



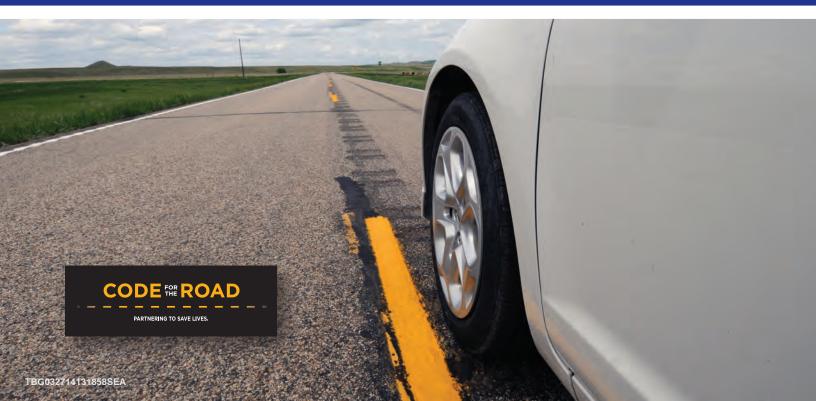






June 2014

# North Dakota **Local Road Safety Program**



## North Dakota Local Road Safety Program

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### On behalf of

North Dakota Department of Transportation

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23 USC 409 NDDOT Reserves All Objections

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### **Acronyms and Abbreviations**

4Es education, enforcement, engineering, and emergency medical services

100MVMT 100 million vehicle miles traveled

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 Manual on Uniform Traffic Control Devices

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

### North Dakota Local Road Safety Program

## **Executive Summary**

This Local Road Safety Program (LRSP) was prepared for Grand Forks County and the City of Grand Forks (referred to collectively as the Grand Forks region). 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 serious crashes (defined as those crashes resulting in at least one fatality or incapacitating injury) by documenting at-risk locations, identify effective low-cost safety improvement strategies, and better position the Grand Forks region 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 systemic safety projects for the 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 Grand Forks region, 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 at high-risk locations within the region, other equally important 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 serious crashes or with roadway geometry and
  traffic characteristics similar to other locations in North Dakota where serious crashes have
  occurred.
- Development of approximately \$4.1 million of suggested safety projects across the Grand Forks region (Table ES-1), including the filled out forms suitable for submittal to the 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.

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TABLE ES-1
Grand Forks Region Total Safety Project Costs

Rural Projects	Roadway Segments	Intersections	Curves	Total
Grand Forks County	\$375,457	\$2,586,180	\$302,820	\$3,264,457
Urban Projects	Roadway Segments	Intersections – Right-Angle	Intersections – Pedestrians and Bicyclists	Total
City of Grand Forks	\$60,000	\$57,600	\$772,800	\$890,400

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 to Grand Forks County and the City of Grand Forks in an effort to reduce the number of serious 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 Grand Forks region 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.

In addition, some of the locations are within the Metropolitan Planning Organization (MPO) boundaries and the following should be taken into account:

- Projects or improvements within an MPO boundary must be coordinated with that MPO prior to submittal to NDDOT
- Projects or improvements must be consistent with the MPO's Long Range Transportation Plan (LRTP)
- Projects or improvements selected for funding must be incorporated in the MPO's Transportation Improvement Program (TIP)

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. North Dakota interprets Section 409 to mean that basic crash data are available to the public on request, but that the data 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. This LRSP contains \$4.1 million of potential safety projects, which could provide the Grand Forks region with a sufficient backlog of projects for up to 5 years. As a result, Grand Forks County and the City of Grand Forks are encouraged to periodically update this LRSP.

The City of Grand Forks and Grand Forks County 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 <b>6 weeks to respond</b> .
January through March	NDDOT reviews the requests and conducts additional studies if required.
Following Fall	HSIP approval notices are sent after program concurrence from the 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 serious crashes (those crashes resulting in at least one fatality or incapacitating injury) 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 serious 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, Grand Forks County, and the City of Grand Forks prepared this LRSP Safety Plan (Plan) as Phase 2 of a comprehensive effort to reduce the number of fatal and incapacitating injury The Strategic Highway Safety Plan (SHSP) development process was key in helping us identify the importance of local roads to achieve our longterm 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

crashes (referred collectively as serious crashes) that occur on North Dakota's local road system in the Grand Forks region (a collective term for Grand Forks County and the City of Grand Forks). The area covered by the Plan covers a portion of NDDOT District 6 – Grand Forks (Figure 1-1). Additionally, Cass, Barnes, Eddy, Foster, Griggs, Ransom, Richland, Sargent, Steele, and Traill counties and the cities of Fargo, West Fargo, Valley City, and Wahpeton participated in Phase 2 of the study; however, their information is provided in separate reports.

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 serious 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.

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The traffic safety priorities identified in this Plan are the result of a data-driven analysis of nearly 88,450 crashes (including 2,231 serious crashes) on all roads in North Dakota. Of these crashes, 7,486 total crashes and 131 serious crashes occurred in the Grand Forks region over the 5-year period from 2008 to 2012, with 5,754 of the total crashes and 81 serious crashes occurring in the City of Grand Forks.

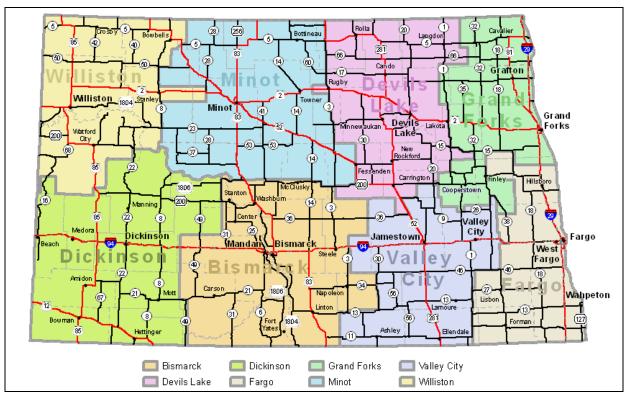


FIGURE 1-1 North Dakota Department of Transportation's Eight Districts

### 1.2 Traffic Safety – A National Perspective

According to the National Highway Traffic Safety Administration (NHTSA), 32,310 people were killed in traffic crashes in 2011 – an average of 89 people killed every day – and an additional 2.2 million people were injured. The number of fatalities nationally decreased significantly and steadily in the 1970s and 1980s. Beginning in the early 1990s and continuing through the early 2000s, traffic fatalities began to increase. However, since 2005, traffic fatalities have decreased dramatically to the lowest number of fatalities in recent history – 32,310 fatalities in 2011.

Like the national trend, the North Dakota traffic fatality rate also decreased in the 1970s and 1980s. Likewise, North Dakota's traffic fatalities slowly increased through the 1990s and early 2000s, and began to decrease again in 2005. However, unlike the national trend, North Dakota's traffic fatality rate has increased since 2008. The 2013 North Dakota Strategic Highway Safety Plan recognizes the following issues likely account for much of the increase:

• Shifts in the age of the driving population.

- 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 serious 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 the FHWA concluded that up to that point, states' efforts had not been effective in lowering the number of serious crashes because: (1) efforts were not focused on serious crashes nor the primary factors resulting in serious 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 serious crash.

AASHTO and the 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 of safety—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 issue.

In 2007, AASHTO set a goal to reduce the number of traffic fatalities nationally by 1,000 each year for the next 20 years, which is an integral first step in a national *Toward Zero Deaths* safety vision. The 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 serious injury crashes.

### 1.3 North Dakota's Statewide Safety Planning Efforts

Through 2004, North Dakota had a fatality rate (1.34 fatalities per 100 million vehicle miles traveled [100MVMT] in 2004) that was less than the national average (1.44 fatalities per 100MVMT). However, in recent years, the North Dakota fatality rate (1.61 fatalities per 100MVMT in 2011) has risen to above the national average (1.10 fatalities per 100MVMT) and the overall number of traffic fatalities has crept upward (see Figure 1-2). In 2011, there were 148 fatalities on North Dakota roads: the most traffic fatalities reported in the state since 1982.

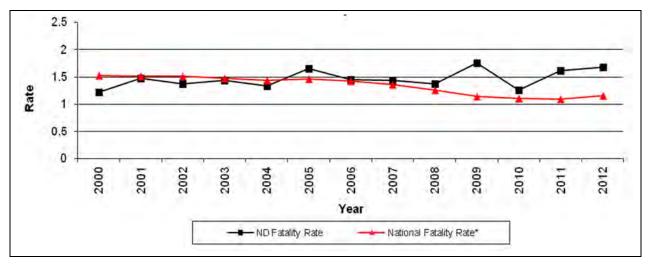


FIGURE 1-2 Fatality Rate – National and North Dakota (2000 to 2012)

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

- Young drivers (under age 21)
- Speeding 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 Serious Injury Crashes by AASHTO Safety Emphasis Area

			e Crashes oads)	
	Safety Emphasis Area			
	Involving Driver under Age 21	22%	501	
	Involving drivers over the age of 64	13%	280	
Drivers	Speeding or Aggressive Driving	26%	576	
Dilveis	Alcohol-Related	30%	667	
	Distracted, asleep, or fatigued drivers	9%	206	
	Unbelted Vehicle Occupants	48%	1,067	

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

	Safety Emphasis Area					
Special Hears	Pedestrians crashes	5%	117			
Special Users	Bicycle crashes	2%	46			
Vehicles	Motorcycles crashes	12%	265			
verlicles	Heavy vehicle crashes	15%	342			
	Train-vehicle collisions	1%	13			
Highways	Lane-Departure Including both lane-departure (898 serious crashes) and head-on/ sideswipe-opposing crashes (150 serious crashes)	47%	1,048			
	Intersections	23%	513			
	Work zone crashes	2%	36			
Total Serious (F	otal Serious (Fatal and Incapacitating Injury) Crashes 2,231					

#### Notes:

Information is from the 2008-to-2012 North Dakota crash data records, which is an update to the information in the 2013 North Dakota SHSP that 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 serious crashes in North Dakota occurred on local roads, the density of these crashes was very low (approximately 0.002 serious 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 serious 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.

For the Grand Forks region, the Grand Forks Metropolitan Planning Organization (MPO) coordinates project development throughout the region. Based on this, the following should be considered when reviewing suggested project locations:

- Projects or improvements within an MPO boundary must be coordinated with that MPO before submittal to NDDOT
- Projects or improvements must be consistent with the MPO's Long Range Transportation Plan (LRTP)
- Projects or improvements selected for funding must be incorporated in the MPO's Transportation Improvement Program (TIP)

The focus areas of the systemic risk assessment are rural, paved county and tribal highways<sup>1</sup>, 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 serious local road crashes occurred on rural county roads. Of these crashes, approximately half occurred on paved roads, which account 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 were roadway segments (60 percent of serious crashes), horizontal curves (32 percent of serious crashes), and intersections (32 percent of serious crashes).

Major cities were selected as a focus because approximately 90 percent of the serious local-road crashes occurred within the city boundaries of the 12 cities in this category. Furthermore, 40 percent of the serious crashes occurred on urban arterials and collectors. 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 freeways), the U.S. and state highways were included in the review.

Figure 1-3 shows the approach used to develop this Plan for the Grand Forks region. The process began with the crash analysis and concluded with this LRSP Safety Plan, the culmination of the NDDOT and concerned local agencies working together for nearly half a year.

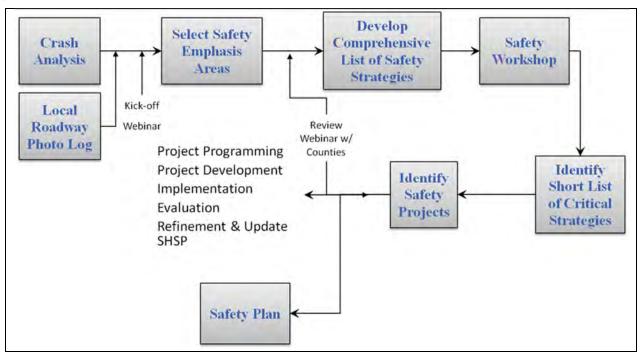


FIGURE 1-3 Local Road Safety Program Safety Plan Approach

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<sup>&</sup>lt;sup>1</sup> 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.

# 2.0 Grand Forks Region Safety Emphasis Areas and Crash Overview

The first step in the process to prepare Safety Plans for Grand Forks County and the City of Grand Forks (referred to collectively as the Grand Forks region) was to conduct a crash analysis overview statewide for North Dakota and then for the Grand Forks region as a whole.

### 2.1 Grand Forks Region Crash Overview

### 2.1.1 North Dakota Crash Mapping

Crash data was taken from the 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-year period of crash data (from 2008 to 2012) was analyzed and used to determine risk factors specific to Grand Forks region local roads. Consistent with the NDDOT's SHSP, the analysis focused on serious (fatal and incapacitating injury) crashes.

### 2.1.2 Facilities Analyzed

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

- Paved rural local roadway 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 serious 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 roadway segments and intersections were analyzed in the City of Grand Forks.
   Urban roadway types analyzed within the city limits included:
  - State routes
  - Urban principal arterials
  - Urban minor arterials
  - Urban collector roads
- All other local roadway segments and intersections, including gravel roads, were reviewed for locations with multiple serious crashes or "hot spots."

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### 2.1.3 Crash Data Sets

Crash data for the 5 years from 2008 to 2012 was used for the Grand Forks region 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). For the Grand Forks region, there were not enough crashes to be statistically reliable; therefore, decisions were based on the crashes for all Phase 2 cities and city-containing counties combined (Figure 2-1), statewide data (Figure 2-2), or national research.

The Grand Forks region data set includes 5,041 crashes on local roads; of these, 85 were fatal or incapacitating injury crashes. Disaggregating the serious crashes by road type (paved, gravel, or local), area (urban versus rural), and crash type category (intersection versus roadway segment crashes) resulted in the distribution shown in Table 2-1, Figure 2-1, and Figure 2-2.

TABLE 2-1 Crash Distribution (2008 to 2012)

Location	Grand Forks Region (Percent/Number)	Statewide (Percent/Number)
Rural Roads	31% (26 crashes)	71% (789 crashes)
Paved Rural Roads	35% (9 crashes)	50% (394 crashes)
CMC Gravel Roads	8% (2 crashes)	9% (73 crashes)
Paved Rural Road Segments	75% (6 crashes)	59% (225 crashes)
Single Vehicle, Lane-Departure Crashes on Paved Rural Road Segments	83% (5 crashes)	76% (170 crashes)
Paved Rural Road Intersections	12% (1 crash)	36% (137 crashes)
Paved Rural Road Thru-STOP Intersections	100% (1 crash)	44% (60 crashes)

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

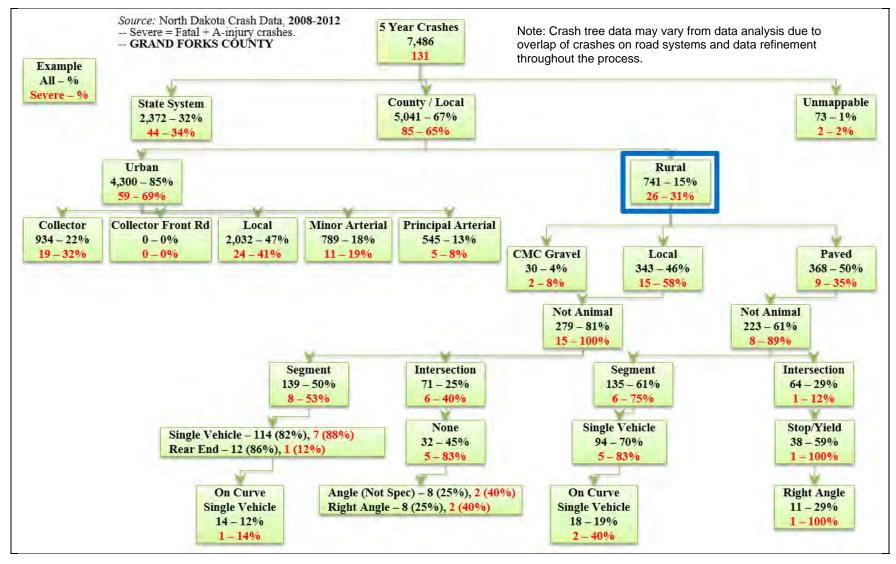


FIGURE 2-1
Grand Forks Region Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

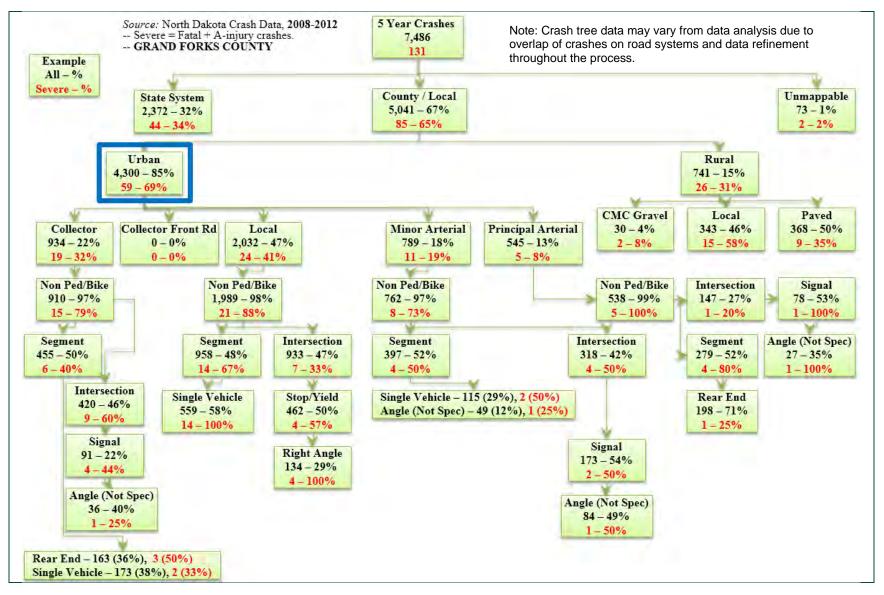


FIGURE 2-1 (Continued)

Grand Forks Region Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

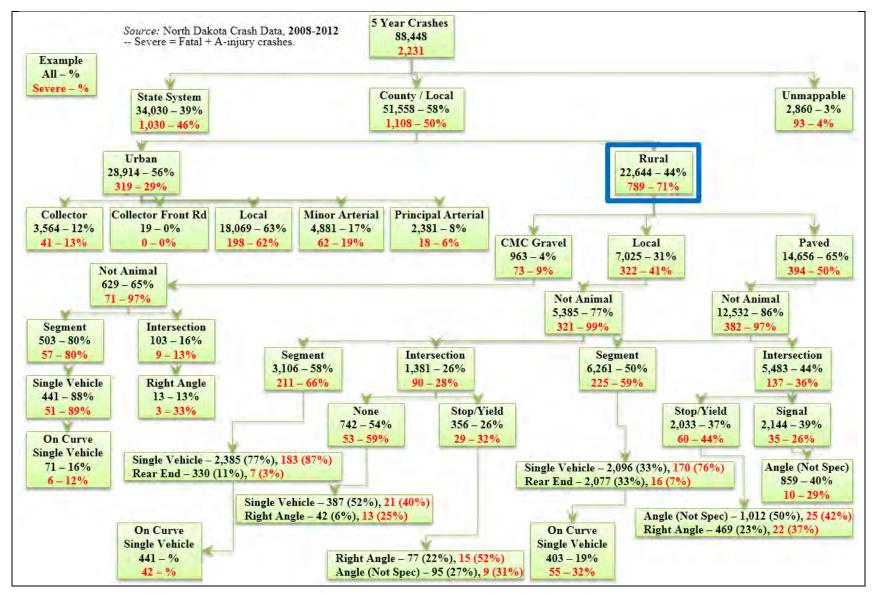
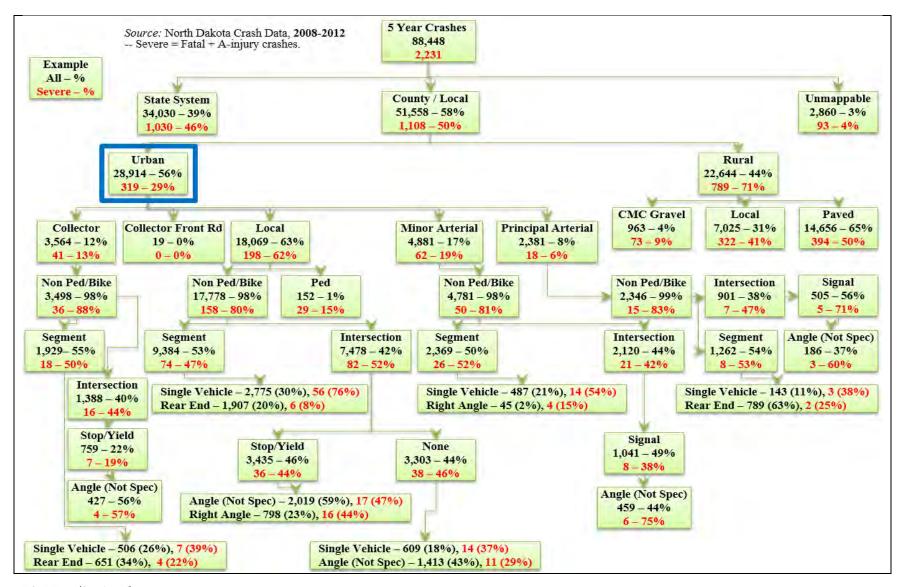


FIGURE 2-2 North Dakota Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)



#### FIGURE 2-2 (Continued)

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

### 2.2 Grand Forks Region Safety Emphasis Areas

The total number of serious crashes (those crashes resulting in a fatality or incapacitating injury) in each county over the 5-year period from 2008 to 2012 was so few that the crash data was 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 the Grand Forks region, resulting in the distribution of serious crashes among AASHTO's 22 emphasis areas (Table 2-2). The safety emphasis areas for the Grand Forks region 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
Grand Forks Region Serious Crashes by Safety Emphasis Areas (2008 to 2012)

Grand Forks Region Schools Grashes by Salety Emphasis	Statewide	2008 to 2012 Serious Crashes					
		Grand Forks Region		State Roads		Local System	
Safety Emphasis Areas	(% of Total)	%	#	%	#	%	#
Total Serious Crashes	2,231	131		44		87	
Involving Drivers Under Age 21	22%	31%	41	32%	14	31%	27
Involving Drivers Over Age 64	13%	18%	23	27%	12	13%	11
Excessive Speed or Aggressive Driving	26%	25%	37	25%	11	25%	22
Alcohol-Related	30%	22%	46	18%	8	24%	21
Distracted, Asleep, or Fatigued Drivers	9%	5%	19	7%	3	5%	4
Unbelted Vehicle Occupants	48%	41%	63	25%	11	49%	43
Pedestrian Crashes	5%	5%	4	5%	2	5%	4
Bicycle Crashes	2%	5%	3	0%	0	7%	6
Motorcycle Crashes	12%	18%	18	11%	5	21%	18
Heavy Vehicle Crashes	15%	5%	18	11%	5	2%	2
Train-Vehicle Collisions	1%	2%	1	0%	0	2%	2
Lane-Departure (Run-Off-the-Road and Head-On) Crashes	47%	37%	65	34%	15	39%	34
Head-On	7%	5%	8	7%	3	5%	4
Run-off-the-Road Crashes	40%	32%	57	27%	12	34%	30
Intersection Crashes	23%	30%	34	25%	11	32%	28

TABLE 2-2
Grand Forks Region Serious Crashes by Safety Emphasis Areas (2008 to 2012)

		2008 to 2012 Serious Crashes						
	Statewide	Grand Forks Region		State Roads		Local System		
Safety Emphasis Areas	(% of Total)	%	#	%	#	%	#	
Work Zone Crashes	2%	2%	2	5%	2	0%	0	
Deer Collisions	1%	1%	1	0%	0	1%	1	
Adverse (Winter) Weather Related	16%	10%	13	11%	5	9%	8	

Note:

Serious 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, a roadway segment, curve, or 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 the Grand Forks region are provided in Section 3.2.

### 2.3 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 serious crashes per year, and (2) basic roadway and traffic characteristics of locations with serious crashes. These characteristics are not considered to be the cause of crashes, but instead are used to determine the risk that a future serious crash would occur at a particular location. Information from historic crashes was used to evaluate the remainder of the Grand Forks region's local road system and prioritize locations for safety investment based on similar characteristics.

Ten counties were studied as a part of Phase 2 in the LRSP: Cass, Barnes, Eddy, Foster, Griggs, Ransom, Richland, Sargent, Steele, and Traill counties. Urban-rural counties are designated as those containing a city with a population greater than 5,000, while rural-rural counties are those without cities exceeding this population. Since Grand Forks County contains the City of Grand Forks (which has a population greater than 5,000), the focus of this chapter is on the risk analysis for urban-rural county roads. The City of Grand Forks is the subject of the urban

portion of this Plan, but for analysis purposes, the data were combined for all of Phase 2 urban areas (the cities of Fargo, West Fargo, Wahpeton, and Valley City).

### 2.3.1 Rural Roadway 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, 50 percent of crashes occured on paved roads. Therefore, the focus of the LRSP is on rural paved roadway segments.

There are 274 miles of rural paved county roads in Grand Forks County. From 2008 to 2012, 10 serious crashes were reported on these roads. The predominant crash type on these roads was single-vehicle lane-departure (Figure 2-3). The following five risk factors were identified for rural lane-departure crashes on paved roads in the county:

- Average Daily Traffic (ADT) Of the urban-rural paved roads, 29 percent have an ADT greater than 525 vehicles per day. However, 53 percent of the serious lane-departure crashes occurred above this ADT (Figure 2-4). Therefore, any segment with an ADT greater than 525 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 serious crash occurring. North Dakota's review of serious crashes on their urban-rural county roads (shown in Figure 2-5) confirms this relationship with the serious crash density increasing as the access density increases. Any roadway segment with an access density greater than or equal to eight access points per mile received a star.
- 3. **Lane-Departure Crash Density –** The average lane-departure crash density for urban-rural counties was 0.064 crash per mile per year. Due to limited number of crashes in each county, any roadway segment where the lane-departure crash density was greater than the average for the county received a star.
- 4. **Critical Radius Curve Crash Density -** Nationally, lane-departure crashes frequently occur within curves. Curves with radii between 500 and 1,200 feet (that is, critical radius curves) have a higher serious crash rate than other curves, and roadway segments with more curves in this radius 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 urban-rural county average critical curve radius crash density for these types of curves along roadway segments was 0.095 crash per mile. Any segment with a curve critical radius crash density greater than or equal to 0.095 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 2-6. Roads were evaluated using photos taken in the autumn of 2013 to determine the rating. Roads with a rating of 2 or 3 received a star.

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<sup>&</sup>lt;sup>1</sup> 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.

Detailed segment analysis and results for Grand Forks 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.

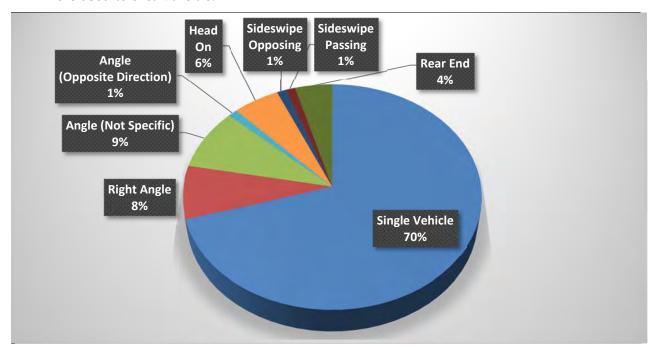


FIGURE 2-3
Urban-Rural Counties Serious Crash Types on Rural Paved Roads (2008 to 2012)

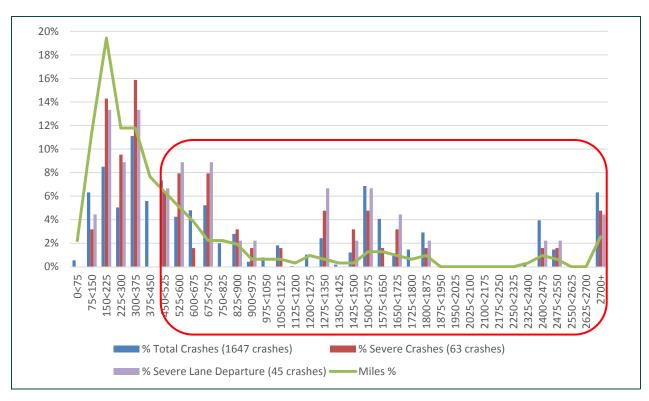


FIGURE 2-4
Urban-Rural Counties Roadway Segment Average Daily Traffic (ADT) Crash Data (2008 to 2012)

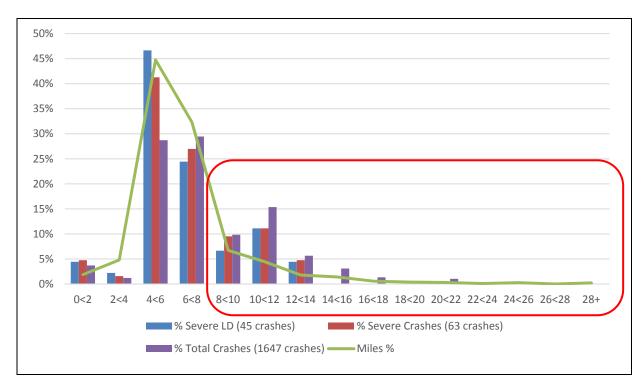


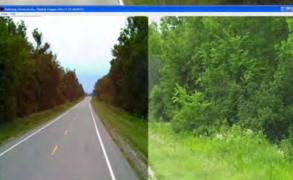
FIGURE 2-5 Urban-Rural Counties Serious Crashes by Access Density on North Dakota (2008 to 2012)



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 2-6 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 274 miles of rural paved roads in the Grand Forks region contain 58 curves totaling almost 7 miles in length (2 percent of the road system mileage).

With only three serious crashes along curves 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 serious crashes since 32 percent of serious lane-departure crashes occurred in curves. As a result, the LRSP team used characteristics of curves in the county where crashes had occurred, as well as available information from similar analysis of national 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 -** Grand Forks County and all counties in Phase 1 and Phase 2 did not have enough serious curve crashes to provide insight into North Dakota's characteristics (Figure 2-7). National data show that curves with mid-range radii had higher crash densities. 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 serious lane-departure crashes that were reported in Grand Forks County from 2008 to 2012. Any curve with a radius between 500 and 1,200 feet received a star.
- 2. **Average Daily Traffic (ADT) -** Traffic volumes over 500 vehicles per day present a risk factor in urban-rural counties and represent a higher risk for crashes (Figure 2-8). Sixty-four percent of serious lane-departure crashes occurred along curves with this ADT, while only 31 percent of curves are represented in this range. Therefore, curves with an ADT over 500 vehicles per day received a star.
- 3. **Intersection within the Curve –** In Grand Forks County, the presence of an intersection within a curve increased the risk for a serious crash. 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 Grand Forks County and, therefore, received a star.
- 5. **Serious Crashes –** If a serious crash occurred on a curve between 2008 and 2012, the curve received a star.

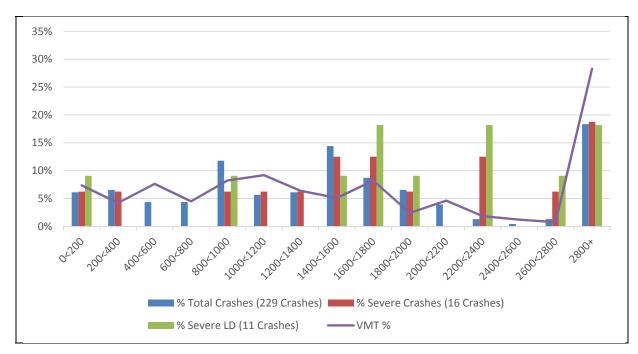


FIGURE 2-7
Phase 1 and Phase 2 Urban-Rural Curve Crashes by Radii – 500 to 1,200 feet (2008 to 2012)

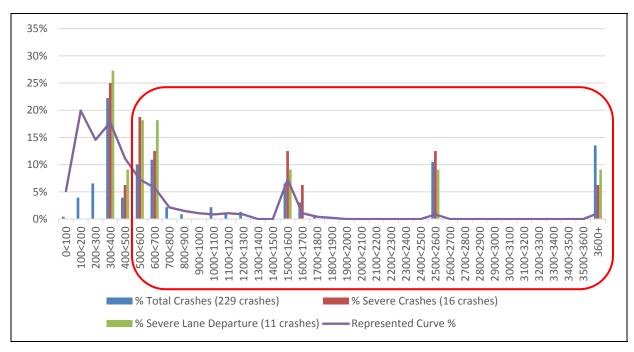


FIGURE 2-8
Urban-Rural Curve Crashes by Average Daily Traffic (ADT) – Greater than 500 Vehicles per Day (2008 to 2012)



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

Based on 229 total crashes and 16 serious lane-departure crashes along the urban-rural county roads, 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 Grand Forks 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 in the Grand Forks region 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 (the difference 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 friction factor that are 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 all Phase 2 rural local roads, serious crashes are most common at Thru-STOP intersection,<sup>2</sup> where 95 percent of serious intersection crashes (18 crashes) occurred from 2008 to 2012 (Figure 2-10). Serious right-angle and angle crashes are the most common types of crashes at these intersections (Figure 2-11).

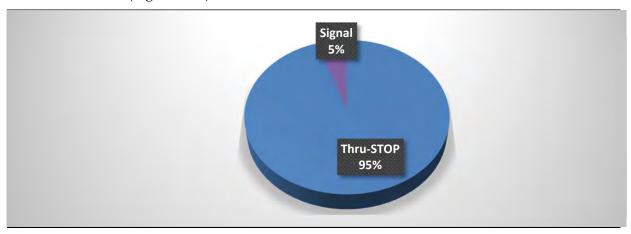


FIGURE 2-10
Phase 2 Rural Serious Crashes by Traffic Control Device (2008 to 2012)

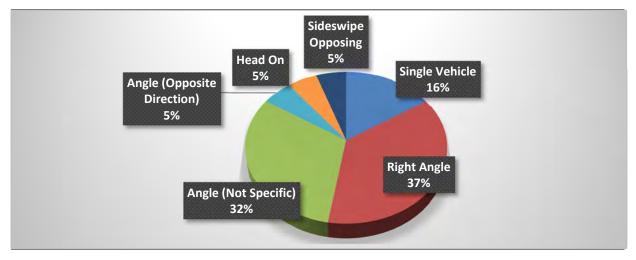


FIGURE 2-11
Phase 2 Rural Serious Crashes by Crash Type (2008 to 2012)

<sup>&</sup>lt;sup>2</sup> 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 proceding through the intersection.

In Grand Forks County, 83 rural intersections with 80 Thru-STOP locations were reviewed. The average serious crash density at rural Thru-STOP locations is 0.01 serious crash per intersection per year. This low density supports assessing an intersection risk based on the characteristics of the locations where serious crashes occurred. The following seven rural Thru-STOP risk factors were identified for serious right-angle crashes in the county:

- 1. **ADT Cross Product –** 94 percent of the serious right angle crashes at rural Thru-STOP intersections occurred at intersections with an ADT Cross Product<sup>3</sup> of major and minor entering vehicles greater than 60,000 (Figure 2-12). An intersection was considered to have a higher risk of serious right angle crashes if the ADT Cross Product was greater than 60,000. These intersections received a star.
- 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 serious 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.
- 3. **Within or Near a Curve -**Research has shown that intersections located within or near a horizontal curve are subject to a higher level of risk (Figure 2-14). In this analysis, intersections located within 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. Grand Forks County intersections with development present had more serious crash rates (Figure 2-14) and therefore received a star.
- 5. **Railroad Crossing -** Intersections at 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 serious 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 at which either of the stopped approaches do not enocounter 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.

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 $<sup>^{3}</sup>$  The ADT Cross Product is the major-street entering volume multiplied by the minor-street entering volume.

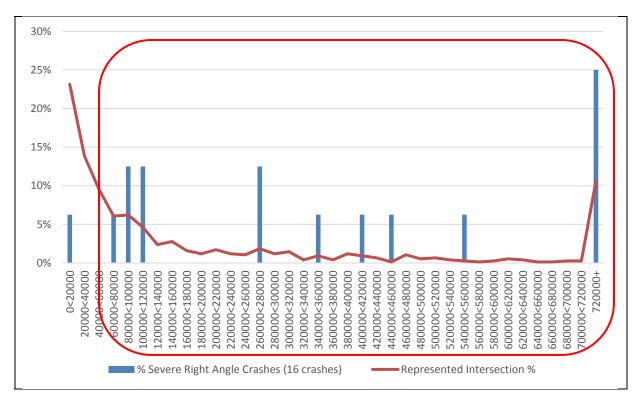


FIGURE 2-12
Phase 1 and Phase 2 Rural ADT Cross Product (2008 to 2012)

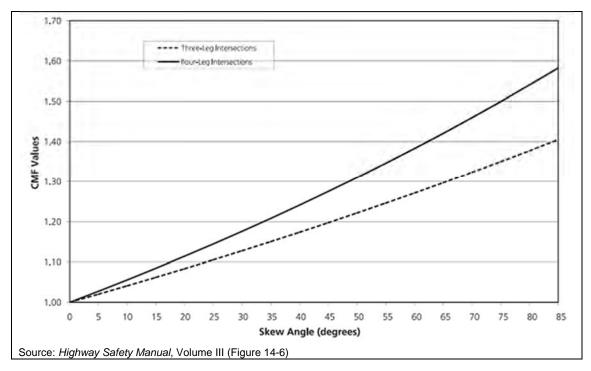


FIGURE 2-13 Intersection Skew Risk

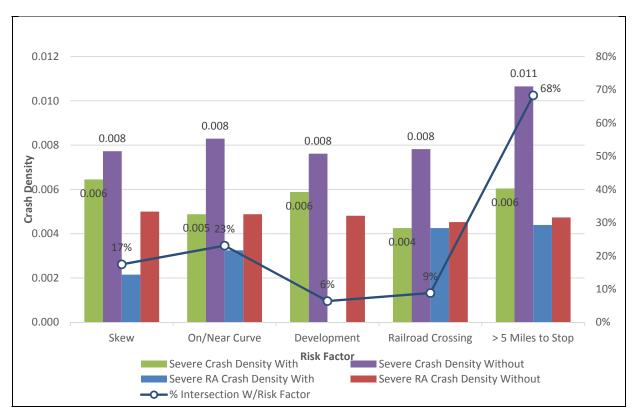


FIGURE 2-14
Rural Intersection Risk Factors for the Phase I & Phase II Urban-Rural Counties (2008 to 2012)

Grand Forks County had 76 total rural intersection crashes from 2008 to 2012, and only 5 of those crashes are serious. Due to the small number of serious crashes, some of the data and risk factors may be misleading based on the county data alone. National data were 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 two or more 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 (City of Grand Forks)

Approximately 500 miles of urban local roads were reviewed in Phases 1 and 2, where 23,603 total and 281 serious 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 the City of Grand Forks, 1,374 rear-end crashes and 105 head-on and sideswipe-opposing crashes occurred from 2008 to 2012.

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

- 1. **Average Daily Traffic (ADT) –** Both rear-end and head-on crashes were overrepresented in road corridors with ADT volumes greater than 6,000 vehicles per day (Figure 2-15). (Note: This ADT volume includes data from the cities of Fargo, West Fargo, Valley City, Wahpeton, Devils Lake, Bismarck, and Minot.) Corridors with an ADT greater than 6,000 vehicles per day received a star.
- 2. **Access Density -** Rear-end and head-on crashes are overrepresented in Phases 1 and 2 along corridors with access densities greater than or equal to 30 access points per mile (Figure 2-16), and therefore received a star.
- 3. **Road Geometry -** Crashes are overrepresented per corridor mile on roadways with four or more lanes (Figure 2-17), and therefore multilane roadways were given a star.
- 4. **Speed Limit** -Serious rear-end and head-on crashes were overrepresented in low-speed corridors (40 mph or less) (Figure 2-18), and therefore received a star.
- 5. **Serious Rear-End, Sideswipe, or Head-On Crash -** If an intersection had any serious rearend, sideswipe (opposing or passing), or head-on crash from 2008 to 2012, the intersection received a star.

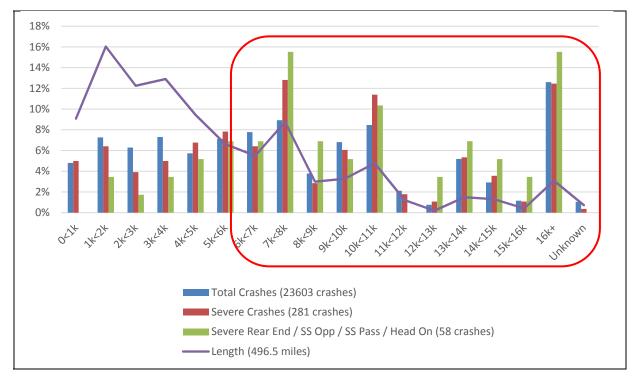


FIGURE 2-15
Phase 1 and Phase 2 Urban Roadway Segment Average Daily Traffic (ADT) (2008 to 2012)

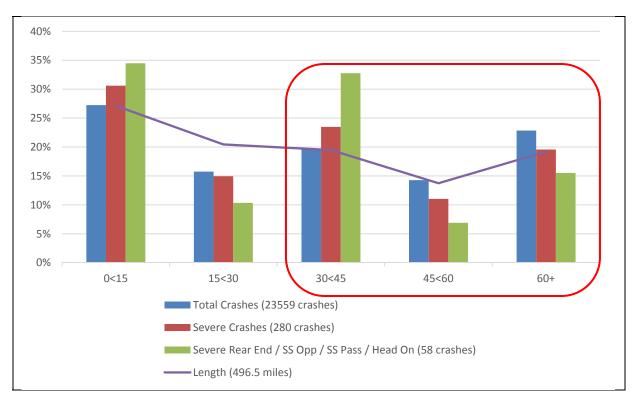


FIGURE 2-16
Phase 1 and Phase 2 Urban Roadway Segment Access Density (2008 to 2012)



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

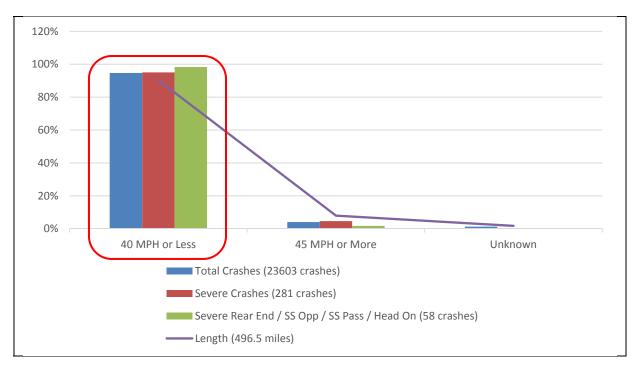


FIGURE 2-18
Phase I & Phase II Urban Roadway Segment Crashes by Speed (2008 to 2012)

Detailed urban segment analysis and results for the City of Grand Forks are provided in Chapter 4. The five 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 (City of Grand Forks)

In the City of Grand Forks, 137 intersections including 47 signalized intersections were analyzed. Of the 1,147 total crashes in Phases 1 and 2, only 27 serious crashes occurred at the City of Grand Forks urban intersections analyzed. These data support assessing an intersection's risk based on the characteristics of locations with serious crashes. A variety of information was collected on each intersection and from that, the following six risk factors for right angle crashes were chosen:

- 1. **Traffic Control Device** Serious crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-19). Therefore, signalized intersections received a star.
- 2. **Entering ADT -** Higher volumes of vehicles entering intersections was considered a risk factor. Approximately 40 percent of right-angle crashes at signalized intersections in Phase 1 and Phase 2 urban areas occurred at intersections with an entering vehicles ADT greater than 18,000 vehicles per day (Figure 2-20). Therefore, any intersection with an entering vehicles ADT greater than 18,000 vehicles per day received a star.

- 3. **Road Geometry** Serious angle crashes were overrepresented on divided roadways with signalized intersections (Figure 2-21). Therefore, intersections on divided roadways received a star.
- 4. **Major Corridor Speeds** Low-speed corridors were found to act as a surrogate for serious angle crashes (Figure 2-22). Therefore, intersections with low speed limits (40 mph or less) received a star.
- 5. **Total Lanes on Major Approach –** Serious angle crashes were overrepresented at intersections containing six or more approach lanes (Figure 2-23). Therefore, intersections with six or more approach lanes received a star.
- 6. **Serious Crashes –** Any intersection where one or more serious crashes had occurred received a star.

Detailed urban intersection right angle analysis and results for the City of Grand Forks is in Chapter 4. The risk factors previously listed were used to help prioritize intersections with the highest-priority intersections receiving the most stars. Intersections where right angle crashes occurred 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.

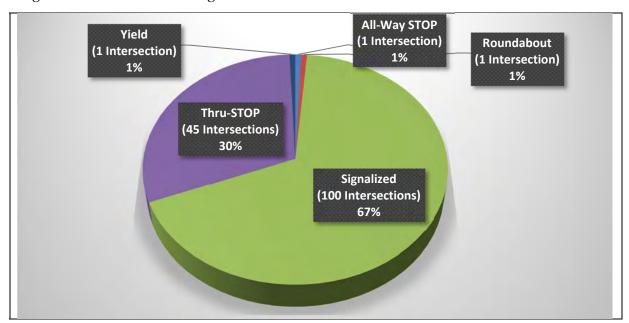


FIGURE 2-19
Phase 1 and Phase 2 Urban Serious Crashes by Intersection Traffic Control Device (2008 to 2012)

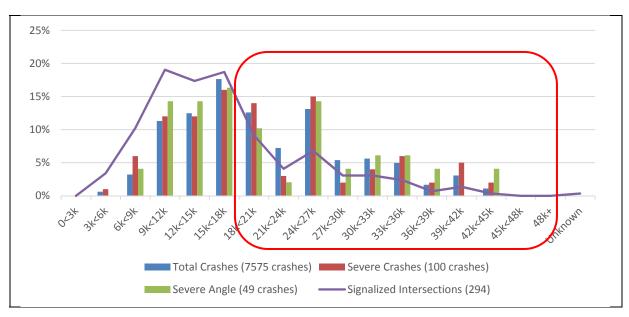


FIGURE 2-20
Phase 1 and Phase 2 Urban Crashes by Intersection Entering Vehicles Average Daily Traffic (ADT)



FIGURE 2-21
Phase 1 and Phase 2 Urban Crashes by Road Geometry



FIGURE 2-22 Phase 1 and Phase 2 Urban Crashes by Intersection Configuration

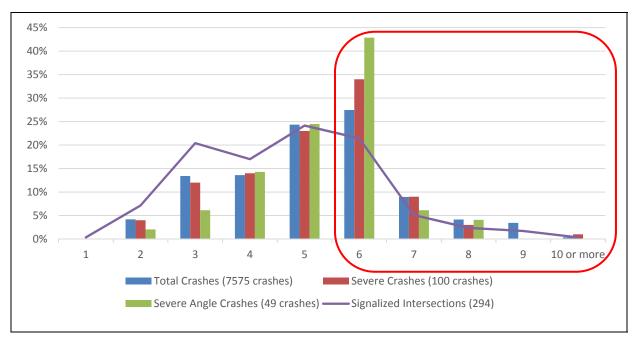


FIGURE 2-23
Phase 1 and Phase 2 Urban Signalized Intersection Crashes by Major Lanes Distribution (ADT)

# 2.3.6 Urban Intersections – Pedestrian/Bicycle Crashes, Cities with Populations Greater than 5,000 (City of Grand Forks)

Similar analysis was completed for pedestrian and bicycle crashes at intersections. Only 3 serious pedestrian and bicycle crashes occurred at City of Grand Forks intersections from 2008 to 2012; therefore, the data were combined with all of the Phase 1 and Phase 2 urban intersection analysis. The following seven risk factors were identified based on the analysis:

- 1. **Traffic Control Device -** Serious pedestrian and bicycle crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-24). Therefore, signalized intersections received a star.
- 2. **Entering Vehicles ADT –** A high volume of vehicles entering an intersection was considered a risk factor. A majority of the serious pedestrian and bicycle crashes occurred at intersections with an entering vehicles ADT greater than 18,000 vehicles per day (Figure 2-25). Therefore, any intersection with an entering vehicles ADT greater than 18,000 vehicles per day or greater received a star.
- 3. **Pedestrian Generator –** Intersections with adjacent land uses likely to generate pedestrian traffic (such as a school, playground, bar or gas station) had a higher pedestrian and bicycle crash risk than other intersections (Figure 2-26). Therefore, an intersection with a pedestrian generator present received a star.
- 4. **Major Corridor Speeds -** Low-speed corridors were found to act as a surrogate for serious pedestrian and bicyclist crashes (Figure 2-27). Therefore, intersections with low speed limits (40 mph or less) received a star.
- 5. **Marked Crosswalk -** The presence of marked crosswalks was found to be a surrogate for serious pedestrian and bicyclist crashes (Figure 2-28). Therefore, intersections with a marked crosswalk received a star.
- 6. **Bus Stop –** The presence of a bus stop was associated with increased rate of pedestrian and bicyclist crashes (Figure 2-29). Therefore, intersections with a bus stop received a star.
- 7. **Pedestrian and Bicycle Crashes –** Any intersections that had any bicycle or pedestrian crash from 2008 to 2012 received a star.

Detailed urban intersection pedestrian and bicycle analysis and results for the City of Grand Forks are provided in Chapter 4. The seven 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.

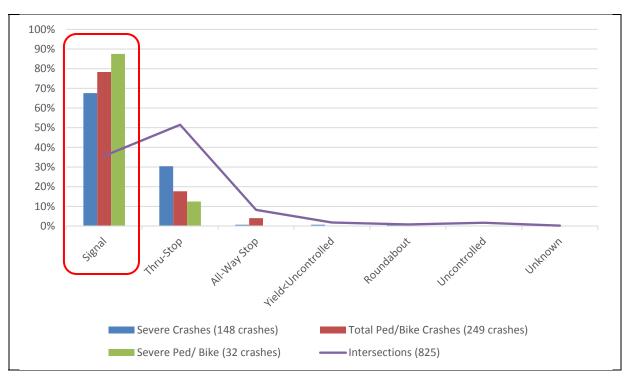


FIGURE 2-24
Phase 1 and Phase 2 Urban Pedestrian/Bike Crashes by Intersection Traffic Control Devices

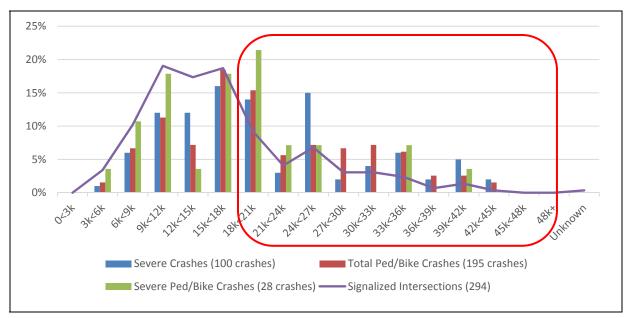


FIGURE 2-25
Phase 1 and Phase 2 Urban Pedestrian and Bicycle Crashes by ADT

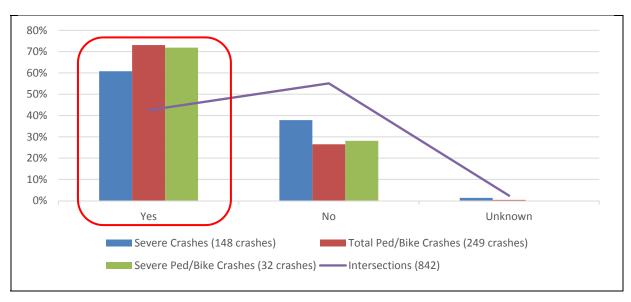


FIGURE 2-26
Phase 1 and Phase 2 Pedestrian and Bicycle Crashes at Urban Intersection with a Pedestrian Generator

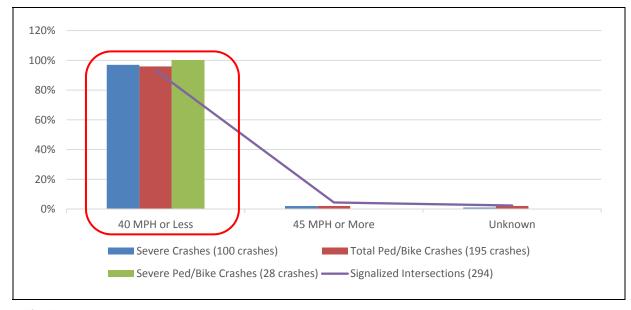


FIGURE 2-27
Phase 1 and Phase 2 Urban Pedestrian and Bicycle Crashes by Speed Limit

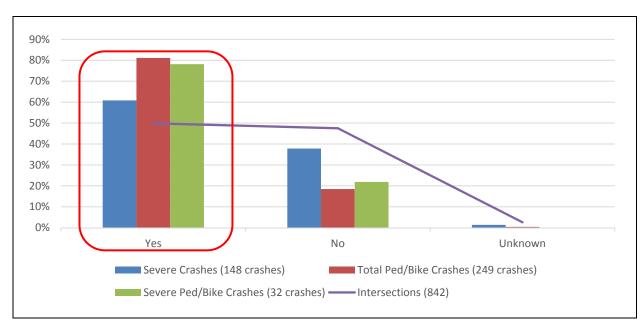


FIGURE 2-28
Phase 1 and Phase 2 Urban Pedestrian and Bicycle Crashes by Crosswalk Presence

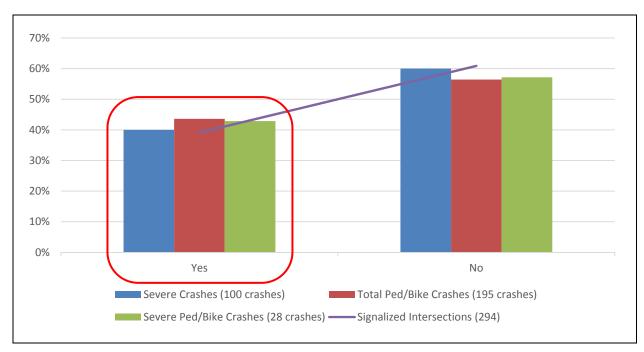


FIGURE 2-29
Phase 1 and Phase 2 Urban Pedestrian and Bicycle Crashes by Bus Stop Presence

## 2.4 Grand Forks Region Risk Summary

Table 2-3 summarizes the risk factors, ranges, and sources used in the Grand Forks region's systemic analysis.

TABLE 2-3
Grand Forks Region Risk Summary

Grand Forks Region Risk Summary	Grand Forks Region				
Risk Factors	Minimum	Maximum	Source		
Rural Roadway Segments			'		
ADT Range	525	Unlimited	Urban-Rural Phases 1 and 2		
Lane Departure Density	0.064	Unlimited	Urban-Rural Phases 1 and 2		
Access Density	8	Unlimited	Urban-Rural Phases 1 and 2		
Curve Critical Radius Density	0.095	Unlimited	Urban-Rural Phases 1 and 2		
ERA	2	3	All Rural Phases 1 and 2		
Rural Curves					
Radius	500	1,200	National		
ADT Range	500	Unlimited	Urban-Rural Phases 1 and 2		
Intersection on Curve	Pres	ent	All Rural Phases 1 and 2		
Visual Trap	Pres	ent	All Rural Phases 1 and 2		
Serious Crashes	1 Unlimited		All Rural Phases 1 and 2		
Rural Intersections					
ADT Cross Product	60,000 Unlimited		All Rural Phases 1 and 2		
Skew	Pres	ent	National		
On/Near Curve	Pres	ent	National		
Development	Pres	ent	National		
Railroad Crossing	Pres	ent	National		
Previous STOP >5 Miles	Pres	ent	National		
Total Crashes	1	Unlimited	Urban-Rural Phases 1 and 2		
Urban Roadway Segments					
ADT	6,000	Unlimited	All Urban Phases 1 and 2		
Road Geometry	Multi	lane	All Urban Phases 1 and 2		
Access Density	30	Unlimited	All Urban Phases 1 and 2		
Corridor Speeds	Low (≤4	0 mph)	All Urban Phases 1 and 2		
Serious Rear-End, Sideswipe, or Head-On Crash	1	Unlimited	All Urban Phases 1 and 2		
Urban Right-Angle Crash Corridors	\$				
Entering ADT	18,000 Unlimited		All Urban Phases 1 and 2		
Traffic Control	Sig	nal	All Urban Phases 1 and 2		
Major Corridor Speeds	Low (≤4	0 mph)	All Urban Phases 1 and 2		
Road Geometry	Divid	ded	All Urban Phases 1 and 2		
Total Lanes on Major Approach	≤6 Approa	ch Lanes	All Urban Phases 1 and 2		
Serious Crashes	1	Unlimited	All Urban Phases 1 and 2		

TABLE 2-3
Grand Forks Region Risk Summary

	Grand Forks Region				
Risk Factors	Minimum	Maximum	Source		
Urban Pedestrian and Bicycle Cras	h Corridors				
Traffic Control	Signal		All Urban Phases 1 and 2		
Entering ADT	18,000 Unlimited		All Urban Phases 1 and 2		
Major Corridor Speeds	Low (≤4	0 mph)	All Urban Phases 1 and 2		
Pedestrian Generator	Ye	es	All Urban Phases 1 and 2		
Marked Crosswalk	Ye	s	All Urban Phases 1 and 2		
Pedestrian/Bicycle Crashes	1 Unlimited		All Urban Phases 1 and 2		
Bus Stop	Yes		Cities of Grand Forks, Fargo, and West Fargo only		



## 3.0 Grand Forks Region 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 incapacitating injuries. The primary sources for these strategies are the National Cooperative Highway Research Program (NCHRP) *Report 500* series and the National Highway Traffic Safety Administration (NHTSA) *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, (Seventh Edition, 2013). 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. NCHRP *Report 500* series assigns strategies 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 and NHTSA 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 3-10). 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 effectiveness of the strategy to influence driver behavior based on current best practice and evaluation research results when available.

