent Involvement in Teen Driving: An In-Depth Look at the Importance and the Initiatives*. <http://www.ghsa.org/html/publications/pdf/sfteens13.pdf>
- For additional information on mandated and voluntary parent/teen education programs in Connecticut, Massachusetts, Georgia, and select Virginia counties, see GHSA's *Curbing Teen Driver Crashes: An In-Depth Look at State Initiatives*. <http://www.ghsa.org/html/publications/pdf/sfteens12.pdf>
- For age-specific information and resources for parents on how to start and continue the conversation about alcohol use with their children, see the North Dakota's *Parents LEAD* program (Listen, Educate, Ask, Discuss). <http://www.parentslead.org/>

Considerations for future expanded local agency/community support of ND SHSP impaired driving safety strategies:

- Engage local traffic safety stakeholders (law enforcement, school administrators, driving schools, insurance companies, community health providers, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency GDL and teen driver safety policy initiatives.

Other high-impact, proven strategies for local agency consideration:

- Conduct locally facilitated peer-to-peer driver safety outreach campaigns designed for high school students to raise peer awareness of the common risk factors threatening novice drivers.

5.4.6 Unbelted

Burleigh County Priority Strategy – Conduct highly publicized enforcement campaigns to maximize restraint use

Description: See Section 5.4.4 for a description of high-visibility/highly publicized enforcement campaigns.

North Dakota law enforcement agencies (state, county, city and tribal) participate in the state's Click It or Ticket mobilization program to boost seat belt use and reduce highway fatalities through stepped up enforcement of unrestrained occupants, The mobilization is supported by

national and local paid advertising and earned media campaigns aimed at raising awareness before the enforcement saturation. Click It or Tick It takes place each year in May around the Memorial Day holiday. North Dakota has increased its focus on nighttime seat belt use because fewer motorists buckle up at night.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.
- Assist local law enforcement agencies with identifying locations with high unbelted crash involvement for high-visibility enforcement.
- With local law enforcement, attend county board/city council meetings to speak on the importance of enforcing belt use.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO belt use campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus seat belt enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- To learn about local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- For statewide belt use mobilizations, the TSO distributes media outreach materials to local enforcement agencies which may include: press releases, talking points, camera-ready artwork and posters, belt-use fact sheets, a print public service announcement (PSA), and live-read radio PSAs. (*Note: TSO to assemble available information resources.*)
- For guidance on planning and publicizing belt-use saturation patrols:
NHTSA 2013 national seat belt enforcement *Products for Enforcement Action Kit (PEAK)* to help enforcement rally officers and alert the public to prepare for maximum high-visibility seat belt enforcement during the day and also at night.
<http://www.trafficsafetymarketing.gov/CIOT-PEAK>

Nighttime Enforcement of Seat Belt Laws: An Evaluation of Three Community Programs, NHTSA, Report No. DOT HS 811 189, August 2009.

Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming, NHTSA, Report No. DOT HS 811 080, March 2009.

Avoiding “Tween” Tragedies: Demonstration Project to Increase Seat Belt Use Among 8- to 15-year-old Motor Vehicle Occupants, NHTSA, Report No. DOT HS 811 096, June 2012.

For the above and other belt enforcement and information outreach resources:
<http://www.nhtsa.gov/Driving+Safety/Occupant+Protection>

- Other seat-belt safety resources:

Governor's Highway Safety Administration:

<http://www.ghsa.org/html/issues/occprotection/index.html>

Insurance Institute for Highway Safety:

<http://www.iihs.org/iihs/topics/t/safety-belts/topicoverview>

Potential future considerations for expanded local agency, tribal and community-based support of SHSP safety strategies:

- Pursue tribal ordinances for primary enforcement of seat belt laws.
- Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving [MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council, community health provider, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency primary seat belt legislative initiatives.
- Conduct community-wide and sustained public information outreach to educate and create cultural awareness of the risks associated with unbelted motorists.

5.4.7 Speed and Aggressive Driving

Burleigh County Priority Strategy – Conduct highly publicized and targeted speed and aggressive driving enforcement campaigns

Description: See Section 5.4.4 for a description of high-visibility/highly publicized enforcement campaigns.