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

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TABLE 3-1 Impaired Driving Strategies (Behavioral Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Eliminate Drinking and Driving	A1 – Promote Responsible Beverage Service Policies for Alcohol Servers and Retailers	Moderate	Advocate for responsible alcohol server and retailer training and compliance checks.
	A2 – Employ Alcohol Screening and Brief Interventions	Proven	Implement health care provider interventions with crash victim after an alcohol- related crash (traumatic event) to screen for alcohol use problems, educate on risks of impaired driving, and treatment referral. Develop fact sheets and materials to be used.
	A3 – Support Community Programs for Alternative Transportation	Moderate	Employ "Safe Cab" initiatives via partnership among beer distributors, bar owners and/or county/city community programs. Conduct public outreach on accessible safe-ride alternatives.
	A4 – Promote ND "No Refusal" Law	Moderate	Educate high-risk populations/communities on North Dakota's new "No Refusal" law where consequences of DUI test refusal are greater than test failure.
	A5 – Promote Sobriety Initiatives for DUI offenders	Proven	Promote 24/7, DUI courts, and ignition interlock programs through educating local judicial and legal counsel members, probation officers, counseling and treatment providers as well as the general public.
B – Enforce DWI Laws	<b>B1</b> – Conduct Regular High- Visibility DUI Enforcement Saturations	Proven	Conduct a multi-agency, multi-squad car enforcement effort. Agencies work in collaboration to provide data-driven, high-visibility education/media outreach and enforcement for high-risk roadways.
	<b>B2</b> – 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.
	<b>B3</b> – Educate and Enforce Zero Tolerance Laws for Drivers Under Age 21	Tried	Conduct education and high-visibility enforcement through community events including local media and public outreach about underage drinking and driving.
	<b>B4</b> – Monitor Prosecution and Sentencing of DUI Offenders	Moderate	Monitor prosecution and judicial sentencing of DUI cases Courts or Intensive Supervision Programs
	<b>B5</b> – Strengthen Alcohol Compliance	Tried	Promote judicial monitoring of "last place of drink" for bar-related DUI offenders and notify establishments of their over-serving.

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

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Enforce Seat Belt use laws	A1 – Conduct High-Visibility Enforcement to Maximize Restraint Use	Proven	Conduct a multi-agency, multi-squad car enforcement effort. Agencies work in collaboration to provide data-driven, saturated, high-visibility enforcement coupled with media outreach targeted toward high-risk populations. Conduct enhanced enforcement on North Dakota's secondary roads.  Incorporate enhanced nighttime enforcement including multi-agency (when possible) and multiple squad cars in well-lit areas where slow-moving vehicles are passing and conducting seat belt observations for a limited time.
	A2 - Enforce Secondary Belt Use Law	Proven	Reinforce officers issuing second belt use ticket during traffic stops.
	A3 – Pursue Tribal Ordinances for Primary Enforcement of Seat Belt Laws.	Proven	Under tribal ordinance, pursue primary seat belt enforcement for occupants in all seating positions.
B – Maximize use of occupant restraints by all vehicle occupants	<b>B1</b> – Encourage Employer Traffic Safety Programs and Policies	Tried	Encourage employers to offer traffic safety education programs to employees and to enact traffic safety policies with clear consequences for failure to comply. Utilize materials and policy statements designed for employers by Network of Employers for Traffic Safety.
	<b>B2</b> – Brief intervention regarding unbelted risks	Experimental	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.
	B3 – Provide Insurance Incentives	Experimental	Promote local insurance provider incentives (for example, reduced premium rates) for safe driving practices including belt use at the time of traffic crash.

TABLE 3-3
Speed and Aggressive Driving Strategies (Behavioral Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Deter aggressive driving for high-risk populations and	A1 – Identify High-Risk Speed Locations/Corridors for Enforcement.	Proven	Analyze crash data to define high-risk speed locations for enhanced enforcement and public outreach efforts.
locations	A2 – Conduct High-Visibility Enforcement of Speeding and Aggressive Driving	Proven	Conduct a multi-agency, multi-squad car enforcement effort. Agencies work in collaboration to provide data-driven, saturated, high-visibility enforcement at high-risk speed corridors/roadways coupled with media outreach to high-risk populations.
	A3 – Pursue Local/Tribal Use of Automated Enforcement in High-Risk Areas	Proven	Pursue the use of automated enforcement in high-risk highway work zones and school crossing zones through the use of local/tribal safety ordinances.
	A4 – Conduct Enhanced Enforcement of Red Light Running	Proven	Provide enhanced enforcement for red-light-running violators using officer enforcement support for intersection RLR confirmation lights.
B – Maximize driver compliance and awareness	<b>B1</b> – Conduct Brief Interventions for Speed- Related Injuries	Tried	Implement health care provider brief intervention with crash victim after crash (traumatic event) due to excessive speed on speed risks and consequences. Develop fact sheets and materials to be used.
	<b>B2</b> – Increase Driver Awareness of Speed Using Speed Reader Boards	Proven	Expand use of speed reader boards providing feedback to drivers on their actual speed (for example, flash warnings when speeds exceeds limit). Most effective in slowing traffic on residential streets, near school zones and around playgrounds.

**TABLE 3-4** Young Driver Strategies (Behavioral Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Publicize, enforce, and adjudicate laws pertaining to young drivers	A1 – Conduct high visibility enforcement of GDL, no cell and texting laws, underage drinking and driving, and seatbelt use laws	Proven	Conduct enhanced enforcement and public outreach for young driver safety. Publicizing is best done through community events to attract local media and a community public education campaign about young driver laws, enhanced enforcement, and the necessary parental involvement.
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	Promote required parent education component of local driver education programs (private and public school providers) 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.
	B2 – Promote use of invehicle 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 invehicle monitoring devices for parental monitoring and coaching.
	<b>B3</b> – Promote Safe Teen Driving Outreach	Tried	Encourage driver education, local insurance, and public health organizations to provide teens and their parents 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 on-line driving logs.
	<b>B4</b> – Provide information on insurance provider parentteen 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.
C – Educate Young Drivers	C1 – Brief interventions regarding driving risks and consequences	Experimental	When teen driver receives a moving violation or is involved in a crash, health care provider conducts brief intervention with crash victim after crash (traumatic event) on driving risks and consequences
	C2 – Conduct Peer-to-Peer safety outreach	Moderate	Promote peer education of traffic safety through peer-to-peer outreach campaigns and contests to engage teens on teen driving risks and socially reinforced safe driving behaviors.

TABLE 3-5 Cross-Cutting Safety Strategy (Behavioral Strategy)

Ok	bjectives	Strategies	Effectiveness	Programs and Tactics
Quali Timel	mproved ity and liness of h Data	A1 – Local and Tribal Enforcement use of Traffic and Criminal Software (TraCS)		Promote local and tribal enforcement full deployment of TraCS for in-the-field incident reporting and electronic submission of crash reports to the NDDOT.

TABLE 3-6 Speeding Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate <sup>1</sup>	Timeframe for Implementation <sup>2</sup>
A – Set appropriate speed limits	A1 – Install speed signage using variable message signs in school zones	Tried	Low	Medium
B – Communicate appropriate speeds	B1 – Implement dynamic speed feedback signs, including dynamic message boards at rural to urban transitions	Tried	Low	Medium
through use of traffic control devices	<b>B2</b> – Use <b>in-pavement</b> measures to communicate the need to reduce speeds	Tried	Moderate	Short
C – Ensure that roadway supports appropriate and safe speeds	C1 – Effect safe speed transitions through design elements and on approaches to lower-speed areas	Tried	High	Long

 $<sup>^{1}</sup>$  Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection

 $<sup>^{2}</sup>$  Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

TABLE 3-7
Lane Departure Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate <sup>1</sup>	Timeframe for Implementation <sup>2</sup>
A – Keep vehicles from encroaching on the	A1 – Install edge rumble strips (shoulder or edge line)	Proven	Low	Short
roadside	A2 – Install enhanced pavement markings, 6-inch edge line, or embedded wet-reflective pavement markings on section with narrow or no paved shoulders	Experimental/ Tried	Low	Short
	A3 – Provide enhanced shoulders, lighting, delineation (for example, Chevrons), or pavement markings for sharp horizontal curves	Tried / Proven	Low	Short
	A4 – Provide skid-resistance pavement surfaces	Proven	Moderate	Medium
	A5 – Apply shoulder treatments *Eliminate shoulder drop-offs *Safety edge *Widen and/or pave shoulders	Experimental/ Proven	Moderate	Medium
B – Minimize the likelihood of crashing	B1 – Design safer slopes and ditches to prevent rollovers	Proven	Moderate to High	Medium
into an object or overturning if the vehicle travels off the shoulder	B2 – Remove/relocate objects in hazardous locations	Proven	Moderate to High	Medium
C – Reduce the severity of the crash	C1 – Improve design and application of barrier and attenuation systems	Tried	Moderate to High	Medium
D – Keep vehicles from	D1 - Install centerline rumble strips for two-lane roads	Tried	Low	Short
encroaching into opposite lane	D2 – Reallocate total two-lane roadway width (lane and shoulder) to include a "buffer median"	Tried	Low	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")	Tried	Moderate to High	Medium

 $<sup>^{1}</sup>$  Cost: Low = <\$10,000 per mile; Moderate = \$10,000 to \$100,000 per mile; High = >\$100,000 per mile

<sup>&</sup>lt;sup>2</sup> Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

TABLE 3-8 Signalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate <sup>1</sup>	Timeframe for Implementation <sup>2</sup>
A – Reduce frequency and severity of	A1 - Optimize signal operation (phasing/timing, etc.)	Tried / Proven	Low	Short
intersection conflicts	A2 – Optimize clearance intervals	Proven	Low	Short
through traffic control and operational improvements	A3 – Employ signal coordination along a corridor or route	Proven	Low	Medium
improvemente	A4 – Employ emergency vehicle preemption	Proven	Moderate	Medium
B – Reduce intersection conflicts through geometrics	B1 – Provide/improve left-turn channelization	Proven	Moderate	Long
C – Improve pedestrian safety with signal	C1 – Install countdown timers	Tried	Low	Short
improvements	C2 – Re-time signals to provide a leading pedestrian interval (advanced walk)	Tried	Low	Short
D – Improve driver awareness of intersections and signal control	D2 – Improve visibility of signals (overhead indications, 12-inch lenses, background shields, LED's) and signs (mast arm mounted street names) and signs (mast arm mounted street names) at intersections	Tried	Low	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	Tried	Low	Short
F – Improve safety through other infrastructure treatments	F1 – Restrict or eliminate parking on intersection approaches	Proven	Low	Short

<sup>&</sup>lt;sup>1</sup> Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection

<sup>2</sup> 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	Effectiveness	Cost to Implement and Operate <sup>1</sup>	Timeframe for Implementation <sup>2</sup>
A – Reduce the frequency and	A1 – Provide left-turn lanes at intersections	Tried	Moderate	Medium
severity of intersection conflicts	A2 – Provide offset turn lanes at intersections	Proven	Moderate	Medium
through geometric design improvements	A3 – Realign intersection approaches to reduce or eliminate intersection skew	Tried	Moderate to High	Medium
accign improvement	A4 – Improve pedestrian and bicycle facilities to reduce conflicts between motorists and nonmotorists	Proven	High	Medium
	<b>A5</b> – Use <b>indirect left-turn treatments</b> to minimize conflicts at divided highway intersections	Varies	Moderate	Medium
B – Improve sight distance at unsignalized intersections	<b>B1 – Clear sight triangle</b> on approaches and in medians by clearing grub, eliminating parking, etc	Tried	Moderate	Medium
C – Improve driver awareness of intersections as	C1 – Improve visibility of intersections by providing enhanced signing, delineation or pavement markings/messages (stop bar, larger regulatory signs, LED stop signs, etc)	Tried	Low	Short
viewed from the intersection approach	C2 – Improve visibility of intersections by providing appropriate street lighting	Tried	Low	Short
	C3 – Install larger regulatory and warning signs at intersections, including the use of dynamic warning signs at appropriate intersections	Proven	Low to Moderate	Medium
	C4 – Call attention to the intersection by installing rumble strips or splitter islands on intersection approaches	Tried	Low	Short
D – Appropriate intersection traffic control to minimize crash frequency and severity	D1 – Construct roundabouts at appropriate locations	Tried	Low to Moderate	Medium

 $<sup>^{1}</sup>$  Cost: Low = <50,000 per intersection; Moderate = 50,000 to 500,000 per intersection; High = >500,000 per intersection

<sup>&</sup>lt;sup>2</sup> Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

TABLE 3-10
Urban Segment Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate <sup>1</sup>	Timeframe for Implementation <sup>2</sup>
A – Include pedestrian and bicycle	A1 – Install sidewalks in appropriate locations	Proven	Moderate to High	Medium
accommodations	A2 – Minimize pedestrian crossing distances using curb extensions or median islands	Proven	Low	Medium
B – Improve roadway configuration to accommodate left turns	<b>B1</b> – Restripe roadway to a <b>three-lane (road diet) or five-lane</b> cross-section.	Proven	Low	Medium
C – Improve access management near intersections	C1 – Restrict or eliminate turning maneuvers by providing channelization or closing median openings	Tried	Low	Short
	C2 – Restrict access to properties using driveway closures or turn restrictions	Tried	Low	Medium
	C3 – Restrict cross-median access near intersections	Tried	Low	Medium

 $<sup>^{1}</sup>$  Cost: Low = <50,000 per intersection; Moderate = 50,000 to 500,000 per intersection; High = >500,000 per intersection

<sup>&</sup>lt;sup>2</sup> Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

## 3.3 Safety Strategies Workshop

A Safety Planning Workshop was held with representatives from Grand Forks County and the City of Grand Forks on December 6, 2013. Two additional workshops were held in Valley City and Fargo as part of the LRSP Phase 2 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 Bill Vasicek (Altru Health System), Lt. David Wolf (North Dakota Highway Patrol), Sgt. Macki and Lt. Ferguson (Grand Forks Police), Lt. BJ Maxson (Grand Forks County Sheriff's Department), and Jane Williams (City of Grand Forks) who 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 discussed potential safety strategies and began the process of prioritizing the strategies. The group reviewed and discussed driver-behavior and 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 the Grand Forks region are:

## • Behavioral strategies

- Court monitoring of prosecution and sentencing of DUI offenders
- Conduct high-visibility targeted enforcement of speeding and aggressive driving
- Conduct enhanced enforcement of red light running
- Encourage driver education providers to require parent education component
- Conduct high-visibility targeted enforcement to maximize restraint use
- Pursue local support for primary seat belt law

#### Infrastructure strategies

- Install edge rumble strips
- Implement dynamic speed feedback signs, including dynamic message boards at rural to urban transitions
- Supplement conventional enforcement of red-light running with confirmation lights;
   include a public information campaign to increase awareness and compliance
- Improve visibility of intersections by providing appropriate street lighting
- Restrict or eliminate turning maneuvers by providing channelization or closing median openings

Infrastructure 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 the FHWA's CMF [Crash Modification Factors] Clearinghouse and other published research. Table 3-11 provides a summary for driver behavior strategies reviewed in Chapter 5 of this report. In addition, Table 3-11 provides a summary of the crash reduction factors that were found in the CMF Clearinghouse for infrastructure safety strategies considered and/or suggested for Grand Forks, along with an estimated unit cost for each strategy. Most factors reported are based on research that was assigned with higher-quality ratings.

**TABLE 3-11**Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor <sup>a</sup>	Typical Installation Costs	
Impaired Driving			
Court monitoring of prosecution and sentencing of DUI offenders	Higher conviction rates; and stronger penalties	Low cost for a volunteer program	
Speeding and Aggressive Driving			
Conduct high-visibility targeted enforcement of speeding and aggressive driving	3%	Up to \$50 per hour of officer overtime plus media costs	
Conduct enhanced enforcement of red light running	25% to 84% reduction in violations	Up to \$50 per hour of officer overtime	
Young Drivers			
Encourage driver education providers to require parent education component	2%	\$1,500 per school district	
Seat Belt Use			
Conduct high-visibility targeted enforcement to maximize restraint use	3%	Up to \$50 per hour of officer overtime	
Pursue local support for primary seat belt law	9% increase in observed belt use when a state law is passed	Low to Moderate	
Rural Segments			
4-inch latex edge line		\$1,320 per mile	
4-inch latex centerline		\$660 per mile	
6-inch latex edge line	10% to 45% all rural serious crashes	\$1,980 per mile	
Shoulder or edge line rumble strips	20% run off road crashes	\$4,200 per mile	
Ground in wet-reflective markings		\$36,000 per mile	
Centerline rumble strips	40% head-on/sideswipe- crashes	\$3,600 per mile	
6-inch centerline		\$1,020 per mile	
Rural Curves			
Chevrons	20% to 30%	\$3,960 per curve	
Arrow board only		\$1,200 per curve	

**TABLE 3-11**Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor <sup>a</sup>	Typical Installation Costs
Advance warning sign and advisory speed plaque		\$1,440 per curve
2-foot paved shoulder and shoulder rumble strips	20% to 30% run-off-the-road crashes	\$44,400 per mile +\$3,600 per mile
Rural Intersections		
Roundabout	20% to 50% all crashes/ 60% to 90% right-angle crashes	\$3,000,000 per intersection
Directional median (RCI or J-Turn)	17% all crashes/ 100% angle crashes	\$900,000 per intersection
Mainline dynamic warning sign	50% all crashes/ 75% serious right-angle crashes	\$60,000 per intersection
Close median		\$30,000 per intersection
Intersection lighting	25% to 40% nighttime crashes	\$10,200 per streetlight
Upgrade signs and pavement markings	40% upgrade of all signs and pavement markings/ 15% for STOP AHEAD pavement marking	\$2,640 per approach <sup>b</sup>
Clear sight triangle	37% serious injury crashes <sup>c</sup>	\$2,940 per intersection d
Urban		
Conversions (three-lane/five-lane)	30% to 50%	\$30,000 per mile [three-lane] \$42,000 per mile [five-lane] +\$30,000 per signalized intersection for updates (for example, loop and signal head placement)
Access management	5% to 31%	\$360,000 per mile <sup>e</sup>
Signal – confirmation lights	25% to 84% reduction in violations	\$1,200 per two approaches
Pedestrian/bicycle – advanced walk	Up to 60% pedestrian/ vehicle crashes	\$0 per intersection
Pedestrian/bicycle – countdown timers	25% vehicle/pedestrian crashes	\$12,000 per intersection
Pedestrian/bicycle – curb extensions	Increase in vehicles yielding to pedestrians	\$36,000 per corner
Pedestrian/bicycle – median refuge island	46% in vehicle/pedestrian crashes	\$24,000 per approach

- <sup>a</sup> Crash reduction factors based on review of CMF Clearinghouse and other published research
- <sup>b</sup> Includes \$540 per STOP sign, \$540 per junction sign assembly, \$600 per STOP AHEAD sign, \$600 per STOP AHEAD pavement marking message, and \$360 per stop bar
- <sup>c</sup> Reduction based on increasing sight distance triangle
- <sup>d</sup> Inclusive of sign upgrades identified and materials and labor for clearing of sight triangle.
- <sup>e</sup> 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.

N/A = not applicable

# 4.0 Grand Forks Region Infrastructure Safety Projects

## 4.1 Grand Forks Region 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 or city's documented safety emphasis areas and target crash types. These emphasis areas account for the greatest number of serious crashes occurring on the local road system. Mitigating the factors that contribute to these crashes will assist each county in reducing serious 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 the NDDOT's SHSP with a focus on proven effectiveness at reducing the target crash type and low cost of implementation. Proveneffective 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 on roadway segments
- Angle crashes and pedestrian and bicycle crashes at intersections

For consistency across the Grand Forks region, project decision trees were created so that locations with similar characteristics across the county 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 roadway 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 revised in accordance with input from the local agencies and NDDOT.

High-priority rural roadway segment projects focused on addressing the most common type of serious 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).

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, a curve is eligible for a safety improvement project in three ways.

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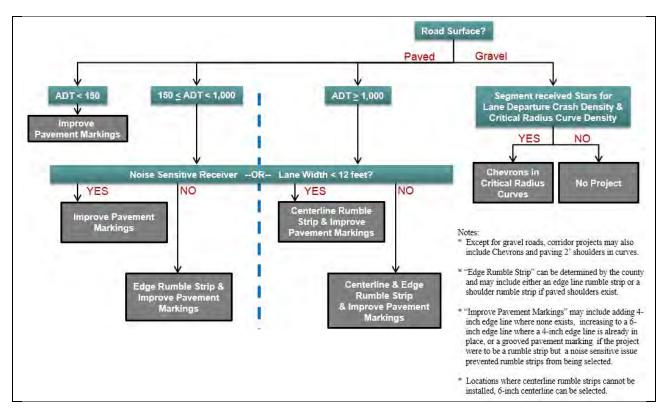


FIGURE 4-1 High-Priority Rural Roadway Segment Project Decision Tree

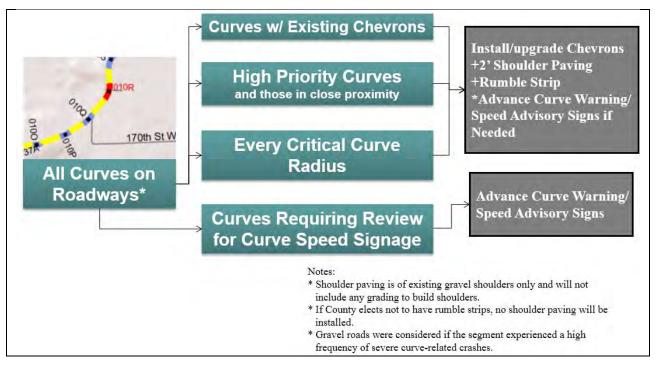


FIGURE 4-2 High-Priority Rural Curve Project Decision Tree

High-priority rural intersection projects (Figure 4-3) focused on addressing the most common type of serious 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.

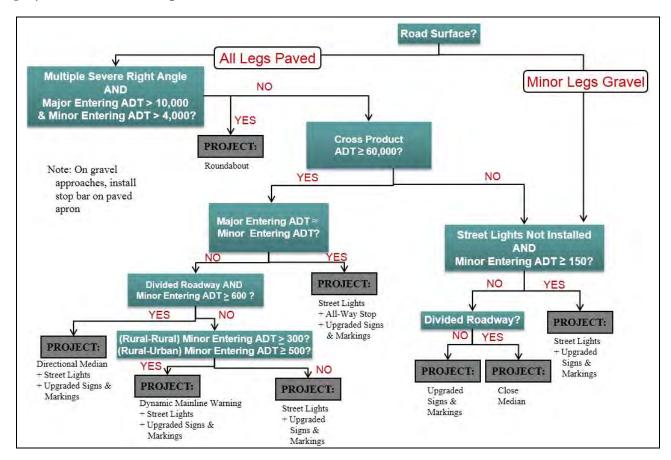


FIGURE 4-3 High-Priority Rural Intersection Project Decision Tree

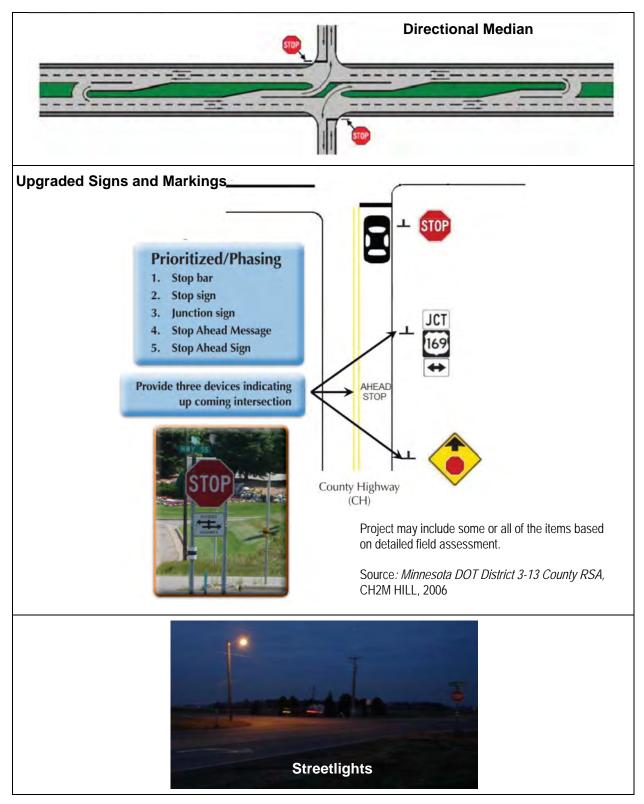


FIGURE 4-4 Intersection Safety Strategies Considered for Deployment

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. This buffer space would be created by converting to a three-lane or five-lane roadway and by better managing access along divided arterials (Figure 4-5).

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

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

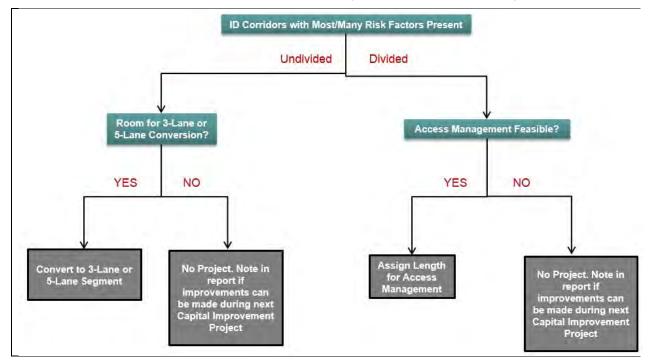


FIGURE 4-5 High-Priority Urban Roadway Segment (Turning) Project Decision Tree

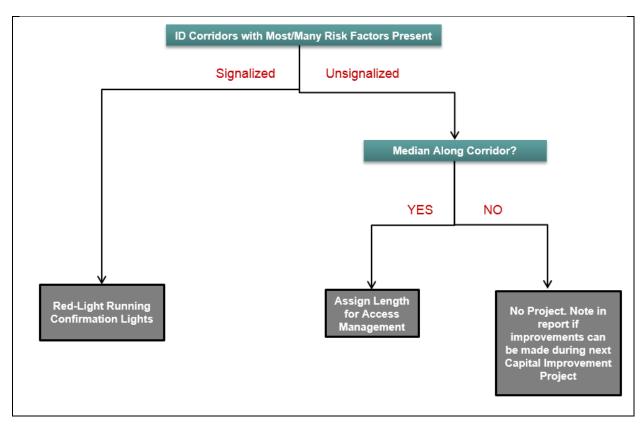


FIGURE 4-6 High-Priority Urban Right-Angle Intersection (Signalized) Project Decision Tree

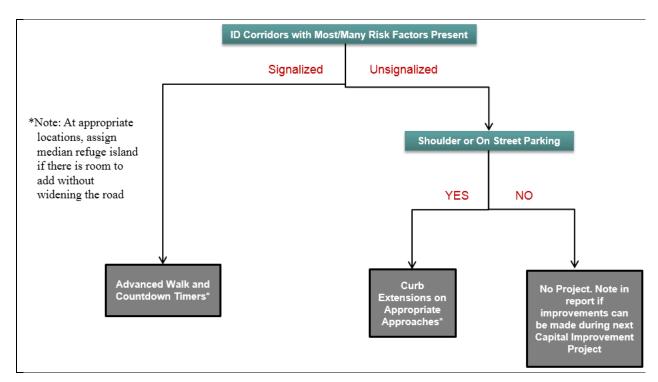


FIGURE 4-7 High-Priority Urban Pedestrian and Bicyclist Intersection Project Decision Tree

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 of the location from the LRSP process (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 Grand Forks region are described in the following sections. The costs assigned to each project are planning level estimates and do not include right-of-way. 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 the Grand Forks region 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 SHSP.

It is not expected or required that the county or city pursue safety projects in the suggested ranking order. The ranking suggests general priorities, given that actual project development decisions will be made by county or city 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. The county or city 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 the Grand Forks region is \$4,154,857. A cost breakout by project type and county/city is provided in Table 4-1.

TABLE 4-1
Grand Forks Region Total Safety Project Costs

Rural Projects	Roadway Segments	Intersections	Curves	Total
Grand Forks County	\$375,457	\$2,586,180	\$302,820	\$3,264,457
Urban Projects	Roadway Segments	Intersections – Right-Angle	Intersections – Pedestrians and Bicyclists	Total
City of Grand Forks	\$60,000	\$57,600	\$772,800	\$890,400

## **Grand Forks County**

The total project cost suggested for Grand Forks County is \$3,264,457. 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 Figure 4-9. These locations are described in further detail in Appendix: Grand Forks County, along with priority rankings and suggested project sheets.

TABLE 4-2
Grand Forks County Project Costs

Project Type	Cost
Intersections	\$2,586,180
Roadway Segments	\$375,457
Curves	\$302,820
Total	\$3,264,457

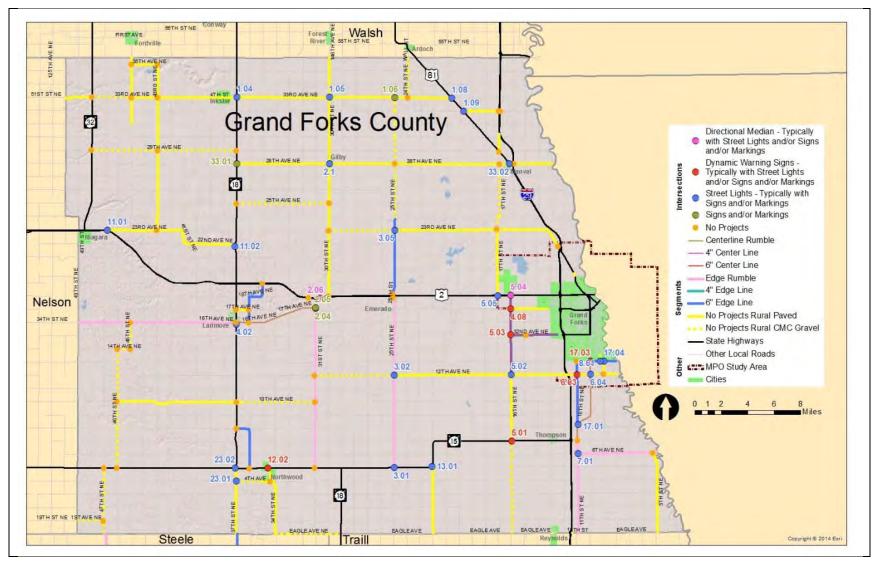
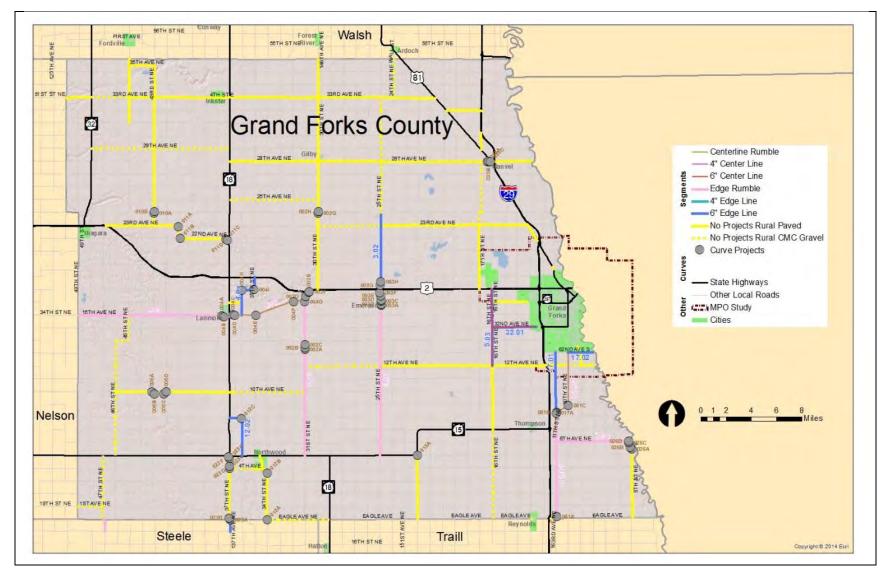


FIGURE 4-8
Grand Forks County Projects Location Map—Roadway Segments and Intersection Projects



**FIGURE 4-9**Grand Forks County Projects Location Map—Roadway Segments and Curve Projects

## City of Grand Forks

The total project cost suggested for the City of Grand Forks is \$890,400. The project cost breakout for roadway segment, right-angle intersection, and pedestrian/bicyclist intersection projects are listed in Table 4-3. High-priority locations that received a project are shown in Figure 4-10 and Figure 4-11. These locations are described in further detail in Appendix: City of Grand Forks, along with priority rankings and suggested project sheets.

TABLE 4-3 City of Grand Forks Project Costs

Project Type	Cost
Roadway Segments	\$60,000
Right-Angle Intersections	\$57,600
Pedestrian and Bicyclist Intersections	\$772,800
Total	\$890,400

Twelve roadway segments identified as high-priority locations did not receive projects. These roadway segments are already three-lane, five-lane, or divided sections, therefore no projects were suggested since these existing treatments reduce rear-end and head-on crashes (Table 4-4).

TABLE 4-4
City of Grand Forks Urban Roadway Segment Locations with Existing Treatments

Segment ID	Local Name	Segment Start	Segment End	Treatment In Place
830.02	DeMers Ave/ ND 297	I-29 Western Ramps	ND/MN Border	Existing Divided/Five-Lane
807.02	Columbia Rd S	36th Ave S	9th Ave S	Existing Divided/Five-Lane
838.01	US 2/Gateway Dr	55th St N	Columbia Rd	Existing Divided
807.03	Overpass – Columbia Rd	9th Ave S	University Ave	Existing Access Managed/Narrow Overpass
825.02	17th Ave S	16th St S	12th St S	Existing Five-Lane
810.04	S Washington St	Hammerling Ave	DeMers Ave/ND 297	Existing Five-Lane
835.01	6th Ave N	42nd St N	Columbia Rd	Existing Three-Lane
822.02	32nd Ave S	I-29 Western Ramps	S Washington St	Existing Divided/Access Managed
803.03	42nd St N/S	17th Ave S	6th Ave N	Existing Five-Lane
832.02	University Ave	42nd St N	20th St N	Existing Divided/Five-Lane
807.04	Columbia Rd N	University Ave	US 2/Gateway Dr	Existing Divided
810.03	S Washington St	32nd Ave S	Hammerling Ave	Existing Divided

All intersection corridors identified as high-priority intersections received projects.

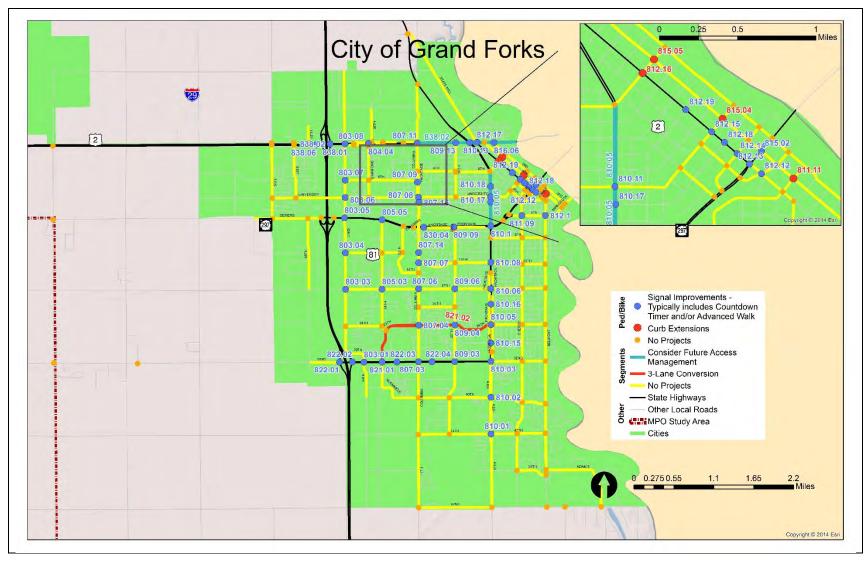


FIGURE 4-10
City of Grand Forks Projects Location Map—Roadway Segments and Pedestrian and Bicycle Projects

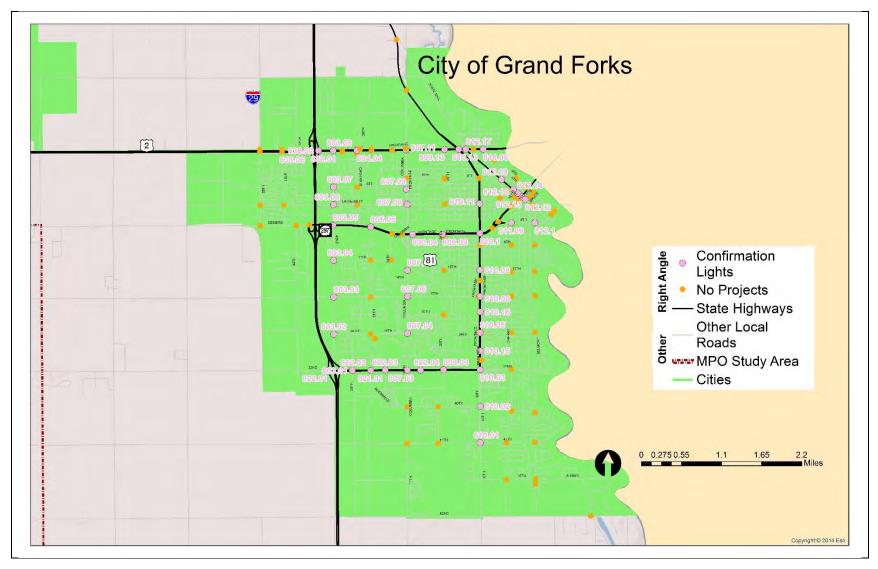


FIGURE 4-11
City of Grand Forks Projects Location Map—Right Angle Intersection Projects

23 USC 409 NDDOT Reserves All Objections

Grand Forks County

# **Grand Forks County Summary of Suggested Rural Segment Projects**

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	6" Edge Lines	Edge Rumble Strip	Center Line Rumble	6" Center Line	Project Cost (\$)
1	17.02	Grand Forks 17	Intersection with 11th St NE	Intersection with 16th St SE	2.9	****	0.0	2.9	0.0	0.0	0.0	\$5,742.00
2	17.01	Grand Forks 17	Intersection with Grand Forks 81/11th St NE	Intersection with 62nd Ave S	4.8	****	0.0	4.8	0.0	0.0	0.0	\$9,504.00
3	3.02	Grand Forks 3	Intersection with US 2/18th Ave	Intersection with 24th Ave NE (Mekinock)	5.9	***	0.0	5.9	0.0	0.0	0.0	\$11,682.00
4	3.01	Grand Forks 3	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	13.0	***	0.0	2.0	11.1	0.0	0.0	\$50,271.00
5	32.01	Grand Forks 32	Intersection with Grand Forks 5/16th St NE	Grand Forks western city limits	3.5	***	0.0	3.5	0.0	0.0	3.5	\$10,500.00
6	5.03	Grand Forks 5	Intersection with Grand Forks 6/12th Ave NE	Intersection with US 2/18th Ave/Gateway Dr	6.0	***	0.0	6.0	0.0	0.0	6.0	\$18,000.00
7	81.02	Grand Forks 81	7th Ave NE	Intersection with Grand Forks 17/62nd Ave S	6.5	***	0.0	0.0	6.5	6.5	0.0	\$50,700.00
8	4.02	Grand Forks 4	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	6.3	***	0.0	1.3	5.0	5.0	1.3	\$43,092.00
9	7.01	Grand Forks 7	Intersection with Grand Forks 81/11th St NE	North Dakota/Minnesota State Line	7.0	***	0.0	0.0	7.0	0.0	0.0	\$29,400.00
10	81.01	Grand Forks 81	Grand Forks/Traill County Line	7th Ave NE	7.1	***	0.0	0.0	7.1	0.0	0.0	\$29,820.00
11	4.03	Grand Forks 4	Intersection with Grand Forks 4/16th Ave NE	Intersection with US 2/19th Ave NE	3.9	***	0.0	3.9	0.0	0.0	0.0	\$7,722.00
12	2.01	Grand Forks 2	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	13.1	**	0.0	0.7	12.4	0.0	0.0	\$53,565.90
13	4.01	Grand Forks 4	Grand Forks/Nelson County Line	Intersection with ND 18/37th St NE	12.0	**	0.0	1.2	10.8	0.0	0.0	\$47,736.00
14	12.02	Grand Forks 12	Intersection with ND 18/5th Ave NE (Northwood)	Intersection with ND 18/37th St NE	3.9	**	0.0	3.9	0.0	0.0	0.0	\$7,722.00
	23 USC	409					0.0	36.0	59.9	11.5	10.8	\$375,456.90

# **Grand Forks County**

Rural Segment Listing
\*High Priority Segments Project Sheet Page Number

23 USC 409 NDDOT Reserves All Objections

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 Assesment
	1.01	Grand Forks		Grand Forks/Nelson County Line	Intersection with ND 32/48th St NE	2.0	1	90	0.10	5.9	0.00	1
	1.03	Grand Forks		Intersection with Grand Forks 19/45th St NE	Intersection with ND 18/37th St NE	8.0	2	224	0.05	7.3	0.00	1
	1.04	Grand Forks		Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/30th St NE	7.0	1	483	0.03	8.1	0.00	1
		Grand Forks		Intersection with Grand Forks 2/30th St NE	Intersection with US 81	9.3	0	376	0.00	5.6	0.00	1
		Grand Forks		Intersection with US 81	Intersection with I-29	2.8	0	85	0.00	6.4	0.00	1
12		Grand Forks		Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	13.1	3	398	0.05	5.4	0.46	2
		Grand Forks		Intersection with US 2/18th Ave	Intersection with Grand Forks 33/28th Ave NE	10.1	2	318	0.04	5.5	0.20	1
		Grand Forks		Intersection with Grand Forks 33/28th Ave NE	Grand Forks/Walsh County Line	8.0	2	333	0.05	4.9	0.00	1
4		Grand Forks		Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	13.0	4	552	0.06	7.8	0.46	2
3		Grand Forks		Intersection with US 2/18th Ave	Intersection with 24th Ave NE (Mekinock)	5.9	1	872	0.03	5.8	0.34	2
13		Grand Forks		Grand Forks/Nelson County Line	Intersection with ND 18/37th St NE	12.0	3	207	0.05	7.7	0.17	2
8		Grand Forks		Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	6.3	7	1,103	0.22	5.7	0.80	1
11	4.03	Grand Forks		Intersection with Grand Forks 4/16th Ave NE	Intersection with US 2/19th Ave NE	3.9	2	150	0.10	12.5	0.51	1
	4.04	Grand Forks		Intersection with ND 18/37th St NE	Intersection with Grand Forks 4A/36th St NE	1.0	0	290	0.00	13.2	0.00	1
	4.05	Grand Forks		Intersection with Grand Forks 5/16th St NE	Intersection with 58th St N (Grand Forks)	2.8	2	3,544	0.14	6.5	0.00	1
	5.02	Grand Forks	5	Intersection with ND 15/7th Ave NE	Intersection with Grand Forks 6/12th Ave NE	5.0	0	658	0.00	6.4	0.00	1
6	5.03	Grand Forks	5	Intersection with Grand Forks 6/12th Ave NE	Intersection with US 2/18th Ave/Gateway Dr	6.0	5	1,860	0.17	9.0	0.00	1
	5.04	Grand Forks		Intersection with US 2/18th Ave/Gateway Dr	Intersection with Grand Forks 11/23rd Ave NE	5.0	0	330	0.00	10.7	0.00	1
	5.06	Grand Forks	5	Intersection with US 81	Intersection with I-29	1.3	0	190	0.00	10.6	0.00	1
	6.01	Grand Forks	6	Intersection with Grand Forks 16/46th St NE	Intersection with 35/5 St NE (Kempton)	9.6	0	140	0.00	6.3	0.42	1
	6.04	Grand Forks	6	Intersection with Grand Forks 3/25th St NE	Intersection with I-29/US 81	13.1	3	489	0.05	7.6	0.00	1
	6.05	Grand Forks	6	Intersection with I-29/US 81	Intersection with Grand Forks 81/10th St NE/S Washington St (Grand Forks)	1.8	7	852	0.79	4.5	0.00	1
9	7.01	Grand Forks	7	Intersection with Grand Forks 81/11th St NE	North Dakota/Minnesota State Line	7.0	1	879	0.03	8.0	0.14	1
	10.01	Grand Forks	10	Intersection with Grand Forks 11/23rd Ave NE	Intersection with Grand Forks 1/33rd Ave NE	10.1	0	140	0.00	7.0	0.20	1
	10.02	Grand Forks	10	Intersection with Grand Forks 1/33rd Ave NE	Intersection with Grand Forks 19/45th St NE	4.5	0	55	0.00	5.8	0.00	1
	11.01	Grand Forks	11	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	10.5	0	214	0.00	6.1	0.38	1
	11.03	Grand Forks	11	Intersection with Grand Forks 3/25th St NE	Intersection with I-29/US 81	13.1	8	375	0.12	7.9	0.08	1
	12.01	Grand Forks	12	Grand Forks/Steele County Line	Intersection with ND 18/5th Ave NE (Northwood)	5.3	0	418	0.00	5.4	0.37	1
14	12.02	Grand Forks	12	Intersection with ND 18/5th Ave NE (Northwood)	Intersection with ND 18/37th St NE	3.9	1	110	0.05	4.4	0.26	2
		Grand Forks		Grand Forks/Traill County Line	Intersection with ND 15/5th Ave NE	5.1	1	195	0.04	7.6	0.20	1
2		Grand Forks		Intersection with Grand Forks 81/11th St NE	Intersection with 62nd Ave S	4.8	5	340	0.21	11.3	0.21	2
1		Grand Forks		Intersection with 11th St NE	Intersection with 16th St SE	2.9	3	868	0.21	11.3	0.00	2
		Grand Forks		Intersection with Grand Forks 6/12th Ave NE	Intersection with Grand Forks 17/62nd Ave S	1.0	0	550	0.00	8.0	0.00	1
		Grand Forks		Intersection with 31st Ave NE	Grand Forks/Walsh County Line	5.0	0	330	0.00	5.0	0.00	1
	23.01	Grand Forks		Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE	5.1	4	326	0.16	4.7	1.19	1
	26.01	Grand Forks		Grand Forks/Traill County Line	Intersection with Grand Forks 7/6th Ave NE	6.1	0	175	0.00	6.6	0.66	1
5	32.01	Grand Forks	-	Intersection with Grand Forks 5/16th St NE	Grand Forks western city limits	3.5	4	2,400	0.23	12.7	0.00	1
		Grand Forks		Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/30th St NE	7.0	0	260	0.00	6.0	0.00	1
		Grand Forks		Intersection with Grand Forks 2/30th St NE	Intersection with US 81	13.7	5	516	0.07	5.9	0.22	1
	33.03	Grand Forks		Intersection with I-29	North Dakota/Minnesota State Line	2.9	1	340	0.07	8.7	0.00	<u>·</u> 1
10	81.01	Grand Forks		Grand Forks/Traill County Line	7th Ave NE	7.1	3	758	0.08	7.9	0.14	 1
7	81.02	Grand Forks		7th Ave NE	Intersection with Grand Forks 17/62nd Ave S	6.5	6	1,655	0.18	6.6	0.31	<u>.</u> 1
				-		272.1	87	,	-		-	

Edge Risk Legend

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

Critical ADT Range - Lane Departure
525
100,000 Min Max

Lane Critical Radius Departure Curves Access 87 29 Total Total Mileage 272.1 272.1 272.1 Average Density (Total/Mile) 0.0 0.06 0.11

														Tiebre	akers
#				•	<u> </u>				Lane Departure	Access	Curve Critical	Edge			
	Corridor	Route	#	Start	End	Length	ADT	ADT Range	Density	Density	Radius Density	Risk	Totals	Edge Risk	ADT
1	17.02	Grand Forks	17	Intersection with 11th St NE	Intersection with 16th St SE	2.9	868	*	*	*		*	****	2	868
2	17.01	Grand Forks	17	Intersection with Grand Forks 81/11th St NE	Intersection with 62nd Ave S	4.8	340		*	*	*	*	****	2	340
3	3.02	Grand Forks	3	Intersection with US 2/18th Ave	Intersection with 24th Ave NE (Mekinock)	5.9	872	*			*	*	***	2	872
4		Grand Forks	3	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	13.0	552	*			*	*	***	2	552
5	32.01	Grand Forks	32	Intersection with Grand Forks 5/16th St NE	Grand Forks western city limits	3.5	2,400	*	*	*			***	1	2,400
6	5.03	Grand Forks	5	Intersection with Grand Forks 6/12th Ave NE	Intersection with US 2/18th Ave/Gateway Dr	6.0	1.860	*	*	*			***	1	1.860
7	81.02	Grand Forks	81	7th Ave NE	Intersection with Grand Forks 17/62nd Ave S	6.5	1.655	*	*		*		***	1	1.655
8	4.02	Grand Forks	4	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	6.3	1,103	*	*		*		***	1	1,103
9		Grand Forks	7	Intersection with Grand Forks 81/11th St NE	North Dakota/Minnesota State Line	7.0	879	*		*	*		***	1	879
10	-	Grand Forks	81	Grand Forks/Traill County Line	7th Ave NE	7.1	758	*	*		*		***	1	758
11	4.03	Grand Forks	4	Intersection with Grand Forks 4/16th Ave NE	Intersection with US 2/19th Ave NE	3.9	150		*	*	*		***	1	150
12		Grand Forks	2	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	13.1	398				*	*	**	2	398
13		Grand Forks	4	Grand Forks/Nelson County Line	Intersection with ND 18/37th St NE	12.0	207				*	*	**	2	207
14		Grand Forks	12	Intersection with ND 18/5th Ave NE (Northwood)	Intersection with ND 18/37th St NE	3.9	110				*	*	**	2	110
15		Grand Forks	4	Intersection with Grand Forks 5/16th St NE	Intersection with 58th St N (Grand Forks)	2.8	3,544	*	*				**	1	3.544
16		Grand Forks	6	Intersection with I-29/US 81	Intersection with Grand Forks 81/10th St NE/S Washington St (Grand Forks)	1.8	852	*	<u>^</u>				**	1	852
17	17.03	Grand Forks	17	Intersection with Grand Forks 6/12th Ave NE	Intersection with Grand Forks 17/62nd Ave S	1.0	550	*	^	*			**	1	550
18		Grand Forks	33	Intersection with Grand Forks 2/30th St NE	Intersection with US 81	13.7	516		*		*		**	1	516
19		Grand Forks	33	Intersection with I-29	North Dakota/Minnesota State Line	2.9	340		<u>^</u>	*	^		**	1	340
20		Grand Forks	23	Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE	5.1	326				*		**	1	326
21		Grand Forks	5	Intersection with ND 15/7th Ave NE	Intersection with Name 13/3/11 Ave NE	5.0	658	*			^		*	1	658
22	1.04	Grand Forks	1	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/30th St NE	7.0	483	^		*			*	1	483
23	-	Grand Forks	12	Grand Forks/Steele County Line	Intersection with ND 18/5th Ave NE (Northwood)	5.3	418				*		*	1	418
24	-	Grand Forks	11	Intersection with Grand Forks 3/25th St NE	Intersection with I-29/US 81	13.1	375		*		*		*	1	375
25		Grand Forks	5	Intersection with US 2/18th Ave/Gateway Dr	Intersection with Grand Forks 11/23rd Ave NE	5.0	330		*	*			*	1	330
26		Grand Forks	2	Intersection with US 2/18th Ave	Intersection with Grand Forks 33/28th Ave NE	10.1	318				*		*	1	318
27	4.04	Grand Forks	4	Intersection with ND 18/37th St NE	Intersection with Grand Forks 33/28th Ave NE	1.0	290			*	*		*	1	290
	-	Grand Forks					214			*	*		*	1	
28			11 13	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	10.5	195				<u></u> ★			1	214
29		Grand Forks		Grand Forks/Traill County Line	Intersection with ND 15/5th Ave NE	5.1					*		*	1	195
30	5.06	Grand Forks	5	Intersection with US 81	Intersection with I-29	1.3	190			*			*	•	190
31	26.01	Grand Forks	26	Grand Forks/Traill County Line Intersection with Grand Forks 16/46th St NE	Intersection with Grand Forks 7/6th Ave NE	6.1	175 140				<u></u> ★		*	1	175 140
32	6.01	Grand Forks	6		Intersection with 35/5 St NE (Kempton)	9.6							*	'	
33		Grand Forks	10	Intersection with Grand Forks 11/23rd Ave NE	Intersection with Grand Forks 1/33rd Ave NE	10.1	140				*		*	1	140
34	1.01	Grand Forks	1	Grand Forks/Nelson County Line	Intersection with ND 32/48th St NE	2.0	90		*				*	1	90
35	6.04	Grand Forks	6	Intersection with Grand Forks 3/25th St NE	Intersection with I-29/US 81	13.1	489							1	489
36		Grand Forks	1	Intersection with Grand Forks 2/30th St NE	Intersection with US 81	9.3	376							1	376
37	2.03	Grand Forks	2	Intersection with Grand Forks 33/28th Ave NE	Grand Forks/Walsh County Line	8.0	333							1	333
38	19.01	Grand Forks	19	Intersection with 31st Ave NE	Grand Forks/Walsh County Line	5.0	330							1	330
39		Grand Forks	33	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/30th St NE	7.0	260							1	260
40	1.03	Grand Forks	1	Intersection with Grand Forks 19/45th St NE	Intersection with ND 18/37th St NE	8.0	224							1	224
41		Grand Forks	1	Intersection with US 81	Intersection with I-29	2.8	85							1	85
42	10.02	Grand Forks	10	Intersection with Grand Forks 1/33rd Ave NE	Intersection with Grand Forks 19/45th St NE	4.5	55							1	55
						Tot	al Stars -	- 13	15	12	20	7			

	#	%	Mileage	<u></u>
****	0	0%	0.0	0%
****	2	5%	7.7	3%
***	9	21%	59.2	22%
**	9	21%	56.3	21%
*	14	33%	91.2	34%
	8	19%	57.7	21%
	42	100%	272.1	100%

ADT Range Lane Departure Density Access Density
Curve Critical Radius Density Edge Risk Assessment 
Stars

ADT Range If segment has an ADT in the range of most at risk ADT based on North Dakota totals. (525 < ADT < 100000)
If segment has higher lane departure density than the North Dakota average (0.064).
If segment has access density than the North Dakota average (8).

If segment has higher density of curves with critical radius than the North Dakota average (0.095).

Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

36%

29%

48%

17%

% That Gets Star -- 31%

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 17 from Intersection with 11th St NE to Intersection with 16th St SE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with 11th St NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with 16th St SE Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 0' ADT: 868 Shoulder Type: None ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes ☑ Enhancing Emergency Medical Capabilities to Increase Length (miles): 2.9 County Road Grand Forks 17 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Market has Total Road Dept K+A Crashes 0 0.55 0.21 0.00 Density (per mile per year) Rate (per MVM) 1.74 0.65 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.206 0.064 Access Density 113 8.0 Curve Critical Radius Density 0.000 0.095 Edge Risk 2 2 or 3 Describe Proposed Safety Improvements Description Notes - Noise sensitive. Intersection projects Cost per mi Mileage Cost Type Proactive \$1,320 suggested on other sheets. 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 \$5,742 Proactive 2.9 \$4,200 Edge Rumble Strip Proactive 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$5,168 Local Match (10% of Total project cost) \$574 \*Total Project Cost \$5,742 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

17.02

6/11/2014

23 USC 409

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 17 from Intersection with Grand Forks 81/11th St NE to Intersection with 62nd Ave S Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with Grand Forks 81/11th St NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with 62nd Ave S Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 0' ADT: 340 Shoulder Type: None ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 4.8 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 17 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Road Dept K+A Crashes 0 0.25 0.21 0.00 Density (per mile per year) Rate (per MVM) 2.01 1.68 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.209 0.064 Access Density 11.3 8.0 Curve Critical Radius Density 0.209 0.095 Edge Risk 2 2 or 3 Describe Proposed Safety Improvements Description Notes - Noise sensitive. Curve and intersection Cost per mi Mileage Cost Type Proactive \$1,320 projects suggested on other sheets. 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 Proactive 4.8 \$9,504 Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$8,554 Local Match (10% of Total project cost) \$950 \*Total Project Cost \$9.504 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

17.01

6/11/2014

23 USC 409

### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 3 from Intersection with US 2/18th Ave to Intersection with 24th Ave NE (Mekinock) Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with US 2/18th Ave Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with 24th Ave NE (Mekinock) Speed Limit: Low □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 0' ADT: 872 Shoulder Type: None ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 5.9 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 3 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 0 0 14 0.03 0.00 Density (per mile per year) Rate (per MVM) 0.43 0.11 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.034 0.064 Access Density 5.8 8.0 Curve Critical Radius Density 0.341 0.095 Edge Risk 2 2 or 3 Describe Proposed Safety Improvements Description Notes - Noise sensitive. Curve and intersection Cost per mi Mileage Cost Type Proactive \$1,320 projects suggested on other sheets. 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 \$11,682 Proactive 5.9 Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$10,514 Local Match (10% of Total project cost) \$1,168 \*Total Project Cost \$11,682 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

3.02

6/11/2014

23 USC 409

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 3 from Intersection with ND 15/5th Ave NE to Intersection with US 2/18th Ave Agency Name: Grand Forks County ND DOT District: 6 Contact Name: Nick West Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with ND 15/5th Ave NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with US 2/18th Ave Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 0' ADT: 552 Shoulder Type: None ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 13.0 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 3 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 14 0 0.22 0.06 0.00 Density (per mile per year) Rate (per MVM) 1.07 0.31 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.061 0.064 Access Density 7.8 8.0 Curve Critical Radius Density 0.460 0.095 Edge Risk 2 2 or 3 Describe Proposed Safety Improvements Description Notes - No Edge Rumbles on north end residential Cost per mi Mileage Cost Type Proactive \$1,320 area. Curve and intersection projects suggested on 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 Proactive 2.0 \$3,861 other sheets. \$4,200 Edge Rumble Strip Proactive 11.1 \$46,410 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$45,244 Local Match (10% of Total project cost) \$5,027 \*Total Project Cost \$50.271 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No

Project suggested for agency's consideration.

23 USC 409

NDDOT Reserves All Objections

Page:

Date.

3.01

6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 32 from Intersection with Grand Forks 5/16th St NE to Grand Forks western city limits Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with Grand Forks 5/16th St NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Grand Forks western city limits Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 3' ADT: 2400 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 3.5 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 32 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 16 0 0.91 0.23 0.00 Density (per mile per year) Rate (per MVM) 1.04 0.26 0.00 Road Value ADT Range 2,400 525≤ADT≤100000 RD Density 0.226 0.064 Access Density 127 8.0 Curve Critical Radius Density 0.000 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Notes - Noise sensitive. Intersection projects Cost per mi Mileage Cost Type Proactive suggested on other sheets. 4" Edge Lines \$1,320 0.0 \$0 6" Edge Lines \$1,980 Proactive 3.5 \$6,930 Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 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 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

32.01

6/11/2014

23 USC 409

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 5 from Intersection with Grand Forks 6/12th Ave NE to Intersection with US 2/18th Ave/Gateway Dr Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with Grand Forks 6/12th Ave NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with US 2/18th Ave/Gateway Dr Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 2' ADT: 1860 Shoulder Type: Composite ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 6.0 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 5 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 15 0 0.50 0 17 0.00 Density (per mile per year) Rate (per MVM) 0.74 0.25 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.167 0.064 Access Density 9.0 8.0 Curve Critical Radius Density 0.000 0.095 Edge Risk 2 or 3 \*\*\* Describe Proposed Safety Improvements Description Notes - No Edge Rumbles or Centerline Rumbles on Cost per mi Mileage Type north end residential area. Intersection projects Proactive 4" Edge Lines \$1,320 0.0 \$0 6" Edge Lines \$1,980 Proactive 6.0 \$11,880 suggested on other sheets. Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 \$6,120 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 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

5.03

6/11/2014

23 USC 409

### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 81 from 7th Ave NE to Intersection with Grand Forks 17/62nd Ave S Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: 7th Ave NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with Grand Forks 17/62nd Ave S Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 8' ADT: 1655 Shoulder Type: Gravel ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes ☑ Enhancing Emergency Medical Capabilities to Increase Length (miles): 6.5 County Road Grand Forks 81 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Mark State State Road Dept K+A Crashes 12 0.37 0.18 0.06 Density (per mile per year) Rate (per MVM) 0.61 0.31 0.10 Road Value ADT Range 1,655 525≤ADT≤100000 RD Density 0.185 0.064 Access Density 6.6 8.0 Curve Critical Radius Density 0.308 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Notes - Curve and intersection projects suggested on Cost per mi Mileage Cost Type Proactive \$1,320 4" Edge Lines 0.0 \$0 other sheets. 6" Edge Lines \$1,980 Proactive 0.0 \$0 \$4,200 Edge Rumble Strip Proactive 6.5 \$27,300 Center Line Rumble Strip Proactive \$3,600 6.5 \$23,400 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$45,630 Local Match (10% of Total project cost) \$5,070 \*Total Project Cost \$50,700 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

23 USC 409

NDDOT Reserves All Objections

81.02

6/11/2014

Segment ID:

Date.

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 4 from Intersection with ND 18/37th St NE to Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with ND 18/37th St NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants Facility Type: 2-Lane Shoulder Width: 2' ☐ Younger Driver/Older Driver Safety ADT: 1103 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 6.3 County Road Grand Forks 4 ☐ Enhancing Emergency Medical Capabilities to Increase Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 25 0 0.79 0.22 0.00 Density (per mile per year) Rate (per MVM) 1.97 0.55 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.223 0.064 Access Density 5.7 8.0 Curve Critical Radius Density 0.797 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Notes - No Edge Rumbles or Centerline Rumbles on Description Cost per mi Mileage Cost Type west and east end residential areas. Curve and Proactive 4" Edge Lines \$1,320 0.0 \$0 \$1,980 6" Edge Lines Proactive 1.3 \$2,495 intersection projects suggested on other sheets. Edge Rumble Strip Proactive \$4,200 5.0 \$21,168 Center Line Rumble Strip Proactive \$3,600 5.0 \$18,144 6" Center Line Proactive \$1,020 \$1,285 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$38,783 Local Match (10% of Total project cost) \$4,309 \*Total Project Cost \$43.092 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No

Project suggested for agency's consideration.

23 USC 409

NDDOT Reserves All Objections

Page:

Date.

4.02

6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 7 from Intersection with Grand Forks 81/11th St NE to North Dakota/Minnesota State Line Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with Grand Forks 81/11th St NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: North Dakota/Minnesota State Line Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 1' ADT: 879 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 7.0 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 7 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 12 0 0.34 0.03 0.00 Density (per mile per year) Rate (per MVM) 1.07 0.09 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.029 0.064 Access Density 8.0 8.0 Curve Critical Radius Density 0.144 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Cost per mi Mileage Cost Notes - Intersection projects suggested on other Type Proactive \$1,320 4" Edge Lines 0.0 \$0 sheets. 6" Edge Lines \$1,980 Proactive 0.0 \$0 Edge Rumble Strip Proactive \$4,200 7.0 \$29,400 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$26,460 Local Match (10% of Total project cost) \$2,940 \*Total Project Cost \$29,400 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No

Project suggested for agency's consideration.

23 USC 409

NDDOT Reserves All Objections

Page:

Date.

7.01

6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 81 from Grand Forks/Traill County Line to 7th Ave NE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Grand Forks/Traill County Line Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: 7th Ave NE Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 1' ADT: 758 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes ☑ Enhancing Emergency Medical Capabilities to Increase Length (miles): 7.1 County Road Grand Forks 81 Rumble Installed: None ■ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 0 Density (per mile per year) 0 11 0.08 0.00 Rate (per MVM) 0.41 0.31 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.085 0.064 Access Density 7.9 8.0 Curve Critical Radius Density 0.142 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Cost per mi Mileage Cost Notes -Type Proactive \$1,320 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 Proactive 0.0 \$0 \$4,200 Edge Rumble Strip Proactive 7.1 \$29,820 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$26,838 Local Match (10% of Total project cost) \$2,982 \*Total Project Cost \$29,820 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page: 23 USC 409 Segment ID: 81.01

Project suggested for agency's consideration.

Date.

6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 4 from Intersection with Grand Forks 4/16th Ave NE to Intersection with US 2/19th Ave NE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with Grand Forks 4/16th Ave NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with US 2/19th Ave NE Speed Limit: High □ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 2' ADT: 150 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 3.9 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 4 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Road Dept K+A Crashes 0 0.21 0.10 0.00 Density (per mile per year) Rate (per MVM) 3.75 1.88 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.102 0.064 Access Density 12.5 8.0 Curve Critical Radius Density 0.512 0.095 \* Edge Risk 2 or 3 \*\*\* Describe Proposed Safety Improvements Description Cost per mi Mileage Cost Notes - Noise sensitive. Curve projects suggested on Type Proactive \$1,320 4" Edge Lines 0.0 \$0 other sheets. 6" Edge Lines \$1,980 \$7,722 Proactive 3.9 Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$6,950 Local Match (10% of Total project cost) \$772 \*Total Project Cost \$7.722 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No

Project suggested for agency's consideration.

23 USC 409

NDDOT Reserves All Objections

Page:

Date.

4.03

6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 2 from Intersection with ND 18/5th Ave NE to Intersection with US 2/18th Ave Agency Name: Grand Forks County ND DOT District: 6 Contact Name: Nick West Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with ND 18/5th Ave NE Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with US 2/18th Ave Speed Limit: High ■ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 1' ADT: 398 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 13.1 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 2 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 14 0 0.21 0.05 0.00 Density (per mile per year) Rate (per MVM) 1.47 0.32 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.046 0.064 Access Density 54 8.0 Curve Critical Radius Density 0.460 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Notes - No Edge Rumbles on north end residential Cost per mi Mileage Cost Type Proactive \$1,320 area. Curve and intersection projects suggested on 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 Proactive 0.7 \$1,297 other sheets. \$4,200 Edge Rumble Strip Proactive 12.4 \$52,269 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$48,209 Local Match (10% of Total project cost) \$5,357 \*Total Project Cost \$53.566 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

2.01

6/11/2014

23 USC 409

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Grand Forks 4 from Grand Forks/Nelson County Line to Intersection with ND 18/37th St NE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Grand Forks/Nelson County Line Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with ND 18/37th St NE Speed Limit: High ■ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety Facility Type: 2-Lane Shoulder Width: 1' ADT: 207 Shoulder Type: Paved ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 12.0 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 4 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Road Dept K+A Crashes 0.12 0.05 0.02 Density (per mile per year) Rate (per MVM) 1.55 0.66 0.22 Road Value ADT Range 525≤ADT≤100000 RD Density 0.050 0.064 Access Density 77 8.0 Curve Critical Radius Density 0.167 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Notes - No Edge Rumbles on east end residential Cost per mi Mileage Cost Type Proactive \$1,320 area. Curve and intersection projects suggested on 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 Proactive 1.2 \$2,376 other sheets. Edge Rumble Strip Proactive \$4,200 10.8 \$45,360 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$42,962 Local Match (10% of Total project cost) \$4,774 \*Total Project Cost \$47,736 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

4.01

6/11/2014

23 USC 409

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming Grand Forks 12 from Intersection with ND 18/5th Ave NE (Northwood) to Intersection with ND 18/37th St NE Agency Name: Grand Forks County ND DOT District: 6 **Contact Name: Nick West** Telephone Number: 701-780-8248 Email Address: nick.west@gfcounty.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Intersection with ND 18/5th Ave NE (Northwood) Lane Width: 12' ☐ Reduce Alcohol Impaired Driving End: Intersection with ND 18/37th St NE Speed Limit: High ■ Increase the Use of Safety Restraints for all Occupants Facility Type: 2-Lane Shoulder Width: 0' ☐ Younger Driver/Older Driver Safety ADT: 110 Shoulder Type: None ☐ Curb Aggressive Driving Road Type Rural Paved ☑ Improvements to Address Lane Departure Crashes Length (miles): 3.9 ☐ Enhancing Emergency Medical Capabilities to Increase County Road Grand Forks 12 Rumble Installed: None ☐ Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Road Dept K+A Crashes 0 0.05 0.05 0.00 Density (per mile per year) Rate (per MVM) 1.28 1.28 0.00 Road Value ADT Range 525≤ADT≤100000 RD Density 0.051 0.064 Access Density 4.4 8.0 Curve Critical Radius Density 0.257 0.095 Edge Risk 2 or 3 Describe Proposed Safety Improvements Description Cost Notes - Curve projects suggested on other sheets. Cost per mi Mileage Type Proactive \$1,320 4" Edge Lines 0.0 \$0 6" Edge Lines \$1,980 \$7,722 Proactive 3.9 Edge Rumble Strip Proactive \$4,200 0.0 \$0 Center Line Rumble Strip Proactive \$3,600 0.0 \$0 6" Center Line Proactive \$1,020 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Federal Funds \$6,950 Local Match (10% of Total project cost) \$772 \*Total Project Cost \$7.722 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Project Accepted? Reference Number ID Number ☐ No Page:

Project suggested for agency's consideration.

Segment ID:

Date.

12.02

6/11/2014

23 USC 409

	Grand Forks County Curves																		
						Inside	Outside				Crash	es							
_									Speed			_							
Curve	ID Corrie	or Segi	ment	Start	End	Shoulder	Shoulder	Curve Advisory	Advisory	Chevrons	Total	Total	Radius	ADT	Intersection	Visual	Speed	Risk	Notes
Count						Type	Туре	Sign	Sign			Severe	(ft)		on Curve	Trap	Limit	Ranking	
1 (	002A 2.01	Grand	d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	Yes	Yes	No	-	-	2,756	398	No	No	High		S-Curve, Unreadable MPH, Delineators
	002B 2.01		d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	Yes	Yes	No	-	-	869	398	No	No	High	*	S-Curve, Unreadable MPH, Delineators
	002C 2.01		d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	Yes	Yes	No	2	-	1,979	398	No	No	High		S-Curve, 40 MPH, Arrow Board w/2Chevrons
4 (	002D 2.01	Grand	d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	Yes	No	No	-	-	1,534	398	No	Yes	High	*	Curve Warning
	002E 2.01		d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	Yes	No	No	2	-	230	398	Yes	Yes	High	**	Sharp Curve
	002F 2.01		d Forks	Intersection with ND 18/5th Ave NE	Intersection with US 2/18th Ave	Paved	Paved	No	No	No	8	-	1,592	398	Yes	Yes	High	**	
	002G 2.02		d Forks	Intersection with US 2/18th Ave	Intersection with Grand Forks 33/28th Ave NE	Paved	Paved	Yes	No	No	-	-	956	318	Yes	No	High	**	S-Curve, Arrow Board w/2 Chevrons
	002H 2.02		d Forks	Intersection with US 2/18th Ave	Intersection with Grand Forks 33/28th Ave NE	Paved	Paved	Yes	No	No	-	-	1,435	318	Yes	No	High	*	S-Curve, Arrow Board w/2 Chevrons
	003A 3.01 003B 3.01		d Forks d Forks	Intersection with ND 15/5th Ave NE Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave Intersection with US 2/18th Ave	None None	None None	Yes Yes	No No	No No	-	-	1,687 1.894	552 552	No No	No No	High	*	S-Curve S-Curve
	003C 3.01		d Forks	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	None	None	Yes	No	No	_		1,010	552	Yes	No	High High	***	S-Curve
	003C 3.01		d Forks	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	None	None	Yes	No No	No	_		1,010	552	No	No	High	**	S-Curve
	003E 3.01		d Forks	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	None	None	Yes	No	No	_		2,037	552	Yes	Yes	High	***	S-Curve
	003F 3.01		d Forks	Intersection with ND 15/5th Ave NE	Intersection with US 2/18th Ave	None	None	Yes	No	No	_	_	2.111	552	Yes	No	High	**	S-Curve
	003G 3.02		d Forks	Intersection with US 2/18th Ave	Intersection with 24th Ave NE (Mekinock)	None	None	No	No	No	-	-	5,390	872	Yes	No	Low	**	0 04.70
16 (	003H 3.02	Grand	d Forks	Intersection with US 2/18th Ave	Intersection with 24th Ave NE (Mekinock)	None	None	No	No	No	1	-	3,218	872	Yes	Yes	Low	***	
17 (	004A 4.01	Grand	d Forks	Grand Forks/Nelson County Line	Intersection with ND 18/37th St NE	Paved	Paved	Yes	No	No	-	-	611	207	No	Yes	High	**	S-Curve
18 (	004B 4.01	Grand	d Forks	Grand Forks/Nelson County Line	Intersection with ND 18/37th St NE	Paved	Paved	Yes	No	No	-	-	591	207	No	Yes	High	**	S-Curve
19 (	004C 4.02	Grand	d Forks	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	Paved	Paved	Yes	No	No	-	-	1,129	1103	Yes	No	High	***	S-Curve, Border of City
	004D 4.02		d Forks	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	Paved	Paved	Yes	No	No	-	-	1,193	1103	No	No	High	**	S-Curve
	004E 4.02		d Forks	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	Paved	Paved	Yes	No	No	1	-	2,924	1103	Yes	No	High	**	Curve Warning
	004F 4.02		d Forks	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	Paved	Paved	Yes	No	No	-	-	1,830	1103	Yes	No	High	**	Curve Warning
	004G 4.02		d Forks	Intersection with ND 18/37th St NE	Intersection with Grand Forks 2/17th Ave (Arvilla)/31st St NE	Paved	Paved	Yes	No	No	1	-	348	1103	Yes	Yes	High	***	Curve Warning
	004H 4.03		d Forks	Intersection with Grand Forks 4/16th Ave NE	Intersection with US 2/19th Ave NE	Paved	Paved	Yes	No	No	-	-	82	150	Yes	Yes	High	**	Sharp Curve, Arrow Board w/2 Chevrons, Unfinished Streets
	0041 4.03		d Forks	Intersection with Grand Forks 4/16th Ave NE	Intersection with US 2/19th Ave NE	Paved	Paved	Yes	No	No	1	-	975	150	Yes	Yes	High	***	Curve Warning
	006A 6.01		d Forks	Intersection with Grand Forks 16/46th St NE	Intersection with 35/5 St NE (Kempton)	Paved	Paved	Yes	No No	No	-	-	949 946	140 140	No Yes	No	High	*	S-Curve, Delineators
	006B 6.01 006C 6.01		d Forks	Intersection with Grand Forks 16/46th St NE	Intersection with 35/5 St NE (Kempton)	Paved Paved	Paved Paved	Yes Yes	No No	No No	-	-	946	140	Yes No	No	High	**	S-Curve, Delineators
	006C 6.01 006D 6.01		d Forks d Forks	Intersection with Grand Forks 16/46th St NE Intersection with Grand Forks 16/46th St NE	Intersection with 35/5 St NE (Kempton) Intersection with 35/5 St NE (Kempton)	Paved	Paved	Yes	No No	No No	1	- 1	990 950	140	Yes	No No	High High	**	S-Curve, Delineators S-Curve, Delineators
	000D 6.01		d Forks	Intersection with Grand Forks 16/46th St NE	North Dakota/Minnesota State Line	Paved	Paved	Yes	No	No	-	- :	2.783	879	Yes	No	High	**	Curve Warning, Edge Line Rumbles in Curve Shldr
	010A 10.0		d Forks	Intersection with Grand Forks 11/23rd Ave NE	Intersection with Grand Forks 1/33rd Ave NE	Paved	Paved	Yes	No	No			992	140	Yes	No	High	**	S-Curve, Arrow Board w/2 Chevrons
	010B 10.0		d Forks	Intersection with Grand Forks 11/23rd Ave NE	Intersection with Grand Forks 1/33rd Ave NE	Paved	Paved	Yes	No	No	_	_	1,232	140	Yes	No	High	*	S-Curve, Arrow Board w/2 Chevrons
	011A 11.0		d Forks	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	None	None	Yes	No	No	_	-	1,162	214	Yes	Yes	High	***	Curve Warning
	011B 11.0		d Forks	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	None	None	Yes	No	No	-	-	1,162	214	Yes	Yes	High	***	Curve Warning
35 (	011C 11.0		d Forks	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	None	None	Yes	No	No	-	-	1,260	214	No	No	High		Curve Warning, Arrow Board w/2 Chevrons
	011D 11.0	Grand	d Forks	Intersection with US 2/23rd Ave	Intersection with ND 18/37th St NE	None	None	No	No	No	-	-	594	214	Yes	No	High	**	J.
37 (	011E 11.0	Grand	d Forks	Intersection with Grand Forks 3/25th St NE	Intersection with I-29/US 81	Paved	Paved	Yes	Yes	No	2	-	145	375	Yes	Yes	High	**	Sharp Curve, 15 MPH, Arrow Board w/2 Chevrons, Railroad Crossing
	012A 12.0	Grand	d Forks	Grand Forks/Steele County Line	Intersection with ND 18/5th Ave NE (Northwood)	Gravel	Gravel	Yes	No	Yes	-	-	522	418	Yes	Yes	High	***	Curve Warning
	012B 12.0		d Forks	Grand Forks/Steele County Line	Intersection with ND 18/5th Ave NE (Northwood)	Gravel	Gravel	Yes	No	Yes	-	-	1,314	418	No	Yes	High	*	Curve Warning
	012C 12.0			Intersection with ND 18/5th Ave NE (Northwood)	Intersection with ND 18/37th St NE	None	None	Yes	No	No	-	-	793	110	Yes	Yes	High	***	Curve Warning
	013A 13.0		d Forks	Grand Forks/Traill County Line	Intersection with ND 15/5th Ave NE	Composite	Composite	Yes	Yes	Yes	3	-	739	195	Yes	Yes	High	***	Curve Warning, 30 MPH
	017A 17.0		d Forks	Intersection with Grand Forks 81/11th St NE	Intersection with 62nd Ave S	None	None	Yes	Yes	Yes	-	-	262	340	Yes	Yes	High	**	Sharp Curve, 25 MPH
	023A 23.0		d Forks	Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE	Paved	Paved	Yes	Yes	No	-	-	1,233	326	No	No	High		S-Curve, 30 MPH
	023B 23.0		d Forks	Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE	Paved	Paved	Yes	Yes No	Yes	-	- [	1,092	326 326	No	No	High	*	S-Curve, 30 MPH, Arrow Board w/2 Chevrons
	023C 23.0 023D 23.0		d Forks d Forks	Grand Forks/Steele County Line Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE Intersection with ND 15/5th Ave NE	Paved Paved	Paved Paved	Yes Yes	No No	No No	T .	- [	853 590	326 326	No No	No No	High High	*	Winding Road, Nonconventional Winding Road, Nonconventional
	023E 23.0		a Forks d Forks	Grand Forks/Steele County Line Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE Intersection with ND 15/5th Ave NE	Paved	Paved	Yes	No No	No	1	1	1,105	326	No No	No	High	**	Winding Road, Nonconventional S-Curve
	023F 23.0		d Forks d Forks	Grand Forks/Steele County Line Grand Forks/Steele County Line	Intersection with ND 15/5th Ave NE	Paved	Paved	Yes	No	No	'.	<u> </u>	660	326	Yes	No	High	**	S-Curve
70	026A 26.0		d Forks	Grand Forks/Traill County Line	Intersection with Grand Forks 7/6th Ave NE	Paved	Paved	Yes	No	Yes	-	-	981	175	No	No	High	*	S-Curve, Arrow Board w/2 Chevrons
	026B 26.0		d Forks	Grand Forks/Traill County Line	Intersection with Grand Forks 7/6th Ave NE	Paved	Paved	Yes	No	Yes			784	175	No	No	High	*	S-Curve, Arrow Board w/2 Chevrons
	026C 26.0		d Forks	Grand Forks/Traill County Line	Intersection with Grand Forks 7/6th Ave NE	Paved	Paved	Yes	No	No	_	- [	2,287	175	No	No	High		Curve Warning
	026D 26.0		d Forks	Grand Forks/Traill County Line	Intersection with Grand Forks 7/6th Ave NE	Paved	Paved	No	No	No	-	-	433	175	Yes	No	High	*	
	033A 33.0		d Forks	Intersection with Grand Forks 2/30th St NE	Intersection with US 81	Composite	Composite	Yes	No	Yes	-	-	887	516	No	No	High	**	S-Curve
54 (	033B 33.0	Grand	d Forks	Intersection with Grand Forks 2/30th St NE	Intersection with US 81	Composite	Composite	Yes	No	Yes	-	-	516	516	No	No	High	**	S-Curve
	033C 33.0		d Forks	Intersection with Grand Forks 2/30th St NE	Intersection with US 81	Composite	Composite	No	No	No	1	1	1,272	516	Yes	Yes	High	****	Railroad Crossing
	081A 81.0		d Forks	Grand Forks/Traill County Line	7th Ave NE	Paved	Paved	Yes	No	Yes	1	-	1,994	758	Yes	No	High	**	S-Curve
	081B 81.0		d Forks	7th Ave NE	Intersection with Grand Forks 17/62nd Ave S	Gravel	Gravel	Yes	No	Yes	-	-	1,456	1655	Yes	Yes	High	***	Curve Warning
58 (	081C 81.0	Grand	d Forks	7th Ave NE	Intersection with Grand Forks 17/62nd Ave S	Gravel	Gravel	Yes	No	Yes	1 27	1	1,429	1655	Yes	Yes	High	****	Curve Warning

			Total	
	Stars	#	%	
	****	0	0%	
	****	2	3%	
	***	12	21%	
	**	24	41%	
	*	15	26%	
23 USC 409		5	9%	
NDDOT Reserves All Objections		58	100%	

 
 Critical Ranges
 Min
 Max

 Radius
 500
 1,200

 ADT
 500
 100,000

HIGHWAY SAFETY North Dakota Department SFN 59959 (06-2011)				HSIP) PROJE	ECT APPL	ICATIO	N						
			Agency Na Contact Na Email Addre	me: Grand For me: Nick West ess: nick.west	ks County  @gfcounty.		D 18/5th	Ave NE to		tion with US ND DOT District lephone Number	: 6	3	
Please attach a location ma				er describe your pro	oject.								
Start: Intersection End: Intersection Facility Type: 2-Lane ADT: 398 Road Type Rural Paved County Road Grand Forks	with ND 18/5 with US 2/18	th Ave NE th Ave		S L Rur	Lane Width: Speed Limit: noulder Width: shoulder Type: .ength (miles): mble Installed:	High 1' Paved 13.1				SHSP Empha Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Safe		& Systemic	Ranking Rev	view	E	voore							
North Dakota Crashes, 2008   Curve ID   K   A     002A   0   0   002B   0   002C   0   002D   0   002E   0   002F   0   0   002F   0   0   0   0   0   0   0   0   0	Radius (ft) 2,756 869 1,979 1,534 230 1,592		ADT 398 398 398 398 398 398 398	Intersection on Curve  No No No No Yes Yes		years  Risk Ranking  *  *  *  **	Proximity or Existing Chevrons  X - X X X X	High Priority Segment + Critical Radius x	Sign Improvement Project Chevron Chevron Chevron Arrow Chevron	Shoulder Paving Project - - - - - -	Shoulder Rumble Strip Project Inside/Outside Inside/Outside Inside/Outside Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque - 45 - Inspect Curve
*Curve numbering not conse Ranking Criteria	ecutive, as so	ome curves ma		Severe Crashe Radiu AD ntersection on Cun	Criteria es > 0 us 500 to 1200 DT 00 to 10000 ve Yes	-	Curves are se	elected for projects s ty or Existing Ch	ct if:				
-				Visual Tra	ap Yes	-							
Describe Proposed Sa	afety Impro	ovements	Advance Warr	ning Sign/Speed Ac Shoulder	ow Board Only dvisory Plaque r Rumble Strip	Proactive Proactive Proactive Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile	Quantity 5 1 2 .6 miles	Total cost \$19,800 \$1,200 \$2,880 \$2,196	Notes - Segmen suggested on ot		on projects
				Sn	oulder Paving	Proactive	\$44,400	per mile	.0 miles	\$0 \$26,076	=		
Project Cost Estimate	(attach de	etailed copy							Proposed Y	ear of Construct	ion		
		ical NDDOT costs		Match (10% of Tota	Project Cost	\$2,608 <b>\$26,076</b>	-						
NDDOT Central Office Project Accepted?	Yes	□No			Reference	e Number				ID Number	T		
Notes	100				/ Noterello	5 110111001				no manual	1		
23 USC 409 NDDOT Reserves All Ob	bjections				Projec	et suggested	d for agency's	consideration.				Page Segment ID Date	: 2.01

HIGHWAY SAFET North Dakota Departme SFN 59959 (06-2011)			M (HSIP) PROJECT	APPLICAT	ION						
C		Agency Contac Email A	rom Intersection v  y Name: Grand Forks C  t Name: Nick West ddress: nick.west@gfc further describe your project.	ounty	18th Ave t	o Intersec		Grand Forks ND DOT District lephone Number	: 6		
Location Description			rartier describe your project.								
Facility Type: 2-Lane ADT: 318 Road Type Rural Pave County Road Grand Fork	n with Grand F ed ks	orks 33/28th Ave NE	Spec Shouldd Shouldd Length Rumble Ii	e Width: 12' ed Limit: High r Width: 2' er Type: Paved (miles): 10.1 nstalled: None				SHSP Empha Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupant	
Describe Current Sa		& Systemic Ranking	Review								
North Dakota Crashes, 20  Curve ID K A  002G 0 0	Radius (ft)	ADT 318		5 years  /isual Risk  Trap Rankii  No **		High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project	Shoulder Rumble Strip Project Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque 50
*Curve numbering not con Ranking Criteria  Describe Proposed \$			Severe Crashes Radius 500	teria	Curves are s	selected for projec ★s ity or Existing Ch	ct if:		Inside/Outside		
Describe Proposed S	salety IIIDN		C Arrow Boa Warning Sign/Speed Advisory Shoulder Ruml	scription Type hevrons Proact ard Only Proact r Plaque Proact r Paving Proact	ve \$3,960 ve \$1,200 ve \$1,440 ve \$3,600	per curve per curve per curve per curve per mile per mile	Quantity 2 0 1 .1 miles .0 miles	Total cost \$7,920 \$0 \$1,440 \$465 \$0 \$9,825	Notes - Intersect sheets.	ion projects sug	gested on other
Project Cost Estimat	te (attach de	etailed copy)					Proposed Y	ear of Construct	ion		
NDDOT Central Offic Project Accepted?			ocal Match (10% of Total proje *Total Projer 4); includes engineering, construct	ct Cost \$9,82	2.5 :y			ID Number	ı		
Notes										Page:	2
23 USC 409 NDDOT Reserves All (				Project sugges	sted for agency's	consideration.				Segment ID: Date:	2.02 6/11/2014

HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			I (HSIP) PROJEC	T APPL	LICATIO	N						
		Contact N Email Add	lame: Grand Forks lame: Nick West lress: nick.west@g	County fcounty.		O 15/5th	Ave NE to		ion with US ND DOT District lephone Number	: 6	ı	
Please attach a location map(s)  Location Description (Co			ther describe your project	ct.								
Start: Intersection with End: Intersection with Facility Type: 2-Lane ADT: 552 Road Type Rural Paved County Road Grand Forks	n ND 15/5th n US 2/18th	Ave NE Ave	Sj Shou Shou Leng Rumbl	ane Width: beed Limit: lder Width: ulder Type: gth (miles): e Installed:	High 0' None 13.0				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Safety North Dakota Crashes, 2008 - 2		Systemic Ranking R	eview	-	years							
Curve ID K A Ra 003A 0 0 003B 0 0 003C 0 0 003D 0 0 003E 0 0	ndius (ft) 1,687 1,894 1,010 1,030 2,037 2,111	ADT	Severe Crashes	Visual Trap No No No No No No Ves No Criteria > 0	Risk Ranking  * ** ***  **  **  **  **  **  **  **	Curves are s	elected for projec	et if:	Shoulder Paving Project	Shoulder Rumble Strip Project Inside/Outside Inside/Outside Inside/Outside Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign - - x x - -	Advisory Speed Plaque - - 50 50 - -
_				000 to 1200 00 to 10000 Yes Yes		- x in Proximi - within Critic	ty or Existing Ch	evron column				
Describe Proposed Safe	ty Impro	/ements										
	_	Advance Wa	Arrow I arning Sign/Speed Advis Shoulder Ru	Board Only ory Plaque ımble Strip	Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 6 0 2 .5 miles .0 miles	Total cost \$23,760 \$0 \$2,880 \$1,799 \$0 \$28,439	Notes - Segmen suggested on other		on projects
Project Cost Estimate (a	ttach det	ailed copy)						Proposed Y	ear of Construct	ion		
		Loca	al Match (10% of Total pro *Total Pro	ject Cost	\$2,844 <b>\$28,439</b>	-						
NDDOT Central Office Of Project Accepted?		] No		Referenc	e Number	ı			ID Number	Т		
Notes		g mo	l	Vereieile	O NUMBER	ı			no munici	ı		
23 USC 409 NDDOT Reserves All Object	ctions			Projec	et suggested	I for agency's	consideration.				Page Segment ID Date	3.01

HIGHWAY SAFETY North Dakota Department SFN 59959 (06-2011)				P) PROJE	CT APPL	ICATIO	N						
		( E	Agency Name: Contact Name: mail Address:	Grand Forks Nick West nick.west@	s County gfcounty.		18th Ave	e to Inters		h 24th Ave N ND DOT District lephone Number	:: 6 `	,	
Location Description				scribe your proje	ect.								
Start: Intersection of End: Intersection of End: Intersection of Facility Type: 2-Lane ADT: 872 Road Type Rural Paved County Road Grand Forks	with US 2/18 with 24th Ave	th Ave	,	Sho Sho Lei	Lane Width: Speed Limit: ulder Width: oulder Type: ngth (miles): ble Installed:	Low 0' None 5.9				SHSP Empha Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety riving ddress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Safe		& Systemic Ra	anking Review										
North Dakota Crashes, 2008	3 - 2012				5	years						Advance	
Curve ID K A	Radius (ft)	AI		Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Horizontal Alignment Warning Sign	Advisory Speed Plaque
003G 0 0 003H 0 0	5,390 3,218	8	72 72	Yes Yes	No Yes	**	- X	-	Chevron Chevron		Inside/Outside Inside/Outside	-	-
*Curve numbering not conse Ranking Criteria	ecutive, as so	ome curves may h	S	evere Crashes Radius	Criteria > 0 500 to 1200 00 to 10000 Yes		Curves are se	elected for projects	et if:				
Describe Proposed Sa	afety Impro	ovements											
		Α	dvance Warning Si	ign/Speed Advi Shoulder F	Board Only	Proactive Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 2 0 0 .5 miles .0 miles	Total cost \$7,920 \$0 \$0 \$1,637 \$0 \$9,557	_Notes - Segmen suggested on ot		on projects
Project Cost Estimate	(attach de	etailed copy)							Proposed Y	ear of Construct	tion		
		ical NDDOT costs (M	Local Match	(10% of Total) *Total Pr	oject Cost	\$956 <b>\$9,557</b>	-						
NDDOT Central Office Project Accepted?	Yes	□No			Reference	e Number				ID Number	T		
Notes		_			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. 10111001				,			
23 USC 409 NDDOT Reserves All Ob	ojections	,			Projec	t suggested	for agency's	consideration.				Page. Segment ID. Date.	3.02

HIGHWAY SAFET North Dakota Departme SFN 59959 (06-2011)				IP) PROJE	CT APPL	ICATIO	N						
,			Agency Name: Contact Name: Email Address:	Grand Fork Nick West nick.west@	s County		County	Line to In		N with ND 18/ ND DOT District lephone Number	: 6		
Please attach a location m  Location Description				scribe your proj	ect.								
Start: Grand For End: Intersection Facility Type: 2-Lane ADT: 207 Road Type Rural Pave County Road Grand Forl	ks/Nelson Cou n with ND 18/3	nty Line	uivesy	Sho Sh Le	Lane Width: Speed Limit: oulder Width: oulder Type: ngth (miles): ble Installed:	High 1' Paved 12.0				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety iving Idress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Sa	fety Issues	& Systemic F	Ranking Review	,									
North Dakota Crashes, 20		· · · · · · · · · · · · · · · · · · ·	<u> </u>		5	years						A -1	
Curve ID K A	Radius (ft)		ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
004A 0 0 004B 0 0	611 591		207 207	No No	Yes Yes	** **	-	x x	Chevron Chevron	·	Inside/Outside Inside/Outside	x x	40 40
*Curve numbering not con Ranking Criteria	secutive, as so	ome curves may	\$	Severe Crashes Radius	Criteria 6 > 0 5 500 to 1200 7 00 to 10000 9 Yes		Curves are s	elected for projects sty or Existing Ch	et if:				
Describe Proposed	Safety Impre	ovements											
			Advance Warning S	Sign/Speed Adv Shoulder F	Board Only	Proactive Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 2 0 2 .1 miles .0 miles	Total cost \$7,920 \$0 \$2,880 \$462 \$0 \$11,262	_Notes - Segmen suggested on ot		on projects
Project Cost Estimat	te (attach de	etailed copy)							Proposed Y	ear of Construct	ion		
AIDDOT Control Office		ical NDDOT costs	Local Match	1 (10% of Total *Total Pr	roject Cost	\$1,126 <b>\$11,262</b>	-						
NDDOT Central Office Project Accepted?	Yes	□No			Reference	e Number	1			ID Number	1		
Notes							•				·		
23 USC 409 NDDOT Reserves All (					Project	t suggested	d for agency's	consideration.				Page Segment ID Date	4.01

North Dakota De SFN 59959 (06-20	epartn 011)	nent of T	ranspo	TEMENT PROGRAM (HS rtation Programming	•									
				orks from Intersection Agency Name Contact Name Email Address Use additional sheets to further de	Grand Forks Nick West nick.west@g	County		E to Inter	section w		Forks 2/17tl ND DOT District ephone Number	: 6		St NE
				Containing Curves)	, , ,									
End: In Facility Type: 2- ADT: 11 Road Type Ri County Road Gi	itersect -Lane 103 ural Pa rand Fo	ved	Grand Fo	7th St NE orks 2/17th Ave (Arvilla)/31st St NE	S Shou Shou Len Rumb	ane Width: Speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 6.3				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depar icy Medical Capab	for all Occupan	
				& Systemic Ranking Review	1									
North Dakota Cra  Curve ID	ishes, 2		12 us (ft)	ADT	Intersection on Curve	5 Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
004C ( 004D ( 004E ( 004F	0 ( 0 ( 0 ( 0 (	) 1, ) 2, ) 1,	129 193 924 830 48	1,103 1,103 1,103 1,103 1,103	Yes No Yes Yes Yes	No No No No Yes	*** ** ** **	- X X	x x - -	Chevron Chevron Chevron Chevron	: : :	Inside/Outside Inside/Outside Inside/Outside Inside/Outside Inside/Outside	- - - - x	- - - - - 35
Ranking Crite	eria			Inters	Severe Crashes Radius	Criteria > 0 500 to 1200 00 to 10000 Yes Yes	- )	Curves are se	elected for projects	ct if:				
Describe Prop	posed	l Safety	Impro	vements										
			-	Advance Warning	Arrow Sign/Speed Advis Shoulder R	Board Only sory Plaque	Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 5 0 1 .5 miles .0 miles	Total cost \$19,800 \$0 \$1,440 \$1,943 \$0	_Notes - Segmen suggested on ot		on projects
Project Cost I	Estim	ate (atta	ach de	tailed copy)						Proposed Yo	\$23,183 ear of Construct	ion		
·		* Base	d on typi	Local Matc	h (10% of Total p *Total Pro	oject Cost	\$2,318 <b>\$23,183</b>	=						
NDDOT Centr											lin ti			
Project Accepted Notes	?	☐ Ye	5	□ No		Referenc	e Number	<u> </u>			ID Number			
23 I NDDOT Rese	USC 40 erves A		ons			Projec	t suggested	for agency's	consideration.				Page Segment ID Date	4.02

North Dakota Departme SFN 59959 (06-2011)	nt of Transp	ortation Programmin	g					NIL A NIP	<del></del>		10.0404	NE NE	
Please attach a location m		Con Ema	ency Name: Gran stact Name: Nick sil Address: nick.	d Forks West west@g	County		Orks 4/10	otn Ave Ni		ND DOT District:	: 6		
Location Description													
Start: Intersection End: Intersection Facility Type: 2-Lane ADT: 150 Road Type Rural Pave County Road Grand Fork	n with US 2/19	Forks 4/16th Ave NE 9th Ave NE		S Shou Sho Len	ane Width: speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	: High : 2' : Paved : 3.9				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emergen Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capat	for all Occupar	
Describe Current Sat		& Systemic Rank	ing Review						1				
North Dakota Crashes, 200	08 - 2012				5	years	Proximity or	High Priority	Sign		Shoulder	Advance Horizontal	
Curve ID K A	Radius (ft)	ADT	on	section Curve	Visual Trap	Risk Ranking	Existing Chevrons	Segment + Critical Radius	Improvement Project	Shoulder Paving Project	Rumble Strip Project	Alignment Warning Sign	Advisory Speed Plaque
004H 0 0 004I 0 0	975	150 150		res res	Yes Yes	**	- X	- X	Arrow Chevron		Inside/Outside Inside/Outside	x x	Inspect Curve 50
*Curve numbering not cons Ranking Criteria  Describe Proposed S			Severe	Crashes Radius	Criteria	- )	Curves are s	elected for projects	ct if:				
	, ,				D i - ti	T	Unit Cost		Quantity	Total cost	Notes Comme		
		Adva	ince Warning Sign/Sp Sl	Arrow eed Advis	Board Only sory Plaque umble Strip	Proactive Proactive	\$3,960 \$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	1 1 2 .3 miles	\$3,960 \$1,200 \$2,880 \$1,109 \$0	Notes - Segmer sheets.	ii projecis sugg	ested on other
Project Cost Estimat	e (attach d	letailed copy)							Proposed Y	ear of Constructi	ion		
	* Based on ty	pical NDDOT costs (March		of Total p	oject Cost	\$915 <b>\$9,149</b>	_						
NDDOT Central Offic	e Only	,	,,	, , , , , , , , , , , , , , , , , , ,		Ť			<u> </u>				
Project Accepted? Notes	Yes	□ No			Reference	e Number				ID Number			
23 USC 409 NDDOT Reserves All C		 ]			Projec	ct suggeste	d for agency's	consideration				Page Segment ID Date	: 4.03
	,				,								

HIGHWAY SAFETY IMPRO North Dakota Department of Transpo SFN 59959 (06-2011)		ISIP) PROJECT APF	PLICATIO	N						
Please attach a location map(s). You ma	Contact Nan Email Addres	ne: Grand Forks Count ne: Nick West ss: nick.west@gfcount	у	ks 16/46	th St NE to		tion with 35/ ND DOT District ephone Number	: 6	. ,	
Location Description (Corridor	Containing Curves)					ı	01100.5			
Start: Intersection with Grand F End: Intersection with 35/5 St Facility Type: 2-Lane ADT: 140 Road Type Rural Paved County Road Grand Forks	NE (Kempton)	Lane Widi Speed Lim Shoulder Widi Shoulder Typ Length (mile: Rumble Installe	nit: High th: 1' ne: Paved s): 9.6				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depar ocy Medical Capab	for all Occupant	
Describe Current Safety Issues North Dakota Crashes, 2008 - 2012	& Systemic Ranking Revi	ew	5 years							
Curve ID K A Radius (ft)  006A 0 0 949  006B 0 0 946  006C 0 0 990	ADT 140 140 140	Intersection Visual on Curve Trap No No Yes No No No	Risk Ranking *	Proximity or Existing Chevrons	High Priority Segment + Critical Radius  x x x	Sign Improvement Project Chevron Chevron Chevron	Shoulder Paving Project - - -	Shoulder Rumble Strip Project Inside/Outside Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign  x x x	Advisory Speed Plaque 50 50 50
006D 0 0 950	140	Yes No	**	-	x	Chevron	-	Inside/Outside	x	50
*Curve numbering not consecutive, as se Ranking Criteria  Describe Proposed Safety Impr	Int	Criteria  Severe Crashes > 0 Radius 500 to 12 ADT 00 to 100 tersection on Curve Yes Visual Trap Yes	00	Curves are se	elected for projects ty or Existing Che	et if:				
	o i o in o in o									
	Advance Warnin	Descripti Chevro Arrow Board Or ng Sign/Speed Advisory Plaq Shoulder Rumble St Shoulder Pavi	ns Proactive nly Proactive ue Proactive rip Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 4 0 4 .5 miles .0 miles	Total cost \$15,840 \$0 \$5,760 \$1,913 \$0 \$23,513	_Notes -		
Project Cost Estimate (attach de	etailed copy)					Proposed Y	ear of Construct	ion		
* Based on ty:  NDDOT Central Office Only	Local M.	atch (10% of Total project co: *Total Project Co	st <b>\$23,513</b>	-						
Project Accepted?	□No	Refere	nce Number				ID Number	I		
Notes		,		•				•		
23 USC 409 NDDOT Reserves All Objections		Proj	ect suggeste	d for agency's	consideration.				Page: Segment ID: Date:	8 6.01 6/11/2014

		Agency Contact	Prsection with Grain Name: Grand Forks Country Name: Nick West (dress: inck.west @gfcountry on project of the classification of the	unty	11/23rd A	ve NE to I		on with Gran ND DOT District lephone Number	: 6		NE
Location Description	on (Corridor	Containing Curves)	artion december your project.								
End: Intersecti Facility Type: 2-Lane ADT: 140 Road Type Rural Pa County Road Grand Fo	ion with Grand F ved orks	Forks 11/23rd Ave NE Forks 1/33rd Ave NE	Speed Shoulder Shoulder Length (n Rumble Inst	Type: Paved niles): 10.1				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupant	
Describe Current S	afety Issues	& Systemic Ranking I	Review								
Curve ID K A	A Radius (ft)	ADT	Intersection Vis	ap Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
010A 0 0 010B 0 0		140 140	Yes N Yes N		x	- X	Chevron Chevron	:	Inside/Outside Inside/Outside	- -	50 -
*Curve numbering not co Ranking Criteria	onsecutive, as s	ome curves may have been		ia 0 0 1200	Curves are s	elected for projects ts ity or Existing Che	ot if:				
Describe Proposed	l Safety Impr	rovements									
		Advance V	Arrow Board Varning Sign/Speed Advisory P Shoulder Rumble	vrons Proactive d Only Proactive Plaque Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 2 0 1 .2 miles .0 miles	Total cost \$7,920 \$0 \$1,440 \$613 \$0 \$9,973	_Notes -		
Project Cost Estima	ate (attach d	letailed copy)					Proposed Y	ear of Construct	ion		
			Federal F cal Match (10% of Total project *Total Project ; includes engineering, constructior	cost) \$997 Cost <b>\$9,973</b>	_						
NDDOT Central Off								lia			
Project Accepted? Notes	Yes	□No	Ref	erence Number				ID Number			
23 USC 40 NDDOT Reserves Al		]		Project suggeste	d for agency's	consideration.				Page: Segment ID: Date:	9 10.01 6/11/2014

HIGHWAY SAFET North Dakota Departme SFN 59959 (06-2011)			AM (HSIP) PROJEC	T APPL	ICATIO.	N						
Please attach a location m	nap(s). You ma	Agend Contac Email A ay use additional sheets to	Orks from Interse y Name: Grand Forks tt Name: Nick West ddress: nick.west@gf further describe your projec	County		S 2/23rd	Ave to Int		with ND 18/3 ND DOT District ephone Number	: 6	3	
Location Description	n (Corridor	Containing Curves)										
Start: Intersectio End: Intersectio Facility Type: 2-Lane ADT: 214 Road Type Rural Pave County Road Grand For	on with ND 18/3 ed ks	37th St NE	Sp Shoul Shou Leng Rumble	ane Width: beed Limit: der Width: ulder Type: yth (miles): e Installed:	High 0' None 10.5				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety iving Idress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Sa		& Systemic Ranking	Review									
Curve ID K A 011A 0 0 011B 0 0	Radius (ft)  1,162 1,162	ADT 214 214	Intersection on Curve Yes Yes	Visual Trap Yes Yes	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius X	Sign Improvement Project Chevron Chevron	Shoulder Paving Project -	Shoulder Rumble Strip Project Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque -
011C 0 0	1,260	214	No	No		Х	-	Chevron	-	Inside/Outside	-	-
011D 0 0	594	214	Yes	No	**	-	X	Chevron	-	Inside/Outside	х	40
*Curve numbering not con Ranking Criteria  Describe Proposed			Severe Crashes Radius 5	Oriteria > 0 00 to 1200 0 to 10000 Yes Yes		Curves are se	elected for projects	et if:				
Decorrac i reposed i	ourcey impr	<u>overnento</u>										
		Advance	Arrow B Warning Sign/Speed Adviso Shoulder Ru	Board Only ory Plaque mble Strip	Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 4 0 1 .9 miles .0 miles	Total cost \$15,840 \$0 \$1,440 \$3,222 \$0 \$20,502	_ Notes - Intersect sheets.	tion projects su	ggested on other
Project Cost Estima	te (attach d	etailed copy)						Proposed Y	ear of Construct	ion		
			Fede ocal Match (10% of Total pro *Total Proj 4); includes engineering, constru	ject Cost	\$2,050 <b>\$20,502</b>	-						
NDDOT Central Office	ce Only	□No		Deference	e Number				ID Number	_		
Project Accepted? Notes		□ NO		Keierence	e Mulliber	ı			190111001	1	Page	
23 USC 409 NDDOT Reserves All				Projec	t suggested	for agency's	consideration.				Segment ID. Date:	

HIGHWAY SAFETY North Dakota Departmen SFN 59959 (06-2011)		/EMENT PROGRAM ( ortation Programming	(HSIP) PROJEC	T APPL	ICATIO	N						
Cur		Contact Na	ime: Grand Forks ime: Nick West ess: nick.west@g	County		y Line to	Intersecti		ID 18/5th Ave ND DOT District lephone Number	:: 6		
Location Description				<u> </u>								
Facility Type: 2-Lane ADT: 418 Road Type Rural Paved County Road Grand Forks	with ND 18/5	th Ave NE (Northwood)	S Shou Sho Len: Rumbl	ane Width: speed Limit: slder Width: ulder Type: gth (miles): le Installed:	High 2' Gravel 5.3				SHSP Empha Reduce Alcohol Im Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Al Enhancing Emerge Improve Intersectio	Safety Restraints er Driver Safety riving ddress Lane Depar ncy Medical Capab	for all Occupant	
		& Systemic Ranking Rev	view									
North Dakota Crashes, 2008	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
012A 0 0 012B 0 0	522 1,314	418 418	Yes No	Yes Yes	***	x x	- -	Chevron Chevron	Inside/Outside Inside/Outside	Inside/Outside Inside/Outside	- -	40 -
*Curve numbering not conse Ranking Criteria	ecutive, as sc	ome curves may have been ren	Severe Crashes Radius 8	Criteria > 0 500 to 1200 00 to 10000 Yes Yes		Curves are se	elected for projects	ct if:			_	
Describe Proposed Sa	afety Impro	ovements										
		Advance Warı	Arrow ning Sign/Speed Advis Shoulder Ru	Board Only sory Plaque	Proactive Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 2 0 1 .2 miles .2 miles	Total cost \$7,920 \$0 \$1,440 \$861 \$10,622 \$20,844	Notes - Intersect sheets.	ion projects suç	ggested on other
Project Cost Estimate	(attach de	etailed copy)						Proposed Y	ear of Construct	tion		
NDDOT Central Office		Local I	Match (10% of Total p *Total Pro	ject Cost	\$2,084 <b>\$20,844</b>	-						
Project Accepted?		□No		Reference	e Number				ID Number			
Notes												
23 USC 409 NDDOT Reserves All Ol	bjections			Project	t suggested	d for agency's	consideration.				Page: Segment ID: Date:	12.01

HIGHWAY SAFETY IMPROV North Dakota Department of Transpo SFN 59959 (06-2011)		ISIP) PROJECT APPI	LICATIO	N						
Curves on G	Contact Nam Email Addres	ne: Grand Forks County ne: Nick West ss: nick.west@gfcounty.		Ave NE	(Northwoo	•	rsection with ND DOT District lephone Number	: 6		
Location Description (Corridor										
Start: Intersection with ND 18/5 End: Intersection with ND 18/3 Facility Type: 2-Lane ADT: 110 Road Type Rural Paved County Road Grand Forks	th Ave NE (Northwood) 7th St NE	Lane Width: Speed Limit Shoulder Width: Shoulder Type: Length (miles): Rumble Installed:	High 0' None 3.9				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Safety Issues	& Systemic Ranking Review									
North Dakota Crashes, 2008 - 2012  Curve ID K A Radius (ft)	ADT	Intersection Visual on Curve Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius		Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
012C 0 0 793	110	Yes Yes	***	-	X	Chevron	-	Inside/Outside	X	45
*Curve numbering not consecutive, as so Ranking Criteria  Describe Proposed Safety Impression	Int	Criteria  Severe Crashes > 0  Radius 500 to 1200  ADT 00 to 10000 ersection on Curve Yes Visual Trap Yes	-	Curves are s	elected for projects ty or Existing Ch	ct if:				
	Advance Warnir	Description Chevrons Arrow Board Only ng Sign/Speed Advisory Plaque Shoulder Rumble Strip Shoulder Paving	Proactive Proactive Proactive Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 1 0 1 .2 miles .0 miles	Total cost \$3,960 \$0 \$1,440 \$828 \$0 \$6,228	_Notes - Segmen sheets.	it projects sugge	ested on other
Project Cost Estimate (attach de	etailed copy)					Proposed Y	ear of Construct	ion		
	Local Maical NDDOT costs (March 2014); inclu	Federal Funds atch (10% of Total project cost) *Total Project Cost des engineering, construction and o	\$623 <b>\$6,228</b>	-						
NDDOT Central Office Only Project Accepted? □ Yes	□No	Reference	e Number				ID Number	T		
Notes	<u></u>	Neteralic	o Humbel	1			ino raunioci			
23 USC 409		_							Page Segment ID	12.02
NDDOT Reserves All Objections		Projec	t suggeste	d for agency's	consideration.				Date	6/11/2014

Diagon ettoch a location		Agency Name: G Contact Name: N Email Address: n	Grand Forks Co lick West lick.west@gfco	ounty	County L	Line to Into		with ND 15/5 ND DOT District elephone Number	t: <b>6</b>		
Location Descripti	ion (Corridor Contain)	itional sheets to further desc ing Curves)	ribe your project.								
Start: Grand F End: Intersec Facility Type: 2-Lane ADT: 195 Road Type Rural P: County Road Grand F	Forks/Traill County Line tition with ND 15/5th Ave NE aved Forks	:	Spee Shoulder Shoulder Length	e Width: 12' d Limit: High r Width: 2' er Type: Composi (miles): 5.1 sstalled: None	е			SHSP Empha Reduce Alcohol Im Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ar Enhancing Emerge Improve Intersectio	Safety Restraints er Driver Safety riving ddress Lane Depa ncy Medical Capal	s for all Occupan	
Describe Current	Safety Issues & Syste 2008 - 2012	mic Ranking Review		5 years							
Curve ID K	A Radius (ft) 0 739		on Curve	/isual Risk Trap Ranking Yes ***	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project Inside/Outside	Shoulder Rumble Strip Project Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque 45
*Curve numbering not of Ranking Criteria	consecutive, as some curve	s may have been removed fr	Crit vere Crashes Radius 500	eria > 0 to 1200	Curves are s - 3 or more + - x in Proximi	selected for projec ★s ity or Existing Ch	ct if:				
*Curve numbering not o Ranking Criteria	consecutive, as some curve	Se	Crit vere Crashes Radius 500 ADT 00 t	eria > 0 to 1200	Curves are s	selected for projec ★s ity or Existing Ch	ct if:				
Ranking Criteria	consecutive, as some curve	Se Intersec	Crit vere Crashes Radius 500 ADT 00 t tion on Curve	eria > 0 to 1200 o 100000 Yes	Curves are s - 3 or more + - x in Proximi	selected for projec ★s ity or Existing Ch	ct if:				
Ranking Criteria		Se Intersec	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Ci Arrow Boa gn/Speed Advisory Shoulder Rumb	eria > 0 to 1200 oo 100000 Yes Yes Scription Type hevrons Proactivard Only Proactiv	Curves are s - 3 or more + - x in Proximi - within Critic  Unit Cost - \$3,960 - \$1,200 - \$1,400 - \$3,600	selected for projec ★s ity or Existing Ch	ct if:	Total cost \$3,960 \$0 \$1,440 \$404 \$4,981	Notes - Intersections sheets.	ction projects su	ggested on other
Ranking Criteria  Describe Propose	d Safety Improvemen	Se Intersec ts  Advance Warning Sig	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Ci Arrow Boa gn/Speed Advisory Shoulder Rumb	eria > 0 to 1200 o 100000 Yes Yes Scription Type nevrons Proactiv ard Only Proactiv Plaque Proactiv	Curves are s - 3 or more + - x in Proximi - within Critic  Unit Cost - \$3,960 - \$1,200 - \$1,400 - \$3,600	selected for project ity or Existing Ch all Radius	Quantity 1 0 1 1 miles .1 miles	\$3,960 \$0 \$1,440 \$404 \$4,981 \$10,785	sheets.	ction projects su	ggested on other
Ranking Criteria  Describe Propose		Se Intersects  Advance Warning Sig	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Crit Arrow Bos gn/Speed Advisory Shoulder Rumb Shoulder Federa	eria > 0 to 1200 o o 100000 Yes Yes Proactive Proactive Proactive Plaque Proactive Paying Pa	Curves are s - 3 or more ≠ - x in Proximi - within Critic  Unit Cost 9 \$3,960 9 \$1,200 9 \$3,600 9 \$3,600 9 \$44,400	selected for project ity or Existing Ch all Radius	Quantity 1 0 1 1 miles .1 miles	\$3,960 \$0 \$1,440 \$404 \$4,981	sheets.	ction projects su	ggested on other
Ranking Criteria  Describe Propose  Project Cost Estin	d Safety Improvement	Se Intersects  Advance Warning Sig	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Crit Arrow Boa In/Speed Advisory Shoulder Rumb Shoulder  Federa 10% of Total projee *Total Projee	eria > 0 to 1200 o 1000000 Yes Yes Proactive Plaque Plaqu	Curves are s - 3 or more ≠ - x in Proximi - within Critic  Unit Cost 9 \$3,960 9 \$1,200 9 \$3,600 9 \$3,600 9 \$44,400	selected for project ity or Existing Ch all Radius	Quantity 1 0 1 1 miles .1 miles	\$3,960 \$0 \$1,440 \$404 \$4,981 \$10,785	sheets.	ction projects su	ggested on other
Ranking Criteria  Describe Propose	d Safety Improvement	Se Intersects  Advance Warning Sig	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Cl Arrow Boa pn/Speed Advisory Shoulder Rumb	eria > 0 to 1200 o 1000000 Yes Yes Proactive Plaque Plaqu	Curves are s - 3 or more ≠ - x in Proximi - within Critic  Unit Cost 9 \$3,960 9 \$1,200 9 \$3,600 9 \$3,600 9 \$44,400	selected for project ity or Existing Ch all Radius	Quantity 1 0 1 1 miles .1 miles	\$3,960 \$0 \$1,440 \$404 \$4,981 \$10,785	sheets.	ction projects su	ggested on other
Project Cost Estin  NDDOT Central Of Project Accepted?	d Safety Improvement  mate (attach detailed compared in the co	Se Intersects  Advance Warning Sig	Crit vere Crashes Radius 500 ADT 00 t tion on Curve Visual Trap  Des Cl Arrow Boa pn/Speed Advisory Shoulder Rumb	eria  > 0  to 1200  o 100000  Yes  Yes  Proactiv  Plaque Proactiv  Plaque Proactiv  Paving Proactiv  Paving Proactiv  Strip Proactiv  Paving Proactiv  Strip Proactiv  Paving Proactiv  Strip Proactiv  Paving Proactiv  Strip Proactiv	Curves are s - 3 or more ≠ - x in Proximi - within Critic  Unit Cost 9 \$3,960 9 \$1,200 9 \$3,600 9 \$3,600 9 \$44,400	selected for project ity or Existing Ch all Radius	Quantity 1 0 1 1 miles .1 miles	\$3,960 \$0 \$1,440 \$404 \$4,981 \$10,785 /ear of Construct	sheets.	ction projects su	

HIGHWAY SAFETY IMPR North Dakota Department of Trans SFN 59959 (06-2011)			PLICATIO	ON						
	Ager Cont Email	ks from Intersection w ncy Name: Grand Forks Coun act Name: Nick West I Address: nick.west@gfcoun to further describe your project.	ty	d Forks	81/11th St		ersection with ND DOT District lephone Number	: 6		
Location Description (Corrido										
Start: Intersection with Gran End: Intersection with 62nd Facility Type: 2-Lane ADT: 340 Road Type Rural Paved County Road Grand Forks		Lane Wit Speed Lir Shoulder Wi Shoulder Ty Length (mil Rumble Install	mit: High dth: 0' pe: None es): 4.8				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupan	
Describe Current Safety Issue	es & Systemic Rankii	ng Review								
North Dakota Crashes, 2008 - 2012  Curve ID K A Radius (	t) ADT	Intersection Visua on Curve Trap		Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed
017A 0 0 262	340	Yes Yes	**	X	-	Arrow		Inside/Outside	X X	Inspect Curve
*Curve numbering not consecutive, as Ranking Criteria		een removed from further analysis be  Criteria  Severe Crashes > 0 Radius 500 to 1 ADT 00 to 10 Intersection on Curve Yes Visual Trap Yes	200 0000	Curves are s	elected for projects ty or Existing Ch	ct if:				
Describe Proposed Salety IIII	provements									
		Descript Chevrt Arrow Board C ce Warning Sign/Speed Advisory Plac Shoulder Rumble S Shoulder Pav	ons Proactive Only Proactive que Proactive strip Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 0 1 1 0 0 miles	Total cost \$0 \$1,200 \$1,440 \$132 \$0 \$2,772	_Notes - Segmen suggested on ot		on projects
Project Cost Estimate (attach	detailed copy)					Proposed Y	ear of Construct	ion		
* Based on	typical NDDOT costs (March 2	Federal Fur Local Match (10% of Total project or *Total Project Co 2014); includes engineering, construction at	ost) \$277 ost <b>\$2,772</b>	-						
Project Accepted?	No	Refere	ence Number				ID Number			
Notes									Do	. 44
23 USC 409									Page Segment ID	
NDDOT Reserves All Objections		Pro	oject suggeste	d for agency's	consideration.				Date	

HIGHWAY SAFETY IMP North Dakota Department of Tra SFN 59959 (06-2011)			P) PROJEC	CT APPL	ICATIO	N						
С		and Forks from Agency Name: Contact Name: Email Address:	Grand Forks Nick West nick.west@g	County		County	Line to Int		with ND 15/5 ND DOT District lephone Number	: 6		
Please attach a location map(s). You Location Description (Corri			scribe your proje	ct.								
Start: Grand Forks/Steele End: Intersection with NE Facility Type: 2-Lane ADT: 326 Road Type Rural Paved County Road Grand Forks	County Line	<b>G.1. 1</b> 00)	Shou Sho Len	Lane Width: Deed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 5.1				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depar acy Medical Capab	for all Occupan	
Describe Current Safety Iss		Ranking Review										
Curve ID K A Radius	s (ft) 33 32 30 0 0 05 0	S	Severe Crashes Radius : ADT ( ection on Curve	Visual Trap No No No No No No No No So No		Curves are se	elected for projects	et if:	Shoulder Paving Project	Shoulder Rumble Strip Project Inside/Outside Inside/Outside Inside/Outside Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign - x x x x - x	Advisory Speed Plaque 5 45 40 - 40
			Visual Trap	Yes								
Describe Proposed Safety I	mprovements	Advance Warning S	Arrow sign/Speed Advis Shoulder R	Board Only sory Plaque	Proactive Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 6 0 4 .5 miles .0 miles	Total cost \$23,760 \$0 \$5,760 \$1,932 \$0 \$31,452	_Notes - Intersect sheets.	ion projects su	ggested on other
Project Cost Estimate (attack	ch detailed copy	<i>(</i> )						Proposed Y	ear of Construct	ion		
NDDOT Central Office Only	, ,,	Local Match	(10% of Total p *Total Pro	oject Cost truction and co	\$3,145 <b>\$31,452</b> ontingency							
Project Accepted?	□ No			Reference	e Number				ID Number			
23 USC 409 NDDOT Reserves All Objection	ns			Project	t suggested	for agency's	consideration.				Page. Segment ID. Date.	23.01

HIGHWAY SAFETY IMPR North Dakota Department of Tran SFN 59959 (06-2011)			PPLICATIO	N						
	Age Con Emai	ks from Grand Forks/ ncy Name: Grand Forks Cou tact Name: Nick West il Address: nick.west@gfcou	unty	nty Line	to Intersed		Grand Fork ND DOT District lephone Number	: 6		
Location Description (Corrid										
Start: Grand Forks/Traill Co End: Intersection with Gran Facility Type: 2-Lane ADT: 175 Road Type Rural Paved County Road Grand Forks	unty Line Id Forks 7/6th Ave NE	Lane V Speed Shoulder V Shoulder Length (n Rumble Inst	Type: Paved niles): 6.1				SHSP Empha Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupant	
Describe Current Safety Issu	es & Systemic Ranki	ing Review								
Curve ID         K         A         Radius (           026A         0         981           026B         0         784           026C         0         2,287	175 175		rap Ranking No * No *	Proximity or Existing Chevrons  x x x	High Priority Segment + Critical Radius X X	Sign Improvement Project Chevron Chevron Chevron	Shoulder Paving Project - - -	Shoulder Rumble Strip Project Inside/Outside Inside/Outside Inside/Outside	Advance Horizontal Alignment Warning Sign X X	Advisory Speed Plaque 50 45
026D 0 0 433	175	Yes	lo <b>★</b>	X	-	Chevron	-	Inside/Outside	х	35
*Curve numbering not consecutive, a Ranking Criteria		Criter Severe Crashes > Radius 500 tc ADT 00 to Intersection on Curve Y	ria 0 0 0 1200	Curves are se	elected for projects	et if:				
Describe i repesca Garety in	provements									
	Advar	Che Arrow Board nce Warning Sign/Speed Advisory P Shoulder Rumble		\$1,200 \$1,440	per curve per curve per curve per mile per mile	Quantity 4 0 3 .4 miles .0 miles	Total cost \$15,840 \$0 \$4,320 \$1,338 \$0 \$21,498	_ Notes -		
Project Cost Estimate (attach	detailed copy)					Proposed Y	ear of Construct	ion		
	n typical NDDOT costs (March	Local Match (10% of Total project	Cost \$21,498	-						
NDDOT Central Office Only Project Accepted?  ☐ Yes	□No	Ref	ference Number				ID Number	T		
Notes Troject Accepted?	<b>-</b>	Ken	S. SHOO MUHIDA				po muniodi			
23 USC 409 NDDOT Reserves All Objections	$\overline{}$	-	Project suggested	d for agency's	consideration.	_		_	Page: Segment ID: Date:	

HIGHWAY SAFE  North Dakota Department SFN 59959 (06-2011)		VEMENT PROGRAM ( ortation Programming	(HSIP) PROJECT A	PPLICATIO	ON						
		Contact Na Email Addre	ime: Grand Forks Cou ime: Nick West ess: nick.west@gfcou	inty	rand For	ks 2/30th		ntersection ND DOT District lephone Number	t: 6	ı	
Location Descriptio		ay use additional sheets to furth Containing Curves)	er describe your project.								
•	on with Grand F on with US 81	Forks 2/30th St NE	Speed Shoulder V Shoulder	Type: Composit niles): 13.7	е			SHSP Empha Reduce Alcohol Im Increase the Use o Younger Driver/Old Curb Aggressive D Improvements to A Enhancing Emerge Improve Intersectio	f Safety Restraints er Driver Safety riving ddress Lane Depar ncy Medical Capab	for all Occupan	
		& Systemic Ranking Rev	/iew								
North Dakota Crashes, 20  Curve ID K A 033A 0 0	Radius (ft)	ADT 516	Intersection Vison Curve Tr. No N	ap Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project Inside/Outside	Shoulder Rumble Strip Project Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque 45
033B 0 0 033C 0 1		516 516	No N Yes Ye	lo ** es ****	х	х	Chevron Chevron	Inside/Outside Inside/Outside	Inside/Outside Inside/Outside	Х	40
Ranking Criteria			Criter Severe Crashes > Radius 500 tc ADT 00 to ntersection on Curve Ye	ia 0 0 1200	Curves are s	elected for projects	ct if:				
Describe Proposed	Salety IIIIpr	ovements									
		Advance Warr	Che Arrow Board ning Sign/Speed Advisory P Shoulder Rumble		\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 3 0 2 .2 miles .2 miles	Total cost \$11,880 \$0 \$2,880 \$633 \$7,802 \$23,195	_ Notes - Intersect sheets.	ion projects su	ggested on other
Project Cost Estima	ate (attach d	etailed copy)					Proposed Y	ear of Construc	tion		
NDDOT Central Offi		Local I	Match (10% of Total project *Total Project	Cost \$23,195	_						
Project Accepted?	Yes	□No	Ref	erence Number				ID Number			
Notes											
23 USC 40		 [								Page. Segment ID.	33.02
NDDOT Reserves All	Objections			Project suggeste	d for agency's	consideration.				Date.	