North Dakota law enforcement agencies (state, county, city and tribal) participate in the state's Ticketing Aggressive Cars and Trucks (TACT) program to reduce speed-related fatalities and severe injuries through stepped up enforcement of aggressive cars and trucks primarily in oil-impacted counties. For aggressive driving enforcement, officers focus on drivers who commits a combination of moving traffic violations such as speeding, following too closely, running red lights, which endangers other persons or property.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- Assist local law enforcement agencies with identifying locations with high speed and aggressive driving-related crash involvement for high-visibility enforcement.
- With local law enforcement, attend county board/city council meetings to speak on the importance of enforcing speed and aggressive driving.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO speed campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus speed enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.

- To learn about local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- For guidance for law enforcement on planning and publicizing local speed saturation patrols and successful case examples, see NHTSA's *Guidelines for Developing a Municipal Speed Enforcement Program* at:
<http://www.nhtsa.dot.gov/people/injury/enforce/program.htm>
- For a summary of successful aggressive driving enforcement programs deployed at the local and state-level across the country, see NHTSA's (2001 b) *Aggressive Driving Enforcement: Strategies for Implementing Best Practices* at:
<http://www.nhtsa.gov/people/injury/enforce/aggressdrivers/aggenforce/>
- Other speed-related safety resources:
 - Governor's Highway Safety Administration:
<http://www.ghsa.org/html/issues/speeding.html>
 - Insurance Institute for Highway Safety:
<http://www.iihs.org/iihs/topics/t/speed/topicoverview>

Potential future considerations for expanded local agency, tribal and community-based support of SHSP safety strategies:

- Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving [MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council, community health provider, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency legislative initiatives to strengthen penalties such as increased fines for right-of-way and speed violations.

Burleigh County's Priority Strategy – Provide enhanced enforcement to support local agency implementation of Red-Light-Running confirmation lights for at-risk intersection locations.

Description: To reduce the most common type of severe crashes at signalized intersections--right angle crashes – Burleigh County would like to deploy an innovative safety strategy using a downstream confirmation light system to reduce red-light running. A blue LED light mounted on the back of a traffic light is activated when an offender runs the red light. A single officer stationed across the intersection downstream from the traffic light safely observes and pursues the red light violator (instead of one officer to observe and an additional officer to pursue). To implement, red-light-running confirmation lights requires interdependent collaboration of both engineering and enforcement; even more effective would be added public outreach about the RLR confirmation lights.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.

- Work with NDDOT staff regarding specific design features of the system. Contact NDDOT Traffic Operations Section, Shawn Kuntz, 701-328-2673.
- Coordinate with local law enforcement:
 - Ask for their assistance in locating the enforcement lights on traffic signal poles/mast arms (optimum viewing locations)
 - Ask for an agreement regarding minimum levels of enforcement (i.e., one hour per day at any of the equipped locations)
 - Provide training to officers after installation – demonstrate that the “Blue/Confirmation” Light does come on at the same instant as the red light of the signal.
- Encourage law enforcement to coordinate with the City/County attorney – make sure the attorney understands the technology and is willing to prosecute the violators.
- Encourage the City/County attorney to coordinate with the district court judge – make sure the judge understands the technology and will uphold charges and support the conviction of violators.
- Prior to issuing any tickets for violations using the Confirmation Lights, have the traffic signal operations engineer check all of the signals clearance intervals (Yellow + All Red) to make sure they are 100 percent consistent with the agencies adopted guidelines. Have a note confirming compliance signed by the engineer put in the signal controller cabinet. (This will help address the inevitable complaint by those issued tickets that the agency changed the clearance intervals to generate more violators – to increase revenue streams.)
- With local law enforcement, attend county board/city council meetings to speak on the community safety benefits of red-light-running confirmation lights.

Implementation Resources:

- For crash data and analysis to focus red-light-running enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- Safety projects developed as part of the LRSP are eligible for funding through the state’s Highway Safety Improvement Program (HSIP) including enhanced enforcement.
- Contact local agencies that have deployed red-light-running confirmation lights:

City of Burnsville Public Works,
Minnesota
Engineering Department
100 Civic Center Parkway
Burnsville, MN 55337
Phone: 952-895-4534

Richardson Police Department, Texas
140 North Greenville Ave.
Richardson, TX 75081
Phone: 972-744-4800

Burleigh County’s Priority Strategy – Provide enhanced enforcement on local, at-risk locations for lane departure.