SFN 59959 (06-2011)		Agency N Contact N Email Add	n Grand Forks ame: Grand Forks ame: Nick West ress: nick.west@	s County gfcounty		Forks/Tr	aill Count		7th Ave NE ND DOT District lephone Number		3	
Please attach a location ma			her describe your proje	ect.								
Start: Grand Forks. End: 7th Ave NE Facility Type: 2-Lane ADT: 758 Road Type Rural Paved County Road Grand Forks	/Traill County Line	ning Curves)	Show Show Show Ler	Lane Width Speed Limit ulder Width oulder Type ngth (miles) ble Installed	:: High :: 1' :: Paved :: 7.1				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa acy Medical Capab	for all Occupant	
Describe Current Safe	ety Issues & Sys	temic Ranking Re	view									
North Dakota Crashes, 2008	3 - 2012		Intersection	Visual	5 years Risk	Proximity or Existing	High Priority Segment +	Sign Improvement	Shoulder Paving	Shoulder Rumble Strip	Advance Horizontal Alignment	Advisory Speed
Curve ID K A 081A 0 0	Radius (ft) 1,994	ADT 758	on Curve Yes	Trap No	Ranking ★★	Chevrons	Critical Radius	Project Chevron	Project	Project Inside/Outside	Warning Sign -	Plaque
*Curve numbering not conse Ranking Criteria	ecutive, as some cur	ves may have been re	moved from further an		use a large							
-				> 0 500 to 120 00 to 1000 Yes Yes		- 3 or more 🖈	ty or Existing Ch					
Describe Proposed Sa	afety Improveme	nts										
		Advance Wa	rning Sign/Speed Advi Shoulder R	Board Only sory Plaque tumble Strip	s Proactive y Proactive	\$1,200 \$1,440 \$3,600	per curve per curve per curve per mile per mile	Quantity 1 0 0 .2 miles .0 miles	Total cost \$3,960 \$0 \$0 \$570 \$0 \$4,530	_Notes - Intersec sheets.	tion projects sug	gested on other
Project Cost Estimate	(attach detailed	сору)						Proposed Y	ear of Construct	ion		
-		Local	Match (10% of Total pro	oject Cos	\$453 t <b>\$4,530</b>	_						
NDDOT Central Office		O1 costs (March 2014); ii	ncludes engineering, cons	truction and	contingency							
	Yes No			Reference	ce Number				ID Number			
23 USC 409 NDDOT Reserves All Ob	pjections			Proje	ct suggested	d for agency's	consideration.				Page: Segment ID: Date:	18 81.01 6/11/2014

HIGHWAY SAFE  North Dakota Department SFN 59959 (06-2011)		VEMENT PROGRAM ortation Programming	(HSIP) PROJEC	T APPL	ICATIO	N						
	man(s). You ma	Contact N	lame: Grand Forks lame: Nick West lress: nick.west@g	County		Intersec	tion with (		rks 17/62nd / ND DOT District lephone Number	: 6	1	
Location Descriptio			iner describe your projec	J.								
Start: 7th Ave N End: Intersectic Facility Type: 2-Lane ADT: 1655 Road Type Rural Pav County Road Grand Fo	on with Grand F	Forks 17/62nd Ave S	Sj Shou Shot Leng	ane Width: peed Limit: lder Width: ulder Type: gth (miles): e Installed:	High 8' Gravel 6.5				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Oldo Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupant	
Describe Current Sa	afety Issues	& Systemic Ranking Re	eview									
North Dakota Crashes, 20	008 - 2012			5	years						Advance	
Curve ID K A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Horizontal Alignment Warning Sign	Advisory Speed Plaque
081B 0 0 081C 1 0		1,655 1,655	Yes Yes	Yes Yes	***	X X	-	Chevron Chevron	:	Inside/Outside Inside/Outside		-
*Curve numbering not co Ranking Criteria	nsecutive, as so	ome curves may have been re	Severe Crashes Radius 5	Criteria > 0 500 to 1200 00 to 10000 Yes Yes		Curves are se	elected for projects	et if:				
Describe Proposed	Safety Impr	ovements										
		Advance Wa	Arrow I arning Sign/Speed Advis Shoulder Ru	Board Only ory Plaque	Proactive Proactive Proactive Proactive	\$1,200 \$1,440	per curve per curve per mile per mile	Quantity 2 0 0 .6 miles .0 miles	Total cost \$7,920 \$0 \$0 \$2,119 \$0 \$10,039	Notes - Segmen suggested on other		n projects
Project Cost Estima	ate (attach d	etailed copy)						Proposed Y	ear of Construct	ion		
		Loca	Match (10% of Total pro**Total Pro	ject Cost	\$1,004 <b>\$10,039</b>	-						
NDDOT Central Offi		□Ne.	I	Deference	a Mumbar	1			ID Number			
Project Accepted? Notes	Yes	No	<u> </u>	Reference	e Number	I			ID Number	I		
23 USC 40 NDDOT Reserves All				Project	t suggested	I for agency's	consideration.				Page: Segment ID: Date:	81.02

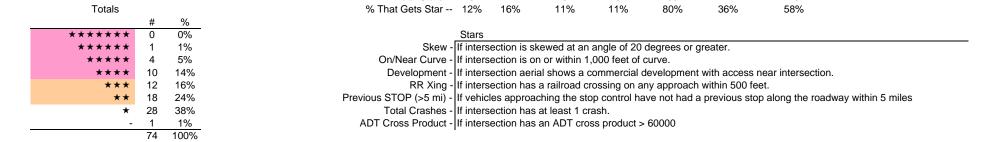
# Grand Forks County Summary of Suggested Rural Intersection Projects

Page	Intersection ID	Description	Risk Ranking	Directional Median	Mainline Dynamic Warning Sign	Close Median	Install Street Lights	Signs & Markings	Project Cost (\$)
1	33.02	US 81 & 3rd St (Grand Forks 33)	*****	-	-	-	Х	х	\$22,380
2	23.02	5th Ave NE (ND 15) & 37th St NE (Grand Forks 23)	****	-	-	-	Х	Х	\$15,480
3	2.1	30th St NE (Grand Forks 2) & 28th Ave NE (Grand Forks 33)	****	-	-	-	Х	Х	\$20,760
4	4.02	37th St NE (ND 18) & 16th Ave (Grand Forks 4) (S)	****	-	-	-	Х	Х	\$12,840
5	2.05	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (N)	****	-	-	-	-	Х	\$2,640
6	5.04	18th Ave/Gateway Dr (US 2) & 16th St NE (Grand Forks 5) (E)	****	Х	-	-	-	Х	\$905,280
7	4.08	Demers Ave (Grand Forks 4) & 16th St NE (Grand Forks 5)	****	-	X	-	Х	Х	\$74,520
8	2.06	18th Ave (US 2) & 17th Ave (Grand Forks 2) (W)	****	X	ı	-	Х	Х	\$912,840
9	3.05	25th St NE (Grand Forks 3) & 23rd Ave NE (Grand Forks 11)	****	-	ı	-	Х	Х	\$14,880
10	11.01	23rd Ave (US 2) & 23rd Ave NE (Grand Forks 11)	****	-	-	-	Х	Х	\$12,840
11	12.02	5th Ave NE (ND 15) & Greatnorth Road (Grand Forks 12) (E)	***	-	x	-	-	х	\$62,640
12	1.05	33rd Ave NE (Grand Forks 1) & 30th St NE (Grand Forks 2)	***	-	-	-	Х	Х	\$15,480
13	1.08	US 81 & 33rd Ave NE (Grand Forks 1) (N)	***	-	-	-	Х	Х	\$14,520
14	1.09	US 81 & 32nd Ave NE (Grand Forks 1) (S)	****	-	-	-	Х	Х	\$14,520
15	2.04	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (S)	****	-	-	-	-	Х	\$2,640
16	5.01	7th Ave NE (ND 15) & 16th St NE (Grand Forks 5)	***	-	X	-	Х	Х	\$74,880
17	6.04	12th Ave (Grand Forks 6) & 10th St NE (Grand Forks 81)	***	-	-	-	Х	Х	\$15,480
18	5.05	18th Ave (US 2) & 17th St NE (Grand Forks 5) (W)	***	-	-	-	X	х	\$14,880
19	5.02	16th St NE (Grand Forks 5) & 12th Ave NE (Grand Forks 6)	***	-	-	-	Х	Х	\$15,480
20	7.01	6th Ave NE (Grand Forks 7) & S Columbia Rd (Grand Forks 81)	***	-	-	-	Х	Х	\$14,520
21	1.04	37th St NE (ND 18) & 33rd Ave NE (Grand Forks 1)	***	-	-	=	Х	Х	\$15,480
22	3.01	5th Ave NE (ND 15) & 25th St NE (Grand Forks 3)	***	-	-	-	Х	Х	\$14,520
23	3.02	Veitch St (Grand Forks 3) & 12th Ave NE (Grand Forks 6)	***	-	-	-	Х	Х	\$14,880
24	23.01	37th St NE (Grand Forks 23) & 4th Ave NE (Grand Forks 500)	***	-	-	-	Х	Х	\$13,560
25	11.02	37th St NE (ND 18) & 22nd Ave NE (Grand Forks 11)	***	-	-	-	Х	Х	\$12,840
26	13.01	5th Ave NE (ND 15) & 22nd St NE (Grand Forks 13)	***	-	-	-	Х	Х	\$12,840
27	17.01	11th St NE (Grand Forks 17) & S Columbia Rd (Grand Forks 81) (S)	***	-	-	=	Х	Х	\$12,840
28	6.03	12th Ave (Grand Forks 6) & S Columbia Rd (Grand Forks 17) (W)	**	-	х	-	-	Х	\$65,280
29	5.03	16th St NE (Grand Forks 5) & 15th Ave NE (Grand Forks 32)	**	-	x	-	Х	Х	\$74,520
30	17.03	62nd Ave (Grand Forks 17) & S Washington St (Grand Forks 81) (N)	**	-	х	-	Х	Х	\$75,480
31	33.01	7th St NE (ND 18) & 28th Ave NE (Grand Forks 33)	**	-	-	-	-	х	\$4,680
32	8.01	Belmont Rd (Grand Forks 8) & 62nd Ave [Western] (Grand Forks 17)	**	-	-	-	Х	х	\$12,840
33	1.06	33rd Ave NE (Grand Forks 1) & 25th St NE (Grand Forks 3) (W)	**	-	-	-	-	х	\$4,080
34	17.04	62nd Ave (Grand Forks 17) & Belmont Rd [Eastern] (Grand Forks 17)	**	-	-	-	Х	х	\$12,840
	USC 409 erves All Objections			2	6	0	27	34	\$2,586,180

23 US 409 NDDOT Reserves All Objections

Int #	Sys	Num	Intersection Description	Skew	On/Near	Development	RR	ADT	Previous	Total	ADT Cross	Cra	ash Cost
1.01	Grand Forks	1	48th St NE (ND 32) & 33rd Ave NE (Grand Forks 1)	No	Curve No	No .	Xing No	565	Yes	0 0	Product > 60000 No	\$	_
1.02	Grand Forks	1	33rd Ave NE (Grand Forks 1) & 45th St NE (Grand Forks 19)	No	No	No	No	475	Yes	0	No	\$	-
1.03	Grand Forks	1	33rd Ave NE (Grand Forks 1) & 43rd St NE (Grand Forks 10)	No	No	No	No	263	Yes	0	No	\$	-
1.04	Grand Forks	1 1	37th St NE (ND 18) & 33rd Ave NE (Grand Forks 1) 33rd Ave NE (Grand Forks 1) & 30th St NE (Grand Forks 2)	No No	No No	No Yes	No	875 700	Yes Yes	0	Yes Yes	\$ \$	12,000
1.05	Grand Forks Grand Forks	1	33rd Ave NE (Grand Forks 1) & 30th St NE (Grand Forks 2)	No	No	No	Yes No	510	Yes	1	No No	φ \$	12,000
1.07	Grand Forks	1	33rd Ave NE (Grand Forks 1) & 24th St (Grand Forks 3) (E)	No	No	No	No	462	Yes	0	No	\$	-
1.08	Grand Forks	1	US 81 & 33rd Ave NE (Grand Forks 1) (N)	Yes	No	No	Yes	2035	Yes	0	Yes	\$	-
1.09	Grand Forks	1	US 81 & 32nd Ave NE (Grand Forks 1) (S)	Yes	No	No	Yes	1955	Yes	0	Yes	\$	-
2.01	Grand Forks	2	5th Ave NE (ND 18) & 31st St (Grand Forks 2)	No	No No	No	No	1835 382	Yes	0	Yes	\$ \$	-
2.02	Grand Forks Grand Forks	2	31st St (Grand Forks 2) & 10th Ave NE (Grand Forks 6) (S) 31st St NE (Grand Forks 2) & 12th Ave NE (Grand Forks 6) (N)	No No	No	No No	No No	297	Yes Yes	0	No No	φ \$	-
2.04	Grand Forks	2	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (S)	No	Yes	No	Yes	1368	Yes	0	Yes	\$	-
2.05	Grand Forks	2	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (N)	Yes	Yes	No	Yes	1368	Yes	0	Yes	\$	-
2.06	Grand Forks	2	18th Ave (US 2) & 17th Ave (Grand Forks 2) (W)	No	Yes	No	No	3093	Yes	4	Yes	\$	127,000
2.07	Grand Forks Grand Forks	2	18th Ave (US 2) & 30th St NE (Grand Forks 2) (E) 30th St NE (Grand Forks 2) & 23rd Ave NE (Grand Forks 11)	No No	No No	No No	No No	3352 460	Yes Yes	0	Yes No	\$ \$	-
2.09	Grand Forks	2	30th St NE (Grand Forks 2) & 25th Ave NE (Grand Forks 11)	No	No	Yes	Ye	362	Yes	0	No	\$	
2.10	Grand Forks	2	30th St NE (Grand Forks 2) & 28th Ave NE (Grand Forks 33)	No	No	Yes	Yes	793	Yes	1	Yes	\$	91,000
3.01	Grand Forks	3	5th Ave NE (ND 15) & 25th St NE (Grand Forks 3)	No	No	No	No	1482	Yes	1	Yes	\$	12,000
3.02	Grand Forks	3	Veitch St (Grand Forks 3) & 12th Ave NE (Grand Forks 6)	No	No	No	No	928	Yes	1	Yes	\$	12,000
3.05	Grand Forks	3	25th St NE (Grand Forks 3) & 23rd Ave NE (Grand Forks 11)	No	No	Yes	No	705	Yes	1	Yes	\$	12,000
3.06 4.01	Grand Forks Grand Forks	3 4	25th St NE (Grand Forks 3) & 28th Ave NE (Grand Forks 33)  16th Ave NE (Grand Forks 4) & 45th St NE (Grand Forks 16)	No No	No No	No No	No No	705 200	Yes Yes	0	Yes No	\$ \$	-
4.01	Grand Forks	4	37th St NE (ND 18) & 16th Ave (Grand Forks 4) (S)	No	No	Yes	Yes	1065	Yes	1	Yes	\$	12,000
4.04	Grand Forks	4	37th St NE (ND 18) & 17th Ave (Grand Forks 4) (N)	No	No	No	No	1558	No	0	Yes	\$	
4.05	Grand Forks	4	17th Ave (Grand Forks 4) & Co Rd 4A (Grand Forks 4)	No	No	No	No	320	No	1	No	\$	91,000
4.06 4.07	Grand Forks	4	19th Ave NE (US 2) & Co Rd 4A (Grand Forks 4)	No No	No No	No No	No No	2087 1190	Yes No	0	Yes Yes	\$ \$	-
4.07	Grand Forks Grand Forks	4	16th Ave (Grand Forks 4) & Co Rd 4A (Grand Forks 4)  Demers Ave (Grand Forks 4) & 16th St NE (Grand Forks 5)	No	No	No	Yes	4153	Yes	6	Yes	\$	309,000
5.01	Grand Forks	5	7th Ave NE (ND 15) & 16th St NE (Grand Forks 5)	No	No	No	No	1620	Yes	3	Yes	\$	848,000
5.02	Grand Forks	5	16th St NE (Grand Forks 5) & 12th Ave NE (Grand Forks 6)	No	No	No	No	1323	Yes	1	Yes	\$	91,000
5.03	Grand Forks	5	16th St NE (Grand Forks 5) & 15th Ave NE (Grand Forks 32)	No	No	No	No	2910	No	2	Yes	\$	148,000
5.04	Grand Forks	5 5	18th Ave/Gateway Dr (US 2) & 16th St NE (Grand Forks 5) (E)	No	No	Yes	No	8105	Yes	25	Yes		2,003,000
5.05 5.06	Grand Forks Grand Forks	<u> </u>	18th Ave (US 2) & 17th St NE (Grand Forks 5) (W) 17th St NE (Grand Forks 5) & 23rd Ave NE (Grand Forks 11)	No No	No No	No No	No No	7503 655	Yes Yes	0	Yes Yes	<u>\$</u> \$	136,000
5.07	Grand Forks	5	17th St NE (Grand Forks 5) & 28th Ave NE (Grand Forks 33)	No	No	No	No	445	Yes	0	No	\$	-
5.08	Grand Forks	5	US 81 & 17th St NE (Grand Forks 5)	Yes	No	No	No	1970	No	0	No	\$	-
6.01	Grand Forks	6	10th Ave NE (Grand Forks 6) & 46th St NE (Grand Forks 16)	No	No	No	No	115	Yes	0	No	\$	-
6.02	Grand Forks Grand Forks	6	37th St NE (ND 18) & 10th Ave NE (Grand Forks 6)  12th Ave (Grand Forks 6) & S Columbia Rd (Grand Forks 17) (W)	No No	No No	No No	No No	788 1995	Yes No	0 1	Yes Yes	\$ \$	412,000
6.04	Grand Forks	6	12th Ave (Grand Forks 6) & 10th St NE (Grand Forks 81)	No	No	No	No	2220	Yes	2	Yes	\$	227,000
6.05	Grand Forks	6	12th Ave (Grand Forks 6) & 9th St NE/Belmont Rd (Grand Forks 17) (E)	No	No	No	No	713	Yes	0	Yes	\$	-
7.01	Grand Forks	7	6th Ave NE (Grand Forks 7) & S Columbia Rd (Grand Forks 81)	No	No	No	No	1292	Yes	2	Yes	\$	24,000
7.02	Grand Forks	7	6th Ave NE (Grand Forks 7) & 5th St NE (Grand Forks 26)	No	Yes	No	No	983	Yes	0	No	\$	-
8.01 10.01	Grand Forks Grand Forks	8 10	Belmont Rd (Grand Forks 8) & 62nd Ave [Western] (Grand Forks 17) 43rd St NE (Grand Forks 10) & 23rd Ave NE (Grand Forks 11)	No No	No No	No No	No No	1528 300	No Yes	0	Yes No	\$	36,000
10.01	Grand Forks	10	43rd St NE (Grand Forks 10) & 29th Ave NE (Grand Forks 15)	No	No	No	No	183	Yes	0	No	\$	-
10.04	Grand Forks	10	35th Ave NE (Grand Forks 10) & 45th St NE (Grand Forks 19)	No	No	No	No	322	Yes	0	No	\$	-
11.01	Grand Forks	11	23rd Ave (US 2) & 23rd Ave NE (Grand Forks 11)	No	Yes	No	No	2110	Yes	1	Yes	\$	12,000
11.02	Grand Forks	11	37th St NE (ND 18) & 22nd Ave NE (Grand Forks 11)	No	Yes	No	No	1000	Yes	0	Yes	\$	40.000
12.02 12.03	Grand Forks Grand Forks	12 12	5th Ave NE (ND 15) & Greatnorth Road (Grand Forks 12) (E) 5th Ave NE (ND 15) & 36th St NE (Grand Forks 12) (W)	Yes No	No No	Yes No	Ye No	2418 1550	No No	0	Yes Yes	\$ \$	12,000
12.03	Grand Forks	12	37th St NE (ND 18) & 8th Ave (Grand Forks 12)	No	No	No	No	710	Yes	0	No	\$	-
13.01	Grand Forks	13	5th Ave NE (ND 15) & 22nd St NE (Grand Forks 13)	No	Yes	No	No	1228	Yes	0	Yes	\$	-
14.01	Grand Forks	14	37th St NE (ND 18) & 25th Ave NE (Grand Forks 14)	No	No	No	No	680	Yes	0	No	\$	-
15.01	Grand Forks Grand Forks	15 15	148th St NE (ND 32) & 29th Ave NE (Grand Forks 15) 37th St NE (ND 18) & 29th Ave NE (Grand Forks 15)	No No	No No	No No	No No	467 635	Yes Yes	0	No No	\$ \$	-
15.02 16.01	Grand Forks Grand Forks	16	47th St NE (Grand Forks 16) & 29th Ave NE (Grand Forks 15)	No	No	No No	No	110	Yes	0	No No	\$	
16.02	Grand Forks	16	5th Ave NE (ND 15) & 47th St NE (Grand Forks 16) (W)	No	No	No	No	603	Yes	0	No	\$	
16.03	Grand Forks	16	5th Ave NE (ND 16) & 46th St NE (Grand Forks 16) (E)	No	No	No	No	655	Yes	0	No	\$	-
16.04	Grand Forks	16	46th St NE (Grand Forks 16) & 14th Ave NE (Grand Forks 16)	No	No	No	No	65	Yes	0	No	\$	-
16.05 17.01	Grand Forks Grand Forks	16 17	14th Ave NE (Grand Forks 16) & 45th St NE (Grand Forks 16) 11th St NE (Grand Forks 17) & S Columbia Rd (Grand Forks 81) (S)	No Yes	No Yes	No No	No No	79 1523	Yes No	0	No Yes	\$ \$	-
17.01	Grand Forks	17	S Columbia Rd (Grand Forks 17) & 62nd Ave (Grand Forks 17)	No	No	No	No	2075	No	0	Yes	φ \$	
17.03	Grand Forks	17	62nd Ave (Grand Forks 17) & S Washington St (Grand Forks 81) (N)	No	No	No	No	3390	No	3	Yes	\$	115,000
17.04	Grand Forks	17	62nd Ave (Grand Forks 17) & Belmont Rd [Eastern] (Grand Forks 17)	No	No	No	No	1190	No	1	Yes	\$	12,000
23.01	Grand Forks	23	37th St NE (Grand Forks 23) & 4th Ave NE (Grand Forks 500)	No	Yes	No	No	492	Yes	1	No	\$	12,000
23.02 32.01	Grand Forks Grand Forks	23 32	5th Ave NE (ND 15) & 37th St NE (Grand Forks 23)  32nd Ave S (Grand Forks 32) & Prairie Rd	Yes No	Yes No	No No	No No	1598 2822	Yes No	0	Yes No	\$ \$	136,000
33.01	Grand Forks Grand Forks	33	7th St NE (ND 18) & 28th Ave NE (Grand Forks 33)	No	No	No	No	662	Yes	1	No	\$	91,000
33.02	Grand Forks	33	US 81 & 3rd St (Grand Forks 33)	Yes	Yes	Yes	Ye	1935	Yes	1	Yes	\$	12,000
81.01	Grand Forks	81	S Columbia Rd (Grand Forks 81) & 7th Ave NE	No	No	No	No	1698	Yes	0	Yes	\$	-
501.01	Grand Forks	N/A	18th Ave (US 2) & Park St NE	Yes	Yes	No	No	2123	No	0	No	\$	-

Rank	Int#	Intersection Description	Skew	On/Near Curve	Development	RR Xing	Previous	Total	ADT Cross Product > 60000	Priority	Cras	sh Cost
1	33.02	US 81 & 3rd St (Grand Forks 33)	*	*	*		*	*	<u></u> ★	*****	\$	12,000
2	23.02	5th Ave NE (ND 15) & 37th St NE (Grand Forks 23)	*	*			*	*	*	****	\$ 1	136,000
3	2.1	30th St NE (Grand Forks 2) & 28th Ave NE (Grand Forks 33)			*	*	*	*	*	****		91,000
4	4.02	37th St NE (ND 18) & 16th Ave (Grand Forks 4) (S)			*	*	*	*	*	****		12,000
5 6	2.05 5.04	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (N) 18th Ave/Gateway Dr (US 2) & 16th St NE (Grand Forks 5) (E)	*	*	*	*	<u>*</u>	*	<u>*</u>	****	\$ 20	103 000
7	4.08	Demers Ave (Grand Forks 4) & 16th St NE (Grand Forks 5)				*	*	*	<u></u> ★	***		309,000
8	2.06	18th Ave (US 2) & 17th Ave (Grand Forks 2) (W)		*			*	*	*	****	\$ 1	127,000
9	3.05	25th St NE (Grand Forks 3) & 23rd Ave NE (Grand Forks 11)			*		*	*	*	***		12,000
10 11	11.01 12.02	23rd Ave (US 2) & 23rd Ave NE (Grand Forks 11)  5th Ave NE (ND 15) & Greatnorth Road (Grand Forks 12) (E)	*	*	*		*	*	<u>*</u>	****	\$ \$	12,000 12,000
12	1.05	33rd Ave NE (Grand Forks 1) & 30th St NE (Grand Forks 2)			*	*	*		<u>^</u>	***	\$	-
13	1.08	US 81 & 33rd Ave NE (Grand Forks 1) (N)	*			*	*		*	***	\$	-
14	1.09	US 81 & 32nd Ave NE (Grand Forks 1) (S)	*			*	*		*	****	\$	-
15	2.04	31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (S)		*		*	*		*	***	\$	-
16 17	5.01 6.04	7th Ave NE (ND 15) & 16th St NE (Grand Forks 5) 12th Ave (Grand Forks 6) & 10th St NE (Grand Forks 81)					<u>*</u>	<u>*</u>	<u>*</u>	***		348,000 227,000
18	5.05	18th Ave (US 2) & 17th St NE (Grand Forks 5) (W)					*	<del>`</del>	<u>^</u>	***		136,000
19	5.02	16th St NE (Grand Forks 5) & 12th Ave NE (Grand Forks 6)					*	*	*	***		91,000
20	7.01	6th Ave NE (Grand Forks 7) & S Columbia Rd (Grand Forks 81)					*	*	*	***	\$	24,000
21	1.04	37th St NE (ND 18) & 33rd Ave NE (Grand Forks 1)					*	*	*	***	\$	12,000
22	3.01	5th Ave NE (ND 15) & 25th St NE (Grand Forks 3)					*	*	<u>*</u>	***	\$	12,000
23	3.02 23.01	Veitch St (Grand Forks 3) & 12th Ave NE (Grand Forks 6) 37th St NE (Grand Forks 23) & 4th Ave NE (Grand Forks 500)		*			<u> </u>	<u>*</u>	*	***	φ \$	12,000 12,000
25	11.02	37th St NE (ND 18) & 22nd Ave NE (Grand Forks 11)		*			*	**	*	***	\$	-
26	13.01	5th Ave NE (ND 15) & 22nd St NE (Grand Forks 13)		*			*		*	***	\$	-
27	17.01	11th St NE (Grand Forks 17) & S Columbia Rd (Grand Forks 81) (S)	*	*					*	***	\$	-
28 29	6.03 5.03	12th Ave (Grand Forks 6) & S Columbia Rd (Grand Forks 17) (W) 16th St NE (Grand Forks 5) & 15th Ave NE (Grand Forks 32)						*	<u>*</u>	**		412,000 148,000
30	17.03	62nd Ave (Grand Forks 17) & S Washington St (Grand Forks 81) (N)						*	<u> </u>	**		115,000
31	33.01	7th St NE (ND 18) & 28th Ave NE (Grand Forks 33)					*	*		**	_	91,000
32	8.01	Belmont Rd (Grand Forks 8) & 62nd Ave [Western] (Grand Forks 17)						*	*	**	\$	36,000
33	1.06	33rd Ave NE (Grand Forks 1) & 25th St NE (Grand Forks 3) (W)					*	*		**	\$	12,000
34 35	17.04 2.01	62nd Ave (Grand Forks 17) & Belmont Rd [Eastern] (Grand Forks 17) 5th Ave NE (ND 18) & 31st St (Grand Forks 2)					*	*	<u>*</u>	**	\$	12,000
36	2.07	18th Ave (US 2) & 30th St NE (Grand Forks 2)					*		<u>^</u>	**	\$	-
37	2.09	30th St NE (Grand Forks 2) & 25th Ave NE (Grand Forks 14)			*		*			**	\$	-
38	3.06	25th St NE (Grand Forks 3) & 28th Ave NE (Grand Forks 33)					*		*	**	\$	-
39 40	4.06 5.06	19th Ave NE (US 2) & Co Rd 4A (Grand Forks 4) 17th St NE (Grand Forks 5) & 23rd Ave NE (Grand Forks 11)					*		<u>*</u>	**	\$	-
41	6.02	37th St NE (ND 18) & 10th Ave NE (Grand Forks 6)					*		<u> </u>	**	\$	
42	6.05	12th Ave (Grand Forks 6) & 9th St NE/Belmont Rd (Grand Forks 17) (E	)				*		*	**	\$	_
43	7.02	6th Ave NE (Grand Forks 7) & 5th St NE (Grand Forks 26)		*			*			**	\$	-
44	81.01	S Columbia Rd (Grand Forks 81) & 7th Ave NE					*		*	**	\$	-
45 46	501.01 4.05	18th Ave (US 2) & Park St NE 17th Ave (Grand Forks 4) & Co Rd 4A (Grand Forks 4)	*	*				*		**	Ψ	91,000
47	1.01	48th St NE (ND 32) & 33rd Ave NE (Grand Forks 1)					*			*	\$	-
48	1.02	33rd Ave NE (Grand Forks 1) & 45th St NE (Grand Forks 19)					*			*	\$	-
49	1.03	33rd Ave NE (Grand Forks 1) & 43rd St NE (Grand Forks 10)					*			*	\$	-
50	1.07	33rd Ave NE (Grand Forks 1) & 24th St (Grand Forks 3) (E)					*			*	\$	-
51 52	2.02	31st St (Grand Forks 2) & 10th Ave NE (Grand Forks 6) (S) 31st St NE (Grand Forks 2) & 12th Ave NE (Grand Forks 6) (N)					*			*	\$	-
53	2.08	30th St NE (Grand Forks 2) & 23rd Ave NE (Grand Forks 11)					*			*	\$	
54	4.01	16th Ave NE (Grand Forks 4) & 45th St NE (Grand Forks 16)					*			*	\$	-
55	4.04	37th St NE (ND 18) & 17th Ave (Grand Forks 4) (N)							*	*	\$	-
56 57	4.07 5.07	16th Ave (Grand Forks 4) & Co Rd 4A (Grand Forks 4) 17th St NE (Grand Forks 5) & 28th Ave NE (Grand Forks 33)					*		*	*	\$	-
58	5.07 5.08	US 81 & 17th St NE (Grand Forks 5) & 28th Ave NE (Grand Forks 33)	*				*			*	\$	
59	6.01	10th Ave NE (Grand Forks 6) & 46th St NE (Grand Forks 16)	.,				*			*	\$	
60	10.01	43rd St NE (Grand Forks 10) & 23rd Ave NE (Grand Forks 11)					*			*	\$	-
61	10.02	43rd St NE (Grand Forks 10) & 29th Ave NE (Grand Forks 15)					*				\$	-
62 63	10.04 12.03	35th Ave NE (Grand Forks 10) & 45th St NE (Grand Forks 19) 5th Ave NE (ND 15) & 36th St NE (Grand Forks 12) (W)					*		*	*	\$	-
64	12.03	37th St NE (ND 18) & 8th Ave (Grand Forks 12)					*		^	*	\$	
65	14.01	37th St NE (ND 18) & 25th Ave NE (Grand Forks 14)					*			*	\$	-
66	15.01	148th St NE (ND 32) & 29th Ave NE (Grand Forks 15)					*			*	\$	-
67	15.02	37th St NE (ND 18) & 29th Ave NE (Grand Forks 15)					*			*	\$	-
68 69	16.01 16.02	47th St NE (Grand Forks 16) & 1st Ave NE (Grand Forks 24) 5th Ave NE (ND 15) & 47th St NE (Grand Forks 16) (W)					<u>*</u>			*	\$	-
70	16.03	5th Ave NE (ND 16) & 46th St NE (Grand Forks 16) (E)					*			*	\$	-
71	16.04	46th St NE (Grand Forks 16) & 14th Ave NE (Grand Forks 16)					*			*	\$	-
72	16.05	14th Ave NE (Grand Forks 16) & 45th St NE (Grand Forks 16)					*			*	\$	-
73 74	17.02 32.01	S Columbia Rd (Grand Forks 17) & 62nd Ave (Grand Forks 17) 32nd Ave S (Grand Forks 32) & Prairie Rd							*	*	\$ \$	
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Total Stars --

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) US 81 & 3rd St (Grand Forks 33) ND DOT District: 6 **Agency Name: Grand Forks County Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 940 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1935 Minor Entering ADT: 995 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0.00 Rate (per MVM) 0.3 0.3 0.0 Risk Ranking Value Critical Skew Yes Yes Yes On/Near Curve Yes Development Yes Yes Near RR Crossing Ye Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - All-Way STOP. Quantities for Description Cost Roundabout \$3,000,000 per intersection \$0.00 painted right turn island with yield sign for 0 **Directional Median** \$900,000 per intersection 0 \$0.00 the westbound to northbound movement. Curve projects suggested on other sheets. Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 5 \$540 per sign \$2,700.00 Upgrade Junction Sign \$540 per sign 4 \$2,160.00 Upgrade Stop Ahead Sign \$2,400.00 \$600 per sign 4 Upgrade Stop Ahead Marking per marking 4 \$2,400.00 \$600 Upgrade Stop Bar \$360 per marking 7 \$2,520.00 Review Signs and CST \$2,940 per intersection \$0.00 \$22,380.00 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 \$20,142 Local Match (10% of Total project cost) \$2,238 \*Total Project Cost \$22,380 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? Reference Number ☐ Yes ☐ No Notes Page: 23 USC 409 Intersection ID: 33.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 5th Ave NE (ND 15) & 37th St NE (Grand Forks 23) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1155 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1598 Minor Entering ADT: 443 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.3 0.0 0.0 Risk Ranking Value Critical Skew Yes Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Curve projects suggested on other Description Cost Roundabout \$3,000,000 per intersection \$0.00 0 sheets **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 2 Upgrade Stop Ahead Marking \$600 per marking \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$15,480.00 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 \$13,932 Local Match (10% of Total project cost) \$1,548 \*Total Project Cost \$15,480 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 2 23 USC 409 Intersection ID: 23.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

HIGHWAY SAFET				(HSIP) PROJECT	APPLICAT	ION		
North Dakota Departme SFN 59959 (06-2011)	ent of Tra							
			•	orks 2) & 28th	-		-	
		Grand For Nick West	ks County			DOT District		
			@gfcounty.org		reiepni	one Number	r: 701-780-8248	
Please attach a location n				er describe your project.				
Location Descriptio	n							
Configura Urba Enteri	n/Rural:   County: ( ng ADT: 1	Undivided Rural Grand Forks 793	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 393 400		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements Enhancing En	nasis Area (check all that apply nol Impaired Driving Use of Safety Restraints for all er/Older Driver Safety sive Driving s to Address Lane Departure C nergency Medical Capabilities section Safety	Occupants
Describe Current Sa								
North Dakota Crashes, 20	JU8 - 2012	2	5	years				
		Total	Angle	K+A				
Rate (pe	Crashes	1 0.7	1 0.7	0.00 0.0				
παιο (ρι		J.,	Ų.,	0.0				
	Skew	Value No	Critical Yes	Risk Ranking	_		Photo No	
On/Nea	ar Curve	No	Yes				Available	
	lopment	Yes	Yes	*				
Near RR (	•	Yes	Yes	*				
Distance from previou Volume Cross		Yes Yes	Yes ≥ 100,000	*				
	Crashes	1	>0	*				
				****				
Describe Proposed	Safety	Improvem	ents					
		Description	Unit Cost		Units	Cost	Notes - All-Way STOP. Curv	e projects
		Roundabout		per intersection	0	\$0.00	suggested on other sheets	., .,
Mainlina D		onal Median Varning Sign		per intersection	0 0	\$0.00 \$0.00		
Mailille D		lose Median		per intersection per intersection	0	\$0.00		
I		Street Lights		per street light	1	\$10,200.00		
U		de Stop Sign unction Sign		per sign per sign	4 4	\$2,160.00 \$2,160.00		
Upgr	rade Stop	Ahead Sign	\$600	per sign	4	\$2,400.00		
Upgrade	-	ead Marking ade Stop Bar		per marking per marking	4 4	\$2,400.00 \$1,440.00		
R		ins and CST	·	per intersection	0	\$0.00		
Oines and Markin as and C	24			f	adde the determinent	\$20,760.00		
Signs and Markings and S  Project Cost Estima				minor legs associated v		Year of Con	struction	
Local Match (10%		ederal Funds	\$18,684 \$2,076					
	_	oject Cost	\$20,760	-				
* Based on typical NDDOT cos	•	, .	engineering, construction an	d contingency				
NDDOT Central Officer			□ N.	Deference Number			ID Number	
Project Accepted? Notes		Yes	No	Reference Number			ID Number	
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23 USC 409 NDDOT Reserves All Ob	iections		Proid	ect suggested for agency	's consideration		Intersection ID: Date:	2.10 6/11/2014
TIPPOT IVESCIACS VII OD	1000000		FTOJE	or suggested for agency	o oonoluctaliott.		Date.	U/ 1 1/2U

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 37th St NE (ND 18) & 16th Ave (Grand Forks 4) (S) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: T Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 875 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1065 Minor Entering ADT: 190 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.5 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development Yes Yes Near RR Crossing Yes Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets.. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign 1 \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 23 USC 409 Intersection ID: 4.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 31st St NE (Grand Forks 2) & 17th Ave NE (Grand Forks 4) (N) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: T Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: Yes Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1243 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1368 Minor Entering ADT: 125 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0 0.00 Rate (per MVM) 0.0 0.0 0.0 Risk Ranking Value Critical Skew Yes Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing Yes Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** n >0 \*\*\*\* Describe Proposed Safety Improvements **Unit Cost** Units Cost Notes - Segment and curve projects Description Roundabout \$3,000,000 per intersection 0 \$0.00 suggested on other sheets.. **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light Installed \$0.00 Upgrade Stop Sign \$540 per sign 1 \$540.00 Upgrade Junction Sign \$540 per sign \$540.00 1 Upgrade Stop Ahead Sign \$600 per sign 1 \$600.00 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$2,640.00 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 \$2,376 Local Match (10% of Total project cost) \$264 \*Total Project Cost \$2,640 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 5 23 USC 409 Intersection ID: 2.05 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

Agency Name: Grand Forks County Contact Name: Nick Wast Email Address: nick.west 8g/county org		4041 4	- 10 - 1	(110.0) 0.40:	04 NE 70		- 5\ /=\	
Contact Name: Nick Wast Email Address: nick, wast @glocunty.org aeae attach a location map(a). You may use additional sheets to further describe your project.    Configuration: X	A NI			(US 2) & 16th				
Email Address: nick.west@focunty.org asea attach a location map(s). You may use additional sheets to further describe your project.  **Postation Description**  Configuration: X								40
SHSP Emphasis Area (check all that apply)   SHSP Emphasis Area (check all that apply)   Reduce Alcohol Impaired Driving   Increase the Use of Safety Restrains for all Occ Orofiguration (2): Divided   Street Lights: Yes   Plashers: No   Configuration (2): Divided   Street Lights: Yes   Plashers: No   County: Grand Forks   Major Embring ADT: 5450   Improvements to Addisess Land Departure Created   The County Grand Forks   Major Embring ADT: 5450   Improvements to Addisess Land Departure Created   The County Grand Forks   Major Embring ADT: 5450   Improvements to Addisess Land Departure Created   The County Grand Forks   Major Embring ADT: 5450   Improve Intersection Safety   Secribe Current Safety Issues & Systemic Ranking Review   The Alcota Crashes, 2008 - 2012   System   Total   Angle   K+A   Crashes   25   7   1.00   Total   Ratio (per M/M)   1.7   0.5   0.1   Total   Angle   K+A   Crashes   25   7   1.00   Total   Angle   K+A   Total Crashes   25   7   1.00   Total   Angle   K+A   Total Crashes   25   7   1.00   Total   Total Crashes   25   5.00   * * * * * * * * * * * * * * * * * *					relepii	one Number	. /01-/00-02	40
SHSP Emphasis Area (check all that apply)   Reduce Alcohol Impaired Driving   Reduce Alcohol Impaired Reduce A				er describe vour project				
SHSP Emphasis Area (check all that apply)   Reference Number   Should check   Should project   Sugarized		ou may use a	duditional sheets to furth	er describe your project.				
Configuration: X Traffic Control Device: Signalized Configuration (2): Divided Street Lights: Yes Configuration (2): Divided C	oution Becomption					SHSP Emph	asis Area (check	c all that apply)
Contiguration (2): Divided UtranRural: Rural Rur						Reduce Alcoh	ol Impaired Drivi	ing
UthanRural: Rural County, Grand Forks Entering ADT: 8105 Minor Entering ADT: 4960 Entering ADT: 8105 Minor Entering ADT: 3145  Entering ADT: 8105 Minor Entering ADT: 3145  Escribe Current Safety Issues & Systemic Ranking Review  with Dakola Crashes, 2008 - 2012  Total Angle K-A  Crashes 25 7 1.00 Rate (per MVM) 1.7 0.5 0.1   Value Critical Risk Ranking  Skew No Ves Development Ves Ves  Development Ves Ves  Development Ves Ves  No Total Crashes 25 > 0.1  Distance from previous STOP Ves Ves  Volume Cross Product Ves 2 100,000 * * * * * * * * * * * * * * * * *				_			•	•
County. Grand Forks Major Entering ADT: 4960   Improvements to Address Lane Departure Crast Entering ADT: 8105   Improvements to Improve Intersection Safety   Improvements Safety Issues & Systemic Ranking Review with Dakota Crashes, 2008 - 2012   5 years      Total Angle K+A Crashes, 2008 - 2012   5 years			•			U		afety
Entering ADT: 8105 Minor Entering ADT: 3145								e Departure Crashes
Improve Intersection Safety  Intersection Safety  Intersection Safety  Improve Intersection Safety  Intersection Safety  Improve Int	-							
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Value							TO STATE OF THE PARTY OF THE PA	
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On/Near Curve No Perlipment Yes Yes				Risk Ranking	<u></u>			
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Near RR Crossing   No						THE REAL PROPERTY.		0
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Total Crashes   25	•			*				Google
Description Unit Cost Units Cost Other sheets.    Description   Unit Cost   Units   Cost Other sheets   Sugger   Cost Other sheets			•	*	<u></u>	her Gath 9 Test	1/2	GOOGIC 81
Description   Unit Cost   Units   Cost   Notes - Segment projects sugge other sheets.				***				
Description   Unit Cost   Units   Cost   Notes - Segment projects sugge of the selection   Sa,000,000   per intersection   Sa,000,000   So,000   Other sheets.	escribe Proposed Safety	Improvem	ents					
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Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Sign \$600 per marking 2 \$1,200.00 Upgrade Stop Ahead Marking \$600 per marking 2 \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$7,200.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 Review Signs and CST \$2,940 per intersection 0 \$0.00  \$905,280.00  Ins and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.  **Proposed Year of Construction**  Federal Funds \$814,752 Local Match (10% of Total project cost) \$90,528  **Total Project Cost \$905,280  assed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **DOT Central Office Only**  Digect Accepted?			\$10,200	per street light	Installed	\$0.00		
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ris and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.  **Proposed Year of Construction**    Federal Funds   \$814,752     Local Match (10% of Total project cost)   \$90,528     *Total Project Cost   \$905,280     assed on typical NDDOT costs (March 2014); includes engineering, construction and contingency    DDOT Central Office Only   Yes   No   Reference Number   ID Number						\$0.00	<u>_</u>	
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Local Match (10% of Total project cost) \$90,528  *Total Project Cost \$905,280  ased on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DDOT Central Office Only  oject Accepted?	,	2014110				J J. 9011		
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DOT Reserves All Objections Project suggested for agency's consideration. Date: 6	23 USC 409						Inte	

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Demers Ave (Grand Forks 4) & 16th St NE (Grand Forks 5) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 2645 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 4153 Minor Entering ADT: 1508 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 6 4 0.00 Rate (per MVM) 0.8 0.5 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Yes Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** 6 >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment projects suggested on Description Cost Roundabout \$3,000,000 per intersection \$0.00 other sheets... 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000.00 \$60,000 per intersection 1 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light \$10,200.00 1 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$74,520.00 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 \$67,068 Local Match (10% of Total project cost) \$7,452 \*Total Project Cost \$74,520 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? ☐ No Reference Number ☐ Yes Notes Page: 23 USC 409 Intersection ID: 4.08 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 18th Ave (US 2) & 17th Ave (Grand Forks 2) (W) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: T Increase the Use of Safety Restraints for all Occupants Configuration (2): Divided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 2500 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 3093 Minor Entering ADT: 593 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 4 5 0.00 Rate (per MVM) 0.7 0.9 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - The proposed solution should Description Cost Roundabout \$3,000,000 per intersection \$0.00 consider access management at the 0 **Directional Median** \$900,000 per intersection \$900,000.00 intersection of US 2 and the Turtle River 1 State Park entrance (Park Ave NE) and Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection \$0.00 other nearby intersections due to proximity. 0 Segment and curve projects suggested on Installing Street Lights \$10,200 per street light \$10,200.00 1 Upgrade Stop Sign other sheets. \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$912,840.00 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 \$821,556 Local Match (10% of Total project cost) \$91,284 \*Total Project Cost \$912,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? Reference Number ☐ Yes ■ No Notes Page: 8 23 USC 409 Intersection ID: 2.06 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 25th St NE (Grand Forks 3) & 23rd Ave NE (Grand Forks 11) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 448 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 705 Minor Entering ADT: 258 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.8 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development Yes Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$14,880.00 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 \$13,392 Local Match (10% of Total project cost) \$1,488 \*Total Project Cost \$14,880 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 23 USC 409 Intersection ID: 3.05 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 23rd Ave (US 2) & 23rd Ave NE (Grand Forks 11) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: T Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Divided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 2078 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 2110 Minor Entering ADT: 33 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.3 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Curve projects suggested on other Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 sheets **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 10 23 USC 409 Intersection ID: 11.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

	5th Ave	NE (ND 15) 8	Greatnorth R	oad (Gran	d Forks	12) (E)	
Agency Name: (		ks County			OOT District		
Contact Name: I				Telepho	one Number	: 701-780-82	48
Email Address: I							
Please attach a location map(s). You	ou may use a	dditional sheets to furth	er describe your project.				
Location Description				T	SHSP Emph	asis Area (check	all that annly)
					Reduce Alcoh	ol Impaired Drivi	ng
Configuration:		Traffic Control Device:					straints for all Occupants
Configuration (2): L		Street Lights:				r/Older Driver S	afety
Urban/Rural: F	Rurai Grand Forks	Flashers: Major Entering ADT:			Curb Aggressi		e Departure Crashes
Entering ADT: 2		Minor Entering ADT:					Capabilities to Increase
Ç		J		✓	Improve Inters		•
Dosariba Current Safety Isa	SUOS & SVI	stomic Panking Po	wiow				
Describe Current Safety Iss North Dakota Crashes, 2008 - 2012			years				
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Crashes	Total 1	Angle 1	0.00	_	· Carl		
Rate (per MVM)	0.2	0.2	0.00				7 00000
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					Harris .		-
	Value	Critical	Diels Denlsine		11.000	To the same	
Skew	Value Yes	Critical Yes	Risk Ranking ★	_		*	100
On/Near Curve	No	Yes					
Development	Yes	Yes	*				
Near RR Crossing	Ye	Yes					
Distance from previous STOP	No	Yes					EP77-
Volume Cross Product Total Crashes	Yes 1	≥ 100,000 >0	*			enne.	
7.614			***	<del></del>			
Describe Proposed Safety I	Improvom	onto					
Describe Froposed Salety I	mprovem	<del>ciilo</del>					
	Description	Unit Cost		Units	Cost		projects suggested on othe
	Roundabout onal Median		per intersection per intersection	0	\$0.00 \$0.00	sheets.	
Mainline Dynamic W			per intersection	1	\$60,000.00		
•	lose Median	: '	per intersection	Ö	\$0.00		
	Street Lights		per street light	Installed	\$0.00		
	de Stop Sign		per sign	1	\$540.00		
Upgrade Ju Upgrade Stop	unction Sign		per sign per sign	1	\$540.00 \$600.00		
Upgrade Stop Ahe			per marking	i	\$600.00		
	de Stop Bar	·	per marking	1	\$360.00		
Review Sig	ins and CST	\$2,940	per intersection	0	\$0.00	_	
Signs and Markings and Street Ligh	nt project cos	ts vary by the number o	f minor legs associated v	vith the intersecti	\$62,640.00 on.		
Project Cost Estimate (attach			Ţ.		Year of Con	struction	
F_	ederal Funds	\$56,376					
Local Match (10% of Total p		\$6,264					
	oject Cost	\$62,640	-				
* Based on typical NDDOT costs (March 2		engineering, construction an	d contingency				
NDDOT Central Office Only		□ No	Peterance Number	1		ID Number	
Project Accepted? Notes	Yes	□ No	Reference Number	1		ID Number	<u> </u>
·· <del>·</del>							
23 USC 409							Page: 11 rsection ID: 12.02

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 33rd Ave NE (Grand Forks 1) & 30th St NE (Grand Forks 2) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 395 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 700 Minor Entering ADT: 305 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0 0.00 Rate (per MVM) 0.0 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development Yes Yes Near RR Crossing Yes Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** n >0 \*\*\* Describe Proposed Safety Improvements **Unit Cost** Units Description Cost Notes - . Roundabout \$3,000,000 per intersection \$0.00 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 2 Upgrade Stop Ahead Marking \$600 per marking \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$15,480.00 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 \$13,932 Local Match (10% of Total project cost) \$1,548 \*Total Project Cost \$15,480 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ☐ No Notes Page: 12 23 USC 409 Intersection ID: 1.05 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

N 59959 (06-2011)								
		US 81 & 33	rd Ave NE (Gra					
Agency Name:		ks County			<b>DOT Distric</b>			
Contact Name:				Teleph	none Numbe	r: 701-780-82	48	
Email Address:								
ease attach a location map(s). Y	ou may use a	dditional sheets to furth	er describe your project.					
cation Description								
						nasis Area (checl nol Impaired Driv		<b>'</b> )
Configuration:	Χ	Traffic Control Device	: Thru-STOP			Jse of Safety Re		Occupant
Configuration (2):		Street Lights	: No			er/Older Driver S		•
Urban/Rural:		Flashers	: No		Curb Aggress			
	Grand Forks	Major Entering ADT				s to Address Lan		
Entering ADT:	2035	Minor Entering ADT	: 140	<b>□</b>	-	nergency Medica section Safety	al Capabilities	to Increas
					improvo intor	Social Caroty		
scribe Current Safety Is								
th Dakota Crashes, 2008 - 201	2	5	years					
	Total	Angle	K+A	_	The Later		The World	THE RE
Crashes	0	0	0.00			e i		
Rate (per MVM)	0.0	0.0	0.0	_				
						719		
					63			
	Value	Critical	Risk Ranking					
Skew	Yes	Yes	★	_				-
On/Near Curve	No	Yes						
Development	No	Yes					Sept	
Near RR Crossing	Yes	Yes	*			and the same		
Distance from previous STOP	Yes	Yes	*		The State of the S			
Volume Cross Product	Yes 0	≥ 100,000	*			The same of	Name of the last	
Total Crashes	U	>0	***	_			The state of the s	
scribe Proposed Safety	Improvem	ents						
	Description	Unit Cost		Units	Cost	Notes		
	Roundabout		per intersection	0	\$0.00	<del></del> "		
	ional Median		per intersection	0	\$0.00			
Mainline Dynamic V			per intersection	0	\$0.00			
	Close Median		per intersection	0	\$0.00 \$10.200.00			
	Street Lights de Stop Sign		per street light per sign	2	\$10,200.00 \$1,080.00			
	Junction Sign		per sign	2	\$1,080.00			
Upgrade Stop	Ahead Sign	\$600	per sign	2	\$1,200.00			
Upgrade Stop Ah	-		per marking	1	\$600.00			
	ade Stop Bar gns and CST		per marking per intersection	1 0	\$360.00 \$0.00			
Keview 91(	yris ariu CST	\$2,940	per intersection	U	\$0.00	<u>—</u>		
s and Markings and Street Lig			of minor legs associated wi					
oject Cost Estimate (atta	acn detaile	а сору)		Proposed	Year of Con	struction		
	ederal Funds	\$13,068						
Local Match (10% of Total		\$1,452	=					
	roject Cost	\$14,520	d					
sed on typical NDDOT costs (March and DOT Central Office Only		engineering, construction an	a contingency					
ect Accepted?		□ No	Reference Number			ID Number		
es	- **	<del>_</del>						
							Page:	13
23 USC 409		<b>-</b> ·				Inte	ersection ID:	1.08
DOT Reserves All Objections		Proi	ect suggested for agency's	consideration	1		Date:	6/11/20

Contact Name: Nick West Email Address: nick.west@gfcounty.org ase attach a location map(s). You may use additional sheets to further describe your project.  Configuration: X Configuration: X Configuration: X Configuration: Rural Urban/Rural: Rural County: Grand Forks Major Entering ADT: 1900 Entering ADT: 1955 Minor Entering ADT: 1900 Entering ADT: 1955 Minor Entering ADT: 55  Crashes O O 0 0.00 Rate (per MVM) O.0 O.0 O.0  Value Critical Risk Ranking  Skew Yes Yes On/Near Curve No Near RC Crossing Near RC Crossing Vese Yes Volume Cross Product Yes Volume Cross Product Yes 100,000  X Yes Distance from previous STOP Yes Volume Cross Product Yes 100,000  X Yes Distance from previous STOP Yes Volume Cross Product Yes 100,000  X Yes Description Unit Cost Directional Median Sp00,000 per intersection O Mainline Dynamic Warning Sign Close Median Sp00,000 per intersection O Mainline Dynamic Warning Sign Close Median Sp00,000 per intersection O Installing Street Lights Shop Par Sign Upgrade Stop Ahead Sign Upgrade Stop Ahead Sign Sp00 per sign Q Per per marking 1 Review Signs and CST Sp0 per marking 1 Review Signs and CST Sp0 per marking 1 Review Signs and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with the intersecton O Install Markings and Street Light project costs vary by the number of minor legs associated with	
Contact Name: Nick West Email Address: nick.west@gfcounty.org ase attach a location map(s). You may use additional sheets to further describe your project.  **Cation Description**  **Configuration: X	s 1) (S)
Email Address: nick.west@gfcounty.org asse attach a location map(s). You may use additional sheets to further describe your project.  **Cartiful Description**  Configuration: X Configuration: A Configuration: A Configuration (2): Undivided Urban/Rural Rural County: Grand Forks Major Entering ADT: 1900 Entering ADT: 1955 Minor Entering ADT: 1900 Entering ADT: 1955 Minor Entering ADT: 900 Entering ADT: 1955  **Secribe Current Safety Issues & Systemic Ranking Review**  The Dakota Crashes, 2008 - 2012  **Secribe Current Safety Issues & Systemic Ranking Review**  Total Angle K+A  Crashes 0 0 0.0.00  Rate (per MVM) 0.0 0.0 0.0 0.0  Rate (per MVM) 0.0 0.0 0.0 0.0  **Rate (per MVM) 0.0 0.0 0.0 0.0  **Pes  On/Near Curve No Yes Development No Yes Development No Yes Development No Yes  On-Near R Crossing Yes Yes *  **Yolume Cross Product Yes ≥ 100,000 *  Total Crashes 0 >0 >0  ****  **Poscribe Proposed Safety Improvements**  **Description Unit Cost Units Cost National Security Cost Security Cost Security Cost Security Security Cost	DOT District: 6
ase attach a location map(s). You may use additional sheets to further describe your project.    Cation Description	one Number: 701-780-8248
Configuration: X	
Configuration: X Configuration (2): Undivided Urban/Rural Rural County: Grand Forks Entering ADT: 1955 Entering ADT: 1955 Entering ADT: 1955 Entering ADT: 1955  Secribe Current Safety Issues & Systemic Ranking Review Th Dakota Crashes, 2008 - 2012  Total Angle  Value Critical Risk Ranking  Skew Yes Yes Angle Angle Angle  Value Critical Risk Ranking  Skew Yes Yes Angle A	
Configuration: X   Traffic Control Device: Thru-STOP   Configuration (2): Undivided   Urban/Rural: Rural   County: Grand Forks   Entering ADT: 1955   Major Entering ADT: 1900   County: Grand Forks   Major Entering ADT: 1955   County: Grand Forks   Major Entering ADT: 1900   County: Grand Forks   County: Gr	
Configuration: X   Traffic Control Device: Thru-STOP   Configuration (2): Undivided   Urban/Rural: Rural   Flashers: No   County: Grand Forks   Major Entering ADT: 1900   County: Grand Forks   Major Entering ADT: 1955   County: Grand Forks	SHSP Emphasis Area (check all that apply)
Configuration (2): Undivided Urban/Rural: Rural Flashers: No County: Grand Forks Entering ADT: 1955 Minor Entering ADT: 1900 Minor Entering ADT: 1900 Minor Entering ADT: 1900 Minor Entering ADT: 1900 Minor Entering ADT: 55 Minor	Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupant
Urban/Rural: Rural County: Grand Forks Entering ADT: 1900	Younger Driver/Older Driver Safety
County: Grand Forks Entering ADT: 1955    County: Grand Forks   Major Entering ADT: 1900	Curb Aggressive Driving
Scribe Current Safety Issues & Systemic Ranking Review     Total	Improvements to Address Lane Departure Crashes
th Dakota Crashes, 2008 - 2012 5 years  Total Angle K+A  Crashes 0 0 0.0.00  Rate (per MVM) 0.0 0.0 0.0 0.0  Rate (per MVM) 0.0 0.0 0.0 0.0  Rate (per MVM) 0.0 0.0 0.0 0.0     Value   Critical Risk Ranking	Enhancing Emergency Medical Capabilities to Increas
Total	Improve Intersection Safety
Total	
Total   Angle	
Value   Critical   Risk Ranking	
Rate (per MVM)   0.0   0.0   0.0   0.0	
Skew Yes Yes *  On/Near Curve No Yes Pes Ses Ses Ses Ses Ses Ses Ses Ses Ses S	STATE OF STREET
Skew Yes Yes Xes Xes On/Near Curve No Yes Development No Yes Near RR Crossing Yes Yes Xes Xes Xes Xes Xes Xes Xes Xes Xes Xes X	
Skew Yes Yes	
Skew Yes Yes	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Skew Yes Yes	
On/Near Curve No Yes Development No Yes Near RR Crossing Yes Yes * Distance from previous STOP Yes Yes * Volume Cross Product Yes ≥ 100,000 * Total Crashes 0 >0  Description Unit Cost  Description Unit Cost  Roundabout \$3,000,000 per intersection 0 Directional Median \$900,000 per intersection 0 Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Sign \$600 per marking 1 Upgrade Stop Ahead Sign \$600 per marking 1 Review Signs and CST \$2,940 per intersection 0  Installing Street Light project costs vary by the number of minor legs associated with the intersect of the cost of Total Project Cost \$14,520  Federal Funds \$13,068 Local Match (10% of Total Project Cost \$14,520  Both Control Office Only Federal Office Only Fect Accepted?	
Development   No   Yes   Yes   Xes   Xe	
Near RR Crossing Yes Yes Yes    Volume Cross Product Yes ≥ 100,000    Total Crashes 0    Description Unit Cost    Roundabout \$3,000,000 per intersection 0    Directional Median \$900,000 per intersection 0    Mainline Dynamic Warning Sign \$60,000 per intersection 0    Close Median \$30,000 per intersection 0    Installing Street Lights \$10,200 per street light 1    Upgrade Stop Sign \$540 per sign 2    Upgrade Stop Ahead Sign \$600 per sign 2    Upgrade Stop Ahead Marking \$600 per sign 2    Upgrade Stop Ahead Marking \$600 per marking 1    Upgrade Stop Bar \$360 per marking 1    Upgrade Stop Bar \$360 per marking 1    Review Signs and CST \$2,940 per intersection 0    Estimate (attach detailed copy)    Federal Funds \$13,068    Local Match (10% of Total project Cost \$14,520    sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency    DOT Central Office Only    Federal Punds    1	
Volume Cross Product Total Crashes       Yes       ≥ 100,000       ★         Total Crashes       2       100,000       ★         ***********************************	
Total Crashes 0 >0	
Description Unit Cost Units Roundabout \$3,000,000 per intersection 0 Directional Median \$900,000 per intersection 0 Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	
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Description Unit Cost Units  Roundabout \$3,000,000 per intersection 0 Directional Median \$900,000 per intersection 0 Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Sign \$600 per marking 1 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect because the state of the state o	
Roundabout \$3,000,000 per intersection 0 Directional Median \$900,000 per intersection 0 Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 seed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	
Roundabout \$3,000,000 per intersection 0 Directional Median \$900,000 per intersection 0 Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 seed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	
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Mainline Dynamic Warning Sign \$60,000 per intersection 0 Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Ahead Marking \$600 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect opject Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	\$0.00 \$0.00
Close Median \$30,000 per intersection 0 Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Ahead Marking \$600 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	\$0.00
Installing Street Lights \$10,200 per street light 1 Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect spect Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	\$0.00
Upgrade Stop Sign \$540 per sign 2 Upgrade Junction Sign \$540 per sign 2 Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect spect Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	\$10,200.00
Upgrade Stop Ahead Sign \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1  Upgrade Stop Bar \$360 per marking 1  Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect because the second se	\$1,080.00
Upgrade Stop Ahead Marking \$600 per marking 1 Upgrade Stop Bar \$360 per marking 1 Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOT Central Office Only ect Accepted?	\$1,080.00
Upgrade Stop Bar Review Signs and CST \$2,940 per intersection 0  In sand Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  DOOT Central Office Only lect Accepted?	\$1,200.00 \$600.00
Review Signs and CST \$2,940 per intersection 0  as and Markings and Street Light project costs vary by the number of minor legs associated with the intersect object Cost Estimate (attach detailed copy)  Federal Funds \$13,068  Local Match (10% of Total project cost) \$1,452  *Total Project Cost \$14,520  sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **DOT Central Office Only**  ect Accepted?  Reference Number	\$360.00
Federal Funds \$13,068 Local Match (10% of Total project Cost \$14,520 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **DOT Central Office Only** ect Accepted?  Sassociated with the intersect with the intersect project Cost \$13,068 \$13,068 \$1,452 *Total Project Cost \$14,520 **Reference Number*  Reference Number	\$0.00
Federal Funds \$13,068 Local Match (10% of Total project cost) \$1,452 *Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **DOT Central Office Only** ect Accepted?	\$14,520.00
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Local Match (10% of Total project cost) \$1,452  *Total Project Cost \$14,520  sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  *DOT Central Office Only  lect Accepted?	
*Total Project Cost \$14,520 sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  *DOT Central Office Only lect Accepted?	
sed on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **DOT Central Office Only**  ect Accepted?	
DOT Central Office Only ect Accepted? □ Yes □ No Reference Number	
ect Accepted?	
	ID Number
	1.5
	Page: 14
23 USC 409	Page: 14 Intersection ID: 1.09

HIGHWAY SAF North Dakota Depa				(HSIP) PROJECT	APPLICAT	ION	
SFN 59959 (06-2011)					NE (O		L - 4) (0)
Agon	ov Namo:	31St St		rks 2) & 17th A		and Forl OT Distric	
		Nick West					r: 701-780-8248
Email	Address:	nick.west	@gfcounty.org		•		
		You may use a	dditional sheets to furth	er describe your project.			
Location Descrip	otion					SHSD Empl	hasis Area (check all that apply)
Confi I Er	ntering ADT:	: Undivided : Rural : Grand Forks : 1368	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	Yes No 1243 125		Reduce Alcol Increase the Younger Driv Curb Aggress Improvement Enhancing Er	hol Impaired Driving Use of Safety Restraints for all Occupants er/Older Driver Safety
Describe Curren  North Dakota Crashe			stemic Ranking Re				
nvorin Dakota Crashe	s, 2000 <b>-</b> 20	14	5	years			
	0. 1	Total	Angle	K+A	_		
Rat	Crashes e (per MVM)		0 0.0	0.00 0.0			
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							<b>经验学</b> 飞
		Value	Critical	Risk Ranking			
_	Skew		Yes			200	
	/Near Curve Development		Yes Yes	*			make a
	RR Crossing		Yes	*		Sales Sales	The second second
Distance from pre			Yes	*			
	ross Product otal Crashes		≥ 100,000 >0	*		42 TO 10	312
				***			
Describe Propos	sed Safety	/ Improvem	ents				
_		Description	Hair Oaar		11-2-	0	Notes Comment and some projects
		Description Roundabout	Unit Cost \$3,000,000	per intersection	Units 0	Cost \$0.00	Notes - Segment and curve projects suggested on other sheets
		tional Median	\$900,000	per intersection	0	\$0.00	
Mainlii		Warning Sign Close Median	: '	per intersection per intersection	0	\$0.00 \$0.00	
		Street Lights		per street light	Installed	\$0.00	
		ade Stop Sign		per sign	1	\$540.00 \$540.00	
		Junction Sign p Ahead Sign		per sign per sign	1	\$600.00	
Upg	•	head Marking		per marking	1	\$600.00	
		rade Stop Bar igns and CST		per marking per intersection	1 0	\$360.00 \$0.00	
				<u>.</u>		\$2,640.00	<del>_</del>
Signs and Markings a <b>Project Cost Est</b>		<del>-</del>		f minor legs associated	with the intersection Proposed 1		estruction
Project Cost Est	iiiale (all	acii uetaile	и сору)		Froposeu	teal Of Col.	istraction
		ederal Funds	\$2,376				
Local Match (		I project cost) Project Cost	\$264 <b>\$2,640</b>	-			
* Based on typical NDDO		,	engineering, construction an	d contingency			
NDDOT Central	Office On	1					lib vi
Project Accepted? Notes		Yes	No	Reference Number			ID Number
23 USC 40	19	T					Page: 15 Intersection ID: 2.04
NDDOT Reserves A			Proje	ect suggested for agency	's consideration.		Date: 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 7th Ave NE (ND 15) & 16th St NE (Grand Forks 5) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 320 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1620 Minor Entering ADT: 1300 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 3 1.00 Rate (per MVM) 1.0 0.3 0.3 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes -Description Cost Roundabout \$3,000,000 per intersection \$0.00 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000.00 \$60,000 per intersection 1 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$74,880.00 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 \$67,392 Local Match (10% of Total project cost) \$7,488 \*Total Project Cost \$74,880 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 16 23 USC 409 Intersection ID: 5.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 12th Ave (Grand Forks 6) & 10th St NE (Grand Forks 81) **Agency Name: Grand Forks County ND DOT District: 6 Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1828 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 2220 Minor Entering ADT: 393 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 2 2 0.00 Rate (per MVM) 0.5 0.5 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 2 Upgrade Stop Ahead Marking \$600 per marking \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$15,480.00 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 \$13,932 Local Match (10% of Total project cost) \$1,548 \*Total Project Cost \$15,480 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 17 23 USC 409 Intersection ID: 6.04 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 18th Ave (US 2) & 17th St NE (Grand Forks 5) (W) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Divided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 7278 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 7503 Minor Entering ADT: 225 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.1 0.0 0.0 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes -Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$14,880.00 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 \$13,392 Local Match (10% of Total project cost) \$1,488 \*Total Project Cost \$14,880 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? Reference Number ☐ Yes ■ No Notes Page: 18 23 USC 409 Intersection ID: 5.05 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 16th St NE (Grand Forks 5) & 12th Ave NE (Grand Forks 6) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 885 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1323 Minor Entering ADT: 438 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0.00 Rate (per MVM) 0.4 0.4 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment projects suggested on Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 other sheets. **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 2 Upgrade Stop Ahead Marking per marking \$1,200.00 \$600 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$15,480.00 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 \$13,932 Local Match (10% of Total project cost) \$1,548 \*Total Project Cost \$15,480 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 19 23 USC 409 Intersection ID: 5.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

N 59959 (06-2011)	Sth Asso	NE (Crond Fo	rko 7) 9 C Col.	mhic Dd	(Crond F	orko 94\	
Agency Name:			rks 7) & S Colu		( <b>Grand F</b> DOT Distric	-	
Contact Name:						r: <b>701-780-82</b> 4	48
Email Address:				. 0.00			
ase attach a location map(s). Y			er describe your project.				
cation Description							
						nasis Area (check nol Impaired Drivi	
Configuration:		Traffic Control Device					straints for all Occupan
Configuration (2):		Street Lights			0	er/Older Driver S	afety
Urban/Rural:	Grand Forks	Flashers Major Entering ADT			Curb Aggress		e Departure Crashes
Entering ADT:		Minor Entering ADT					l Capabilities to Increas
, and the second		· ·		✓	Improve Inters	section Safety	•
scribe Current Safety Is	sues & Sys	stemic Ranking Re	eview				
h Dakota Crashes, 2008 - 201	2	5	years				
	Total	Angle	K+A	_		5	A
Crashes	2	0	0.00				
Rate (per MVM)	0.8	0.0	0.0	_			
						753	
	\/-l	Oritical	Diele Dendine				
Skew	Value No	Critical Yes	Risk Ranking	<u> </u>			THE STATE OF THE S
On/Near Curve	No	Yes					
Development	No	Yes			WELL WALLS	THE RELLEVAN	
Near RR Crossing	No	Yes					
Distance from previous STOP	Yes	Yes	*			<b>列制进制制度</b>	
Volume Cross Product Total Crashes	Yes 2	≥ 100,000 >0	*		THE REAL PROPERTY.		
			***	_			
scribe Proposed Safety	Improvem	ents					
	Description	Unit Coat		Linita	Coot	Notos Coama	ant and ourse projects
	Description Roundabout	Unit Cost \$3,000,000	per intersection	Units 0	Cost \$0.00	suggested on	ent and curve projects other sheets
Direct	ional Median	*-,	per intersection	Ö	\$0.00	Suggested on	otrici driceto.
Mainline Dynamic V	Warning Sign	\$60,000	per intersection	0	\$0.00		
	Close Median		per intersection	0	\$0.00		
	Street Lights		per street light	1	\$10,200.00 \$1,080.00		
	de Stop Sign Junction Sign		per sign per sign	2 2	\$1,080.00		
Upgrade Stor	•		per sign	2	\$1,200.00		
Upgrade Stop Ar	-	\$600	per marking	1	\$600.00		
	ade Stop Bar gns and CST		per marking per intersection	1 0	\$360.00 \$0.00		
Treview Oi	gris and OOT	Ψ2,340	per intersection	0	\$14,520.00	<u>—</u>	
s and Markings and Street Lig eject Cost Estimate (atta			f minor legs associated v		ion. <b>Year of Con</b>	etruction	
,		177					
For Local Match (10% of Total	ederal Funds	\$13,068 \$1,452					
	roject Cost		-				
sed on typical NDDOT costs (March	2014); includes		d contingency				
DOT Central Office Only			Deference Number			ID Normalis - in	ı
ect Accepted? es	Yes	No	Reference Number			ID Number	<u> </u>
70							
							Page: 20
23 USC 409 DOT Reserves All Objections		Dua!	ect suggested for agency	a consideration		Inte	rsection ID: 7.0° Date: 6/11/2

orth Dakota Department of T FN 59959 (06-2011)								
	37	th St NE (ND	18) & 33rd Ave	NE (Gra	nd Forks	1)		
Agency Name:					<b>DOT Distric</b>	-		
Contact Name:				Teleph	none Numbe	r: 701-780-82	48	
Email Address:								
Please attach a location map(s). Y	ou may use a	additional sheets to furth	er describe your project.					
Location Description				1	CHCD Empl	agia Araa (ahaa	k all that apply	١
						asis Area (chec ol Impaired Driv		)
Configuration:		Traffic Control Device			Increase the I	Jse of Safety Re	straints for all	Occupants
Configuration (2):		Street Lights				er/Older Driver S	Safety	
Urban/Rural:	Grand Forks	Flashers Major Entering ADT			Curb Aggress	ive Driving s to Address Lan	e Departure C	rachae
Entering ADT:		Minor Entering ADT				nergency Medica		
3		3		<u></u>	Improve Inter		·	
Describe Current Safety Is	SUES & SV	stemic Ranking Re	view					
North Dakota Crashes, 2008 - 201			years					
	Total	Angle	K+A					
Crashes	1	O Aligie	0.00	<u> </u>	The same			
Rate (per MVM)	0.6	0.0	0.0		No.			
,						The state of		
	\/alua	Critical	Diels Denlsine					
Skew	Value No	Critical Yes	Risk Ranking	_				
On/Near Curve		Yes					Mark Control	
Development		Yes						
Near RR Crossing	No	Yes			1 1	1 1		
Distance from previous STOP	Yes	Yes	*		13			
Volume Cross Product		≥ 100,000	*					
Total Crashes	11	>0	***	_				
Describe Proposed Safety	Improvem	ents						
	Description	Unit Cost		Units	Cost	Notes -		
	Roundabout	+-/	per intersection	0	\$0.00	<u> </u>		
	tional Median		per intersection	0	\$0.00			
Mainline Dynamic	Warning Sign Close Median		per intersection	0 0	\$0.00			
	Street Lights	+ /	per intersection per street light	1	\$0.00 \$10,200.00			
	ade Stop Sign		per sign	2	\$1,080.00			
	Junction Sign		per sign	2	\$1,080.00			
	p Ahead Sign		per sign	2	\$1,200.00			
Upgrade Stop Al	-		per marking	2	\$1,200.00			
	ade Stop Bar gns and CST		per marking per intersection	2 0	\$720.00 \$0.00			
			'		\$15,480.00			
Signs and Markings and Street Lig <b>Project Cost Estimate (att</b>	<del></del>		of minor legs associated v		ction.  Year of Con	etruction		
r roject cost Estimate (atte	acii uetaile	и сору)		Froposed	real of Coll	3a action		
	ederal Funds	\$13,932						
Local Match (10% of Total	roject cost)	\$1,548 <b>\$1</b> 5.480	_					
Based on typical NDDOT costs (March	,		d contingency					
NDDOT Central Office Onl	У			•				
Project Accepted?	Yes	No	Reference Number			ID Number		
Notes								
							Page:	21
23 USC 409	Ī					Inte	raye. ersection ID:	1.04
NDDOT Reserves All Objections		Proje	ect suggested for agency	s consideration	١.		Date:	6/11/2014

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 5th Ave NE (ND 15) & 25th St NE (Grand Forks 3) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1308 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1482 Minor Entering ADT: 175 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.4 0.0 0.0 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 \$14,520.00 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 \$13,068 Local Match (10% of Total project cost) \$1,452 \*Total Project Cost \$14,520 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? Reference Number ☐ Yes ■ No Notes Page: 22 23 USC 409 Intersection ID: 3.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Veitch St (Grand Forks 3) & 12th Ave NE (Grand Forks 6) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 613 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 928 Minor Entering ADT: 315 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 2 0.00 Rate (per MVM) 0.6 1.2 0.0 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 suggested on other sheets. **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$14,880.00 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 \$13,392 Local Match (10% of Total project cost) \$1,488 \*Total Project Cost \$14,880 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 23 23 USC 409 Intersection ID: 3.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 37th St NE (Grand Forks 23) & 4th Ave NE (Grand Forks 500) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 353 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 492 Minor Entering ADT: 140 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 1 2 0.00 Rate (per MVM) 2.2 0.0 1.1 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product No $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Curve projects suggested on other Description Cost Roundabout \$3,000,000 per intersection \$0.00 0 sheets **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign 2 \$540 per sign \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Marking per marking 0 \$0.00 \$600 Upgrade Stop Bar \$360 per marking 0 \$0.00 Review Signs and CST \$2,940 per intersection \$0.00 \$13,560.00 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 \$12.204 Local Match (10% of Total project cost) \$1,356 \*Total Project Cost \$13,560 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 24 23 USC 409 Intersection ID: 23.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 37th St NE (ND 18) & 22nd Ave NE (Grand Forks 11) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: T Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 825 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1000 Minor Entering ADT: 175 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0 0 0.00 Rate (per MVM) 0.0 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** n >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Curve projects suggested on other Description Cost Roundabout \$3,000,000 per intersection \$0.00 0 sheets **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 25 23 USC 409 Intersection ID: 11.02 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 5th Ave NE (ND 15) & 22nd St NE (Grand Forks 13) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: T Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1113 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1228 Minor Entering ADT: 115 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0 0 0.00 Rate (per MVM) 0.0 0.0 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** n >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Curve projects suggested on other Description Cost Roundabout \$3,000,000 per intersection \$0.00 0 sheets **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 26 23 USC 409 Intersection ID: 13.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 11th St NE (Grand Forks 17) & S Columbia Rd (Grand Forks 81) (S) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: T Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving $\Box$ County: Grand Forks Major Entering ADT: 1438 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1523 Minor Entering ADT: 85 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0 0 0.00 Rate (per MVM) 0.0 0.0 0.0 Risk Ranking Value Critical Skew Yes Yes Yes On/Near Curve Yes Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Nο Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** n >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 27 23 USC 409 Intersection ID: 17.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

SHSP Emphasis Area (check all that apply) Configuration: X County Grand Forks Major Entering AD: 1905 Major Entering AD: 190	North Dakota Department of T SFN 59959 (06-2011)			6) 0 C Calinada	io Dd (O	and Farl	0 47\ /\A/\		
SHSP Emphasis Area (check all that apply)   Shape	Agency Name: Grand Forks County Contact Name: Nick West				ND	ND DOT District: 6			
Configuration: X Major Entering ADT: 1905  Configuration: X Configuration:				er describe your project.					
Configuration: X Major Entering ADT: 1905  Configuration: X Configuration:		<u> </u>							
Total Angle K+A Rate (per MVM) 0.3 0.3 0.3 0.3    Value   Critical   Risk Ranking	Configuration (2): Urban/Rural: County:	Undivided Rural Grand Forks	Street Lights: Flashers: Major Entering ADT:	No No 1190		Reduce Alcoh Increase the L Younger Drive Curb Aggress Improvements Enhancing Em	ol Impaired Driv Jse of Safety Re er/Older Driver S ive Driving to Address Lar nergency Medic	ving estraints for all Occupants Safety ne Departure Crashes	
Total Angle K+A Rate (per MVM) 0.3 0.3 0.3 0.3    Value   Critical   Risk Ranking			stemic Ranking Re	eview					
Rate (per MVM) 0.3 0.3 0.3 0.3    Value	North Dakota Crashes, 2008 - 201	12	5	years					
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Describe Proposed Safety Improvements    Description   Volume Cross Product   Yes   \$\graphsize 100,000   \frac{\pi}{\pi} \fra									
Near RR Crossing No Yes   Distance from previous STOP No Yes   Volume Cross Product Yes   ≥ 100,000   ★   Total Crashes   1							Passas		
Volume Cross Product   Yes   ≥ 100,000	•								
Describle Proposed Safety Improvements	•			*			31	TO A SECOND	
Describle Proposed Safety Improvements    Description   Unit Cost   Sa,000,000   Per intersection   Units   Sa,000   Route. Twin projects should be coord   So,000   Sogment and curve projects suggested   Mainline Dynamic Warning Sign   \$60,000   Per intersection   So,000   Sogment and curve projects suggested   Mainline Dynamic Warning Sign   \$60,000   Per intersection   So,000   Sogment and curve projects suggested   Mainline Dynamic Warning Sign   \$60,000   Per intersection   So,000   Sogment and curve projects suggested   So,000   Per intersection   Per intersection   So,000   Per intersection				*	_		16 74 6 6	TARREST	
Description   Unit Cost   Units   Cost   Notes - Southbound ramps connect w Roundabout   \$3,000,000 per intersection   0   \$0.00   Route. Twin projects should be coord   \$0.00   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   1   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   \$0,000   Segment and curve projects suggested   \$60,000 per intersection   \$0,000   Segment and curve projects suggested   \$60,000 per intersection   \$0,000   Segment and curve projects suggested   \$60,000 per intersection   \$0,000   Segment and curve projects suggested   \$60,000 per intersection   \$60,000,000   Segment and curve projects suggested   \$60,000 per intersection   \$60,000 per inte				**					
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Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 0 \$0.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Sign \$600 per marking 2 \$1,200.00 Upgrade Stop Ahead Sign \$600 per marking 2 \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$1,200.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 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 \$58,752 Local Match (10% of Total project cost) \$6,528 *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only Project Accepted?				-	0	\$0.00	Segment and	•	
Installing Street Lights \$10,200 per street light 0 \$0.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Marking \$600 per marking 2 \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$1,200.00 Review Signs and CST \$2,940 per intersection 0 \$65,280.00  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 \$58,752 Local Match (10% of Total project Cost \$65,280  *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only  Project Accepted?   Yes   No   Reference Number   ID Number    Page: 28				•			other sheets.		
Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Marking \$600 per marking 2 \$1,200.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 Review Signs and CST \$2,940 per intersection \$65,280.00  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)  Federal Funds \$58,752 Local Match (10% of Total project cost) \$6,528 *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number									
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Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 \$65,280.00 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)  Federal Funds \$58,752 Local Match (10% of Total project cost) \$6,528 *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only Project Accepted?									
Review Signs and CST \$2,940 per intersection 0 \$0.00 \$65,280.00  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 \$58,752 Local Match (10% of Total project cost) \$6,528 *Total Project Cost \$65,280 **Total Project Cost \$65,280 **DoDOT costs (March 2014): includes engineering, construction and contingency  NDDOT Central Office Only  Project Accepted?   Yes   No   Reference Number   ID Number    Notes   Page: 28		-		•					
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)  Federal Funds \$58,752 Local Match (10% of Total project cost) \$6,528  *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only  Project Accepted?    Yes   No   Reference Number   ID Number   Notes   Notes   Notes   Notes   Notes   Notes      Page: 28									
Federal Funds \$58,752 Local Match (10% of Total project cost) \$6,528  *Total Project Cost \$65,280  Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only  Project Accepted?	Ciana and Maulines and Ctuant Li	what munical and	ste view i birithe evienher	f minor long goog sisted					
Federal Funds \$58,752 Local Match (10% of Total project cost) \$6,528  *Total Project Cost \$65,280  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency    NDDOT Central Office Only				n minor legs associated w			struction		
Local Match (10% of Total project cost) \$6,528  *Total Project Cost \$65,280  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  **NDDOT Central Office Only**  Project Accepted?	,		177						
Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  NDDOT Central Office Only  Project Accepted?	Local Match (10% of Tota	project cost)	\$6,528	-					
Project Accepted?	Based on typical NDDOT costs (March	2014); includes		d contingency					
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## HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 16th St NE (Grand Forks 5) & 15th Ave NE (Grand Forks 32) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1600 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 2910 Minor Entering ADT: 1310 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 2 0.00 Rate (per MVM) 0.4 0.2 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Nο Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment projects suggested on Description Cost Roundabout \$3,000,000 per intersection \$0.00 other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 \$60,000.00 Mainline Dynamic Warning Sign \$60,000 per intersection 1 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$1,200.00 \$600 per sign 2 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection 0 \$0.00 \$74,520.00 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 \$67,068 Local Match (10% of Total project cost) \$7,452 \*Total Project Cost \$74,520 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ☐ No Notes Page: 29 23 USC 409 Intersection ID: 5.03 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 62nd Ave (Grand Forks 17) & S Washington St (Grand Forks 81) (N) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: X Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 2438 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 3390 Minor Entering ADT: 953 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 3 2 0.00 Rate (per MVM) 0.5 0.3 0.0 Risk Ranking Value Critical Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Nο Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** 3 >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment and curve projects Description Cost Roundabout \$3,000,000 per intersection \$0.00 suggested on other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 \$60,000.00 Mainline Dynamic Warning Sign \$60,000 per intersection 1 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 2 Upgrade Stop Ahead Marking per marking \$1,200.00 \$600 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$75,480.00 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 \$67,932 Local Match (10% of Total project cost) \$7,548 \*Total Project Cost \$75,480 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ☐ No Notes Page: 30 23 USC 409 Intersection ID: 17.03 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 7th St NE (ND 18) & 28th Ave NE (Grand Forks 33) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 563 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 662 Minor Entering ADT: 100 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 0.00 Rate (per MVM) 0.8 8.0 0.0 Risk Ranking Value Critical Skew No Yes On/Near Curve Yes No Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product No $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes -Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 0 \$0.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Marking \$600 per marking 1 \$600.00 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$4,680.00 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 \$4,212 Local Match (10% of Total project cost) \$468 \*Total Project Cost \$4,680 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ☐ No Notes Page: 31 23 USC 409 Intersection ID: 33.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Belmont Rd (Grand Forks 8) & 62nd Ave [Western] (Grand Forks 17) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: T Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 1125 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1528 Minor Entering ADT: 403 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 years Total K+A Angle Crashes 3 0.00 Rate (per MVM) 0.4 0.0 1.1 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Nο Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** 3 >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment projects suggested on Description Cost Roundabout \$3,000,000 per intersection \$0.00 other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only ID Number Project Accepted? ☐ No Reference Number ☐ Yes Notes Page: 32 23 USC 409 Intersection ID: 8.01 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

#### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 33rd Ave NE (Grand Forks 1) & 25th St NE (Grand Forks 3) (W) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Traffic Control Device: Thru-STOP Configuration: X Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 458 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 510 Minor Entering ADT: 52 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 1 1 0.00 Rate (per MVM) 0.0 1.1 1.1 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product No $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes -Description Cost Roundabout \$3,000,000 per intersection 0 \$0.00 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 0 \$0.00 Upgrade Stop Sign \$540 per sign 2 \$1,080.00 Upgrade Junction Sign \$540 per sign 2 \$1,080.00 Upgrade Stop Ahead Sign \$600 per sign 2 \$1,200.00 Upgrade Stop Ahead Marking per marking 0 \$0.00 \$600 Upgrade Stop Bar \$360 per marking 2 \$720.00 Review Signs and CST \$2,940 per intersection \$0.00 \$4,080.00 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 \$3,672 Local Match (10% of Total project cost) \$408 \*Total Project Cost \$4,080 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? Reference Number ■ No Notes Page: 33 23 USC 409 Intersection ID: 1.06 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

### HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) 62nd Ave (Grand Forks 17) & Belmont Rd [Eastern] (Grand Forks 17) **Agency Name: Grand Forks County** ND DOT District: 6 **Contact Name: Nick West Telephone Number: 701-780-8248** Email Address: nick.west@gfcountv.org Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Configuration: T Traffic Control Device: Thru-STOP Increase the Use of Safety Restraints for all Occupants Configuration (2): Undivided Street Lights: No Younger Driver/Older Driver Safety Urban/Rural: Rural Flashers: No Curb Aggressive Driving County: Grand Forks Major Entering ADT: 915 Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Entering ADT: 1190 Minor Entering ADT: 275 Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 5 vears Total K+A Angle Crashes 0 0.00 Rate (per MVM) 0.5 0.0 0.0 Critical Risk Ranking Value Skew No Yes Yes On/Near Curve No Development No Yes Near RR Crossing Nο Yes Distance from previous STOP Nο Yes Volume Cross Product Yes $\geq 100,000$ **Total Crashes** >0 Describe Proposed Safety Improvements **Unit Cost** Units Notes - Segment projects suggested on Description Cost Roundabout \$3,000,000 per intersection \$0.00 other sheets. 0 **Directional Median** \$900,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$60,000 per intersection 0 \$0.00 Close Median \$30,000 per intersection 0 \$0.00 Installing Street Lights \$10,200 per street light 1 \$10,200.00 Upgrade Stop Sign \$540 per sign \$540.00 Upgrade Junction Sign \$540 per sign 1 \$540.00 Upgrade Stop Ahead Sign \$600 per sign \$600.00 Upgrade Stop Ahead Marking per marking 1 \$600.00 \$600 Upgrade Stop Bar \$360 per marking 1 \$360.00 Review Signs and CST \$2,940 per intersection \$0.00 \$12,840.00 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 \$11,556 Local Match (10% of Total project cost) \$1,284 \*Total Project Cost \$12,840 Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency NDDOT Central Office Only Yes ID Number Project Accepted? ☐ No Reference Number Notes Page: 34 23 USC 409 Intersection ID: 17.04 NDDOT Reserves All Objections Project suggested for agency's consideration. Date 6/11/2014

23 USC 409 NDDOT Reserves All Objections

City of Grand Forks

# City of Grand Forks Urban Segment Listing

Billoon   Decomposition   De	Seg #	Sys	Local Name	Start	End	Length	ADT	Multi- Lane	Access Density	Major Speed Limit	Total Severe Rear End / Sideswipe / Head On Crash	Crash Cost
HEAD   10 designation   S. 488   S. 1978   Destera, force   1						•						+,
18.00   19.0				· · · · · · · · · · · · · · · · · · ·	, ,							¥,
Second Confession   Second Print						•						+,
Section   Sect				, ,								Ψ
Mode												
Marcon   Marco												
Modelgraftin												
Mode   Mode   September   Se					· · - · · · · · · · · · · · · · · ·							
Mode						<u> </u>						
Social Conference   Soci												· · · · · · · · · · · · · · · · · · ·
Monosegreen												\$ 2,093,000
Section   No designation   No designation   Section				,							<u>'</u>	\$ 1,547,000
Strop   Stromborn   Strombor												\$ 136,000
Model   Mode												\$ 10,964,000
Modelignation   Notambia Rd   University Ave   U3 2/Galeway DT   0.7   11,525   Ves   16,57   40   0   5   2,48											•	\$ 4,317,000
Modes   Mode											·	\$ 2,497,000
					·							
					<b>U</b>							
No.   S.   Policy   S.   Policy   S.   Policy				•								Ψ
Modesignation   No designation   No designation   No designation   Standard No Standard												
Stand Ports 81   S. Washington St												
60.03   Grant Forth 8   10   10   15   15   15   15   15   15												
810.03   Grame Forke 81   S. Washington SI   S. Azarba Wes   Hammenting Ave   Debletes AveND 297   0.6   13.678   7.6   83.33   35   0   \$2.278											0	\$ 1,193,000
810.05   No designation   S. Washington St   Hammerling Ave   DeMors Aven/D 297   0.8   13,878   Ves   83,33   35   0   9,277			3									\$ 2,378,000
810.06   No designation   N Washington St   DeMers Ave/ND 297   Road becomes undivided (north of US 2/Gateway D   0.8   5.859   Ves   30.0   35   0   \$ 1.57			<u>~</u>									\$ 2,721,000
Billour   No designation   N. Washington Si   Road becomes undivided (north of US 2/Gateway Dr)   0.8   5.559   Yes   30.00   35   0   \$48												\$ 1,571,000
810.00   No designation   N Washington St   Road becomes undivided (north of US ZiCateway Dr   Mill Rd   1.5   4.665   No   23.33   45   0   5.16											0	
811.0   No designation   Cherry St   \$5th Ave SChestmut St (Road Begins   32nd Ave S   1.5   2,695   No   38.00   25   0   \$20				Road becomes undivided (north of US 2/Gateway Dr)							0	
Billog   Nodesignation   Cherry St   32nd Ave S   4th Ave S   2   2,374   No   78,00   25   0   \$200	811.01				32nd Ave S		2,695	No		25	0	
Second Color   Seco	811.02	No designation	Cherry St		4th Ave S	2	2,374	No		25	0	
1912.00   No designation	811.03	No designation	Cherry St - 1st Ave S - Bruce Ave	4th Ave S	Road Ends (NE of S 4th St)	0.6	1,796	No	41.67	25	0	\$ 623,000
B1203   No designation   S 6th St   Division Ave and Belmont Rd   DeMers Ave   U.S 2/Gateway Dr   1   4,383   No   30,0   30   0   \$ 2,75	812.01	Grand Forks 8		55th Ave S/Chestnut St		0.6		No	53.33	30	0	
B12,04   US 2	812.02	No designation	Belmont Rd	47th Ave S	Division Ave and S 5th St			No	58.75		0	\$ 1,257,000
B12,04   US 2	812.03	No designation	S 5th St	Division Ave and Belmont Rd	DeMers Ave	0.3	3,383	No	40.00	30	0	\$ 48,000
913.01   No designation   N 8th St   University Ave   DeMers Ave   0.2   1,300   No   75.00   25   0   \$ 1.00			US 2 Bus	DeMers Ave	US 2/Gateway Dr	1	4,383	No	38.00	30	0	\$ 278,000
Bit 40  No designation   N 6th St. Kittson Ave   University Ave   S 3rd St   0.5   1,204   No   44,00   25   0   \$ 45     Bit 50  No designation   S 4th St   U.S./Cateway Dr   Minnesota Ave   1.4   1,100   No   42,14   25   0   \$ 18     Bit 50  No designation   S 3rd St   U.S./Cateway Dr   Minnesota Ave   1.3   1,650   No   38.46   25   1   \$ 1,78     Bit 50  No designation   S 3rd St   U.S./Cateway Dr   Minnesota Ave   1.3   1,650   No   38.46   25   1   \$ 1,78     Bit 50  No designation   Washington St Frontage Road (West)   Frontage Road (North of S 3rd Ave)   Shopping center parking lot (South of 16th Ave S)   0.8   373   No   35.00   25   0   \$ 1,88     Bit 50  No designation   Washington St Frontage Road (West)   T/th Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$ 1,88     Bit 50  No designation   Washington St Frontage Road (West)   T/th Ave S   Hammerling Ave   0.2   250   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (West)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (East)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (East)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (East)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (East)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (West)   Parking lot (North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (West)   Parkington North of 19th Ave S)   0.9   427   No   47.78   25   0   \$ 1,47     Bit 50  No designation   Washington St Frontage Road (West)   Parkington North of 19th Ave S   0.9   427	812.05	No designation	Mill Rd	US 2/Gateway Dr	N Washington St	1.8	1,829	No	23.33	30	0	\$ 127,000
815.01   No designation   S 4th St   US 2/Gateway Dr   Minnesota Ave   1.4   1.100   No   34.14   25   0   5   18   1.72	813.01	No designation	N 8th St	University Ave	DeMers Ave	0.2	1,930	No	75.00	25	0	\$ 12,000
816.01 No designation   S 3rd St   US 2/Cateway Dr   Minnesota Ave   1.3   1.550   No   38.46   25   1   \$1.79     17.70 No designation   Washington St Frontage Road (West)   Frontage Road (North of S 32nd Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$1.88     18.71.02 No designation   Washington St Frontage Road (West)   Trih Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$1.88     18.71.02 No designation   Washington St Frontage Road (West)   Trih Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$1.88     18.71.04 No designation   Washington St Frontage Road (East)   Road Begins (North of 5 32nd Ave)   Parkingtot (North of 19th Ave S)   0.9   42.7   No   47.78   25   0   \$5.60     18.71.04 No designation   Washington St Frontage Road (East)   Road Begins (North of 5 32nd Ave)   Parkingtot (North of 19th Ave S)   0.9   42.7   No   47.78   25   0   \$5.60     18.71.04 No designation   Washington St Frontage Road (East)   Road Begins (North of 5 32nd Ave)   Parkingtot (North of 19th Ave S)   0.9   42.7   No   47.78   25   0   \$5.60     18.71.04 No designation   Washington St Frontage Road (East)   Parkingtot (North of 19th Ave S)   Parkingtot (North of	814.01	No designation	N 6th St - Kittson Ave	University Ave	S 3rd St	0.5	1,204	No	44.00	25	0	\$ 453,000
817.01   No designation   Washington St Frontage Road (West)   Frontage Road (North of S 32nd Ave)   Shopping center parking lot (South of 16th Ave S)   0.8   373   No   35.00   25   0   5   1,88	815.01	No designation	S 4th St	US 2/Gateway Dr	Minnesota Ave	1.4	1,100	No	42.14	25	0	\$ 180,000
817.02 No designation   Washington St Frontage Road (West)   17th Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$ 47.	816.01	No designation	S 3rd St	US 2/Gateway Dr	Minnesota Ave	1.3	1,650	No	38.46	25	1	\$ 1,792,000
817.02 No designation   Washington St Frontage Road (West)   17th Ave S   Hammerling Ave   0.2   250   No   65.00   25   0   \$ 47.				Frontage Road (North of S 32nd Ave)	11 0 1 0 1	0.8	373	No	35.00	25	0	\$ 1,887,000
817.04   No designation   Washington St Frontage Road (East)   Parking lot (North of 17th Ave S)   Hammerling Ave   0.2   840   No   45.00   25   0   \$   \$   \$   \$   \$   \$   \$   \$   \$	817.02							No			0	' '
Billand   No designation   S5th Ave S/Chestnut St   Cherry St   Belmont Rd   0.4   153   No   30.00   25   0   \$   \$   \$   \$   \$   \$   \$   \$   \$					<u> </u>						0	<u> </u>
819.01         No designation         Adam's Dr         Belmont Rd         62nd Ave S         1.2         285         No         17.50         25         0         \$ 10           820.01         No designation         47th Ave S - 14th Ave NE         Columbia Rd/NE 11th St         Belmont Rd         1.8         3,089         No         11.11         40         0         \$ 48           821.01         No designation         S 34th St - Ruemmele Rd - 40th Ave S         32nd Ave S         Belmont Rd         2.7         4,239         No         33.33         30         0         \$ 3,60           821.02         No designation         S 34th St - 24th Ave S         32nd Ave S         S Washington St         2         7,083         No         31.00         30         2         8,85           821.03         No designation         24th Ave S         S Washington St         Belmont Rd (Road Ends)         0.8         1,379         No         83.75         25         0         \$ 83           822.01         No designation         32nd Ave S         48th St         1-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         \$ 20,37           822.03         No designation         32nd Ave S         S Was				,	Hammerling Ave						0	*
820.01         No designation         47th Ave S - 14th Ave NE         Columbia Rd/NE 11th St         Belmont Rd         1.8         3,089         No         11.11         40         0         \$48           821.01         No designation         S 34th St - Ruemmele Rd - 40th Ave S         32nd Ave S         Belmont Rd         2.7         4,239         No         33.33         30         0         \$3,50           821.02         No designation         S 34th St - 24th Ave S         32nd Ave S         S Washington St         2         7,083         No         31.00         30         2         \$3,50           821.03         No designation         24th Ave S         S Washington St         2         7,083         No         31.00         30         2         \$8,85           821.03         No designation         24th Ave S         S Washington St         Belmont Rd (Road Ends)         0.8         1,379         No         83.75         25         0         \$85           822.01         No designation         32nd Ave S         48th St         1-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         \$2,937           822.02         No designation         32nd Ave S         S Washington St												T
821.01         No designation         S 34th St - Ruemmele Rd - 40th Ave S         32nd Ave S         Belmont Rd         2.7         4,239         No         33.33         30         0         \$3,50           821.02         No designation         S 34th St - 24th Ave S         32nd Ave S         S Washington St         2         7,083         No         31.00         30         2         \$8,85           821.03         No designation         24th Ave S         S Washington St         Belmont Rd (Road Ends)         0.8         1,379         No         33.75         25         0         \$8,85           822.01         No designation         32nd Ave S         48th St         1-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         \$7.7           822.02         No designation         32nd Ave S         1-29 Western Ramps         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         2												+,
821.02         No designation         \$ 34th St - 24th Ave S         32nd Ave S         \$ Washington St         2         7,083         No         31.00         30         2         \$ 8,85           821.03         No designation         24th Ave S         \$ Washington St         Belmont Rd (Road Ends)         0.8         1,379         No         83.75         25         0         \$ 83           822.01         No designation         32nd Ave S         48th St         1-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         \$ 70,337           822.02         No designation         32nd Ave S         1-29 Western Ramps         S Washington St         2.1         9,143         Yes         20.00         40         0         \$ 20,37           822.02         No designation         32nd Ave S         S Washington St         Belmont Rd         0.8         4,849         No         46.25         25         0         \$ 50           822.01         No designation         24th Ave S         \$ 42nd St         \$ 34th St         0.5         2,470         No         34.00         30         0         \$ 48           824.01         No designation         20th Ave S         Columbia Rd         \$ 20												· ,
821.03         No designation         24th Ave S         S Washington St         Belmont Rd (Road Ends)         0.8         1,379         No         83.75         25         0         \$83           822.01         No designation         32nd Ave S         48th St         I-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         0         \$7           822.02         No designation         32nd Ave S         I-29 Western Ramps         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         Belmont Rd         0.8         4,849         No         46.25         40         0         \$20,37           823.01         No designation         24th Ave S         S Yand St         S 34th St         0.5         2,470         No         46.05         5         5           824.01         No designation         20th Ave S         Columbia Rd         S 20th St         0.5         1,950         No         18.00         25         0         \$68           825.01         No designation         17th Ave S         S 242nd St         S 16th St         1.8 <td></td> <td>\$ 3,507,000</td>												\$ 3,507,000
822.01         No designation         32nd Ave S         48th St         I-29 Western Ramps         0.4         3,988         Yes         20.00         40         0         57           822.02         No designation         32nd Ave S         I-29 Western Ramps         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         81         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         81         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           822.03         No designation         32nd Ave S         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,37           823.01         No designation         24th Ave S         S 42nd St         S 20th St         0.5         1,950         No         10.0         10.0         <												\$ 8,858,000
822.02         No designation         32nd Ave S         I-29 Western Ramps         S Washington St         2.1         9,143         Yes         10.95         40         0         \$20,379           822.03         No designation         32nd Ave S         S Washington St         Belmont Rd         0.8         4,849         No         46.25         25         0         \$50           823.01         No designation         24th Ave S         S 42nd St         S 34th St         0.5         2,470         No         34.00         30         0         \$48           824.01         No designation         20th Ave S         Columbia Rd         S 20th St         0.5         1,950         No         18.00         25         0         \$68           825.01         No designation         17th Ave S         S 42nd St         S 16th St         1.8         5,416         No         25.00         25         0         \$5,13           825.02         No designation         17th Ave S         S 16th St         S 12th St         0.3         7,375         Yes         60.00         25         0         \$3,29           825.03         No designation         17th Ave S         S 12th St         Belmont Rd         0.7         2,906												
822.03         No designation         32nd Ave S         S Washington St         Belmont Rd         0.8         4,849         No         46.25         25         0         \$ 500           823.01         No designation         24th Ave S         S 42nd St         S 34th St         0.5         2,470         No         34.00         30         0         \$ 480           824.01         No designation         20th Ave S         Columbia Rd         S 20th St         0.5         1,950         No         18.00         25         0         \$ 680           825.01         No designation         17th Ave S         S 42nd St         S 16th St         1.8         5,416         No         25.00         25         0         \$ 5,130           825.02         No designation         17th Ave S         S 16th St         S 12th St         0.3         7,375         Yes         60.00         25         0         \$ 3,290           825.03         No designation         17th Ave S         S 12th St         Belmont Rd         0.7         2,906         No         58.57         25         0         \$ 500           826.01         No designation         11th Ave S         N 42nd St         S 30th St         0.8         1,838												
823.01         No designation         24th Ave S         S 42nd St         S 34th St         0.5         2,470         No         34.00         30         0         \$ 48           824.01         No designation         20th Ave S         Columbia Rd         S 20th St         0.5         1,950         No         18.00         25         0         \$ 68           825.01         No designation         17th Ave S         \$ 42nd St         \$ 16th St         1.8         5,416         No         25.00         25         0         \$ 5,13           825.02         No designation         17th Ave S         \$ 16th St         \$ 12th St         0.3         7,375         Yes         60.00         25         0         \$ 3,29           825.03         No designation         17th Ave S         \$ 12th St         Belmont Rd         0.7         2,906         No         58.57         25         0         \$ 50           826.01         No designation         11th Ave S         N 42nd St         \$ 30th St         0.8         1,838         No         20.00         30         0         \$ 52					•							\$ 20,379,000
824.01         No designation         20th Ave S         Columbia Rd         S 20th St         0.5         1,950         No         18.00         25         0         \$ 68           825.01         No designation         17th Ave S         \$ 42nd St         \$ 16th St         1.8         5,416         No         25.00         25         0         \$ 5,13           825.02         No designation         17th Ave S         \$ 16th St         \$ 12th St         0.3         7,375         Yes         60.00         25         0         \$ 3,29           825.03         No designation         17th Ave S         \$ 12th St         Belmont Rd         0.7         2,906         No         58.57         25         0         \$ 50           826.01         No designation         11th Ave S         N 42nd St         \$ 30th St         0.8         1,838         No         20.00         30         0         \$ 52												\$ 508,000
825.01     No designation     17th Ave S     S 42nd St     S 16th St     1.8     5,416     No     25.00     25     0     \$ 5,13       825.02     No designation     17th Ave S     S 16th St     S 12th St     0.3     7,375     Yes     60.00     25     0     \$ 3,29       825.03     No designation     17th Ave S     S 12th St     Belmont Rd     0.7     2,906     No     58.57     25     0     \$ 50       826.01     No designation     11th Ave S     N 42nd St     S 30th St     0.8     1,838     No     20.00     30     0     \$ 52							·					
825.02         No designation         17th Ave S         S 16th St         S 12th St         0.3         7,375         Yes         60.00         25         0         \$ 3,29           825.03         No designation         17th Ave S         S 12th St         Belmont Rd         0.7         2,906         No         58.57         25         0         \$ 50           826.01         No designation         11th Ave S         N 42nd St         S 30th St         0.8         1,838         No         20.00         30         0         \$ 52												
825.03         No designation         17th Ave S         S 12th St         Belmont Rd         0.7         2,906         No         58.57         25         0         \$ 50           826.01         No designation         11th Ave S         N 42nd St         S 30th St         0.8         1,838         No         20.00         30         0         \$ 52												\$ 5,138,000
826.01 No designation 11th Ave S N 42nd St S 30th St 0.8 1,838 No 20.00 30 0 \$ 520												\$ 3,293,000
												\$ 501,000
827.01 No designation 13th Ave S Columbia Rd Belmont Rd 1.8 4,164 No 58.33 25 0 \$ 3,83												\$ 529,000
	827.01	No designation	13th Ave S	Columbia Rd	Belmont Rd	1.8	4,164	No	58.33	25	0	\$ 3,831,000

## City of Grand Forks Urban Segment Listing

23 USC 409 NDDOT Reserves All Objections

Seg #	Sys	Local Name	Start	End	Length	ADT	Multi- Lane	Access Density	Major Speed Limit	Total Severe Rear End / Sideswipe / Head On Crash	Crash Cost
828.01	No designation	8th Ave S	S Washington St	Belmont Rd	0.7	1,794	No	71.43	25	0	\$ 410,000
829.01	No designation	DeMers Ave Frontage Road	S 26th St	S 14th St	0.8	355	No	55.00	25	0	\$ 1,385,000
830.01	No designation	DeMers Ave/ND 297	58th St N (Dirt Road)	I-29 Western Ramps	0.8	6,450	No	11.25	40	0	\$ 326,000
830.02	No designation	DeMers Ave/ND 297	I-29 Western Ramps	North Dakota/Minnesota Border	3.4	9,348	Yes	14.41	40	3	\$ 16,913,000
831.01	No designation	4th Ave S - Minnesota Ave	Demers Ave Ramps	North Dakota/Minnesota Border	0.9	4,109	No	45.56	25	0	\$ 2,134,000
832.01	No designation	University Ave	N 55th St	N 42nd St	1	4,709	No	17.00	30	0	\$ 2,238,000
832.02	No designation	University Ave	N 42nd St	N 20th St	1.5	8,830	No	30.67	30	0	\$ 3,133,000
832.03	No designation	University Ave	N 20th St	S 3rd St (Road Ends)	1.1	4,531	No	64.55	30	0	\$ 3,919,000
834.01	No designation	1st Ave N	DeMers Ave	S 3rd St	1	1,321	0	46.00	30	0	\$ 1,402,000
835.01	No designation	6th Ave N	N 42nd St	Columbia Rd	1	7,119	No	35.00	25	1	\$ 2,500,000
836.01	No designation	8th Ave N	Columbia Rd	S 3rd St (Road Ends)	1.3	939	No	78.46	25	0	\$ 1,730,000
837.01	No designation	US 2 Frontage Road (South)	Road Begins (East of N 42nd St)	Stanford Rd	0.3	1,285	No	43.33	25	0	\$ 187,000
837.02	No designation	US 2 Frontage Road (South)	Road Begins (East of Stanford Rd)	US 2 Frontage Road (North)	0.1	55	No	70.00	25	0	\$ 1,166,000
837.03	No designation	US 2 Frontage Road (North)	US 2 Frontage Road (southern)	Road Ends (West of Columbia Rd)	0.6	785	No	25.00	25	0	\$ -
837.04	No designation	US 2 Frontage Road (North)	US 2	Columbia Rd	0.2	665	No	45.00	25	0	\$ -
838.01	US 2	US 2/Gateway Dr	N 55th St	Columbia Rd	2	8,829	Yes	12.00	40	3	\$ 6,923,000
838.02	US 2	US 2/Gateway Dr	Columbia Rd	North Dakota/Minnesota Border	1.3	7,271	Yes	42.31	40	2	\$ 6,855,000
839.01	US 2	62nd Ave	S Columbia Rd	S Washington St	1	500	Yes	10.00	45	0	\$ 515,000