Description: To reduce lane departure severe crashes on rural paved roads, Burleigh County will be deploying infrastructure safety improvements (e.g., centerline rumble strips, edge line rumble strips, adding or widening edge lines, high visibility pavement markings) at select at-

risk corridors. To maximize the expected safety benefit of the road improvements, integrating increased enforcement presence at targeted at-risk locations and timeframes will reduce risky driver behaviors through strengthening the public's perceived risk of being stopped.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas in the SHSP.
- Work with NDDOT staff regarding specific design features of the system. Contact NDDOT Traffic Operations Section, Shawn Kuntz, 701-328-2673.
- Coordinate with local law enforcement to provide enhanced enforcement at local, at-risk locations for lane departure.
 - Based on crash data, identify timeframes for high crash risk (i.e., Saturday evening hours)
 - Ask for an agreement regarding minimum levels of enforcement (i.e., one hour per day at any of the equipped locations, target contacts per hour, etc.)

Implementation Resources:

- For crash data and analysis to focus lane departure enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- Safety project developed as part of the LRSP are eligible for funding through the state's Highway Safety Improvement Program (HSIP) including enhanced enforcement.
- See Section 5.4.7 for speed and aggressive driving implementation resources.

5.5 Traffic Safety Office Supporting Resources

Unless otherwise indicated, for technical assistance and supporting resources contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.

5.5.1 TSO Grant Program Application Process

The TSO solicits grant applications from eligible state and local agencies and for-profit and non-profit organizations that address North Dakota's problem solution plans or PSPs. PSPs reflect the state's greatest opportunities for behavioral safety improvement. Grant applications are due June 30th of each year and are evaluated based on: (1) response to identified problems, (2) proposed evidenced-based strategy, (3) clear objectives, (4) comprehensive evaluation plans, and (5) cost-effective budgets. Selected projects are included in TSO's Highway Safety Plan and once approved by NHTSA, grant contracts are generally effective October 1 through September 30th.

5.5.2 Technical Assistance

County Outreach Program

The TSO, in cooperation with the North Dakota Association of Counties, offers a county-based Traffic Safety Outreach program to provide advocacy and community mobilization, media support, public outreach, and training to address seat belt use, impaired driving, speeding, and distracted driving at the county level. County participants include law enforcement, transportation engineering, social services, public health, businesses, nonprofit agencies, faith-based agencies, media, and other entities.

5.5.3 Traffic Records/Crash Data

Traffic and Criminal Software or TraCS

The quality of traffic safety problem identification and decision making regarding effective safety strategies and their implementation is based on the quality and timeliness of crash data. Data is collected from officer crash reports at the time of the incident when a crash involves fatalities, injuries, or at least \$1,000 in property damage. NDDOT reviews the crash report and enters the data into a centralized database called the Crash Reporting System or CRS.

To assist law enforcement in providing timely, complete, and accurate crash reports, the NDDOT Traffic Safety Office (TSO) supports the installation of Traffic and Criminal Software or TraCS and provides technical assistance and training to local agency and tribal law enforcement to effectively deploy TraCS for in-the-field incident reporting. Local and tribal enforcement agencies are strongly encouraged to utilize the convenience of TraCS for the electronic submission of crash reports to the NDDOT. Key benefits to participating agencies and tribes are the reduced officer time and effort required for duplicate entry into local and state crash databases, reduced need for data entry resources and administrative support, as well as improving the overall quality and timeliness of the crash report.

Local Agency Crash Data Support

The Upper Great Plains Transportation Institute develops crash data summaries for each law enforcement agency under contract with the TSO for overtime enforcement supporting impaired driving and seat belt enforcement campaigns. The crash data summaries demonstrate the priority crash factors and trends within each local agency's jurisdiction.

Annual Crash Summary

The NDDOT annually publishes the Crash Summary to identify and describe the annual crash data and historical crash trends in North Dakota including the description of factors contributing to the occurrence of traffic crashes and the resulting injuries and fatalities. The Crash Summary is a valuable reference resource for local agencies and their safety partners for problem identification, safety strategy planning, targeted strategy implementation, program evaluation, and media inquiries.

<http://www.dot.nd.gov/divisions/safety/docs/crash-summary.pdf>

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