81.9

Min	Max
6000	5000000
Yes	
30	5000
0	40
	6000 Yes 30

23 USC 409 NDDOT Reserves All Objections

## Tiebreakers

														eakers
Rank	Seg#	Sys	# Local Name	Start	End	Length	ADT	Multi-Lane			Severe Rear End Sideswipe	Priority	Crash Cost	Access Density
ranic	oog "	-	" Loodi Haino	Ctart	End	Longui	,,,,,	Maiti Lano	Density	Limit	or Head-on Crash	1 Horky		riccocc Borlony
1	838.02	US 2	0 US 2/Gateway Dr	Columbia Rd	North Dakota/Minnesota Border	1.3	*	*	*	*	*	****	\$6,855,000	42.3
2*	830.02	No designation	0 DeMers Ave/ND 297	I-29 Western Ramps	North Dakota/Minnesota Border	3.4	*	*		*	*	****	\$16,913,000	14.4
3*	807.02		0 S Columbia Rd	36th Ave S	9th Ave S	1.9	*	*		*	*	****	\$10,964,000	13.7
4		<u> </u>			S Washington St	2.0	*		*	*	*	****		31.0
	821.02			32nd Ave S					*				\$8,858,000	
5*	838.01	US 2	0 US 2/Gateway Dr	N 55th St	Columbia Rd	2.0	*	*		*	*	****	\$6,923,000	12.0
6*	807.03	No designation	<ol> <li>Overpass - Columbia Rd</li> </ol>	9th Ave S	University Ave	0.6	*	*		*	*	****	\$4,317,000	6.7
7*	825.02	No designation	0 17th Ave S	S 16th St	S 12th St	0.3	*	*	*	*		****	\$3,293,000	60.0
8*	810.04	No designation	0 S Washington St	Hammerling Ave	DeMers Ave/ND 297	0.6	*	*	*	*		****	\$2,721,000	83.3
9*	835.01	No designation		N 42nd St	Columbia Rd	1.0	*		*	*	*	****	\$2,500,000	35.0
		•												
10	810.05		0 N Washington St	DeMers Ave/ND 297	8th Ave N	0.8	*	*	*	*		****	\$1,571,000	46.3
11*	822.02	No designation	0 32nd Ave S	I-29 Western Ramps	S Washington St	2.1	*	*		*		***	\$20,379,000	11.0
12*	803.03	No designation	0 N/S 42nd St	17th Ave S	6th Ave N	1.5	*	*		*		***	\$4,185,000	14.0
13*	832.02	No designation	0 University Ave	N 42nd St	N 20th St	1.5	*		*	*		***	\$3,133,000	30.7
14*	807.04	No designation	0 N Columbia Rd	University Ave	US 2/Gateway Dr	0.7	*	*		*		***	\$2,497,000	18.6
15*	810.03	Gramd Forks 81		32nd Ave S	Hammerling Ave	1.2	*	*		*		***	\$2,378,000	16.7
											*			
16	805.01		0 S 34th St	S 34th St (South of 24th Ave S)	DeMers Ave/ND 297 (Road Ends)	1.5			*	*		***	\$2,093,000	34.0
17	816.01		0 S 3rd St	US 2/Gateway Dr	Minnesota Ave	1.3			*	*	*	***	\$1,792,000	38.5
18	810.02	Gramd Forks 81	0 10th St - S Washington St	48th Ave S	32nd Ave S	1.1	*	*		*		***	\$1,193,000	18.2
19	810.06	No designation	0 N Washington St	8th Ave N	Road becomes undivided (north of US 2/Gateway Dr)	8.0		*	*	*		***	\$498,000	30.0
20	832.03		0 University Ave	N 20th St	S 3rd St (Road Ends)	1.1			*	*		**	\$3,919,000	64.5
21	827.01	No designation	·	Columbia Rd	Belmont Rd	1.8			*	*		**	\$3,831,000	58.3
					Belmont Rd	2.7				*				33.3
22	821.01								*			**	\$3,507,000	
23	831.01		0 4th Ave S - Minnesota Ave	Demers Ave Ramps	North Dakota/Minnesota Border	0.9			*	*		**	\$2,134,000	45.6
24	817.01	No designation	0 Washington St Frontage Road (West)	Frontage Road (North of S 32nd Ave)	Shopping center parking lot (South of 16th Ave S)	0.8			*	*		**	\$1,887,000	35.0
25	836.01	No designation	0 8th Ave N	Columbia Rd	S 3rd St (Road Ends)	1.3			*	*		**	\$1,730,000	78.5
26	806.01	No designation	0 S 30th St - 14th Ave S	S Columbia Rd	DeMers Ave/ND 297	0.9			*	*		**	\$1,547,000	33.3
27	834.01		0 1st Ave N	DeMers Ave	S 3rd St	1.0			*	*		**	\$1,402,000	46.0
28	829.01	•		S 26th St	S 14th St	0.8			*	*		**		55.0
									*				\$1,385,000	
29	803.01	No designation		Pavement begins	32nd Ave S	0.5	*			*		**	\$1,317,000	20.0
30	812.02	No designation	0 Belmont Rd	47th Ave S	Division Ave and S 5th St	3.2			*	*		**	\$1,257,000	58.8
31	837.02	No designation	0 US 2 Frontage Road (South)	Road Begins (East of Stanford Rd)	US 2 Frontage Road (North)	0.1			*	*		**	\$1,166,000	70.0
32	821.03	No designation	0 24th Ave S	S Washington St	Belmont Rd (Road Ends)	0.8			*	*		**	\$831,000	83.8
33	803.02	No designation	0 S 42nd St	32nd Ave S	17th Ave S	1.2	*			*		**	\$798,000	12.5
34	809.02	•	0 S 20th St	24th Ave S	DeMers Ave/ND 297	1.3			*	*		**	\$728,000	88.5
35	809.03		0 N 20th St	University Ave	US 2/Gateway Dr	0.7			*	*		**	\$726,000	85.7
36	811.03	No designation	0 Cherry St - 1st Ave S - Bruce Ave	4th Ave S	Road Ends (NE of S 4th St)	0.6			*	*		**	\$623,000	41.7
37	822.03	No designation	0 32nd Ave S	S Washington St	Belmont Rd	0.8			*	*		**	\$508,000	46.3
38	825.03	No designation	0 17th Ave S	S 12th St	Belmont Rd	0.7			*	*		**	\$501,000	58.6
39	823.01	No designation	0 24th Ave S	S 42nd St	S 34th St	0.5			*	*		**	\$484,000	34.0
40	817.02	No designation	Washington St Frontage Road (West)		Hammerling Ave	0.2			*	*		**	\$472,000	65.0
										*				
41	814.01		0 N 6th St - Kittson Ave	University Ave	S 3rd St	0.5			*			**	\$453,000	44.0
42	810.01	Gramd Forks 81		62nd Ave S/Grand Forks 17	48th Ave S	0.9				*	*	**	\$424,000	16.7
43		No designation		S Washington St	Belmont Rd	0.7			*	*		**	\$410,000	71.4
44	809.01	No designation	0 S 20th St	14th Ave NE - 47th Ave S	24th Ave S	1.5			*	*		**	\$393,000	32.7
45	802.01	No designation		17th Ave S	DeMers Ave	1.0			*	*		**	\$345,000	38.0
46	830.01	No designation		58th St N (Dirt Road)	I-29 Western Ramps	0.8	*			*		**	\$326,000	11.3
47	812.04		0 US 2 Bus	DeMers Ave	US 2/Gateway Dr	1.0			*	<del></del>		**	\$278,000	38.0
48	811.01	No designation		55th Ave S/Chestnut St (Road Begins)	32nd Ave S	1.5			*	*		**	\$266,000	38.0
49	804.01	No designation		University Ave	US 2/Gateway Dr Frontage Road (North)	0.7			*	*		**	\$247,000	67.1
50	811.02	No designation		32nd Ave S	4th Ave S	2.0			*	*		**	\$204,000	78.0
51	837.01	No designation	0 US 2 Frontage Road (South)	Road Begins (East of N 42nd St)	Stanford Rd	0.3			*	*		**	\$187,000	43.3
52	815.01	No designation		US 2/Gateway Dr	Minnesota Ave	1.4			*	*		**	\$180,000	42.1
53	803.05	No designation		US 2/Gateway Dr	27th Ave N	1.0			*	*		**	\$103,000	32.0
54	801.01	No designation		University Ave	US 2/Gateway Dr Frontage Road (North)	0.7			*	<del></del>		**	\$84,000	57.1
					<u> </u>				*					
55	822.01	No designation		48th St	I-29 Western Ramps	0.4		*		*		**	\$72,000	20.0
56	817.03	No designation	0 Washington St Frontage Road (East)		Parking lot (North of 19th Ave S)	0.9			*	*		**	\$60,000	47.8
57	812.03	No designation	0 S 5th St	Division Ave and Belmont Rd	DeMers Ave	0.3	-		*	*		**	\$48,000	40.0
58	804.02	No designation		US 2/Gateway Dr Frontage Road (North)	Pavement ends	0.4			*	*		**	\$36,000	35.0
59	803.04	No designation		6th Ave N	US 2/Gateway Dr	0.5			*	*		**	\$36,000	30.0
60	813.01	No designation		University Ave	DeMers Ave	0.3			<u> </u>	<del></del>		**	\$12,000	75.0
						0.2								
61	812.01	Grand Forks 8	0 Belmont Rd	55th Ave S/Chestnut St	47th Ave S	0.6			*	*		**	\$12,000	53.3

23 USC 409 NDDOT Reserves All Objections

### Tiebreakers

Rank	Seg #	Sys	#	Local Name	Start	End	Len	gth ADT	Multi-Lane	Access Density		Severe Rear End Sideswipe or Head-on Crash	Priority	Crash Cost	Access Density
62	808.01	No designation	0	Columbia Frontage Rd	Alley south of 4th Ave N	10th Ave N	0.4	4		*	*		**	\$0	57.5
63	817.04	No designation	0	Washington St Frontage Road (East)	Parking lot (North of 17th Ave S)	Hammerling Ave	0	2		*	*		**	\$0	45.0
64	837.04	No designation	0	US 2 Frontage Road (North)	US 2	Columbia Rd	0.3	2		*	*		**	\$0	45.0
65	818.01	No designation	0	55th Ave S/Chestnut St	Cherry St	Belmont Rd	0.4	4		*	*		**	\$0	30.0
66	825.01	No designation	0	17th Ave S	S 42nd St	S 16th St	1.5	3			*		*	\$5,138,000	25.0
67	832.01	No designation	0	University Ave	N 55th St	N 42nd St	1.0	)			*		*	\$2,238,000	17.0
68	824.01	No designation	0	20th Ave S	Columbia Rd	S 20th St	0.:	5			*		*	\$683,000	18.0
69	826.01	No designation	0	11th Ave S	N 42nd St	S 30th St	0.8	3			*		*	\$529,000	20.0
70	839.01	US 2	0	62nd Ave	S Columbia Rd	S Washington St	1.0	)	*				*	\$515,000	10.0
71	820.01	No designation	0	47th Ave S - 14th Ave NE	Columbia Rd/NE 11th St	Belmont Rd	1.5	3			*		*	\$484,000	11.1
72	800.01	No designation	0	N 55th St	DeMers Ave	US 2/17th Ave	1.0	)			*		*	\$369,000	23.0
73	807.01	No designation	0	11th St NE - Columbia Rd S	62nd Ave S/Grand Forks 17	36th Ave S	1.5	3			*		*	\$136,000	9.4
74	812.05	No designation	0	Mill Rd	US 2/Gateway Dr	N Washington St	1.5	3			*		*	\$127,000	23.3
75	819.01	No designation	0	Adam's Dr	Belmont Rd	62nd Ave S	1.3	2			*		*	\$103,000	17.5
76	807.05	No designation	0	N Columbia Rd	US 2/Gateway Dr	N Washington St	0.	3			*		*	\$72,000	28.8
77	837.03	No designation	0	US 2 Frontage Road (North)	US 2 Frontage Road (southern)	Road Ends (West of Columb	oia Rd) 0.	3			*		*	\$0	25.0
78	802.02	No designation	0	N 48th St	US 2 (northern)	Pavement ends	0.3	3			*		*	\$0	23.3
79	810.07	No designation	0	N Washington St	Road becomes undivided (north of US 2/Gateway Dr	Mill Rd	1.:	5						\$163,000	23.3
* Existing t	reatment			_			Total Stars	19	16	51	77	10			-
		Totals				%	That Gets Star	24%	20%	65%	97%	13%			

Totals Miles 0% 0.0 0% 1% 1.3 2% 15% 14% 11% 12.6 9 11% 11.7 49% 58% 40.4 46 13 16% 14.4 18% 1% 1.5 2% 100% 81.9 100%

If segment has a major entering ADT greater than or equal to 6000 vpd.

If segment has lanes greater than or equal to Yes.

If segment has an access density > 30.

If segment has a speed less than or equal to 40 mph.

If segment has at least 1 severe rear end or sideswipe or head on crash.

HIGHWAY SAFETY IMPROVEMEN North Dakota Department of Transportation Pr SFN 59959 (06-2011)	IT PROGRAM (I	HSIP) PROJECT APPL	LICATION	N		
US 2/Gateway Dr	cy Name: City of Gr act Name: Jane Willi	and Forks	N	D DOT Distric		Project
Please attach a location map(s). You may use add	itional sheets to further	describe your project.				
Location Description			1			
Number: 838.02 Local Road Name: US 2/Gateway Dr Start: Columbia Rd End: North Dakota/Minnes City/Rural: Urban County: Grand Forks	ota Border Sp	ADT: 7,271 Lanes: Yes ss Density 42 peed Limit: 40 gth (miles): 1.3		Reduce Alcohol Increase the Us Younger Driver Curb Aggressiv Improvements	Older Driver Safety Te Driving to Address Lane De ergency Medical Cal	nts for all Occupants
Describe Current Safety Issues & Syste	mic Ranking Revi	ew				
North Dakota Crashes, 2008 - 2012	<b>J</b>	5 years				
		Crashes Rear End Sideswipe Passing Head On Sideswipe Opposing				
			Value	Critical	Star Ranking	
	Severe Rear End	ADT: Major Approach Lanes: Access Density: Speed Limit: / Sideswipe / Head On Crashes:	7,271 Yes 42	≥ 6,000 ≥ 4 ≥ 30 ≤ 40 ≥ 1	* * * * * * *	
Describe Proposed Safety Improvement	ts					
3-Lane 5-Lane	Description Tyl Conversion Proa Conversion Proa Il Revisions Proa	ctive \$30,000 ctive \$42,000	Mileage / # 0.0 0.0 0 in the Future	Cost \$0 \$0 \$0 Yes	any future capital	access management as part of improvement project. Right se projects suggested on other
Project Cost Estimate (attach detailed of	copy)		Proposed	Year of Cor	struction	
	deral Funds \$0 roject cost) \$0 spect Cost	D) ngency		ID Number		
23 USC 409 NDDOT Reserves All Objections		Project suggested fo	r agonovis ag	poidoration	s	Page: 1 Segment ID: 838.02 Date: 6/12/2014

North Dakota Department SFN 59959 (06-2011)	of Transportation Programming					n St Braia	<u> </u>	
	Contact Name: Email Address:	City of Grand Fo Jane Williams JWilliams@gran	rks dforksgov.com	N	D DOT Distric		Ct	
	(s). You may use additional sheets	s to further describe	your project.					
Location Description				T	CHCD E	nphasis Area (check	all that apply)	
Start: End: City/Rural:	S 34th St - 24th Ave S 32nd Ave S S Washington St		nit: 30		Reduce Alcoho Increase the Us Younger Driver Curb Aggressiv Improvements	I Impaired Driving se of Safety Restrain /Older Driver Safety e Driving to Address Lane Dependency Medical Capergency Medical C	pants es	
Describe Current Safe	ty Issues & Systemic Rank	kina Review						
North Dakota Crashes, 2008		g	5 years					
			Crashes Rear End Sideswipe Passing Head On Sideswipe Opposing	1 0 1	-			
	Severe	e Rear End / Sidesw	ADT: Major Approach Lanes: Access Density: Speed Limit: ripe / Head On Crashes	No 31 30	Critical ≥ 6,000 ≥ 4 ≥ 30 ≤ 40 ≥ 1	Star Ranking  *  *  *  *  *  *		
						^^^		
Describe Proposed Sa	fety Improvements							
	Description 3-Lane Conversion 5-Lane Conversion Signal Revisions	Type Proactive Proactive Proactive Conside	Cost per mi / # \$30,000 \$42,000 \$30,000 er Access Management	Mileage / # 2.0 0.0 0 in the Future	Cost \$60,000 \$0 \$0 No \$60,000	Notes - Right angl suggested on othe		e projects
Project Cost Estimate	(attach detailed copy)			Proposed	Year of Cor	struction		
Local	Federal Funds Match (10% of Total project cost)  *Total Project Cost urch 2014); includes engineering, construc	\$54,000 \$6,000 <b>\$60,000</b> etion and contingency	_					
Project Accepted?	· ,	Reference Number			ID Number	1		
Notes	JSC 409		,			Si	Page: egment ID:	2 821.02 6/12/2014

North Dakota Department of Transportation SFN 59959 (06-2011)		fuers D-	Maya A/AIF	2071	- 04h A	N Drains		
Ag Co Em	jency Name: Ci ntact Name: Ja ail Address: JV	ty of Grand Fo ine Williams Villiams@gran	dforksgov.com	N	D DOT District			
Please attach a location map(s). You may use a Location Description	idditional sheets t	o further describe	your project.					
Location Description					SHSP Em	nphasis Area (check	all that annly)	
Number: 810.05 Local Road Name: N Washington St Start: DeMers Ave/ND 2 End: 8th Ave N City/Rural: Urban County: Grand Forks	e/ND 297 Acce Sp Leng		ADT: 10,037 Lanes: Yes ss Density 46 seed Limit: 35 th (miles): 0.8		Reduce Alcoho Increase the Us Younger Driver. Curb Aggressiv Improvements t	I Impaired Driving se of Safety Restrain /Older Driver Safety e Driving to Address Lane Depergency Medical Cap	3	
Describe Current Safety Issues & Sys	stemic Rankir	na Review						
North Dakota Crashes, 2008 - 2012		<b>J</b>	5 years					
			Crashes Rear End Sideswipe Passing Head On Sideswipe Opposing	0 1 0 0	-			
	Severe R		ADT: Major Approach Lanes Access Density: Speed Limit: ipe / Head On Crashes	Yes 46 35	Critical ≥ 6,000 ≥ 4 ≥ 30 ≤ 40 ≥ 1	Star Ranking  *  *  *  *  *		
	•					***		
Describe Proposed Safety Improvem	ents							
5-La	Description ne Conversion ne Conversion gnal Revisions	Type Proactive Proactive Proactive Conside	Cost per mi / # \$30,000 \$42,000 \$30,000 er Access Management	Mileage / # 0.0 0.0 0 in the Future	Cost \$0 \$0 \$0 \$0 Yes	_ Notes - Consider a any future capital i angle and ped/biki sheets.	improvement p	roject. Right
Project Cost Estimate (attach detaile	d copy)			Proposed	Year of Con	struction		
Local Match (10% of Tot	Project Cost	\$0 \$0 <b>\$0</b> n and contingency	_					
Project Accepted? ☐ Yes ☐ No Notes	Re	eference Number			ID Number			
23 USC 409 NDDOT Reserves All Objections			Project suggested for	or agency's co	onsideration	Se	Page: egment ID: Date:	3 810.05 6/12/2014

**City of Grand Forks Right Angle Project Summary** 

Intore+!				Proje	Intersection	
Intersection Count	Segment #	Local Name	Cross Street	Access Management	Confirmation Lights	Intersection Project Cos
1	803.02	S 42nd St	24th Ave S	0	0	\$0
2	803.02	S 42nd St	17th Ave S	0	1	\$1,200
3	803.03	S 42nd St	11th Ave S	0	1	\$1,200
4	803.03	S 42nd St	DeMers Ave/ND 297	0	1	\$1,200
5	803.03	N 42nd St	University Ave	0	1	\$1,200
6	803.03	N 42nd St	6th Ave N	0	1	\$1,200
7	803.04	N 42nd St	US 2/Gateway Dr	0	1	\$1,200
8	804.01	Stanford Rd	US 2/Gateway Dr	0	1	\$1,200
9	805.01	S 34th St	DeMers Ave/ND 297	0	1	\$1,200
10	807.02	Columbia Rd	24th Ave S	0	1	\$1,200
11	807.02	Columbia Rd	20th Ave S	0	0	\$0
12	807.02	Columbia Rd	17th Ave S	0	1	\$1,200
13	807.02	14th Ave S	Columbia Rd	0	0	\$0
14	807.02	Columbia Rd	13th Ave S	0	1	\$1,200
15	807.03	Columbia Rd	University Ave	0	1	\$1,200
16	807.04	Columbia Rd	6th Ave N	0	1	\$1,200
17	807.04	Columbia Rd	8th Ave N	0	0	\$0
18	807.04	Columbia Rd	US 2/Gateway Dr	0	1	\$1,200
19	809.02	S 20th St	DeMers Ave/ND 297	0	1	\$1,200
20	809.03	N 20th St	US 2/Gateway Dr	0	1	\$1,200
21	810.02	S Washington St	47th Ave S	0	1	\$1,200
22	810.02	S Washington St	40th Ave S	0	1	\$1,200
23	810.02	S Washington St	32nd Ave S	0	1	\$1,200
24	810.03	S Washington St	28th Ave S	0	1	\$1,200
25	810.03	S Washington St	Frontage Road	0	0	\$0
26	810.03	S Washington St	24th Ave S	0	1	\$1,200
27	810.03	S Washington St	Campbell Dr	0	1	\$1,200
28	810.03	S Washington St	17th Ave S	0	1	\$1,200
29 30	810.03 810.04	S Washington St	Hammerling Ave & Frontage Road 13th Ave S	0	0 1	\$0 \$1,200
31	810.04	S Washington St	8th Ave S	0		\$1,200 \$0
32	810.04	S Washington St S Washington St	DeMers Ave/ND 297	0	0 1	\$1,200
33	810.05	N Washington St	University Ave	0	1	\$1,200
34	810.05	N Washington St	8th Ave N	0	0	\$1,200
35	810.06	N Washington St	US 2/Gateway Dr	0	1	\$1,200
36	811.02	Cherry St	4th Ave S	0	1	\$1,200
37	812.02	Belmont Rd	32nd Ave S	0	0	\$0
38	812.02	Belmont Rd	4th Ave S	0	1	\$1,200
39	812.03	S 5th St	Kittson Ave	0	<u> </u>	\$1,200
40	812.04	S 5th St	DeMers Ave	0	<u>.</u> 1	\$1,200
41	812.04	S 5th St	1st Ave N	0	1	\$1,200
42	812.04	N 5th St	2nd Ave N	0	1	\$1,200
43	812.04	N 5th St	5th Ave N	0	1	\$1,200
44	812.05	N 5th St	US 2 / Gateway Dr	0	1	\$1,200
45	816.01	N 3rd St	US 2/Gateway Dr	0	1	\$1,200
46	822.01	32nd Ave S	I-29 South Ramp	0	1	\$1,200
47	822.02	32nd Ave S	I-29 North Ramp	0	1	\$1,200
48	822.02	32nd Ave S	S 31st St	0	1	\$1,200
49	822.02	32nd Ave S	S 25th St	0	1	\$1,200
50	822.02	S 38th St	32nd Ave S	0	1	\$1,200
51	822.02	S 34th St	32nd Ave S	0	1	\$1,200
52	822.02	Columbia Rd	32nd Ave S	0	1	\$1,200
53	822.02	S 20th St	32nd Ave S	0	1	\$1,200
54	830.01	DeMers Ave (ND 297)		0	1	\$1,200
55	838.01	Gateway Dr (US 2)	N 47th St	0	1	\$1,200
56	838.01	Gateway Dr (US 2)	I-29 South Ramp	Ö	1	\$1,200
57	838.01	Gateway Dr (US 2)	I-29 North Ramp	0	1	\$1,200

23 USC 409 NDDOT Reserves All Objections

HIGHWAY SAFE			AM (HSIP) PR	OJECT APP	LICATION								
North Dakota Departr SFN 59959 (06-2011)		ation Programming											
Please attach a location	Contact Name: Email Address:	City of Grand Forks Jane Williams JWilliams@grandfo	ersections s orksgov.com		d St fron	n S 32r	d Ave to	S 17th <i>I</i>	Ave				
Location Descripti		se additional sheets to f	urtner describe you	r project.									
		Corridor Street Name Urban/Rural: County: Length	S 42nd St Urban Grand Forks			☐ Younger Driver/Older Driver Safety ☐ Curb Aggressive Driving ☐ Improvements to Address Lane Departure Crashes							
Describe Proposed	d Safety Improv					Major		Severe Angle	Confirmation				
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes			
803.02	S 42nd St	24th Ave S	Т	Thru-STOP	8,943	Undivided	0	0	0	Ped / bike projects suggested on other sheets.			
803.03	S 42nd St	17th Ave S	Т	Signal	10,138	Undivided	0	0	1	Ped / bike projects suggested on other sheets.			
Describe Current S	Safety Issues &	Systemic Ranking											
		Intersection Criteria	Nor	th Dakota Crashes	s, 2008 - 2012		5	years					
Tr	affic Control Device Entering ADT	Signal > 18000		Cor	ription nfirmation Lights	\$1,200	per intersection	Quanity 1	Total Cost \$1,200				
	Road Geometry	Divided		Acce	ized and Divided ess Management	\$360,000	per mile	0.0	\$0				
	Severe Crashes	> 1		*Corridor includ	es miles of divid	led roadway.			\$1,200				
Project Cost Estim	nate (attach deta	ailed copy)				Proposed	Year of Cons	truction					
*Based on typical NDDO NDDOT Central Of	Local Match (109)	Federal Funds % of Total project cost) *Total Project Cost	\$1,080 \$120 <b>\$1,200</b> g, construction and o	contingency									
Project Accepted?			Reference Number	er				ID Number					
									Page:	1			
23 USC NDDOT Reserves				Project sugge	sted for agency's	consideration	n		Intersection ID: Date:	803.02 6/13/2014			

HICHWAY CA	EETV IMPDOV	EMENT PROCE	VW (HGID) DDG	LIECT APP	LICATION					
	FEIY IMPROVE artment of Transport	EMENT PROGRA ation Programming	AIVI (HOIP) PRO	JECT APP	LICATION					
SFN 59959 (06-201			Diel	at Amela Casah	aa @ Cianala l	-tti	I management and a set a			
		Inte	ersections o		es @ Signals I 2nd St fr			N 6th	۸۷۵	
	Agency Name:	City of Grand Fork		)     <b> </b>     <del> </del>    <del> </del>    <del> </del>    <del> </del>		OT District:		J IN OLIT	AVC	
	Contact Name:	Jane Williams					: 701-787-3720			
Please attach a locati		: JWilliams@grandfe use additional sheets to f		roject.						
Location Descrip	otion									
						SHSP Empl	hasis Area (check a	all that apply)		
		Corridor Street Name				Reduce	Alcohol Impaired E	Driving	all Occupants	
		Urban/Rural:	Urban			Younger	r Driver/Older Drive		ali Occupants	
		County: Length	Grand Forks 1.5				gressive Driving ements to Address I	Lane Departur	e Crashes	
		g				Enhanci	ng Emergency Me	dical Capabiliti		
					₹.	Improve	Intersection Safety	у		
Describe Propos	sed Safety Improv	vements				Majar		Causes Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Crashes	Confirmation Lights	Notes
803.04	S 42nd St	11th Ave S	Т	Signal	10,908	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
803.05	S 42nd St	DeMers Ave/ND 297	Х	Signal	19,188	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
803.06	N 42nd St	University Ave	X	Signal	17,985	Undivided	1	0	1	Ped / bike projects suggested on other sheets.
803.07	N 42nd St	6th Ave N	X	Signal	9,302	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Curren	t Safety Issues &	Systemic Ranking								
		Intersection Criteria	North	Dakota Crashes	s, 2008 - 2012		5	years		
	Traffic Control Device				ription		Init Cost	Quanity	Total Cost	
	Entering ADT	> 18000			nfirmation Lights ized and Divided		per intersection	4	\$4,800	
	Road Geometry	Divided		Acce	ess Management es miles of divid	\$360,000	) per mile	0.0	\$0 \$4,800	
	Severe Crashes	> 1		Corridor includ	es miles of divid	ieu roauway.			\$4,000	
Project Cost Est	imate (attach det	ailed conv)				Proposor	d Year of Cons	truction		
Project Cost Est	imate (attach det	, , ,				rioposec	Tear or cons	uucuon		
	Local Match (10	Federal Funds % of Total project cost)	\$4,320 \$480							
;		*Total Project Cost	\$4,800	•						
*Based on typical ND NDDOT Central		14); includes engineering	g, construction and co	ntingency						
Project Accepted?			Reference Number				T	ID Number		
Notes										
20.116	SC 409	7							Page:	2 803.03
	es All Objections			Project sugge	sted for agency's	consideration	on		Intersection ID: Date:	803.03 6/13/2014

North Dakota Depart SFN 59959 (06-2011	ment of Transporta		AM (HSIP) PRO	JECT APP	LICATION							
	Agency Name: Contact Name: Email Address:	City of Grand Fork Jane Williams JWilliams@grandf	sections on	N 42nd S	ND DO	I 6th A	ve to US	2/Gatev	ay Dr			
Please attach a location Location Descript	ion	se additional sheets to	rartier describe your p	roject.								
		Length	N 42nd St Urban Grand Forks		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 Propose			Ozafia	Torffic Occident	Estantia a ADT	Major	Ones Ones had	Severe Angle	Confirmation	Notes		
Intersection ID	Street Name	Cross Street	Config	Traffic Control		Config	Severe Crashes	Crashes	Lights	Notes		
803.08	N 42nd St	US 2/Gateway Dr	X	Signal	12,315	Divided	0	0	1	Ped / bike projects suggested on other sheets.		
Describe Current	Safety Issues &	Systemic Ranking		Dakota Crashes	s, 2008 - 2012		5	years				
T -	raffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1		Cor Unsignali Acce	ription  If irmation Lights zed and Divided iss Management es miles of divide	\$1,200 \$360,000	nit Cost ) per intersection ) per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200			
Project Cost Estin	nate (attach deta	ailed copy)				Proposed	d Year of Cons	truction				
*Based on typical NDD  *BDDOT Central O  Project Accepted? [	OT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineerin	\$120 <b>\$1,200</b>					ID Number	I			
23 USC NDDOT Reserves				Project sugges	sted for agency's	consideratio	on		Page: Intersection ID: Date:	3 803.04 6/13/2014		

	rtment of Transporta	MENT PROGRA tion Programming	M (HSIP) PR	OJECT APP	LICATION					
	Intersect Agency Name: Contact Name: Email Address:	City of Grand Forks	nford Rd fi		ersity Ave	to US	2/Gatewa	ay Dr Fr	rontage	Road (North)
Location Descrip		se additional sneets to it	irtilei describe your	project.						
		Length (	Stanford Rd Jrban Grand Forks			Reduce Increase Youngel Curb Ag Improve Enhanci	hasis Area (check a Alcohol Impaired E to the Use of Safety Driver/Older Drive gressive Driving ments to Address I ng Emergency Med Intersection Safety	Oriving Restraints for er Safety  Lane Departure dical Capabiliti	e Crashes	
	sed Safety Improve		<u> </u>			Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
804.04	Stanford Rd	US 2/Gateway Dr	X	Signal	12,410	Divided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Curren	t Safety Issues &	Systemic Ranking		th Dakota Crashes	2008 - 2012		5.1	years		
	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1	.to	Descr Cor Unsignali Acce	ription  Ifirmation Lights  zed and Divided  ss Management  es miles of divide	\$1,200 \$360,000	nit Cost ) per intersection ) per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200	
Project Cost Est	imate (attach deta	niled copy)				Proposed	d Year of Cons	truction		
NDDOT Central	* DOT costs (March 201 <b>Office Only</b>	Federal Funds % of Total project cost) Total Project Cost 4); includes engineering								
Project Accepted? Notes	Yes No	I	Reference Number	PF				ID Number	Page: Intersection ID:	4 804.01
	es All Objections			Project sugges	sted for agency's	consideration	on		Date:	6/13/2014

HIGHWAY SA North Dakota Dep	FETY IMPROVE artment of Transporta	MENT PROGRA	M (HSIP) PRO	JECT APP	LICATION					
SFN 59959 (06-20	011)	g	Dial	ot Amela Canaba	an @ Cianala Ia		I			
	Agency Name: Contact Name: Email Address:	City of Grand Forks	St from S 3	4th St (S	ND DO	S 24th T District	Ave) to D	eMers A	Ave/ND 2	97 (Road Ends)
Location Descri		se additional sheets to it	ittier describe your p	roject.						
		Length 1	3 34th St Irban Grand Forks			Reduce Increas Younge Curb Aç Improve Enhanc	hasis Area (check Alcohol Impaired I e the Use of Safety r Driver/Older Drive ggressive Driving ments to Address ing Emergency Me l Intersection Safet	Oriving Restraints for er Safety Lane Departur dical Capabiliti	e Crashes	
	sed Safety Improv					Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
805.05	S 34th St	DeMers Ave/ND 297	T	Signal	9,553	Divided	1	0	1	Ped / bike projects suggested on other sheets.
Describe Curre	nt Safety Issues &	Systemic Ranking		Dakota Crashes	2008 - 2012		5	years		
Desired Over 5	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1		Descr Cor Unsignali Acce	ription nfirmation Lights zed and Divided ss Management es miles of divide	\$1,20 \$360,00 ed roadway	Unit Cost 0 per intersection 0 per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200	
Project Cost Es	timate (attach deta	шеа сору)				Propose	d Year of Cons	truction		
*Based on typical NI <b>NDDOT Central</b> Project Accepted? Notes	DDOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineering	\$1,080 \$120 \$1,200 , construction and co	ntingency		_		ID Number		
	ISC 409 ves All Objections			Project sugges	sted for agency's	considerati	on		Page: Intersection ID: Date:	5 805.01 6/13/2014

HIGHWAY SAF	ETY IMPROVE	MENT PROGRA	AM (HSIP) PRO	JECT APP	LICATION					
North Dakota Depart	ment of Transporta		( )							
SFN 59959 (06-2011	)		Righ	nt Angle Crash	es @ Signals I	ntersection	Improvements			
			sections on	S Colur				to S 9th	n Ave	
	Contact Name:					OT District: ne Number:	: 6 : 701-787-3720			
Please attach a location		JWilliams@grandfese additional sheets to		roiect.						
Location Descript	ion				I					
		Urban/Rural: County: Length	S Columbia Rd Urban Grand Forks		00000	Reduce Increase Younger Curb Ag Improve Enhanci	hasis Area (check Alcohol Impaired I a the Use of Safety r Driver/Older Drivi gressive Driving ments to Address ng Emergency Me Intersection Safet	Driving Restraints for er Safety  Lane Departure edical Capabiliti	e Crashes	
Describe Propose			Oneffic	Tooffie Control	Fatastia a ADT	Major	0	Severe Angle	Confirmation	Nata
Intersection ID	Street Name	Cross Street	Config		Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
807.04	Columbia Rd	24th Ave S	Х	Signal	27,505	Divided	1	1	1	Ped / bike projects suggested on other sheets.
807.05	Columbia Rd	20th Ave S	X	Thru-STOP	23,825	Undivided	0	0	0	Ped / bike projects suggested on other sheets.
807.06	Columbia Rd	17th Ave S	X	Signal	32,100	Undivided	1	1	1	Ped / bike projects suggested on other sheets.
806.01	14th Ave S	Columbia Rd	X	Thru-STOP	27,490	Undivided	0	0	0	Ped / bike projects suggested on other sheets.
807.07	Columbia Rd	13th Ave S	X	Signal	30,708	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Current	Safety Issues &	Systemic Ranking		Dakota Crashes	s, 2008 - 2012		5	years		
Ŧ	raffic Control Device	Intersection Criteria Signal	•		ription	U	Init Cost	Quanity	Total Cost	
	Entering ADT	> 18000		Co	nfirmation Lights ized and Divided	\$1,200	per intersection	3	\$3,600	
	Road Geometry	Divided		Acce	ess Management es miles of divid	\$360,000	) per mile	0.0	\$0 \$3,600	
_	Severe Crashes	> 1	•	Corridor includ	cs miles of divid	ica roaaway.			ψ0,000	
Project Cost Estir	nate (attach deta	ailed copy)				Proposed	d Year of Cons	truction		
		Federal Funds	\$3,240							
_		% of Total project cost) *Total Project Cost	\$360 <b>\$3,600</b>							
*Based on typical NDD	OT costs (March 201			ntingency						
NDDOT Central O Project Accepted?			Reference Number					ID Number		
Notes										
		_							Page:	6
23 US0 NDDOT Reserve				Project sugge	sted for agency's	s consideration	on		Intersection ID: Date:	807.02 6/13/2014

HIGHWAY SAFI North Dakota Depart SFN 59959 (06-2011	ment of Transporta		M (HSIP) PR	OJECT APP	LICATION					
Please attach a location Location Descript	Contact Name: Email Address: map(s). You may us	Intersection City of Grand Forks Jane Williams JWilliams@grandfo	s on Over		lumbia R	d fron	n S 9th Av	e to Un	iversity <i>i</i>	Ave
Location Descript	1011									
		Urban/Rural: \ County: ( Length 0	Overpass - Columbi Jrban Grand Forks	a Rd		Reduce Increase Youngel Curb Ag Improve Enhanci	hasis Area (check a Alcohol Impaired E a the Use of Safety Driver/Older Drive gressive Driving ments to Address I ng Emergency Med Intersection Safety	Oriving Restraints for er Safety  Lane Departure  dical Capabiliti	e Crashes	
Describe Propose						Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
807.08										
Describe Current	Safety Issues &	Systemic Ranking	Review							
		Intersection Criteria	Nort	h Dakota Crashes	s, 2008 - 2012		5	years		
₹	raffic Control Device	Signal		Desc	ription		nit Cost	Quanity	Total Cost	
	Entering ADT	> 18000			nfirmation Lights ized and Divided		per intersection	1	\$1,200	
	Road Geometry	Divided			ess Management	\$360,000	) per mile	0.0	\$0	
	Severe Crashes	> 1		*Corridor includ	es miles of divide	ed roadway.			\$1,200	
Project Cost Estin						Proposo	d Year of Cons	truction		
r roject oost Estin	nate juitaen deta	• • •				. roposet	a rear or corrs	a doctori		
_		Federal Funds % of Total project cost) Total Project Cost	\$1,080 \$120 <b>\$1,200</b>	_						
	OT costs (March 201	4); includes engineering		ontingency						
NDDOT Central Of Project Accepted?		T	Reference Number	r			ı	ID Number		
Notes	res invo	ı	Reference Number					ib Number		
23 USC NDDOT Reserves				Project sugge	sted for agency's	consideration	on	ı	Page: Intersection ID: Date:	7 807.03 6/13/2014

HIGHWAY SAF			AM (HSIP) PRO	DJECT APP	LICATION					
North Dakota Depart SFN 59959 (06-2011		tion Programming								
Please attach a location <b>Location Descript</b>	Contact Name: Email Address: map(s). You may us	City of Grand Fork Jane Williams JWilliams@grandf	ons on N Co		Rd from I	Univers	sity Ave to	o US 2/0	Sateway	Dr
Location Descript	1011									
		Urban/Rural:	N Columbia Rd Urban Grand Forks		00000	Reduce Increase Younger Curb Ag Improve Enhanci	hasis Area (check Alcohol Impaired I e the Use of Safety or Driver/Older Driv- gressive Driving ments to Address ng Emergency Me Intersection Safet	Driving Restraints for er Safety  Lane Departuredical Capabiliti	e Crashes	
Describe Propose	d Safety Improve	ements				Maia		Occurry Arrela	Ozafirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Severe Angle Crashes	Confirmation Lights	Notes
807.09	Columbia Rd	6th Ave N	Х	Signal	17,910	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
807.1	Columbia Rd	8th Ave N	Т	Thru-STOP	10,203	Divided	0	0	0	Ped / bike projects suggested on other sheets.
807.11	Columbia Rd	US 2/Gateway Dr	X	Signal	15,740	Divided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Current	Safety Issues & &	Systemic Ranking								
_		Intersection Criteria	Norti	n Dakota Crashes				years		
1	raffic Control Device Entering ADT	Signal > 18000		Cor	ription nfirmation Lights	\$1,200	nit Cost ) per intersection	Quanity 2	Total Cost \$2,400	
	Road Geometry	Divided			ized and Divided ess Management	\$360,000	) per mile	0.0	\$0	
_	Severe Crashes	> 1	_	*Corridor includ	es miles of divid	led roadway.			\$2,400	
Project Cost Estin	nate (attach deta	iled copy)				Proposed	d Year of Cons	truction		
*Based on typical NDD	Local Match (10%  * OT costs (March 2014	Federal Funds 6 of Total project cost) Total Project Cost	\$240 <b>\$2,400</b>	- ontingency		,				
Project Accepted?	Yes No		Reference Numbe	1				ID Number		
23 USC NDDOT Reserves				Project sugge	sted for agency's	s consideration	on		Page: Intersection ID: Date:	8 807.04 6/13/2014

HIGHWAY SAF North Dakota Depar SFN 59959 (06-201	tment of Transporta	EMENT PROGRA ation Programming	AM (HSIP) PRO	JECT APP	LICATION					
	Agency Name: Contact Name: Email Address:	City of Grand Fork Jane Williams JWilliams@grandf	ections on S s orksgov.com	20th St	ND DC	4th Av	e to DeMe	ers Ave	ND 297	
Location Descrip	tion	se additional sheets to	, , ,							
		Length	S 20th St Urban Grand Forks		00000	Reduce Increase Younge Curb Ag Improve Enhanci	hasis Area (check Alcohol Impaired I to the Use of Safety r Driver/Older Drivi gressive Driving ments to Address ng Emergency Me Intersection Safet	Driving Restraints for er Safety  Lane Departuredical Capabilit	e Crashes	
Describe Propose			Ozafia	T#'- OtI	Fatastia a ADT	Major	0	Severe Angle	Confirmation	Nata
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting AD I	Config	Severe Crashes	Crashes	Lights 1	Notes
809.09	S 20th St	DeMers Ave/ND 297	X Paviau	Signal	11,285	Divided	0	0 0		Ped / bike projects suggested on other sheets.
Describe Current	Safety Issues &	Systemic Ranking		Dakota Crashes	s, 2008 - 2012		5	years		
-	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1		Cor Unsignali Acce	ription nfirmation Lights ized and Divided ess Management es miles of divide	\$1,200 \$360,000	Init Cost Diper intersection Diper mile	Quanity 1 0.0	\$1,200 \$0 \$1,200	
Project Cost Esti	mate (attach deta	ailed copy)				Proposed	d Year of Cons	truction		
*Based on typical NDD  NDDOT Central C  Project Accepted?    Notes	OOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineerin	\$120 <b>\$1,200</b>	ntingency				ID Number		
23 US NDDOT Reserve		]		Project sugges	sted for agency's	consideratio	on		Page: Intersection ID: Date:	9 809.02 6/13/2014
				, - 51 049901	agonoy o		-		20.0.	-,# <b>-</b>

North Dakota Depai SFN 59959 (06-201	tment of Transporta	ation Programming										
Please attach a location	Contact Name: Email Address:	City of Grand Fork Jane Williams JWilliams@grandfo	ctions on N	20th St 1	ND DO	versity	Ave to U	S 2/Gate	eway Dr			
Location Descrip	tion	se additional sheets to f	arrior decombe your p	rojoot.								
Describe Propos	ad Safaty Improv	Length	N 20th St Urban Grand Forks		000008	Reduce Increase Younger Curb Ag Improve Enhanci	hasis Area (check Alcohol Impaired I the Use of Safety r Driver/Older Driv gressive Driving ments to Address ng Emergency Me Intersection Safet	Driving  / Restraints for er Safety  Lane Departuredical Capabiliti	e Crashes			
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major	Severe Crashes		Confirmation		Notes	
809.13	N 20th St	US 2/Gateway Dr	T	Signal	11,813	Config Undivided	0	Crashes 0	Lights 1	Segment & ped /	bike projects suggeste	ed on other
Describe Current	Safatu Issuas &	Systemic Ranking	Paviaw									
Describe Current	Sarety Issues &	Systemic Ranking		Dakota Crashes	s, 2008 - 2012		5	years				
-	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1		Cor Unsignali Acce	ription nfirmation Lights ized and Divided ess Management es miles of divid	\$1,200 \$360,000	Init Cost O per intersection O per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200			
Project Cost Esti	mate (attach deta	ailed copy)				Proposed	d Year of Cons	struction				
*Based on typical NDI NDDOT Central C Project Accepted? Notes	OOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineerin	\$1,080 \$120 \$1,200 g, construction and con Reference Number	ntingency	_			ID Number				_
23 US NDDOT Reserve				Project sugge	sted for agency's	consideration	on		Page: Intersection ID: Date:		10 809.03 6/13/2014	

	ETY IMPROVE		AM (HSIP) PR	OJECT APP	LICATION					
North Dakota Depa SFN 59959 (06-201	rtment of Transporta	tion Programming								
Please attach a location Descrip	Contact Name: Email Address: on map(s). You may us	JWilliams@grandf	ns on 10th s orksgov.com		shingto	n St fro	om S 48th	Ave to	S 32nd <i>I</i>	Ave
		Urban/Rural:	10th St - S Washing Urban Grand Forks	ton St	00000	Reduce Increase Younger Curb Ag Improve Enhanci	hasis Area (check Alcohol Impaired I e the Use of Safety r Driver/Older Drivi gressive Driving ments to Address ing Emergency Me l Intersection Safet	Oriving Restraints for er Safety  Lane Departure dical Capabiliti	e Crashes	
	sed Safety Improve		0 "	T # 0	5: ADT	Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config		Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
810.01	S Washington St	47th Ave S	X	Signal	9,298	Divided	0	0	1	Ped / bike projects suggested on other sheets.
810.02	S Washington St	40th Ave S	Х	Thru-STOP	10,710	Divided	3	3	1	Ped / bike projects suggested on other sheets.
810.03	S Washington St	32nd Ave S	Х	Signal	18,653	Divided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Curren	t Safety Issues &	Systemic Ranking	n Review							
20001100 0011011	Curety recues un	Intersection Criteria		th Dakota Crashes	s, 2008 - 2012		5	years		
•	Traffic Control Device	Signal	•		ription nfirmation Lights		Init Cost Oper intersection	Quanity 3	Total Cost \$3,600	
	Entering ADT	> 18000		Unsignal	ized and Divided ess Management		per mile	0.0	\$0	
	Road Geometry Severe Crashes	Divided > 1			es miles of divid	ed roadway.			\$3,600	
Project Coat Fot			•			Dranasa	d Year of Cons	4w.ro4iom		
Project Cost Est	imate (attach deta	• • • • • • • • • • • • • • • • • • • •	<b>60.040</b>			Proposed	Tear or Cons	truction		
*Rased on typical ND		Federal Funds 6 of Total project cost) Total Project Cost 4): includes engineering	\$360 <b>\$3,600</b>	ontingency						
NDDOT Central (	Office Only	.,,				ı		ID Now !		
Project Accepted? Notes	Yes No		Reference Number	er [				ID Number	<u> </u>	
	SC 409 es All Objections			Project sugge	sted for agency's	consideration	on	ı	Page: Intersection ID: Date:	11 810.02 6/13/2014

HIGHWAY SA	FETY IMPROV	EMENT PROGRA	AM (HSIP) PRO	JECT APP	LICATION					
	artment of Transport		( - , -							
	Agency Name Contact Name Email Address	Intersecti : City of Grand Fork : Jane Williams : JWilliams@grandf use additional sheets to	ons on S W s orksgov.com	ashingto	on St from	m S 32 OT District		Hamme	erling Av	re
Location Descri	ption	use additional sheets to	dittier describe your p	тојест.						
		Urban/Rural: County: Length	S Washington St Urban Grand Forks		00000	Reduce Increase Younge Curb Ag Improve Enhanci	hasis Area (check a Alcohol Impaired E the Use of Safety r Driver/Older Drive ggressive Driving ments to Address I ing Emergency Med Intersection Safety	Oriving Restraints for er Safety  Lane Departure  dical Capabiliti	e Crashes	
i i	sed Safety Impro		0 "	T (" 0	5 ADT	Major	0 0 1	Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config		Enterting ADT	Config	Severe Crasnes	Crashes	Lights	Notes
810.15	S Washington St	28th Ave S	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.
810.04	S Washington St	Frontage Road	Х	Thru-STOP	10,468	Divided	0	0	0	Ped / bike projects suggested on other sheets.
810.05	S Washington St	24th Ave S	Х	Signal	16,580	Divided	0	0	1	Ped / bike projects suggested on other sheets.
810.16	S Washington St	Campbell Dr	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.
810.06	S Washington St	17th Ave S	Х	Signal	20,128	Divided	0	0	1	Ped / bike projects suggested on other sheets.
810.07	S Washington St	nerling Ave & Frontage	X	Thru-STOP	13,713	Divided	0	0	0	Ped / bike projects suggested on other sheets.
Describe Currer	nt Safety Issues &	Systemic Ranking		Dakota Crashes	s. 2008 - 2012		5	years		
	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria e Signal > 18000 Divided > 1		Desc Co Unsignal Acce	ription nfirmation Lights ized and Divided ess Management es miles of divid	\$1,200 \$360,000	Unit Cost O per intersection O per mile	Quanity 4 0.0	Total Cost \$4,800 \$0 \$4,800	
Project Cost Es	timate (attach det	tailed copy)				Proposed	d Year of Cons	truction		
*Based on typical NE	DDOT costs (March 20	Federal Funds 3% of Total project cost) *Total Project Cost 14); includes engineerin	\$4,320 \$480 <b>\$4,800</b> g, construction and co	ntingency						
Project Accepted? Notes			Reference Number					ID Number		
		_							Page:	12
	SC 409 ves All Objections			Project sugge	sted for agency's	s consideration	on		Intersection ID: Date:	810.03 6/13/2014

		MENT PROGRA	AM (HSIP) PRO	JECT APP	LICATION					
SFN 59959 (06-20	artment of Transporta 11)	ation Programming								
Please attach a local <b>Location Descri</b>	Agency Name: Contact Name: Email Address: tion map(s). You may u	tersections City of Grand Fork Jane Williams JWilliams@grandf se additional sheets to	on S Washi s orksgov.com	ington S	ND DO	ammer	ing Ave t	o DeMe	rs Ave/N	D 297
Location Descri	рион									
		Urban/Rural:	S Washington St Urban Grand Forks			Reduce Increase Younger Curb Age Improved	asis Area (check a Alcohol Impaired I the Use of Safety Driver/Older Drive gressive Driving ments to Address ng Emergency Me Intersection Safety	Oriving Restraints for er Safety  Lane Departure dical Capabiliti	e Crashes	
	sed Safety Improv					Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
810.08	S Washington St	13th Ave S	X	Signal	17,233	Undivided	0	0	1	Ped / bike projects suggested on other sheets.
810.09	S Washington St	8th Ave S	TT	Thru-STOP	15,858	Undivided	0	0	0	Ped / bike projects suggested on other sheets.
810.1	S Washington St	DeMers Ave/ND 297	X	Signal	24,068	Divided	1	0	1	Ped / bike projects suggested on other sheets.
Describe Currer	nt Safety Issues &	Systemic Ranking								
		Intersection Criteria	North	Dakota Crashes	s, 2008 - 2012		5	years		
	Traffic Control Device	=			ription nfirmation Lights		nit Cost per intersection	Quanity 2	Total Cost \$2,400	
	Entering ADT	> 18000		Unsignal	ized and Divided ess Management		•	0.0	\$0	
	Road Geometry Severe Crashes	Divided > 1			es miles of divid	led roadway.			\$2,400	
Brainet Cont Fo	timate (attach deta					Dranasas	Year of Cons	4v.rotion		
Project Cost Es	umate (attach deta	• • • • • • • • • • • • • • • • • • • •				Proposed	Teal Of Colls	ucuon		
*Based on typical NE	DDOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineerin	\$2,160 \$240 <b>\$2,400</b> g, construction and co	ntingency						
NDDOT Central Project Accepted?	Office Only		Reference Number					ID Number		
Notes									Page:	13
	SC 409 ves All Objections			Project sugge	sted for agency's	s consideration	n		Intersection ID: Date:	810.04 6/13/2014

	artment of Transport	EMENT PROGRA ation Programming	AM (HSIP) PRO	JECT APP	LICATION					
	Agency Name: Contact Name: Email Address:	City of Grand Fork	ons on N Was s orksgov.com	ashingto	ND DC	DeMe	ers Ave/N	D 297 to	N 8th <i>A</i>	Ave
Location Descri	ption									
		Urban/Rural: County: Length	N Washington St Urban Grand Forks		00000	Reduce Increase Younger Curb Ag Improve Enhancii	nasis Area (check Alcohol Impaired I the Use of Safety Driver/Older Driving gressive Driving ments to Address ng Emergency Med Intersection Safet	Driving Restraints for er Safety  Lane Departure edical Capabiliti	e Crashes	
	sed Safety Improv		Confin	Troffic Control	Entertine ADT	Major	Causes Crookes	Severe Angle	Confirmation	Notes
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting AD I	Config	Severe Crashes	Crashes	Lights	Notes Segment & ped / bike projects suggested on other
810.11 810.12	N Washington St N Washington St	University Ave 8th Ave N	x x	Signal Thru-STOP	12,303 8,523	Undivided Divided	0	0	0	Segment & ped / bike projects suggested on other sheets.
Describe Currer	nt Safety Issues &	Systemic Ranking		Dakota Crashes	s, 2008 - 2012		5	years		
	Traffic Control Device				ription nfirmation Lights		nit Cost per intersection	Quanity 1	Total Cost \$1,200	-
	Entering ADT	> 18000		Unsignali	zed and Divided		) per mile	0.0	\$1,200	
	Road Geometry Severe Crashes	Divided > 1			ess Management es miles of divid				\$1,200	-
Project Cost Es	timate (attach deta	ailed copy)				Proposed	Year of Cons	truction		
*Based on typical NC NDDOT Central Project Accepted? Notes	DDOT costs (March 201 Office Only	Federal Funds % of Total project cost) *Total Project Cost (4); includes engineerin	\$1,080 \$120 <b>\$1,200</b> g, construction and co	ntingency				ID Number		
	SC 409 ves All Objections			Project sugge	sted for agency's	consideration	on		Page: Intersection ID: Date:	14 810.05 6/13/2014

	artment of Transporta	MENT PROGRA ation Programming	M (HSIP) PR	OJECT APP	LICATION					
	Agency Name: Contact Name: Email Address:	City of Grand Forks	ton St fro		ve to Ro	ad bed	comes un	divided	(north o	of US 2/Gateway Dr)
Location Descri			•							
		Urban/Rural: L County: 0 Length 0	I Washington St Jrban Grand Forks			Reduce Increase Youngel Curb Ag Improve Enhanci	hasis Area (check a Alcohol Impaired E the Use of Safety r Driver/Older Drive gressive Driving ments to Address I ng Emergency Me Intersection Safety	Oriving Restraints for er Safety  Lane Departure dical Capabiliti	e Crashes	
	sed Safety Improve					Major		Severe Angle	Confirmation	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes
810.13	N Washington St	US 2/Gateway Dr	X	Signal	16,445	Divided	0	0	1	Ped / bike projects suggested on other sheets.
Describe Currer	t Safety Issues &	Systemic Ranking		h Dakota Crashes	s. 2008 - 2012		5	years		
	Traffic Control Device Entering ADT Road Geometry	Signal > 18000 Divided		Cor Unsignali Acce	ription Infirmation Lights I zed and Divided I ss Management I se miles of divide	\$1,200 \$360,000	Init Cost O per intersection O per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200	
	Severe Crashes	> 1							* ,	
Project Cost Es	imate (attach deta	niled copy)				Proposed	d Year of Cons	truction		
*Based on typical ND	*	Federal Funds % of Total project cost) Total Project Cost 4); includes engineering.	\$1,080 \$120 <b>\$1,200</b> , construction and c	 ontingency						
NDDOT Central	Office Only						·	ID No.	1	
Project Accepted? Notes	☐ Yes ☐ No	l	Reference Number	er [				ID Number	l	
	SC 409 res All Objections			Project sugges	sted for agency's	consideration	on		Page: Intersection ID: Date:	15 810.06 6/13/2014

HIGHWAY SAF North Dakota Depar SFN 59959 (06-201:	HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION JOIND Dakota Department of Transportation Programming SFN 59959 (06-2011) Right Angle Crashes @ Signals Intersection Improvements											
	Contact Name: Email Address: n map(s). You may us	City of Grand Forks	ersections	on Cher	ry St fron	n S 32 or District:	nd Ave to	S 4th A	ve			
Location Descrip	tion											
		Length 2	Cherry St Jrban Grand Forks		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 Propose						Major		Covere Angle	Confirmation			
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Crashes	Confirmation Lights	Notes		
811.09	Cherry St	4th Ave S	x	Signal	7,543	Undivided	0	0	1	Ped / bike projects suggested on other sheets.		
Describe Current	Safety Issues &	Systemic Ranking										
- -	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1	Nort	Cor Unsignali Acce	s, 2008 - 2012  ription  nfirmation Lights zed and Divided ss Management es miles of divide	\$1,200 \$360,000	nit Cost per intersection per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200			
Project Cost Estil	nate (attach deta	ailed copy)				Proposed	Year of Cons	truction				
*Based on typical NDD  NDDOT Central O	OT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineering	\$1,080 \$120 <b>\$1,200</b> , construction and c	 ontingency								
Project Accepted?    Notes			Reference Number	er				ID Number				
23 US0 NDDOT Reserve				Project sugges	sted for agency's	consideration	on		Page: Intersection ID: Date:	16 811.02 6/13/2014		

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION  North Dakota Department of Transportation Programming SFN 59959 (06-2011)											
	Agency Name: Contact Name:	JWilliams@grandfo	ns on Belmo	ont Rd fr	ND DO	th Ave	to Divisio	on Ave a	nd S 5th	ı St	
Location Descri				-,							
	SHSP Emphasis Area (check all that apply)  Corridor 812.02 Street Name Belmont Rd Urban/Rural: Urban County: Grand Forks Length 3.2  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 Emergancy Medical Capabilities to Increase Improve Intersection Safety										
	sed Safety Improv					Major		Severe Angle	Confirmation		
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes	
812.05	Belmont Rd	32nd Ave S	Х	All Way STOP	4,998	Undivided	0	0	0	0	
812.1	Belmont Rd	4th Ave S	X	Signal	7,545	Undivided	0	0	1	Ped / bike projects suggested on other sheets.	
Describe Currei	nt Safety Issues &	Systemic Ranking	Review								
		Intersection Criteria		Dakota Crashes	s, 2008 - 2012		5	years			
	Traffic Control Device	Signal			ription nfirmation Lights		nit Cost per intersection	Quanity 1	Total Cost		
	Entering ADT	> 18000		Unsignali	zed and Divided		•	0.0	\$1,200 \$0		
	Road Geometry Severe Crashes	Divided > 1			es miles of divid				\$1,200		
Proiect Cost Es	timate (attach deta	ailed copy)				Proposed	I Year of Cons	truction			
	Local Match (109	Federal Funds % of Total project cost) *Total Project Cost	\$1,080 \$120 <b>\$1,200</b> g, construction and co					ID Number			
	SC 409	1						I.	Page: ntersection ID:	17 812.02	
NDDOT Reser	ves All Objections			Project sugge	sted for agency's	consideration	n		Date:	6/13/2014	

North Dakota Depa	HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION  North Dakota Department of Transportation Programming SFN 59959 (06-2011)											
Please attach a locati	Agency Name: Contact Name: Email Address:	Intersection City of Grand Forks Jane Williams JWilliams@grandfo se additional sheets to fo	s on S 5th		Division A	Ave an	d Belmon	t Rd to	DeMers	Ave		
Location Descrip		oo additional oncolo to t	araner december your	projecti								
		Length	S 5th St Jrban Grand Forks		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 Propos	ed Safety Improv					Major		Covere Angle	Confirmation			
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Crashes	Confirmation Lights	Notes		
812.12	S 5th St	Kittson Ave	X	Signal	4,498	Undivided	0	0	1	Ped / bike projects suggested on other sheets.		
Describe Current	t Safety Issues &	Systemic Ranking		n Dakota Crashes	2000 2012		-	years				
	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1	Note	Descr Cor Unsignali Acce	ription nfirmation Lights ized and Divided ss Management es miles of divid	\$1,200 \$360,000	Init Cost O per intersection O per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200			
Project Cost Esti	imate (attach deta	ailed copy)				Proposed	d Year of Cons	truction				
	, DOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineering	\$1,080 \$120 <b>\$1,200</b> , construction and co	- ontingency								
NDDOT Central ( Project Accepted?			Reference Numbe	rl			1	ID Number				
Notes	(CS La NU		ncicione numbe	1				IN INCHIDE	Page:	18		
	SC 409 es All Objections			Project sugges	sted for agency's	consideration	on		Intersection ID: Date:	812.03 6/13/2014		
	05,000010	1		ojoot ougget	a .o. agonoy 3	201101001011	***		Duit.	0, 10, 2017		

	FETY IMPROVE artment of Transporta		AM (HSIP) PRO	JECT APP	LICATION						
SFN 59959 (06-20			Di-I		0'		1				
		Inters	ections on l		es @ Signals II			2/Gatos	vay Dr		
	Agency Name:	City of Grand Fork		75 Z Dus		OT District:		ZIGale	way Di		
	Contact Name:	Jane Williams JWilliams@grandf	orkegov com		Telephon	e Number	: 701-787-3720				
	tion map(s). You may u			roject.							
Location Descri	iption				l						
		Corridor Street Name Urban/Rural: County: Length	US 2 Bus Urban Grand Forks		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 Propo	sed Safety Improv	rements									
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Severe Angle Crashes	Confirmation Lights	Notes	
812.13	S 5th St	DeMers Ave	X	Signal	15,075	Undivided	1	1	1	Ped / bike projects suggested on other sheets.	
812.14	S 5th St	1st Ave N	Т	Signal	5,670	Undivided	1	0	1	Ped / bike projects suggested on other sheets.	
812.18	N 5th St	2nd Ave N	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.	
812.19	N 5th St	5th Ave N	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.	
Describe Curre	nt Safety Issues &	Systemic Ranking									
		Intersection Criteria	North	Dakota Crashes	s, 2008 - 2012			years			
	Traffic Control Device	· ·			ription nfirmation Lights		Init Cost per intersection	Quanity 4	Total Cost \$4,800		
	Entering ADT	> 18000		Unsignal	ized and Divided ess Management	\$260,000	) per mile	0.0	\$0		
	Road Geometry	Divided			es miles of divid				\$4,800		
	Severe Crashes	> 1	•								
Project Cost Es	timate (attach deta	ailed copy)				Proposed	d Year of Cons	truction			
		Federal Funds	\$4,320								
	Local Match (109	% of Total project cost) *Total Project Cost	\$480 <b>\$4,800</b>								
	DDOT costs (March 201			ntingency							
NDDOT Central Project Accepted?			Reference Number					ID Number			
Notes						_					
										12	
	ISC 409	1							Page: Intersection ID:	19 812.04	
NDDOT Reser	ves All Objections			Project sugge	sted for agency's	consideration	on		Date:	6/13/2014	

HIGHWAY SAF North Dakota Depart SFN 59959 (06-2011	ment of Transporta										
Please attach a location	Contact Name: Email Address:	City of Grand Forks Jane Williams JWilliams@grandfo	ctions on S	3rd St f	ND DO	/Gate	way Dr to	Minnes	sota Ave		
Please attach a location Location Descript	ion		,		•						
		Corridor Street Name Urban/Rural: County: Length	S 3rd St Urban Grand Forks		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 Propose	d Safety Improve	ements				Majar		Causas Angle	Confirmation		
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Crashes	e Confirmation Lights	Notes	
816.06	N 3rd St	US 2/Gateway Dr	Т	Thru-STOP	9,603	Undivided	0	0	1	Segment & ped / bike projects suggested on other sheets.	
Describe Current	Safety Issues & 3	Systemic Ranking									
T -	raffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1	North	Cor Unsignali Acce	s, 2008 - 2012 ription nfirmation Lights ized and Divided ess Management es miles of divide	\$1,200 \$360,000	Init Cost O per intersection O per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200	-	
Project Cost Estir	nate (attach deta	iled copy)			1	Proposed	d Year of Cons	truction			
*Based on typical NDD <b>NDDOT Central O</b>	* 201 OT costs (March	Federal Funds 6 of Total project cost) Total Project Cost 4); includes engineering	\$1,080 \$120 <b>\$1,200</b> g, construction and co	- ntingency							
Project Accepted?			Reference Number					ID Number			
Notes									Page:	20	
23 USC NDDOT Reserves				Project sugge	sted for agency's	consideration	nn.		Intersection ID: Date:	816.01 6/13/2014	
NUUUI Keserve	All Objections			Project sugge	sieu iui agency's	consideration	JII		Date:	0/13/2014	

	FETY IMPROVE		M (HSIP) PRO	JECT APP	LICATION					
SFN 59959 (06-20	artment of Transporta 111)	ition Programming								
		0.6					Improvements			
		tions on S 3		om Gran				nits to I	-29 Wes	tern Ramps
	Contact Name:	City of Grand Forks Jane Williams	•			OT District e Number	:: 6 r: 701-787-3720			
L	Email Address:	JWilliams@grandfo			•					
Location Descri	tion map(s). You may us	se additional sheets to fu	urther describe your p	roject.						
	<i>p.</i>									
		Corridor 8	222.04				hasis Area (check a Alcohol Impaired D			
		Street Name S				Increas	e the Use of Safety	Restraints for	all Occupants	
		Urban/Rural: U	Jrban Grand Forks				er Driver/Older Drive ggressive Driving	er Safety		
		Length (			=	Improv	ements to Address			
					<b>□</b>		ing Emergency Me e Intersection Safet		ies to Increase	
					•	iiiipiov	e intersection salet	у		
Describe Propo	sed Safety Improve	ements				Maine		O AI-	0	
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major Config	Severe Crashes	Severe Angle Crashes	Confirmation Lights	Notes
822.01	32nd Ave S	I-29 South Ramp	X	Signal	9,463	Divided	1	1	1	Ped / bike projects suggested on other sheets.
					•					
Describe Curre	nt Safety Issues & .	Systemic Ranking	Review							
Describe Garrer	n ourcey roodes a	Cystellio Hamang		Dakota Crashes	s, 2008 - 2012		5	years		
1	T#:- O 15 :	Intersection Criteria							T-1-/ 0	
1	Traffic Control Device	Signal			ription nfirmation Lights		Unit Cost 0 per intersection	Quanity 1	Total Cost \$1,200	
	Entering ADT	> 18000		Unsignali	ized and Divided		0 per mile	0.0	\$0	
	Road Geometry	Divided			ss Management			0.0		
	Severe Crashes	> 1		*Corridor include	es miles of divide	ed roadway			\$1,200	
	COVOIO CIACIICO									
Project Cost Es	timate (attach deta	iled copy)				Propose	d Year of Cons	truction		
1		Federal Funds	\$1,080							
	Local Match (10%	6 of Total project cost)	\$120							
		Total Project Cost	\$1,200							
	DDOT costs (March 2014	4); includes engineering	, construction and co	ntingency						
NDDOT Central Project Accepted?		I	Reference Number					ID Number		
Notes	Tes INO		reference mumber					ivuilibei Uii	I	
1										
1										
									Page:	21
	ISC 409 ves All Objections			Project sugges	sted for agency's	considerati	ion		Intersection ID: Date:	822.01 6/13/2014
14DDO I Kesel	· oo / iii Objectiona			. rojoot augget	ocou for ayonoy s	JUI IUIUGI AL	···		Daie.	0/10/2019

		MENT PROGRA	AM (HSIP) PRO	JECT APP	LICATION						
North Dakota Depa SFN 59959 (06-20	artment of Transporta 11)	ation Programming									
Please attach a locat	Contact Name: Email Address:	JWilliams@grandf	ns on S 32n	d Ave fro	ND DC	Vesteri T District:	n Ramps t	to S Wa	shingtor	n St	
Location Descri	otion	se additional sheets to	aranor accombo year p		•						
		Length	S 32nd Ave Urban Grand Forks		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						
Intersection ID	Street Name	Cross Street	Config	Troffic Control	Enterting ADT	Major	Severe Crashes	Severe Angle	Confirmation	Notes	
			Config		-	Config	Severe Crasnes	Crashes	Lights		
822.02	32nd Ave S	I-29 North Ramp	X	Signal	9,938	Divided	0	0	1	Ped / bike projects suggested on other sheets.	
822.03	32nd Ave S	S 31st St	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.	
822.04	32nd Ave S	S 25th St	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.	
803.01	S 38th St	32nd Ave S	Х	Signal	16,763	Divided	0	0	1	Ped / bike projects suggested on other sheets.  Segment & ped / bike projects suggested on other	
821.01	S 34th St	32nd Ave S	Х	Signal	18,820	Divided	0	0	1	sheets.	
807.03	Columbia Rd	32nd Ave S	Х	Signal	25,300	Divided	1	0	1	Ped / bike projects suggested on other sheets.	
809.03	S 20th St	32nd Ave S	X	Signal	14,895	Divided	3	2	1	Ped / bike projects suggested on other sheets.	
Describe Curren	t Safety Issues &	Systemic Ranking		Dakota Crashe	s 2008 - 2012		5	years			
	Traffic Control Device	Intersection Criteria Signal			cription	U	Init Cost	Quanity	Total Cost		
	Entering ADT	> 18000		Co	infirmation Lights lized and Divided	\$1,200	per intersection	7	\$8,400		
	Road Geometry	Divided		Acce	ess Management des miles of divide		) per mile	0.0	\$0 \$8,400		
	Severe Crashes	> 1	•	Corridor includ	ics inites of dividi	ou rouuway.			ψ0,400		
Project Cost Est	imate (attach deta	ailed copy)				Proposed	d Year of Cons	truction			
		Federal Funds % of Total project cost)	\$7,560 \$840								
*Based on typical ND	DOT costs (March 201	*Total Project Cost 4); includes engineerin	\$8,400 g, construction and co	ntingency							
NDDOT Central Project Accepted?			Reference Number	I			1	ID Number			
Notes											
	SC 409 res All Objections			Project suage	ested for agency's	consideration	on		Page: Intersection ID: Date:	22 822.02 6/13/2014	
	•			. 55	. , .						

	AFETY IMPROVE partment of Transporta 011)											
Please attach a loca	Agency Name: Contact Name: Email Address:	JWilliams@grandfo	DeMers Ave	/ND 297	ND DC	h St N	(Dirt Roa	d) to I-2	9 Wester	rn Ramps		
Location Descr	ation map(s). You may u r <b>iption</b>	se additional sheets to i	urtrier describe your p	roject.								
		Urban/Rural: County: Length	DeMers Ave/ND 297 Urban Grand Forks		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							
	Street Name		Cantin	Troffic Control	Entertine ADT	Major	Causas Craabaa	Severe Angle	Confirmation	Notes		
Intersection ID 830.04	Street Name	Cross Street	Config	Traffic Control	Enterting AD I	Config	Severe Crashes	Crashes	Lights	Notes		
Describe Curre	ont Safaty Issues &	Sustamic Ranking	Paviaw	Signal						Ped / bike projects suggested on other sheets.		
Describe Curre	ent Safety Issues &	Systemic Ranking		Dakota Crashes	s. 2008 - 2012		5	years				
	Traffic Control Device Entering ADT Road Geometry Severe Crashes	Intersection Criteria Signal > 18000 Divided > 1		Desci Cor Unsignali Acce	ription  nfirmation Lights ized and Divided ess Management es miles of divide	\$1,200 \$360,000	Init Cost O per intersection O per mile	Quanity 1 0.0	Total Cost \$1,200 \$0 \$1,200			
Project Cost Es	stimate (attach deta	ailed copy)				Proposed	d Year of Cons	truction				
*Based on typical N NDDOT Central	DDOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost (4); includes engineering	\$1,080 \$120 <b>\$1,200</b> g, construction and con	ntingency								
Project Accepted? Notes			Reference Number					ID Number				
									Page:	23		
	USC 409 rves All Objections			Project sugges	sted for agency's	consideration	on		Intersection ID: Date:	830.01 6/13/2014		

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 US 2/Gateway Dr from N 55th St to Columbia Rd  Agency Name: City of Grand Forks Contact Name: Jane Williams Email Address: JWilliams@grandforksgov.com ease attach a location map(s). You may use additional sheets to further describe your project.											
Location Descri			, , , , , , , , , , , , , , , , , , , ,									
		Urban/Rural: County: Length	US 2/Gateway Dr Urban Grand Forks		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							
	sed Safety Improv		0 "	T # 0 + 1	5 ADT	Major		Severe Angle	Confirmation	N .		
Intersection ID	Street Name	Cross Street	Config		Enterting ADT	Config	Severe Crashes	Crashes	Lights	Notes		
838.06	Gateway Dr (US 2)	N 47th St	0	0	0	0	0	0	1	Ped / bike projects suggested on other sheets.		
838.01	Gateway Dr (US 2)	I-29 South Ramp	Х	Signal	12,875	Divided	1	0	1	Ped / bike projects suggested on other sheets.		
838.02	Gateway Dr (US 2)	I-29 North Ramp	X	Signal	13,598	Divided	0	0	1	Ped / bike projects suggested on other sheets.		
Describe Curre	nt Safety Issues &	Svstemic Ranking	Review									
Describe Garrer	in carety issues a			Dakota Crashes	s, 2008 - 2012		5	years				
	Traffic Control Device	Intersection Criteria Signal			ription		Init Cost	Quanity	Total Cost			
	Entering ADT	> 18000		Unsignal	nfirmation Lights ized and Divided		0 per intersection 0 per mile	3 0.0	\$3,600 \$0			
	Road Geometry Severe Crashes	Divided > 1			ess Management les miles of divid		**		\$3,600			
Proiect Cost Es	stimate (attach deta	ailed copy)				Propose	d Year of Cons	truction				
*Based on typical NI NDDOT Central Project Accepted? Notes	DDOT costs (March 201	Federal Funds % of Total project cost) *Total Project Cost 4); includes engineering	\$3,240 \$360 \$3,600 I, construction and co	ntingency				ID Number				
	JSC 409								Page: intersection ID:	24 838.01		
NDDOT Reser	ves All Objections			Project sugge	sted for agency's	considerati	on		Date:	6/13/2014		

HIGHWAY SAFE	TY IMPROVE	MENT PROGRA	M (HSIP) PRO	JECT APP	LICATION							
North Dakota Departi	ment of Transporta											
SFN 59959 (06-2011	)		Righ	ıt Anala Crash	ee @ Signale Ir	ntareaction	Improvements					
		Interces						Woohin	aton Ct			
			tions on M	III KU IIO				wasnii	igion ai			
	Agency Name: Contact Name:	City of Grand Forks				OT District						
		JWilliams@grandfo	rksnov com		relephon	e Number	: 701-787-3720					
Please attach a location	map(s). You may us			roject.								
Location Descripti	ion											
					SHSP Emphasis Area (check all that apply)							
		Corridor 8 Street Name N			Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupants							
		Urban/Rural: U					r Driver/Older Drive		ali Occupants			
		County: 0	Frand Forks			Curb Ag	ggressive Driving	•				
		Length 2	2.3				ements to Address					
					□		ing Emergency Me Intersection Safet		es to Increase			
						iiipiove	intersection Salet	у				
Describe Propose	d Safety Improve	ements										
Intersection ID	Street Name	Cross Street	Config	Traffic Control	Enterting ADT	Major	Severe Crashes	Severe Angle		Notes		
Intersection is	Officer Hame	01033 011001	Comig	Traine Goritroi	Enterting 7.D1	Config	Ocvere orasnes	Crashes	Lights	140103		
812.17	N 5th St	US 2 / Gateway Dr	Х	Signal	14,795	Undivided	1	1	1	0		
Describe Current	Safety Issues & S	Systemic Ranking	Review									
				Dakota Crashes	s, 2008 - 2012		5	years				
_		Intersection Criteria		-	-1-41		l=:1. O = =1	0	T-1-10 :			
I Tr	raffic Control Device	Signal	-		ription nfirmation Lights		Init Cost	Quanity	Total Cost			
	Entering ADT	> 18000			ized and Divided		0 per intersection	1	\$1,200			
	Road Geometry	Divided			ess Management	\$360,00	0 per mile	0.0	\$0			
			•	*Corridor include	es miles of divid	ed roadway.			\$1,200			
_	Severe Crashes	> 1										
Project Cost Estin	nata (attach data	iled conv)				Dronoca	d Voor of Como	truction				
r rojeci cosi Estin	iate (attacii ueta	пец сору)				rropose	d Year of Cons	u acuon				
		Federal Funds	\$1,080									
		6 of Total project cost)	\$120									
		Total Project Cost	\$1,200									
*Based on typical NDD0	OT costs (March 2014	1); includes engineering	, construction and cor	ntingency								
NDDOT Central Of	TICE UNIY		Deference Nurstra					ID Number				
Project Accepted?  Notes	Yes No		Reference Number					ID Number				
. 10.00												
									Page:	25		
23 USC	409								Intersection ID:	812.05		
NDDOT Reserves				Project sugges	sted for agency's	considerati	on		Date:	6/13/2014		

		e Corridor Project Sun			Proje	cts		
ntersection	0	L INI	0	Advanced	Countdown	Curb	Median	Intersection
Count	Segment #	Local Name	Cross Street	Walk	Timers	Extensions	Refuge	Project Cost
1	803.01	S 38th St	32nd Ave S	1	0	0	0	\$2,400
2	803.02	S 42nd St	24th Ave S	0	0	0	0	\$0
3	803.02	S 42nd St	17th Ave S	1	0	0	0	\$2,400
4 5	803.03 803.03	S 42nd St S 42nd St	11th Ave S DeMers Ave/ND 297	1 1	0	0	0 0	\$2,400 \$2,400
5 6	803.03	N 42nd St	University Ave	1	0 0	0 0	0	\$2,400 \$2,400
7	803.03	N 42nd St	6th Ave N		0	0	0	\$2,400
8	803.04	N 42nd St	US 2/Gateway Dr	1	0	0	0	\$2,400
9	804.01	Stanford Rd	University Ave	0	0	0	0	\$0
10	804.01	Stanford Rd	6th Ave N	0	0	0	0	\$0
11	805.01	S 34th St	17th Ave S	1	1	0	0	\$14,400
12	807.02	Columbia Rd	32nd Ave S	1	0	0	0	\$2,400
13	807.02	Columbia Rd	24th Ave S	1	0	0	0	\$2,400
14	807.02	Columbia Rd	20th Ave S	0	0	0	0	\$0
15 16	807.02 807.02	Columbia Rd 14th Ave S	17th Ave S Columbia Rd	1 0	0 0	0	0 0	\$2,400 \$0
17	807.02 807.02	Columbia Rd	13th Ave S	1	0	0	0	\$2,400
18	807.02	Columbia Rd	11th Ave S	1	1	0	0	\$14,400
19	807.03	Columbia Rd	University Ave	1	0	0	0	\$2,400
20	807.03	Columbia Rd	2nd Ave N	1	1	0	0	\$14,400
21	807.04	Columbia Rd	6th Ave N	1	0	0	0	\$2,400
22	807.04	Columbia Rd	8th Ave N	0	0	0	0	\$0
23	807.04	Columbia Rd	US 2/Gateway Dr	1	0	0	0	\$2,400
24	809.01	S 20th St	47th Ave S	0	0	0	0	\$0
25	809.01	S 20th St	40th Ave S	0	0	0	0	\$0
26	809.01	S 20th St	32nd Ave S	1	0	0	0	\$2,400
27	809.02	S 20th St	24th Ave S	1	0	0	0	\$2,400
28 29	809.02 809.02	S 20th St S 20th St	20th Ave S 17th Ave S	0	0 0	0 0	0 0	\$0 \$2,400
30	809.02	S 20th St	13th Ave S	0	0	0	0	\$2, <del>4</del> 00 \$0
31	809.02	S 20th St	DeMers Ave Frontage Road (South)	0	0	0	0	\$0 \$0
32	809.02	S 20th St	DeMers Ave/ND 297	1	1	0	0	\$14,400
33	810.02	S Washington St	47th Ave S	1	<u>·</u> 1	0	0	\$14,400
34	810.02	S Washington St	40th Ave S	1	1	0	0	\$14,400
35	810.02	S Washington St	32nd Ave S	1	0	0	0	\$2,400
36	810.03	S Washington St	28th Ave S	1	1	0	0	\$14,400
37	810.03	S Washington St	Frontage Road	0	0	0	0	\$0
38	810.03	S Washington St	24th Ave S	1	0	0	0	\$2,400
39	810.03	S Washington St	Campbell Dr	1	1	0	0	\$14,400
40	810.03	S Washington St	17th Ave S	1	0	0	0	\$2,400
41 42	810.03 810.04	S Washington St S Washington St	Hammerling Ave & Frontage Road  13th Ave S	0 1	0	0	0	\$0 \$2,400
43	810.04	S Washington St	8th Ave S	0	0	0	0	\$2,400 \$0
44	810.04	S Washington St	DeMers Ave/ND 297	1	0	0	0	\$2,400
45	810.05	N Washington St	2nd Ave N	1	1	0	0	\$14,400
46	810.05	N Washington St	University Ave	1	0	0	0	\$2,400
47	810.05	N Washington St	5th Ave N	1	1	0	0	\$14,400
48	810.05	N Washington St	8th Ave N	0	0	0	0	\$0
49	810.06	N Washington St	US 2/Gateway Dr	1	0	0	0	\$2,400
50	811.02	Cherry St	4th Ave S	1	1	0	0	\$14,400
51	812.02	Belmont Rd	4th Ave S	1	1	0	0	\$14,400
52 53	812.03 812.04	S 5th St S 5th St	Kittson Ave	1	<u> </u>	0	0	\$14,400
53 54	812.04 812.04	S 5th St	DeMers Ave 1st Ave N	1	1	0	0	\$14,400 \$14,400
5 <del>4</del> 55	812.04 812.04	N 5th St	2nd Ave N	1	1	0	0	\$14,400 \$14,400
56	812.04	N 5th St	University Ave	1	0	0	0	\$2,400
57	812.04	N 5th St	5th Ave N	1	1	0	0	\$14,400
58	812.04	N 5th St	8th Ave N	0	0	2	0	\$72,000
59	815.01	S 4th St	Minnesota Ave	0	0	0	0	\$0
60	815.01	Bruce Ave	S 4th St	0	0	2	0	\$72,000
61	815.01	S 4th St	DeMers Ave	1	0	0	0	\$2,400
62	815.01	N 4th St	1st Ave N	1	0	0	0	\$2,400
63	815.01	N 4th St	University Ave	0	0	1	0	\$36,000 \$72,000
64 65	815.01 815.01	N 4th St N 4th St	8th Ave N 10th Ave N	0 0	0 0	2	0 0	\$72,000 \$36,000
65 66	815.01 815.01	N 4th St N 4th St	10th Ave N US 2/Gateway Dr	0	0	1 0	0	\$36,000 \$0
67	821.02	S 34th St	32nd Ave S	1	0	0	0	\$2,400
68	822.01	32nd Ave S	I-29 South Ramp	1	1	0	0	\$14,400
69	822.02	32nd Ave S	I-29 North Ramp	1	<u>.</u> 1	0	0	\$14,400
70	822.02	32nd Ave S	S 31st St	1	1	0	0	\$14,400
71	822.02	32nd Ave S	S 25th St	1	1	0	0	\$14,400
72	830.02	S 34th St	DeMers Ave/ND 297	1	1	0	0	\$14,400
73	830.02	DeMers Ave (ND 297)	Columbia Rd North Ramp	1	1	0	0	\$14,400
74	830.02	S 20th St	DeMers Ave/ND 297	1	1	0	0	\$14,400
75	838.01	Gateway Dr (US 2)	N 47th St	1	1	0	0	\$14,400
76	838.01	Gateway Dr (US 2)	I-29 South Ramp	1	1	0	0	\$14,400
77	838.01	Gateway Dr (US 2)	I-29 North Ramp	1	1	0	0	\$14,400
78	838.01	Gateway Dr (US 2)	Frontage Rd (East of 42nd St)	0	0	0	0	\$0
79	838.01	Stanford Rd	US 2/Gateway Dr	1	1	0	0	\$14,400
80	838.01	Gateway Dr (US 2)	Frontage Rd (East of Stanford Rd)	0	0	0	0	\$0 ***
	838.01	Gateway Dr (US 2)	Frontage Rd (West of Columbia Rd)	0	0	0	0	\$0
81		NI OOUL OI	110.0/0=1	4		^	^	MA 4 400
81 82 83	838.02 838.02	N 20th St N 5th St	US 2/Gateway Dr US 2 / Gateway Dr	1 1	1 1	0 0	0 0	\$14,400 \$14,400

23 USC 409 NDDOT Reserves All Objections

HIGHWAY SAFE	TY IMPROVEMI	ENT PROGRAM (HSIP) PRO	LIECT APPLIC	ΔΤΙΟΝ							
North Dakota Departn	nent of Transportation		JOLOT ALT LIC	AIION							
SFN 59959 (06-2011)			Dodo	atrian and F	Bicycle Intersecti	an Improvemen	oto				
		Intorcocti	ons on S 3		•			22nd A	رم <i>د</i>		
	Agency Name	City of Grand Forks	0115 011 3 3	otii ot i		DOT District:		JZIIU A	<i>i</i> e 3		
	Contact Name:	Jane Williams				hone Number:		20			
Diagon attack a location		JWilliams@grandforksgov.com additional sheets to further describe you	r project								
Location Descripti		additional sheets to further describe you	r project.								
,	-							nasis Area (che		)	
	Corridor	803.01						hol Impaired Dr Use of Safety R		Occupants	
	Street Name	S 38th St					Younger Driv	er/Older Driver	Safety	Собаралю	
	Urban/Rural:	Urban Grand Forks					Curb Aggres	sive Driving ts to Address La	ne Denarture (	rachee	
	Corridor ADT:						Enhancing E	mergency Medi			
						☑	Improve Inter	rsection Safety			
Describe Proposed	Safety Improvem	ents									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting	Development /	Total Ped/Bike		Countdown	Curb	Median Refuge	Notes
				ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	
											Right angle projects suggested on other
803.01	S 38th St	32nd Ave S	Signal	16,763	Yes	0	1	0	0	0	sheets.
				_							
Describe Current S	Safety Issues & Sy	stemic Ranking Review									
			North Dakota	Crashes, 20	08 - 2012	5	years				
_			Intersection Criteria	_		Description		it Cost	Quanity	Total Cost	_
		Traffic Control Device Entering ADT	Signal > 18000			*Advanced Walk ountdown Timers		per intersection per intersection	1 0	\$2,400 \$0	
		Development / Ped Generator	Yes			Curb Extensions			0	\$0	
		Total Ped/Bike Crashes	> 1	_	Media	an Refuge Island	\$24,000 p	er side	0	\$0	_
										\$2,400	
Project Cost Estim	ate (attach detaile	d copy)					Proposed	Year of Con	struction		
		Federal Funds Local Match (10% of Total project cost)									
_		*Total Project Cost		-							
*Based on typical NDDOT costs (I				**Cost for traffic	counts and signal timing	plan development					
NDDOT Central Off Project Accepted? □			Reference Number	T			Ti	D Number	T		
Notes				•			1.		•		
										Page:	1
23 US										Intersection ID:	803.01
NDDOT Reserve				Project sugge	ested for agency's	consideration				Date:	6/13/2014

	artment of Transportation Pro	FPROGRAM (HSIP) Pogramming	ROJECT APPLIC	ATION							
,		Intor			Bicycle Intersect			74b Ava 9	•		
	Agency Name: City		sections on S	5 4ZIIU		DOT District:		in Ave s	•		
	Contact Name: Jan	e Williams illiams@grandforksgov.con	n		Telep	hone Number:	701-787-3	720			
Please attach a loca	ation map(s). You may use addit	ional sheets to further describe									
Location Descri	ipuori					_		hasis Area (ched		)	
	Corridor 803						Increase the	ohol Impaired Dr Use of Safety R	estraints for all	Occupants	
	Street Name S 42 Urban/Rural: Urb						Curb Aggre	iver/Older Driver ssive Driving	-		
	County: Gra Corridor ADT: 7,75						Improvement Enhancing E	nts to Address La Emergency Medi	ane Departure C	Crashes to Increase	
						☑		ersection Safety			
Describe Propo	sed Safety Improvement	s									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
803.02	S 42nd St	24th Ave S	Thru-STOP	8,943	No	0	0	0	0	0	Right angle projects suggested on other sheets.
803.03	S 42nd St	17th Ave S	Signal	10,138	No	0	1	0	0	0	Right angle projects suggested on other sheets.
Describe Curre	nt Safety Issues & Syster	nic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	years				
			Intersection Criteria			Description		nit Cost	Quanity	Total Cost	
		Traffic Control Dev Entering A	rice Signal	-		**Advanced Walk ountdown Timers	\$2,400	per intersection per intersection	1 0	\$2,400 \$0	<del>-</del>
		Development / Ped Genera	itor Yes			Curb Extensions	\$36,000	per corner	0	\$0	
		Total Ped/Bike Crash	nes > 1	-	Medi	an Refuge Island	\$24,000	per side	0	\$0 \$2,400	=
Project Cost Es	stimate (attach detailed co	οργ)					Proposed	d Year of Con	struction		
-		Federal Fur	nds \$2,160								
	Loca	al Match (10% of Total project co	ost) \$240	-							
*Based on typical NDDOT of	osts (March 2014); includes engineering, con	*Total Project Co estruction and contingency	ost <b>\$2,400</b>	**Cost for traffic	counts and signal timing	plan development					
NDDOT Central Project Accepted?			Reference Number					ID Number	_		
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	USC 409									Page: Intersection ID:	803.02
NDDOT Res	erves All Objections		F	Project sugg	ested for agency's	s consideration				Date:	6/13/2014

HIGHWAY SAE	ETV IMPROVE	MENT PROGRAM (HSIP) PRO	O IECT ADDI IC	YATION							
North Dakota Depar SFN 59959 (06-201	tment of Transporta		JJECT AFFLIC	ATION							
	-7				Bicycle Intersect						
	Agency Nam	Interse ne: City of Grand Forks	ections on I	N/S 42r		N 17th AV D DOT District		6th Ave N	1		
	Contact Nan	ne: Jane Williams				hone Number		720			
Please attach a location		ss: JWilliams@grandforksgov.com se additional sheets to further describe you	ır project.								
Location Descrip	tion						CUCD Emp	hasis Area (chec	k all that apply	Λ	
							Reduce Alco	ohol Impaired Dri	ving		
		dor 803.03 me N/S 42nd St						Use of Safety R ver/Older Driver		Occupants	
	Urban/Ru	ral: Urban nty: Grand Forks					Curb Aggres	ssive Driving nts to Address La	ne Denarture (	Prachoe	
	Corridor AL						Enhancing E	Emergency Medic			
							improve inte	ersection Safety			
Describe Propose				Enterting	Development /	Total Ped/Rike	e Advanced	Countdown	Curb	Median Refuge	
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
803.04	S 42nd St	11th Ave S	Signal	10,908	Yes	1	1	0	0	0	Right angle projects suggested on other sheets.
803.05	S 42nd St	DeMers Ave/ND 297	Signal	19,188	No	0	1	0	0	0	Right angle projects suggested on other sheets.
803.06	N 42nd St	University Ave	Signal	17,985	Yes	1	1	0	0	0	Right angle projects suggested on other
803.07	N 42nd St	6th Ave N	Signal	9,302	No	0	1	0	0	0	sheets. Right angle projects suggested on other
000.07	14 42114 01	out Ave IV	Olgital	3,302	140	· ·		Ü	Ü	· ·	sheets.
Dogoviho Curront	Cofoty logges 8	Systemic Ranking Review									
Describe Current	Salety Issues &	Systemic Ranking Review	North Dakota	a Crashes, 20	008 - 2012		5 years				
			Intersection Criteria	,		Descriptio	n Ui	nit Cost	Quanity	Total Cost	
_		Traffic Control Device	Signal	<u>-</u>		**Advanced Wal	k \$2,400	per intersection	4	\$9,600	-
		Entering ADT Development / Ped Generator	Yes			ountdown Timer Curb Extension		per intersection per corner	0	\$0 \$0	
_		Total Ped/Bike Crashes	> 1	_	Medi	an Refuge Islan	d \$24,000	per side	0	\$0 \$9,600	_
										\$9,000	
Project Cost Esti	mate (attach deta	iled copy)					Proposed	Year of Con	struction		
		Federal Funds									
_		Local Match (10% of Total project cost)  *Total Project Cost	7	_							
		eering, construction and contingency	ψ3,000	**Cost for traffic	counts and signal timing	plan development					
NDDOT Central C			Reference Number	T				ID Number	ı		
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	SC 409 ves All Objections			Project suga	ested for agency's	s consideration				Intersection ID: Date:	803.03 6/13/2014
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	FETY IMPROVEM artment of Transportatio	ENT PROGRAM (HSIP) PRO	JECT APPLICA	ATION							
SFN 59959 (06-20	11)		Podos	trian and F	Diavola Interces	ion Improvemer	nto.				
		Intersect	ions on N 4					Gateway	Dr		
	Agency Name:	: City of Grand Forks			N	D DOT District:	6	-			
		: Jane Williams : JWilliams@grandforksgov.com			Telep	hone Number:	701-787-37	20			
	tion map(s). You may use	additional sheets to further describe your	project.								
Location Descri	ption						SHSP Empl	hasis Area (che	ck all that apply	)	
	Corridor	803.04					Reduce Alco	ohol Impaired Dr Use of Safety F	riving		
	Street Name	N 42nd St					Younger Driv	ver/Older Driver		Occupants	
	Urban/Rural: County:	: Urban : Grand Forks					Curb Aggres Improvemen	ssive Driving its to Address La	ane Departure (	Crashes	
	Corridor ADT:	: 4,450						mergency Medi rsection Safety	cal Capabilities	to Increase	
	10 / 1						improvo into	Toodion Gardly			
	sed Safety Improven		T " 0 1 1	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	N. c.
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator		Walk	Timers	Extensions	Island	Notes
803.08	N 42nd St	US 2/Gateway Dr	Signal	12,315	No	0	1	0	0	0	Right angle projects suggested on other sheets.
D't O											
Describe Currer	it Safety Issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	years				
			Intersection Criteria			Description		nit Cost	Quanity	Total Cost	
		Traffic Control Device	Signal			**Advanced Walk	\$2,400	per intersection	1	\$2,400	-
		Entering ADT Development / Ped Generator	> 18000 Yes		С	ountdown Timers Curb Extensions		per intersection per corner	0	\$0 \$0	
		Total Ped/Bike Crashes	> 1		Med	ian Refuge Island		per side	0	\$0	_
										\$2,400	
Project Cost Es	timate (attach detaile	ed copy)					Proposed	Year of Con	struction		
		Federal Funds	\$2,160								
		Local Match (10% of Total project cost)	\$240								
	sts (March 2014); includes engineeri	*Total Project Cost ing, construction and contingency	\$2,400	**Cost for traffic	counts and signal timing	g plan development					
NDDOT Central			Reference Number					ID Number			
Project Accepted? Notes	Yes No		ivererence inminibel	1				ID Number	1		
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NDDOT Rese	USC 409 erves All Objections	1	p	roject suga	ested for agency's	s consideration				Intersection ID: Date:	803.04
DDOT Rese		I .		jour suggi	ugonby					Date.	5,15/2017

### HIGHWAY SAFETY MIPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION  Protections on S 34th St (From S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)  Agency Name: City of Grand Forts  Free and Address. Valletimes 8g and offseque com  Pose state 8 boson regists. Variety or season state 1 boson regists. Variety or season state 2 boson regists. Variety or season regists. Variety or season state 2 boson regists. Variety or season reg	HICHWAY CA	EETV IMPROVEME	ENT DDOCDAM (USID) DDO	LECT ADDL IC	ATION								
Intersections on S 34th St from S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)   Agring Name Cry () Grand From S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)   Agring Name Cry () Grand From S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)   Agring Name Cry () Grand From S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)   Agring Name Cry () Grand From S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends)   Agring Name Cry () Grand From S 34th St (South of 24th Ave S)   Agring Name Cry () Gr				JECT APPLIC	ATION								
Intersections on S 34th St from S 34th St (South of 24th Ave S) to DeMers Ave/ND 297 (Road Ends) Agency Name, (by Grant Fords Contact Name: Jane Williams Passes allated a bostoon margin. We may use additional ableston to Indeed agency.  Passes allated a bostoon margin. We may use additional ableston to Indeed agency.  Counted 200.01  Secretize 200.01  Secretize 200.01  Secretize 200.01  Secretize 200.01  County Counter Fords				Dodo	atrian and F	Diavala Internest	ion Improvemen	nto					
Agency Name: City of Erand Forks Contact Name: Air Williams Passes attach a location map(s). You may use additional allocation but from decorate your project.    Contact Name: A 14-th St.		Interse	actions on S 3/th St						Mare Ave	/ND 207	(Road En	de)	
Contact Name: Jane Williams Email Address X-Williams (Symorthocycorum)  Contact (90.5)  Contac				110111 3 34111	31 (30				WICIS AVE	HID Z31	(Noau Lin	usj	
Describe Current Safety Issues & Systemic Ranking Review  North Dekos Creshes, 2008 - 2012    Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Describe Current Safety Issues & Systemic Ranking Review   North Dekos Creshes, 2008 - 2012   Syears   Description Creshes, 2008 - 2012		Contact Name:	Jane Williams						720				
Control   Cont	Please attach a loca			r project									
Corlor (186.1)  Greet Name S Man S M			additional officers to randor decomps you	- projecti									
Corrido (95.01) Street Name SAME SI Unoqueste Proposed Safety Improvements  Versection ID Street Name Cross Street  Traffic Corrol Cover Safety Instruction  April 17th Ave S Sugnal  Describe Current Safety Issues & Systemic Ranking Review  North Debtols Crashes, 2008 - 2012  Sugnal Safety Improvements Sugnal											)		
Control Control ADT   4,006   Control ADT		Corridor	805.01								Occupants		
Courter Carder Proposed Safety Improvements  Interesting Describe Proposed Safety Improvements  Interesting Describe Proposed Safety Improvements  Interesting Describe Current Safety Issues & Systemic Ranking Review    Street Name										Safety			
Describe Proposed Safety Improvements    Cross Street   Traffic Cornol   Entering   Constitution										ne Departure C	rashes		
Describe Proposed Safety Improvements								Enhancing E	Emergency Medic				
Describe Current Safety Issues & Systemic Ranking Review								Improve Inte	ersection Safety				
Describe Current Safety   Issues & Systemic Ranking Review	Describe Propo	sed Safety Improvem	ents										
Describe Current Safety Issues & Systemic Ranking Review	Intersection ID	Street Name	Cross Street	Traffic Control								Notes	
Describe Current Safety Issues & Systemic Ranking Review  North Dakota Crashes, 2008 - 2012  Symal  Traffic Centred Davies  Symal  Symal  Carbonomy Paul General Symal  Development / Paul General Symal  Carbonomy Paul General Symal  Carbonomy Paul General Symal  Carbonomy Paul General Symal  Carbonomy Paul General Symal  Symal  Carbonomy Paul General Symal  Carbonomy Paul General Symal  Symal  Carbonomy Paul General Symal  Symal  Carbonomy Paul General Symal  Carbonomy Paul Ge													
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North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost	Describe Curren	nt Cofoty Jacuas & Cu	otomio Bonkina Boviou										
Intersection Criteria   Description   Unit Cost   Quanity   Total Cost	Describe Currer	il Salety issues & Sys	Sternic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	vears					
Traffic Control Device Entering ADT > 18000						· <del>-</del>							
Entering ADT > 18000 Countdown Timers \$12,000 per intersection 1 \$12,000 Pe			T#i- Ct  Di		-					Quanity			
Development / Ped Generator Total Ped/Bike Crashes > 1										1			
Project Cost Estimate (attach detailed copy)  Federal Funds Local Match (10% of Total project cost) *Total Project Cost *Total Project Cost *Total Project Cost \$14,400  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  *Cost for traffic counts and signal timing plan development			Development / Ped Generator	Yes			Curb Extensions	\$36,000	per corner		\$0		
Project Cost Estimate (attach detailed copy)  Federal Funds Local Match (10% of Total project cost)  **Total Project Cost **Total Proje			Total Ped/Bike Crashes	> 1	_	Medi	ian Refuge Island	\$24,000	per side	0			
Federal Funds \$12,960 Local Match (10% of Total project cost) \$1,440  *Total Project Cost \$14,400  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency "Cost for traffic counts and signal timing plan development"											\$14,400		
Local Match (10% of Total project cost) \$1,440  *Total Project Cost \$14,400  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency "Cost for traffic counts and signal timing plan development"	Project Cost Es	timate (attach detaile	d copy)					Proposed	Year of Con	struction			
Local Match (10% of Total project cost) \$1,440  *Total Project Cost \$14,400  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency "Cost for traffic counts and signal timing plan development"			F-41 F - 1	£42.000								<u> </u>	
*Total Project Cost \$14,400  *Based on typical NDDOT costs (Merch 2014); includes engineering, construction and contingency "Cost for traffic counts and signal timing plan development													
*Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency "*Cost for traffic counts and signal timing plan development				A	-								
LOUIS DE LA CORTRA CUTTOR CUTO.	*Based on typical NDDOT co	osts (March 2014); includes engineerin			**Cost for traffic	counts and signal timing	g plan development						
NDID   Central office Only				Reference Number					ID Number				
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Page: 5 23 USC 409 Intersection ID: 805.01		1100 400									Page:		
23 USC 409 Intersection ID: 805.01 NDDOT Reserves All Objections Project suggested for agency's consideration Date: 6/13/2014				F	Project sugge	ested for agency's	s consideration						

	artment of Transportati	MENT PROGRAM (HSIP) PRO on Programming	JECT APPLIC	ATION							
	• • •	1-1			Bicycle Intersecti			- Otl. A	0		
	Contact Name	INTERSECT e: City of Grand Forks e: Jane Williams e: JWilliams@grandforksgov.com	ions on S (	Joium	ND	OM 36th A DOT District: hone Number:	6		5		
	tion map(s). You may use	e additional sheets to further describe your	project.								
Location Descrip	ption						SHSP Emp	hasis Area (checl	all that apply	1	
	Street Nam Urban/Rura Count Corridor AD	y: Grand Forks T: 21,456				000	Reduce Alco Increase the Younger Dri Curb Aggres Improvement Enhancing E	ohol Impaired Drive Use of Safety Rever/Older Driver S	ving estraints for all Safety ne Departure C	Occupants	
	sed Safety Improve		T // 0 1 1	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	N. c.
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
807.03	Columbia Rd	32nd Ave S	Signal	25,300	Yes	0	1	0	0	0	Right angle projects suggested on other sheets.
807.04	Columbia Rd	24th Ave S	Signal	27,505	Yes	0	1	0	0	0	Right angle projects suggested on other
807.05	Columbia Rd	20th Ave S	Thru-STOP	23,825	No	0	0	0	0	0	sheets. Right angle projects suggested on other
807.06	Columbia Rd	17th Ave S	Signal	32,100	No	2	1	0	0	0	sheets. Right angle projects suggested on other
806.01	14th Ave S	Columbia Rd	Thru-STOP	27,490	No	0	0	0	0	0	sheets. Right angle projects suggested on other
807.07	Columbia Rd	13th Ave S	Signal	30,708	Yes	0	1	0	0	0	sheets. Right angle projects suggested on other
807.14	Columbia Rd	11th Ave S	Signal	0	0	0	1	1	0	0	sheets.
Describe Curren	t Safety Issues & S	ystemic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	years				
			Intersection Criteria			Description		nit Cost	Quanity	Total Cost	
•		Traffic Control Device Entering ADT	Signal > 18000	•		*Advanced Walk ountdown Timers	\$2,400	per intersection per intersection	5 1	\$12,000 \$12,000	-
		Development / Ped Generator Total Ped/Bike Crashes	Yes > 1			Curb Extensions an Refuge Island	\$36,000	per corner	0	\$0 \$0	
•		rotal roughto ordenoo		•	Mode	ari rtorago lolaria	ψ <u>υ</u> 1,000	por dido		\$24,000	-
Project Cost Est	timate (attach detail	led copy)					Proposed	I Year of Cons	struction		
		Federal Funds Local Match (10% of Total project cost) *Total Project Cost	\$21,600 \$2,400 <b>\$24,000</b>	-							
*Based on typical NDDOT co		ering, construction and contingency		**Cost for traffic	counts and signal timing	plan development	L				
Project Accepted? Notes			Reference Number					ID Number			
	USC 409 erves All Objections		F	Project sugg	ested for agency's	consideration				Page: Intersection ID: Date:	6 807.02 6/13/2014

	artment of Transporta	MENT PROGRAM (HSIP) PRO ation Programming	JECT APPLIC	ATION							
,	,				Bicycle Intersect						
		Intersections o	n Overpass	s - Colu				to Unive	ersity Av	е	
	Agency Nam Contact Nam	ne: City of Grand Forks ne: Jane Williams				DOT District hone Number		<b>720</b>			
	Email Addres	ss: JWilliams@grandforksgov.com			•						
Please attach a loca Location Descri		se additional sheets to further describe your	project.								
Location Descri	ipuon						SHSP Emp	hasis Area (ched	ck all that apply	)	
	0	d 007 00						ohol Impaired Dr		0	
		dor 807.03 me Overpass - Columbia Rd						Use of Safety R ver/Older Driver		Occupants	
	Urban/Ru						Curb Aggres				
	Corridor Al	nty: Grand Forks DT: 23,039					Enhancing E	its to Address La mergency Medic	cal Capabilities	to Increase	
						✓	Improve Inte	rsection Safety			
Describe Propo	sed Safety Improv	ements									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	Notes
Intersection ib	Street Name	Closs Street	Trainic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	INUIES
807.08	Columbia Rd	University Ave	Signal	27,868	Yes	1	1	0	0	0	Right angle projects suggested on other sheets.
											3.10010.
			_		_	_				_	
807.15	Columbia Rd	2nd Ave N	0	0	0	0	1	1	0	0	0
Describe Currer	nt Safety Issues &	Systemic Ranking Review	North Delega	Ob 00	200 2042		F				
ĺ			North Dakota	crasnes, 20	JUU - 2012	:	5 years				
			Intersection Criteria	_		Description		nit Cost	Quanity	Total Cost	=
		Traffic Control Device Entering ADT	Signal			*Advanced Wall		per intersection	2	\$4,800	
		Development / Ped Generator	> 18000 Yes			ountdown Timer: Curb Extension:		per intersection per corner	1 0	\$12,000 \$0	
		Total Ped/Bike Crashes	> 1			an Refuge Island		per side	ő	\$0	
				_						\$16,800	_
D ' / O / F-	. t! t -						D		- 4		
Project Cost Es	stimate (attach deta	шеа сору)					Proposed	Year of Con	struction		
		Federal Funds	\$15,120								
		Local Match (10% of Total project cost)	\$1,680	_							
		*Total Project Cost	\$16,800								
*Based on typical NDDOT co  NDDOT Central		eering, construction and contingency		**Cost for traffic	counts and signal timing	plan development					
Project Accepted?		T	Reference Number					ID Number			
Notes											
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23	USC 409									Page:	
NDDOT Res	erves All Objections		1	Project suaa	ested for agency's	consideration				Intersection ID: Date:	
		•		., 39							

	ment of Transportation	ENT PROGRAM (HSIP) PRO n Programming	JECT APPLIC	ATION							
	Agency Name: Contact Name:				NE		Ave to l		eway Dr		
Please attach a location		JWilliams@grandforksgov.com additional sheets to further describe your	project.								
Location Descript	ion					l	SHSP Empl	hasis Area (chec	k all that annly	\	
	Urban/Rural: County: Corridor ADT:	N Columbia Rd Urban Grand Forks 11,525				0000	Reduce Alco Increase the Younger Driv Curb Aggres Improvemen Enhancing E	hol Impaired Dri Use of Safety R er/Older Driver :	ving estraints for all Safety ne Departure (	Occupants Crashes	
Intersection ID	d Safety Improvement Street Name	ents Cross Street	Traffic Control	Enterting		Total Ped/Bike		Countdown	Curb	Median Refuge	Notes
		0.000 0.000		ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	
807.09	Columbia Rd	6th Ave N	Signal	17,910	Yes	0	1	0	0	0	Right angle projects suggested on other sheets.
807.1	Columbia Rd	8th Ave N	Thru-STOP	10,203	No	0	0	0	0	0	Right angle projects suggested on other sheets.
807.11	Columbia Rd	US 2/Gateway Dr	Signal	15,740	No	1	1	0	0	0	Right angle projects suggested on other sheets.
Describe Current:	Safety Issues & Sys	stemic Ranking Review	North Dakota	Crashes 20	nn - 2012	5	ı years				
			Intersection Criteria			Description		nit Cost	Quanity	Total Cost	
_		Traffic Control Device Entering ADT Development / Ped Generator Total Ped/Bike Crashes	Signal > 18000 Yes > 1	-	Co	*Advanced Walk buntdown Timers Curb Extensions an Refuge Island	\$2,400 p \$12,000 p \$36,000 p	per intersection per intersection per corner	2 0 0 0	\$4,800 \$0 \$0 \$0 \$4,800	
Project Cost Estin	nate (attach detailed	d copy)					Proposed	Year of Con	struction		
		Federal Funds	\$4,320								
-	L	Local Match (10% of Total project cost) *Total Project Cost	\$480 <b>\$4,800</b>	-							
*Based on typical NDDOT costs  NDDOT Central Of	(March 2014); includes engineering	g, construction and contingency		**Cost for traffic	counts and signal timing	plan development					
Project Accepted?			Reference Number					D Number			
Notes											
	SC 409 es All Objections		F	Project sugge	ested for agency's	consideration				Page: Intersection ID: Date:	8 807.04 6/13/2014

		NT PROGRAM (HSIP) P	ROJECT APPLIC	ATION							
SFN 59959 (06-20	partment of Transportation F 011)	Programming									
		lutana atta			Bicycle Intersecti			0 ( - 04()			
	Aganay Nama, Ci	Intersection ity of Grand Forks	ns on S 20th	St fron		<b>E N</b>		S to 24tr	n Ave S		
	Contact Name: Ja					hone Number:		20			
Diagram attack a lass		Williams@grandforksgov.com									
Location Descr		ditional sheets to further describe	your project.								
						_		hasis Area (chec		)	
	Corridor 80	09.01						thol Impaired Dri Use of Safety R		Occupants	
	Street Name S	20th St					Younger Driv	ver/Older Driver			
	Urban/Rural: Ur County: Gi						Curb Aggres	sive Driving its to Address La	ne Departure C	Crashes	
	Corridor ADT: 4,4						Enhancing E	mergency Medions	cal Capabilities	to Increase	
							improve inte	rsection Sarety			
Describe Propo	osed Safety Improvemer	nts									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
809.01	S 20th St	47th Ave S	Thru-STOP	2,990	Yes	0	0	0	0	0	0
809.02	S 20th St	40th Ave S	All Way STOP	4,020	No	0	0	0	0	0	0
											Right angle projects suggested on other
809.03	S 20th St	32nd Ave S	Signal	14,895	Yes	0	1	0	0	0	sheets.
Describe Curre	nt Safety Issues & Syste	emic Ranking Review	North Dakota	Crachos 20	008 - 2012	5	years				
			NOITH DAKOLA	Ciasiles, 20	000 - 2012	3	years				
		T#:- C+-1 D	Intersection Criteria	-		Description		nit Cost	Quanity	Total Cost	_
		Traffic Control Dev Entering A				*Advanced Walk ountdown Timers		per intersection per intersection	0	\$2,400 \$0	
		Development / Ped Genera	ator Yes			Curb Extensions	\$36,000	per corner	0	\$0	
		Total Ped/Bike Crasl	hes > 1	•	Media	an Refuge Island	\$24,000	per side	0	\$0 \$2,400	=
										\$2,400	
Project Cost Es	stimate (attach detailed (	сору)					Proposed	Year of Con	struction		
		Federal Fu	nds \$2,160								
	Lo	cal Match (10% of Total project co	ost) \$240	-							
		*Total Project Co	ost <b>\$2,400</b>								
*Based on typical NDDOT of NDDOT Central	costs (March 2014); includes engineering, of	construction and contingency		**Cost for traffic	counts and signal timing	plan development					
Project Accepted?			Reference Number					ID Number			
Notes											
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1											
<u> </u>										Page:	9
	3 USC 409									Intersection ID:	809.01
NDDOT Res	serves All Objections		F	Project sugg	ested for agency's	consideration				Date:	6/13/2014

		MENT DROOP AN (HOID) DRO	IEGT ABBI IG	471011							
North Dakota Depart SFN 59959 (06-2011	ment of Transporta	MENT PROGRAM (HSIP) PRO tion Programming									
		Interceptio	Pedes ns on S 201		Bicycle Intersect			o Avo/ND	207		
	Agency Nam	ne: City of Grand Forks	115 011 5 201	31 11		D DOT District		5 Ave/ND	291		
Places attach a location	Contact Nam Email Addres	ne: Jane Williams as: JWilliams@grandforksgov.com se additional sheets to further describe your	project		Telep	hone Number	: 701-787-37	720			
Location Descript		se additional sheets to further describe your	project.								
								hasis Area (chec ohol Impaired Dri		)	
	Street Nar Urban/Rur	nty: Grand Forks				100000	Increase the Younger Dri Curb Aggres Improvemer Enhancing E	Use of Safety Rover/Older Driver	estraints for all Safety ne Departure C	rashes	
Describe Propose	ed Safety Improve	ements									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
809.04	S 20th St	24th Ave S	Signal	12,365	No	0	1	0	0	0	0
809.05	S 20th St	20th Ave S	All Way STOP	7,458	No	0	0	0	0	0	0
809.06	S 20th St	17th Ave S	Signal	11,198	Yes	1	1	0	0	0	0
809.07	S 20th St	13th Ave S	All Way STOP	8,823	No	0	0	0	0	0	0
809.08	S 20th St	DeMers Ave Frontage Road (South)	Thru-STOP	3,970	No	0	0	0	0	0	0
809.09	S 20th St	DeMers Ave/ND 297	Signal	11,285	Yes	0	1	1	0	0	Right angle projects suggested on other sheets.
Describe Current	Safety Issues & S	Systemic Ranking Review	North Dakota	Crashas 20	00 2012		5 years				
				Crasiles, 20	00-2012						
		Traffic Control Device Entering ADT Development / Ped Generator	Signal > 18000 Yes			Description **Advanced Wall ountdown Timers Curb Extensions	\$2,400 \$ \$12,000	per intersection per intersection per corner	Quanity 3 1 0	\$7,200 \$12,000 \$0	-
_		Total Ped/Bike Crashes	> 1		Medi	ian Refuge Island	\$24,000	per side	0	\$0 \$19,200	-
Project Cost Estin	nate (attach deta	iled copy)					Proposed	Year of Cons	struction		
_		Federal Funds Local Match (10% of Total project cost) *Total Project Cost	\$17,280 \$1,920 <b>\$19,200</b>								
*Based on typical NDDOT costs  NDDOT Central Of		eering, construction and contingency		**Cost for traffic	counts and signal timing	g plan development	<u> </u>				
Project Accepted?			Reference Number					ID Number			
Notes											
	SC 409 res All Objections		F	roject sugge	ested for agency's	s consideration				Page: Intersection ID: Date:	10 809.02 6/13/2014

	THOUSAN OA	EETV IMPROVE	MENT BROODAN (USIR) BRO	LEGT ABBLIO	471011							
Agency   Name: Clay   Control Plants   Clay   Control Plants   Clay   Control Plants   Clay   Control Plants   Clay   C	North Dakota Dep	partment of Transporta		JECT APPLIC	ATION							
Agency Name: City of Cranif Price   Control		-	Inton-10						0 1 - 00-		,	
County Name   part   Williams   part   Williams   part   Williams   part   Pa		Agency Nam		on 10th St -	5 was				e 5 to 32i	ia Ave s	•	
Contain   Describe Current   Select   Project   Contain   Projec		Contact Nan	ne: Jane Williams						20			
Counting PRIOR   19.02   Counting PRIOR   Counting PRIO	Please attach a loca			project.								
Contact #10.02   Cont			·				ı	OLIOD E				
Describe Current Safety Issues & Systemic Ranking Review											)	
Describe Current Safety Issues & Systemic Ranking Review											Occupants	
Describe Proposed Safety Improvements		Urban/Ru	ral: Urban					Curb Aggres	ssive Driving	•		
Describe Proposed Safety Improvements								Improvemen Enhancing E	its to Address La Emergency Medic	ne Departure ( al Capabilities	crashes to Increase	
Page												
Page	Describe Propo	osed Safety Improve	ements									
Ali				Traffic Control								Notes
Street					ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	
Street												Right angle projects suggested on other
Study   Streamington St.   Study   S	810.01	S Washington St	47th Ave S	Signal	9,298	Yes	0	1	1	0	0	
Study   Streamington St.   Study   S												
A control of the co	810.02	S Washington St	40th Ave S	Thru-STOP	10,710	No	0	1	1	0	0	
Describe Current Safety Issues & Systemic Ranking Review   North Dakota Crashes, 2008 - 2012   Syears	810.03	S Washington St	32nd Ave S	Signal	18,653	Yes	0	1	0	0	0	Right angle projects suggested on other
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost		ŭ	•	· ·								sheets.
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost												
North Dakota Crashes, 2008 - 2012 5 years    Intersection Criteria   Description   Unit Cost   Quanity   Total Cost	2 " 2											
Intersection Criteria   Description   Unit Cost   Quanity   Total Cost	Describe Currei	nt Safety Issues &	Systemic Ranking Review	North Dakota	Crashes 20	108 - 2012		5 vears				
Traffic Control Device   Signal   Standard Walk   Standard W						2012						
Entering ADT Development / Ped Generator Yes Curb Extensions \$12,000 per intersection 2 \$24,000 Per John School Sc		-			_							_
Development / Ped Generator Total Ped/Bike Crashes > 1  Median Refuge Island \$24,000 per side 0 \$0 \$0 \$31,200  Project Cost Estimate (attach detailed copy)  Proposed Year of Construction  Federal Funds \$28,080 \$31,200  *Total Project Cost \$31,200												
Project Cost Estimate (attach detailed copy)  Proposed Year of Construction  Federal Funds \$28,080			Development / Ped Generator	Yes			Curb Extension:	s \$36,000	per corner	0	\$0	
Project Cost Estimate (attach detailed copy)  Federal Funds \$28,080			Total Ped/Bike Crashes	> 1	-	Medi	an Refuge Island	d \$24,000	per side	0		_
Federal Funds \$28,080 Local Match (10% of Total project cost) \$3,120  *Total Project Cost \$31,200  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency  *Project Accepted?											ψ51,200	
Local Match (10% of Total project cost) \$3,120  "Total Project Cost \$31,200  "Based on hybical NDDOT costs (March 2014): includes engineering, construction and contingency  **Cost for traffic counts and signal timing plan development  **NDDOT Central Office Only  Project Accepted?	Project Cost Es	stimate (attach deta	illed copy)					Proposed	Year of Cons	struction		
Local Match (10% of Total project cost) \$3,120  "Total Project Cost \$31,200  "Based on hybical NDDOT costs (March 2014): includes engineering, construction and contingency  **Cost for traffic counts and signal timing plan development  **NDDOT Central Office Only  Project Accepted?			Federal Funds	\$28.080								
**Based on typical NDDOT costs (Narch 2014); includes engineering, construction and contingency  **Cost for traffic counts and signal timing plan development  **Project Accepted?					_							
NDDOT Central Office Only				\$31,200								
Project Accepted?			eering, construction and contingency		**Cost for traffic	counts and signal timing	plan development					
Page: 11 23 USC 409 Intersection ID: 810.02	Project Accepted?			Reference Number					ID Number			
23 USC 409 Intersection ID: 810.02	Notes											
23 USC 409 Intersection ID: 810.02	1											
23 USC 409 Intersection ID: 810.02												
23 USC 409 Intersection ID: 810.02	<b> </b>										Pana	11
NDDOT Reserves All Objections Project suggested for agency's consideration Date: 6/13/2014											Intersection ID:	810.02
	NDDOT Res	serves All Objections	<u> </u>		Project sugge	ested for agency's	consideration				Date:	6/13/2014

	partment of Transportation	IENT PROGRAM (HSIP) PRO on Programming	DJECT APPLIC	ATION							
0111 00000 (00 21	J. 1. /				Bicycle Intersect				_		
	Agency Name	Intersections : City of Grand Forks	on S Wash	ingtor		32nd AV		lammerli	ng Ave		
	Contact Name	: Jane Williams				hone Number		20			
	ation map(s). You may use	: JWilliams@grandforksgov.com additional sheets to further describe your	r project.								
Location Descr	ription					I	SHSP Empl	hasis Area (chec	k all that apply	'n	
	0	r 810.03					Reduce Alco	hol Impaired Dri Use of Safety R	ving		
	Street Name	e S Washington St					Younger Driv	er/Older Driver S		Occupants	
	Urban/Rural County	: Urban r: Grand Forks					Curb Aggres Improvemen	sive Driving ts to Address La	ne Departure	Crashes	
	Corridor ADT	: 11,421				□		mergency Medic rsection Safety	al Capabilities	to Increase	
Describe Brand	and Cafate Immercia					_	miprovo mito	Toodion Garaty			
	Street Name		Traffic Control	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	Notes
Intersection ID	Street Name	Cross Street	Tramic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
810.15	S Washington St	28th Ave S	0	0	0	0	1	1	0	0	Right angle projects suggested on other sheets.
											Silecto.
810.04	S Washington St	Frontage Road	Thru-STOP	10,468	No	0	0	0	0	0	Right angle projects suggested on other
810.05	S Washington St	24th Ave S	Signal	16,580	Yes	0	1	0	0	0	sheets. Right angle projects suggested on other
810.16	S Washington St	Campbell Dr	0	0	0	0	1	1	0	0	sheets. Right angle projects suggested on other
810.06	S Washington St	17th Ave S	Signal	20,128	Yes	1	1	0	0	0	sheets. Right angle projects suggested on other
	-		<u> </u>								sheets. Right angle projects suggested on other
810.07	S Washington St	Hammerling Ave & Frontage Road	Thru-STOP	13,713	Yes	0	0	0	0	0	sheets.
Describe Curre	ent Safety Issues & St	ystemic Ranking Review									
20001120 04110	in carety recated a c	, otomo riamang rionon	North Dakota	Crashes, 20	08 - 2012		years				
			Intersection Criteria			Description		it Cost	Quanity	Total Cost	_
		Traffic Control Device Entering ADT	Signal > 18000			**Advanced Wall ountdown Timers		per intersection per intersection	4 2	\$9,600 \$24,000	
		Development / Ped Generator	Yes			Curb Extensions	\$36,000	per corner	0	\$0	
		Total Ped/Bike Crashes	> 1		Medi	an Refuge Island	\$24,000	per side	0	\$0 \$33,600	-
5 1 10 15											
Project Cost Es	stimate (attach detail	еа сору)					Proposea	Year of Cons	struction		
		Federal Funds Local Match (10% of Total project cost)	\$30,240 \$3,360								
		*Total Project Cost	\$33,600	•							
*Based on typical NDDOT o	costs (March 2014); includes engineer	ring, construction and contingency		**Cost for traffic	counts and signal timing	plan development					
Project Accepted?			Reference Number				J	D Number			
Notes											
[											
	3 USC 409	7								Page: Intersection ID:	810.03
NDDOT Res	serves All Objections		F	roject sugge	ested for agency's	consideration				Date:	

	artment of Transportation	ENT PROGRAM (HSIP) PRO Programming	DJECT APPLIC	ATION							
Please attach a loca	Agency Name: ( Contact Name: , Email Address: , ation map(s). You may use a	Intersections on City of Grand Forks Jane Williams Jwilliams@grandforksgov.com dditional sheets to further describe you	S Washingt		NE		Ave to		Ave/ND	297	
Location Descri	iption					Ī	SHSP Empl	nasis Area (chec	k all that apply)	1	
	Urban/Rural: l County: ( Corridor ADT: 1	S Washington St Urban Grand Forks 13,878					Reduce Alco Increase the Younger Driv Curb Aggres Improvemen Enhancing E	hol Impaired Dri Use of Safety R er/Older Driver	ving estraints for all Safety ne Departure C	Occupants	
	sed Safety Improveme			Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
810.08	S Washington St	13th Ave S	Signal	17,233	Yes	1	1	0	0	0	Right angle projects suggested on other sheets.
810.09	S Washington St	8th Ave S	Thru-STOP	15,858	Yes	0	0	0	0	0	Right angle projects suggested on other
810.1	S Washington St	DeMers Ave/ND 297	Signal	24,068	Yes	3	1	0	0	0	sheets.  Right angle projects suggested on other sheets.
Describe Curre	nt Safety Issues & Sys	stemic Ranking Review	North Dakota	Crashes, 20	08 - 2012	5	years				
			Intersection Criteria			Description		it Cost	Quanity	Total Cost	
		Traffic Control Device Entering ADT Development / Ped Generator Total Ped/Bike Crashes	Signal > 18000 Yes	-	Co	*Advanced Walk ountdown Timers Curb Extensions an Refuge Island	\$2,400 p \$12,000 p \$36,000 p	per intersection per intersection per corner	2 0 0 0	\$4,800 \$0 \$0 \$0 \$0 \$4,800	-
Project Cost Es	stimate (attach detailed	( copy)					Proposed	Year of Con	struction		
		Federal Funds ocal Match (10% of Total project cost) *Total Project Cost	\$480	-							
NDDOT Central		g, construction and contingency		"Cost for traffic	counts and signal timing	pian development					
Project Accepted? Notes	☐ Yes ☐ No		Reference Number					D Number			
	USC 409 erves All Objections		F	Project sugge	ested for agency's	consideration				Page: Intersection ID: Date:	13 810.04 6/13/2014

	FETY IMPROVEM Introduction	ENT PROGRAM (HSIP) PRO	JECT APPLIC	ATION							
SFN 59959 (06-201	11)	arr rogramming	Dede		Bicycle Intersect	1	-4-				
	Contact Name: Email Address:	Intersections ( City of Grand Forks Jane Williams JWilliams@grandforksgov.com	on N Washi		St from [		ve/ND		h Ave N		
Please attach a locat	ion map(s). You may use	additional sheets to further describe your	project.								
								hasis Area (checl		)	
	Urban/Rural: County: Corridor ADT:	N Washington St Urban Grand Forks : 10,037				10000	Increase the Younger Driv Curb Aggres Improvement Enhancing E	Use of Safety Re ver/Older Driver S	estraints for all Safety ne Departure C	Crashes	
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting		Total Ped/Bike		Countdown	Curb	Median Refuge	Notes
Intersection iD	Street Name	Closs Street	Trainic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
810.17	N Washington St	2nd Ave N	Signal	0	0	0	1	1	0	0	0
810.11	N Washington St	University Ave	Signal	12,303	Yes	0	1	0	0	0	Segment & right angle projects suggested on other sheets.
810.18	N Washington St	5th Ave N	Signal	0	0	0	1	1	0	0	0
810.12	N Washington St	8th Ave N	Thru-STOP	8,523	No	0	0	0	0	0	Segment & right angle projects suggested on other sheets.
Describe Curren	t Safety Issues & Sy	estemic Ranking Review									
			North Dakota		008 - 2012		years				
-		Traffic Control Device Entering ADT Development / Ped Generator Total Ped/Bike Crashes	Intersection Criteria Signal > 18000 Yes > 1		Co	Description *Advanced Walk puntdown Timers Curb Extensions an Refuge Island	\$2,400   \$12,000   \$36,000	per intersection per intersection per intersection per corner per side	Quanity 3 2 0 0	Total Cost \$7,200 \$24,000 \$0 \$0 \$31,200	
Project Cost Est	imate (attach detaile	ed copy)					Proposed	Year of Cons	struction		
-		Federal Funds Local Match (10% of Total project cost) *Total Project Cost	\$28,080 \$3,120 <b>\$31,200</b>	-							
*Based on typical NDDOT cos	sts (March 2014); includes engineeri		φ31,200	**Cost for traffic	counts and signal timing	plan development	<u> </u>				
NDDOT Central ( Project Accepted?	Office Only  Yes No	Ti I	Reference Number				I	ID Number			
Notes		,					J.				
	JSC 409 rves All Objections	]	F	Project sugge	ested for agency's	consideration				Page: Intersection ID: Date:	14 810.05 6/13/2014

	AFETY IMPROVEM I partment of Transportation	ENT PROGRAM (HSIP) PRO	JECT APPLIC	ATION							
SFN 59959 (06-20	011)	ir i rogialilililig									
Please attach a loca	Agency Name: Contact Name: Email Address:	Ons on N Washington City of Grand Forks Jane Williams Williams@grandforksgov.com additional sheets to further describe your	St from 8t		NI		es undi	-	orth of L	JS 2/Gate	way Dr)
Location Descri		additional orioto to fartiful accombo your	projecti								
	Urban/Rural: County: Corridor ADT:	N Washington St Urban Grand Forks 5,859					Reduce Alco Increase the Younger Dri Curb Aggres Improvement Enhancing E	whasis Area (che chold Impaired Dr buse of Safety F ver/Older Driver ssive Driving this to Address La Emergency Medi ersection Safety	riving Restraints for all Safety ane Departure C	Occupants	
	sed Safety Improvem			Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator		Walk	Timers	Extensions	Island	Notes
810.13	N Washington St	US 2/Gateway Dr	Signal	16,445	No	0	1	0	0	0	Right angle projects suggested on other sheets.
	10.61.1										
Describe Curre	nt Safety Issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	years				
		Traffic Control Device Entering ADT Development / Ped Generator Total Ped/Bike Crashes	Intersection Criteria Signal > 18000 Yes > 1		C	Description **Advanced Walk ountdown Timers Curb Extensions ian Refuge Island	Ur \$ \$2,400 \$ \$12,000 \$ \$36,000	nit Cost per intersection per intersection per corner per side	Quanity 1 0 0 0	Total Cost \$2,400 \$0 \$0 \$0 \$2,400	-
Project Cost Es	stimate (attach detaile	d copy)					Proposed	Year of Con	struction		
*Based on typical NDDOT c	osts (March 2014); includes engineerin	Federal Funds Local Match (10% of Total project cost)  *Total Project Cost	\$2,160 \$240 <b>\$2,400</b>	**Cost for traffic	counts and signal timing	g plan development					
NDDOT Central	Office Only										
Project Accepted? Notes	☐ Yes ☐ No	l	Reference Number	I .			<u> </u>	ID Number			
	USC 409 erves All Objections		F	Project sugge	ested for agency's	s consideration				Page: Intersection ID: Date:	810.06

		ENT PROGRAM (HSIP) PRO	OJECT APPLIC	ATION							
North Dakota Depa SFN 59959 (06-20		Inters	Pede sections on			32nd Av	e S to 4	th Ave S			
	Contact Name:					D DOT District shone Number		20			
Please attach a locat		JWilliams@grandforksgov.com additional sheets to further describe you	ır project.								
Location Descrip			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	Corridor Street Name Urban/Rural: County: Corridor ADT:	Cherry St Urban Grand Forks					Reduce Alco Increase the Younger Driv Curb Aggres Improvemen Enhancing E	nasis Area (checklot) Impaired Dr Use of Safety Reer/Older Driver sive Driving ts to Address Lamergency Medi resection Safety	iving estraints for all Safety ine Departure 0	Occupants Crashes	
Describe Propos	sed Safety Improvem	ents									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
811.09	Cherry St	4th Ave S	Signal	7,543	No	0	1	1	0	0	Right angle projects suggested on othe sheets.
Describe Curren	nt Safety Issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	008 - 2012		5 years				
							-				
		Traffic Control Device Entering ADT Development / Ped Generator Total Ped/Bike Crashes	> 18000 Yes	<u>-</u>	C	Description **Advanced Walk ountdown Timers Curb Extensions ian Refuge Island	k \$2,400 ps \$12,000 ps \$36,000 ps		Quanity 1 1 0 0	Total Cost \$2,400 \$12,000 \$0 \$0 \$14,400	-
2 1 12 15		,								ψ11,100	
Project Cost Est	timate (attach detaile	а сору)					Proposed	Year of Con	struction		
		Federal Funds Local Match (10% of Total project cost) *Total Project Cost	\$1,440	_							
*Based on typical NDDOT cos NDDOT Central	sts (March 2014); includes engineerin	ng, construction and contingency		**Cost for traffic	counts and signal timing	g plan development					
Project Accepted? Notes			Reference Number				Į I	D Number			
	USC 409 erves All Objections		1	Project sugg	ested for agency's	s consideration				Page. Intersection ID. Date:	811.02

North Dakota Dep	partment of Transportatio	ENT PROGRAM (HSIP) PR in Programming	OJECT APPLIC	ATION							
SFN 59959 (06-2	011)		Pede	strian and I	Bicycle Intersecti	on Improveme	nts				
		Intersect	ions on US 2	2 Bus 1	from DeM	ers Ave	to US 2	/Gatewa	y Dr		
	Agency Name: Contact Name:	City of Grand Forks				DOT District		720			
	Email Address:	JWilliams@grandforksgov.com			reiep	none rumber	. 101-101-51	20			
Please attach a loc  Location Descri		additional sheets to further describe you	our project.								
								hasis Area (chec		)	
	Corridor	812.04						ohol Impaired Dri Use of Safety R		Occupants	
	Street Name Urban/Rural:						Younger Driv Curb Aggres	ver/Older Driver	Safety		
	County:	Grand Forks					Improvemen	nts to Address La	ne Departure C	Crashes	
	Corridor ADT:	4,383				□		mergency Medic rsection Safety	al Capabilities	to Increase	
Describe Brons	osed Safety Improven	aonto					<u> </u>				
			Troffic Control	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	Notos
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
											Diebt and a seizet assessed as other
812.13	S 5th St	DeMers Ave	Signal	15,075	Yes	1	1	1	0	0	Right angle projects suggested on other sheets.
812.14	S 5th St	1st Ave N	Signal	5,670	Yes	1	1	1	0	0	Right angle projects suggested on other sheets.
812.18	N 5th St	2nd Ave N	0	0	0	0	1	1	0	0	Right angle projects suggested on other
949.45	N Eth Ot	Linivoroity Avo	Signal	7.005	No	0	4	0	0	0	sheets.
812.15	N 5th St	University Ave	Signal	7,905	No	0	1			0	Right angle projects suggested on other
812.19	N 5th St	5th Ave N	0	0	0	0	1	1	0	0	sheets.
812.16	N 5th St	8th Ave N	Thru-STOP	5,525	No	0	0	0	2	0	0
Dogoviho Curvo	ant Cafaty Jacquas & Cu	rotomia Banking Baylaw									
Describe Curre	ent Salety Issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	008 - 2012		years				
			Intersection Criteria			Description	. Ur	nit Cost	Quanity	Total Cost	
		Traffic Control Device	e Signal	-		*Advanced Wall	\$2,400	per intersection	5	\$12,000	-
		Entering AD Development / Ped Generate				ountdown Timers Curb Extensions		per intersection per corner	4 2	\$48,000 \$72,000	
		Total Ped/Bike Crashe		-		an Refuge Island			0	\$0 \$132,000	_
										\$132,000	
Project Cost E	stimate (attach detaile	ed copy)					Proposed	Year of Con	struction		
		Federal Fund									
		Local Match (10% of Total project cos *Total Project Cos		-							
	costs (March 2014); includes engineeri	ng, construction and contingency	φ1 <b>02,000</b>	**Cost for traffic	counts and signal timing	plan development					
NDDOT Centra Project Accepted?			Reference Number					ID Number	ı		
Notes	1		oronoo raambor					/4			
		-								Page:	17
	3 USC 409 serves All Objections		F	Project sugg	ested for agency's	consideration				Intersection ID: Date:	812.04 6/13/2014
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	EETV IMPROVEMEN	NT DDGGDAM (HOID) DD	O IFOT APPLIA	. <del> </del>								
North Dakota Dep	artment of Transportation	<b>NT PROGRAM (HSIP) PR</b> Programming	OJECT APPLIC	ATION								
SFN 59959 (06-20	J11)				Bicycle Intersecti							
			ons on S 4th	St fro				innesota	Ave			
	Contact Name: J					DOT District hone Number		20				
Please attach a loca		Williams@grandforksgov.com ditional sheets to further describe yo	ur project.									
Location Descri						I	SHSD Emp	hasis Area (chec	k all that apply	1		
						<u>_</u>	Reduce Alco	ohol Impaired Dri	ving			
	Corridor 8 Street Name S	4th St					Younger Driv	Use of Safety Rover/Older Driver		Occupants		
	Urban/Rural: U County: G	rban rand Forks					Curb Aggres Improvemen	sive Driving its to Address La	ne Departure (	Crashes		
	Corridor ADT: 1	100				□		mergency Medic rsection Safety	al Capabilities	to Increase		
Doscribo Propo	sed Safety Improveme	nte					,	,				
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting	Development /			Countdown	Curb	Median Refuge	Notes	
III.O.OOO.OI.I.D	ou ou manie	0,000 0,000	Traine Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	110.00	
815.01	S 4th St	Minnesota Ave	Thru-STOP	5,403	No	0	0	0	0	0	0	
010.01	0 441 00	Will Incode Ave	11114 6161	0,400	140	Ü	Ü	Ü	Ü	· ·	Ü	
011 11	Pruga Ava	C 4th Ct	Thru STOR	4 122	No	0	0	0	2	0	0	
811.11	Bruce Ave	S 4th St	Thru-STOP	4,123	No							
815.02	S 4th St	DeMers Ave	Signal	16,223	Yes	0	1	0	0	0	0	
815.03	N 4th St	1st Ave N	Thru-STOP	3,550	Yes	0	1	0	0	0	0	
815.04	N 4th St	University Ave	All Way STOP	3,810	Yes	0	0	0	1	0	0	
815.05	N 4th St	8th Ave N	Thru-STOP	1,520	No	0	0	0	2	0	0	
815.1	N 4th St	10th Ave N	0	0	0	0	0	0	1	0	0	
815.06	N 4th St	US 2/Gateway Dr	Thru-STOP	10,945	Yes	0	0	0	0	0	0	
Describe Currer	nt Safety Issues & Syst	emic Ranking Review										
			North Dakota	Crashes, 20	008 - 2012	5	years					
		Traffic Control Devic	Intersection Criteria e Signal	-		Description *Advanced Walk		nit Cost per intersection	Quanity 2	Total Cost \$4,800		
		Entering AD  Development / Ped Generate	T > 18000		Co	ountdown Timers	\$12,000	per intersection	0	\$0		
		Total Ped/Bike Crashe		_		Curb Extensions an Refuge Island		per corner per side	6 0	\$216,000 \$0		
										\$220,800		
Project Cost Es	timate (attach detailed	сору)					Proposed	Year of Cons	struction			
		Federal Fund										
	LC	ocal Match (10% of Total project cos *Total Project Cos		-								
*Based on typical NDDOT co NDDOT Central	osts (March 2014); includes engineering, Office Only	construction and contingency		**Cost for traffic	counts and signal timing	plan development						
Project Accepted?			Reference Number					ID Number				
Notes												
										Page:	18	
	USC 409 erves All Objections		ſ	Project suga	ested for agency's	consideration				Intersection ID: Date:	815.01 6/13/2014	
				,39								

		ENT PROGRAM (HSIP) PRO	JECT APPLIC	ATION							
SFN 59959 (06-20	eartment of Transportation	n Programming									
					Bicycle Intersect						
	A Na	Intersections	on S 34th	St - 241		rom 32n DOT District		to Beim	nont Rd		
	Contact Name:	City of Grand Forks Jane Williams				hone Number		20			
Please attach a loca		JWilliams@grandforksgov.com additional sheets to further describe your	project								
Location Descri		additional sheets to further describe your	project.								
								hasis Area (cheo ohol Impaired Dr		)	
	Corridor						Increase the	Use of Safety R	Restraints for all	Occupants	
	Urban/Rural:	S 34th St - 24th Ave S Urban					Curb Aggres	ver/Older Driver sive Driving	Sarety		
	County: Corridor ADT:	Grand Forks 4 239					Improvement	ts to Address La mergency Medi	ane Departure (	Crashes to Increase	
	Conidon Alb 1.	1,200				☑		rsection Safety	оаг оаравиноо	10 11010400	
Describe Propo	sed Safety Improvem	ents									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting		Total Ped/Bike		Countdown	Curb	Median Refuge	Notes
				ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	
			a					_			Segment & right angle projects
821.01	S 34th St	32nd Ave S	Signal	18,820	Yes	2	1	0	0	0	suggested on other sheets.
Describe Curre	nt Safety Issues & Sys	stemic Ranking Review									
			North Dakota	Crashes, 20	08 - 2012	5	years				
		= # - : - :	Intersection Criteria	-		Description		nit Cost	Quanity	Total Cost	
		Traffic Control Device Entering ADT	Signal > 18000			*Advanced Wall- ountdown Timers		per intersection per intersection	1 0	\$2,400 \$0	
		Development / Ped Generator	Yes			Curb Extensions	\$36,000	per corner	0	\$0	
		Total Ped/Bike Crashes	> 1	-	Medi	an Refuge Island	\$24,000	per side	0	\$0 \$2,400	
Project Cost Es	stimate (attach detaile	а сору)					Proposed	Year of Con	struction		
		Federal Funds	\$2,160								
		Local Match (10% of Total project cost) *Total Project Cost	\$240 <b>\$2,400</b>	-							
*Based on typical NDDOT co	osts (March 2014); includes engineerin	g, construction and contingency	<del></del>	**Cost for traffic	counts and signal timing	plan development					
NDDOT Central Project Accepted?			Reference Number				I	ID Number			
Notes											
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	USC 409 erves All Objections			Project aug =	netod for agency!	consideration				Intersection ID: Date:	821.02 6/13/2014
INDUUT Kes	ici vea Aii Objectiona			roject sugge	ested for agency's	our isidel dilori				Date:	0/10/2014

	FETY IMPROVEM artment of Transportation	ENT PROGRAM (HSIP) PRO	JECT APPLICA	ATION							
SFN 59959 (06-20		arr rogramming									
	In	tersections on 32nd				tion Improvemer		te to I-20	Wastar	n Damne	
		: City of Grand Forks	AVE 3 IIOIII	Granu		D DOT District:		15 10 1-23	VVCSICI	ii ivaiiips	
	Contact Name:	Jane Williams			Telep	ohone Number:	701-787-37	20			
Please attach a locat		: JWilliams@grandforksgov.com additional sheets to further describe your	project.								
Location Descrip	otion					1	CLICD E	:- A (-b		\ \ \	
							Reduce Alco	hasis Area (ched shol Impaired Dr	iving		
	Corridor Street Name							Use of Safety R er/Older Driver		Occupants	
	Urban/Rural:	: Urban					Curb Aggres	sive Driving	•		
	County: Corridor ADT:	: Grand Forks : 3,988					Enhancing E	ts to Address La mergency Medi	ine Departure C cal Capabilities	to Increase	
						☑	Improve Inte	rsection Safety			
Describe Propos	sed Safety Improven	nents									
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
822.01	32nd Ave S	I-29 South Ramp	Signal	9,463	No	0	1	1	0	0	Right angle projects suggested on other sheets.
											Sileets.
		·									
Describe Curren	t Cafaty January P Cu	votomio Banking Baylaw									
Describe Gurren	coalety issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	008 - 2012	5	years				
			Interpostic - C-t-					nit Cost	0:	Total Carr	
		Traffic Control Device	Intersection Criteria Signal			Description **Advanced Walk	\$2,400	per intersection	Quanity 1	Total Cost \$2,400	-
		Entering ADT	> 18000		С	ountdown Timers	\$12,000	per intersection	1	\$12,000	
		Development / Ped Generator Total Ped/Bike Crashes	Yes > 1		Med	Curb Extensions ian Refuge Island		per corner per side	0	\$0 \$0	
•						·				\$14,400	-
Proiect Cost Est	imate (attach detaile	ed copy)					Proposed	Year of Con	struction		
, , , , , , , , , , , , , , , , , , , ,			\$40.000				.,				
		Federal Funds Local Match (10% of Total project cost)	\$12,960 \$1,440								
•		*Total Project Cost	\$14,400								
*Based on typical NDDOT cos NDDOT Central	sts (March 2014); includes engineeri Office Only	ing, construction and contingency		**Cost for traffic	counts and signal timing	g plan development					
Project Accepted?			Reference Number				1	D Number			
Notes											
1											
1											
		-								Page:	
	USC 409 rves All Objections		P	roiect sugge	ested for agency's	s consideration				Intersection ID: Date:	822.01 6/13/2014
		1		., 04990						2410.	-,, 2011

		ENT PROGRAM (HSIP) PRO	JECT APPLIC	ATION							
North Dakota Depart SFN 59959 (06-2011	ment of Transportation	n Programming									
,					Bicycle Intersect						
		Intersections o	n 32nd Ave	S fror		Stern Ra		S Washi	ngton S	St	
	Contact Name:	City of Grand Forks Jane Williams				hone Number:		20			
Diagon attach a locatio		JWilliams@grandforksgov.com additional sheets to further describe your	r project								
Location Descript		additional sneets to further describe your	r project.								
								hasis Area (chec		/)	
	Corridor	822.02						hol Impaired Dri Use of Safety R		I Occupants	
	Street Name Urban/Rural:						Younger Driv Curb Aggres	er/Older Driver S	Safety		
	County:	Grand Forks					Improvemen	ts to Address La			
	Corridor ADT:	9,143				□		mergency Medio rsection Safety	al Capabilities	to Increase	
							miprovo mio	- Coolien Carety			
	ed Safety Improvem			Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
822.02	32nd Ave S	I-29 North Ramp	Signal	9,938	Yes	0	1	1	0	0	Right angle projects suggested on other sheets.
822.03	32nd Ave S	S 31st St	0	0	0	0	1	1	0	0	Right angle projects suggested on other
											sheets. Right angle projects suggested on other
822.04	32nd Ave S	S 25th St	0	0	0	0	1	1	0	0	sheets.
Describe Current	Safety Issues & Sv.	stemic Ranking Review									
		<u> </u>	North Dakota	Crashes, 20	008 - 2012	5	5 years				
			Intersection Criteria			Description	n Ur	it Cost	Quanity	Total Cost	
_		Traffic Control Device	Signal	_		*Advanced Wall	k \$2,400	per intersection	3	\$7,200	-
		Entering ADT Development / Ped Generator	> 18000 Yes			ountdown Timers Curb Extensions		per intersection per corner	3 0	\$36,000 \$0	
_		Total Ped/Bike Crashes	> 1	_		an Refuge Island			0	\$0	_
										\$43,200	
Project Cost Estin	nate (attach detaile	ed copy)					Proposed	Year of Cons	struction		
		Federal Funds	\$38,880								
		Local Match (10% of Total project cost)	\$4,320								
_		*Total Project Cost	\$43,200								
*Based on typical NDDOT costs  NDDOT Central O	(March 2014); includes engineerin	ng, construction and contingency		**Cost for traffic	counts and signal timing	plan development	1				
Project Accepted?			Reference Number					D Number			
Notes											
	20.400	1								Page:	21
	SC 409 es All Objections			Project sugge	ested for agency's	consideration				Intersection ID: Date:	822.02 6/13/2014

	AFETY IMPROVEMED PARTY IMPROVEMENT OF TRANSPORTATION TO THE PROVENED TO THE PR	ENT PROGRAM (HSIP) PRO	JECT APPLIC	ATION							
SFN 59959 (06-2	011)	1 Flogramming									
	Agency Name:	ections on DeMers A			NE	rn Ramps	s to No		ta/Minn	esota Boı	der
	Contact Name: Fmail Address:	Jane Williams JWilliams@grandforksgov.com			Telep	hone Number:	701-787-37	20			
	ation map(s). You may use a	additional sheets to further describe your	project.								
Location Descr	ription					l I	SHSP Empl	hasis Area (chec	k all that apply	)	
	Urban/Rural: County: Corridor ADT:	DeMers Ave/ND 297 Urban Grand Forks 9,348				0000	Reduce Alco Increase the Younger Driv Curb Aggres Improvement Enhancing E	ohol Impaired Dri Use of Safety R ver/Older Driver :	ving estraints for all Safety ne Departure C	Occupants	
	osed Safety Improvem			Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	
Intersection ID	Street Name	Cross Street	Traffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
805.05	S 34th St	DeMers Ave/ND 297	Signal	9,553	No	0	1	1	0	0	Right angle projects suggested on other sheets.
830.04	DeMers Ave (ND 297)	Columbia Rd North Ramp	Signal	11,235	Yes	1	1	1	0	0	Right angle projects suggested on other
809.09	S 20th St	DeMers Ave/ND 297	Signal	11,285	Yes	0	1	1	0	0	sheets.
000.00	0.2011.01	201101071107112 207	Oignai	11,200	.00	Ĭ		•	Ü	ŭ	ű
Describe Curre	nt Safety Issues & Sy:	stemic Ranking Review	North Dakota	Crashae 20	IDS - 2012	5	years				
				Crasiles, 20	100 - 2012						
	-	Traffic Control Device	Intersection Criteria Signal	•		*Advanced Walk	\$2,400	nit Cost per intersection	Quanity 3	Total Cost \$7,200	-
		Entering ADT Development / Ped Generator	> 18000 Yes			ountdown Timers Curb Extensions		per intersection per corner	3 0	\$36,000 \$0	
		Total Ped/Bike Crashes	> 1	•		an Refuge Island	\$24,000		Ö	\$0	_
										\$43,200	
Project Cost Es	stimate (attach detaile	d copy)					Proposed	Year of Con	struction		
		Federal Funds	\$38,880								
		Local Match (10% of Total project cost)  *Total Project Cost	\$4,320 <b>\$43,200</b>	•							
*Based on typical NDDOT of	costs (March 2014); includes engineerin		ψ+3,200	**Cost for traffic	counts and signal timing	plan development					
NDDOT Central Project Accepted?			Reference Number	ı			1	ID Number	I		
Notes	Tes INU	ľ	Kererence Number				!	io Number			
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HICHWAY 6	VEETY IMPROVEM	ENT PROGRAM (HSIP) PRO	LECT ADDL IC	ATION							
	partment of Transportation		JECT APPLICA	ATION							
,	•	ntersections on US 2			Columbi			akota/Mi	nnosota	Rorder	
	Agency Name:	City of Grand Forks	Galeway D	1 11 0111	NE	DOT District	: 6		iiiesota	Boluei	
		JWilliams@grandforksgov.com			Telep	hone Number	: 701-787-37	<b>720</b>			
Please attach a location Descr		additional sheets to further describe your	project.								
								hasis Area (chec ohol Impaired Dri		)	
	Corridor Street Name	838.01 US 2/Gateway Dr						Use of Safety Rover/Older Driver S		Occupants	
	Urban/Rural: County:	Urban Grand Forks					Curb Aggres	ssive Driving its to Address La	ne Departure C	Crashes	
	Corridor ADT:					□	Enhancing E	mergency Medic			
Describe Propo	osed Safety Improven	nents					·				
Intersection ID	Street Name	Cross Street	Traffic Control	Enterting ADT	Development / Ped Generator	Total Ped/Bike Crashes	Advanced Walk	Countdown Timers	Curb Extensions	Median Refuge Island	Notes
											Project could also be coordinated with a
838.06	Gateway Dr (US 2)	N 47th St	0	0	0	0	1	1	0	0	separate project to add ADA ramps and pedestrian push buttons & right angle projects suggested on other sheets.
838.01	Gateway Dr (US 2)	I-29 South Ramp	Signal	12,875	Yes	0	1	1	0	0	Right angle projects suggested on other sheets.
838.02	Gateway Dr (US 2)	I-29 North Ramp	Signal	13,598	Yes	0	1	1	0	0	Right angle projects suggested on other sheets.
838.03	Gateway Dr (US 2)	Frontage Rd (East of 42nd St)	Thru-STOP	9,325	Yes	0	0	0	0	0	0
804.04	Stanford Rd	US 2/Gateway Dr	Signal	12,410	Yes	0	1	1	0	0	Right angle projects suggested on other sheets.
838.04	Gateway Dr (US 2)	Frontage Rd (East of Stanford Rd)	Thru-STOP	10,248	No	0	0	0	0	0	0
838.05	Gateway Dr (US 2)	Frontage Rd (West of Columbia Rd)	Thru-STOP	10,418	Yes	0	0	0	0	0	0
D'' O		and and a Daniella or Davidson									
Describe Curre	ent Salety Issues & Sy	stemic Ranking Review	North Dakota	Crashes, 20	08 - 2012	5	years				
			Intersection Criteria			Description		nit Cost	Quanity	Total Cost	_
		Traffic Control Device Entering ADT	Signal > 18000			*Advanced Walk ountdown Timers	\$12,000	per intersection per intersection	4 4	\$9,600 \$48,000	
		Development / Ped Generator Total Ped/Bike Crashes	Yes > 1		Medi	Curb Extensions an Refuge Island		per corner per side	0 0	\$0 \$0	_
										\$57,600	
Project Cost Es	stimate (attach detaile	ed copy)					Proposed	Year of Cons	struction		
		Federal Funds Local Match (10% of Total project cost)	\$51,840 \$5,760								
		*Total Project Cost	\$57,600								
NDDOT Central				"Cost for traffic	counts and signal timing	plan development	L				
Project Accepted? Notes	Yes No		Reference Number				ļ	ID Number	l		
										Page:	23
	3 USC 409 serves All Objections	]	F	roject sugge	ested for agency's	consideration				Intersection ID: Date:	838.01 6/13/2014

THE HIMAY CAFETY IMPROVEMENT PROCESS AND (HOLD) PROJECT ADDITION	
HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming	
SFN 59959 (06-2011)  Pedestrian and Bi	cycle Intersection Improvements
	Columbia Rd to North Dakota/Minnesota Border
Agency Name: City of Grand Forks Contact Name: Jane Williams	Telephone Number: 701-787-3720
Email Address: JWilliams@grandforksgov.com Please attach a location map(s). You may use additional sheets to further describe your project.	
Location Description	SHSP Emphasis Area (check all that apply)
Corridor 838.02	Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupants
Street Name US 2/Gateway Dr Urban/Rural: Urban	☐ Younger Driver/Older Driver Safety ☐ Curb Aggressive Driving
County: Grand Forks Corridor ADT: 7,271	Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase
05/1007 (-2.7)	Improve Intersection Safety
Describe Proposed Safety Improvements	
	Development / Total Ped/Bike Advanced Countdown Curb Median Refuge Notes Ped Generator Crashes Walk Timers Extensions Island
	No. 0 4 4 0 Segment & right angle projects
809.13 N 20th St US 2/Gateway Dr Signal 11,813	No 0 1 1 0 0 Segment a right angle projects suggested on other sheets.
	Segment & right angle projects
812.17 N 5th St US 2 / Gateway Dr Signal 14,795	suggested on other sheets.
816.06 N 3rd St US 2/Gateway Dr Thru-STOP 9,603	No 0 1 1 0 0 Segment a right angle projects suggested on other sheets.
Describe Current Safety Issues & Systemic Ranking Review  North Dakota Crashes, 200	9 2042 Every
Intersection Criteria Traffic Control Device Signal	Description Unit Cost Quanity Total Cost  **Advanced Walk \$2,400 per intersection 3 \$7,200
Entering ADT > 18000 Development / Ped Generator Yes	Countdown Timers         \$12,000 per intersection         3         \$36,000           Curb Extensions         \$36,000 per corner         0         \$0
Total Ped/Bike Crashes > 1	Median Refuge Island         \$24,000 per side         \$0           \$43,200         \$43,200
Project Cost Estimate (attach detailed copy)	Proposed Year of Construction
	Troposed real of constitution
Federal Funds \$38,880 Local Match (10% of Total project cost) \$4,320	
*Total Project Cost \$43,200  *Based on typical NDDOT costs (March 2014); includes engineering, construction and contingency "Cost for traffic or	unts and signal timing plan development
NDDOT Central Office Only	ID Number
Project Accepted?  □ Yes □ No Reference Number □ Notes	po rounder
23 USC 409	Page: 24 Intersection ID: 838.02
	ted for agency's consideration Date: 6/13/2014



# 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 serious 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). Serious traffic crashes in the Grand Forks region can be largely prevented and reduced if motorists, especially younger drivers, 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 Grand Forks Region

**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 serious crashes are the Grand Forks region's greatest opportunity to strengthen road safety through improving driver behavior. The trend of serious unbelted crashes is increasing statewide. The Grand Forks region is below the 48 percent statewide-unbelted serious crashes with 41 percent of the region's serious 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, 2012). Similarly, over the last decade, each year nearly half of motor vehicle fatalities statewide in North Dakota continue to be alcohol-related. In the Grand Forks region, 22 percent of the region's serious crashes are alcohol-related — lower than the statewide 30 percent. From statewide crash data, nearly half of these preventable serious 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, 2012a). 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 serious crashes involving young drivers have gradually declined statewide, drivers under the age of 21 continue to be overrepresented in crashes with 67 percent occurring on local roads. In the Grand Forks region, 31 percent of serious crashes involve young drivers, which is higher than the 22 percent of statewide serious crashes.

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, 2012b). Speeding and aggressive driving continue to account for approximately 26 percent of all serious crashes in North Dakota with 62 percent of these crashes occurring on the local road system. In the Grand Forks region, 25 percent of the serious crashes involve speeding or aggressive driving, which is similar to the statewide percentage of 26 percent.

## 5.3 Importance of Traffic Safety Culture Change

## 5.3.1 Influence of Traffic Safety Culture

In adopting North Dakota's long-term vision of zero fatalities, the 2013 North Dakota SHSP establishes a statewide goal to reduce the 3-year average of traffic fatalities to 100 or fewer by 2020. To accomplish this interim goal, the Grand Forks region, 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 incapacitating 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

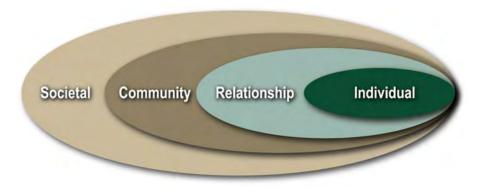


FIGURE 5-1
Social Ecological Perspective of Culture
Source: "Violence – A Global Public Health Problem" by L.L. Dahlberg and E.G. Krug, in *World Report on Violence and Health* (World Health Organization)

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 crashes, 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 2 Priority Strategies

During the LRSP workshop, participants reviewed the Grand Forks region'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 2 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 2 LRSP Workshop Priority Behavioral Strategies and Relationship with the North Dakota SHSP

Phase 2 LRSP Workshop Priority Driver Behavior Strategies	Cass County Region	Eastern Region	Grand Forks Region	2013 North Dakota SHSP	
Impaired Driving					
Employ Alcohol Screening and Brief Interventions	X			X	
Support Community Program for Alternative Transportation		X		Х	
Promote Sobriety Initiatives for DUI Offenders (24/7, Ignition Interlock, DUI Courts)	х	Х		х	
Educate and Enforce Zero Tolerance Laws for Drivers Under Age 21		Х			
Court Monitoring of Prosecution and Sentencing of DUI Offenders			Х		
Speeding and Aggressive Driving					
<ul> <li>Conduct High-Visibility Targeted Enforcement of Speeding and Aggressive Driving</li> <li>Note: Added following speed and aggressive driving enforcement strategy to support priority lane departure infrastructure safety strategy:</li> <li>Provide Enhanced Enforcement on Local, At-Risk Locations for Lane-Departure Crashes</li> </ul>	x	x	X	X	
Conduct Enhanced Enforcement of Red-Light Running			Х	Х	

Phase 2 LRSP Workshop Priority Driver Behavior Strategies	Cass County Region	Eastern Region	Grand Forks Region	2013 North Dakota SHSP	
Young Drivers					
Publicize and conduct a high-visibility enforcement of GDL restrictions, cell phone use and texting laws, underage drinking and driving, and seatbelt laws	х			Х	
Encourage driver education providers (local schools and private providers) to require parent education component		X	х	х	
Unbelted Occupants					
Conduct highly publicized enforcement campaigns to maximize restraint use.			Х	Х	
Enforce Secondary Belt Use Law		Х		Х	
Pursue Local Support for Primary Seat Belt	Х	Χ	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

# Grand Forks Region Priority Strategy – Court Monitoring of Prosecution and Sentencing of DUI Offenders

Description: Court monitoring programs observe DUI cases within the criminal justice system and help to strengthen accountability and system improvement. In court monitoring programs, trained citizen volunteers observe, track, and report on DUI court or administrative hearing activities. Court monitoring involves gathering and analyzing data to assess patterns regarding DUI case dismissals or cases plead to a lesser offense, conviction rates, sanctions imposed, and how the analysis results compare across different judges and different courts. With consistent courtroom attendance, a review of court records and tracking of offender and probation records, volunteers can identify inconsistencies and potential issues in court proceedings of DUI cases. Court monitoring seeks to produce more DUI convictions, stronger sentencing, and a decrease in plea agreements. The presence of informed volunteer court monitors sends a clear message to judges, prosecutors, defense lawyers, and court staff of the community's interest regarding the outcome of DUI cases, which, in turn, fosters greater court system accountability and system improvement at the local level.

An effective alternative to court monitoring programs is a data-driven justice system evaluation of DUI offenders. Instead of volunteer monitoring presence in the courtroom, volunteers gather, review and analyze DUI case data from arrest through adjudication. Volunteers assess patterns regarding DUI arrests from law enforcement data as well as court proceedings of DUI cases based on available system data.

#### 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, such as impaired driving, in the SHSP.

#### Court monitoring action steps -

- Court monitoring programs usually are operated and funded by local citizen and advocacy organizations such as Mothers Against Drunk Driving (MADD) North Dakota.
- Working with MADD North Dakota, the county's local safe community coordinator,
  County attorney's office, and local law enforcement to develop the program framework and
  desired outcomes. For example, determine which DUI cases to be monitored (for example,
  felony-only DUIs vs. all DUIs), court data availability, etc.
- Identify available volunteers, determine existing knowledge of court process, and time availability.
- Utilize MADD court monitoring volunteer training program (to learn terminology, court process, sentencing, etc.) to observe courts and to compile information on DUI cases and resulting outcomes.
- Meet with each court judge to inform him/her about the county's court monitoring
  initiative. Present a positive approach such as the county is seeking to better understand
  how DUI cases are addressed in the local courts.

#### *Justice system evaluation action steps –*

- Begin with contacting the Traffic Safety Office (TSO) and North Dakota's Traffic Safety Resource Prosecutor to understand the necessary DUI data sources for review.
- Beginning with data available through the NDDOT, contact the court system and the local law enforcement and prosecution agencies to gather and consolidate available DUI arrest and court system data.
- Meet with local traffic safety stakeholders to review and analyze the data.
- Meet with those involved in the justice system (judges, prosecutors) where data indicates significant dismissal or plea bargain rates.
- Consider the development of a web-based resource to post the data.

#### Implementation Resources:

- Contact MADD National for information on court monitoring training program information at 1-877-275-6233.
- Grand Forks Substance Abuse Prevention Coalition, Bill Vasicek, Community Safety Coordinator, Altru Health System at bvasicek@altru.org or 701-780-5939

- To explore example state and local implementation of a court monitoring training programs, contact:
  - MADD North Carolina Community Action Site Court Monitoring Program at 919-787-6599
  - Connecticut MADD: Johanna Krebs, Program Manager at 203-764-2566, ext. 6952.
- For information on DUI data sources, contact ND Traffic Safety Resource Prosecutors:
  - Aaron Birst at aaron.birst@ndaco.org, 701-328-7342
  - Kristi Pettit Venhuizen at 701/780-9276
- Information on North Dakota drunk driving penalties: https://www.dot.nd.gov/divisions/safety/penaltiesdrinkingdriving.htm
- For information on Judicial DUI Orientation Training, contact Sharon Gehrman-Driscoll with Minnesotans for Safe Driving at sgehrman@centurylink.net or 952-221-7393
- For North Dakota road safety information including facts sheets, issue briefs, and other
  education and outreach resources, visit the NDSU Rural Transportation Safety and Security
  Center (RTSSC) at:

http://www.ugpti.org/rtssc/resources/

And the NDSU Upper Great Plains Transportation Institute at: <a href="http://www.ugpti.org/resources/">http://www.ugpti.org/resources/</a>

Other impaired-driving safety resources:

National Highway Traffic Safety Administration: <a href="http://www.nhtsa.gov/Impaired">http://www.nhtsa.gov/Impaired</a>

# For additional impaired driving safety strategies, see the following priority ND Local Road Safety Program strategies:

- Employ alcohol screening and brief Interventions by health care providers following an impaired driving crash. (Further explanation can be found in the North Dakota Local Road Safety Program, Phase 2, Cass County Region Report located at: <a href="http://www.dot.nd.gov/divisions/safety/trafficsafety.htm">http://www.dot.nd.gov/divisions/safety/trafficsafety.htm</a>)
- Support community programs for alternative transportation. (Further explanation can be found in the North Dakota Local Road Safety Program, Phase 2, Eastern Region Report located at: <a href="http://www.dot.nd.gov/divisions/safety/trafficsafety.htm">http://www.dot.nd.gov/divisions/safety/trafficsafety.htm</a>)
- Promote sobriety initiatives for DUI offenders (24/7, Ignition Interlock, DUI Courts).
   (Further explanation can be found in the North Dakota Local Road Safety Program, Phase 2, Cass County Region and Eastern Region Reports located at: <a href="http://www.dot.nd.gov/divisions/safety/trafficsafety.htm">http://www.dot.nd.gov/divisions/safety/trafficsafety.htm</a>)
- Educate and enforce zero tolerance laws for drivers under age 21. (Further explanation can be found in the North Dakota Local Road Safety Program, Phase 2, Eastern Region Report located at: <a href="http://www.dot.nd.gov/divisions/safety/trafficsafety.htm">http://www.dot.nd.gov/divisions/safety/trafficsafety.htm</a>)

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.

Consider offering Judge DUI Orientation Training involving victim advocates, a probation
officer, and a treatment evaluation professional to proactively educate court personnel on
current DUI sentencing and treatment practices to support consistent and informed
decision-making.

## 5.4.5 Speeding and Aggressive Driving

Grand Forks Region Priority Strategy – Conduct highly publicized and targeted speeding and aggressive driving enforcement campaigns

**Description:** High-visibility enforcement is a high-priority, proven safety strategy to reduce serious crashes in North Dakota and across the nation. The most effective way to deter unsafe driving is through a highly visible enforcement effort to reinforce the driving public's perception that driving behavior, such as speeding, is at high risk of being stopped and ticketed. High-visibility enforcement consists of multiple jurisdictions and/or multiple squads patrolling a segment of roadway at the same time, often using brightly colored signage and vests. Planned high-visibility 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 of the campaign such as tickets issued and arrests made.

North Dakota law enforcement agencies (state, county, city and tribal) participate in the state's cooperative enforcement programs to reduce speed-related fatalities and incapacitating injuries through stepped up enforcement of aggressive cars and trucks primarily in oil-impacted counties. For aggressive driving enforcement, officers focus on drivers who commit a combination of moving traffic violations such speeding, following too closely, and running red lights endangering 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, such as speeding, in the SHSP.
- 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 initiatives and enforcement grant opportunities, contact the TSO and the state's Law Enforcement Liaison at (701) 328-4692. Enforcement grant application information for overtime speed enforcement can be found at:

https://www.dot.nd.gov/divisions/safety/trafficsafety.htm

- 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 (2001b) *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

• For North Dakota road safety information including facts sheets, issue briefs, and other education and outreach resources, visit the NDSU Rural Transportation Safety and Security Center (RTSSC) at:

http://www.ugpti.org/rtssc/resources/

The NDSU Upper Great Plains Transportation Institute at:

http://www.ugpti.org/resources/

Grand Forks Region'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 serious crashes at signalized intersections-right angle crashes – the Grand Forks region 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, such as speed and aggressive driving, 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 Local Road Safety Plans 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

Grand Forks Region's Priority Strategy – Provide enhanced enforcement on local, at-risk locations for lane-departure crashes.

**Description:** To reduce serious lane-departure crashes on rural paved roads, the Grand Forks region plans to deploy infrastructure safety improvements (for example, 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 driving 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, such as lane departure, 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 (such as Saturday evening hours)
  - Ask for an agreement regarding minimum levels of enforcement (such as 1 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 projects developed as part of the Local Road Safety Plans are eligible for funding through the state's Highway Safety Improvement Program (HSIP) including enhanced enforcement.
- See Section 5.4.5 for speed and aggressive driving implementation resources.

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.

## 5.4.6 Young Drivers

Grand Forks Region 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 drivers 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, such as young drivers, 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 the state of 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 serious 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:
  <a href="https://dps.mn.gov/divisions/ots/teen-driving/Documents/Parent-class-leaders-guide-july-2013.doc">https://dps.mn.gov/divisions/ots/teen-driving/Documents/Parent-class-leaders-guide-july-2013.doc</a>
- 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:
  <a href="http://youngdriverparenting.org/">http://youngdriverparenting.org/</a> and <a href="http://www.saferdrivingforteens.org/">http://www.saferdrivingforteens.org/</a>
- 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.

  <a href="http://www.ghsa.org/html/publications/pdf/sfteens13.pdf">http://www.ghsa.org/html/publications/pdf/sfteens13.pdf</a>
- 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.
   <a href="http://www.ghsa.org/html/publications/pdf/sfteens12.pdf">http://www.ghsa.org/html/publications/pdf/sfteens12.pdf</a>
- 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).
  <a href="http://www.parentslead.org/">http://www.parentslead.org/</a>
- For PowerPoint presentations, parent/teen activities and other tools to be adopted for driver education providers, see *Teendriversource*: *Research Put into Action*.
   www.teendriversource.org
- For information on *Teen Driving Parents/Alive at 25* that includes a 1-hour parent, 4-hour teen driving program including a comprehensive publication, *Teen Driver; A Family Guide to Teen Safe Driving*.
  - http://www.nsc.org/products\_training/Products/MotorVehicleSafety/Pages/TeenDriving.aspx

- For information in Utah's award winning Don't Drive Stupid Parent Night Program. http://publicsafety.utah.gov/highwaysafety/documents/smart.pdf http://www.ghsa.org/html/meetings/awards/2013/13utah.html
- For information on *Parents are the Key* and free downloadable resources that can be customized.

www.cdcgov/ParentsAreTheKey/

• For North Dakota road safety information including facts sheets, issue briefs, and other education and outreach resources, visit the NDSU Rural Transportation Safety and Security Center (RTSSC) at:

http://www.ugpti.org/rtssc/resources/

The NDSU Upper Great Plains Transportation Institute at: http://www.ugpti.org/resources/

#### 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.

Considerations for future expanded local agency/community support of North Dakota SHSP youngdriver 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.

## 5.4.7 Unbelted Occupants

Grand Forks Region Priority Strategy – Conduct highly publicized enforcement campaigns to maximize restraint use.

**Description:** See Section 5.4.5 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. North Dakota conducts four annual *Click It or Ticket* campaigns—including participation in the national campaign 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 resulting in a greater number of nighttime serious crashes.

#### 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, such as unbelted crashes, 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 initiatives, secondary enforcement strategies, and enforcement grant opportunities, contact the TSO and the state's Law Enforcement Liaison at (701) 328-4692. Enforcement grant application information for overtime belt enforcement can be found at:
  - https://www.dot.nd.gov/divisions/safety/trafficsafety.htm
- 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 information on state strategies to achieving a high seat belt use rate. http://www-nrd.nhtsa.dot.gov/Pubs/810962.pdf
- For guidance on planning and publicizing belt-use saturation patrols:

NHTSA 2014 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. <a href="http://www.trafficsafetymarketing.gov/CIOT-PEAK">http://www.trafficsafetymarketing.gov/CIOT-PEAK</a>

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: <a href="http://www.nhtsa.gov/Driving+Safety/Occupant+Protection">http://www.nhtsa.gov/Driving+Safety/Occupant+Protection</a>

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.
- Conduct community-wide and sustained public information outreach to educate and create cultural awareness of the risks associated with unbelted motorists.

Grand Forks Region Priority Strategy – Pursue local support for primary seat belt law.

**Description:** Seat belts save lives. Research supports that lap/shoulder seat belts reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. Seat belts are extremely effective in preventing occupant ejection from the vehicle, the most injurious of crash outcomes (NHTSA, 2014).

Primary enforcement of seat belt laws has a proven track record of getting more people to buckle up. A primary enforcement seat belt law enables a law officer to stop motorists if the driver or any occupant is unbelted. North Dakota's secondary enforcement law permits law enforcement to ticket unbelted motorists only if they are stopped for some other offense such as speeding.

Studies show that seat belt use in states with primary laws is 9 percentage points higher compared to states with secondary laws (Shults and Beck, 2012). Primary enforcement sends a clear message to the motoring public that the State views safety belt use (and the safety belt law) as essential for the safe operation of a motor vehicle. When States upgrade their laws from secondary to primary, the perceived public importance of safety belt use is strengthened leading to greater seat belt compliance. Increasing adult belt use also has a significant impact on child passenger safety, because drivers who wear safety belts are more likely to restrain their child passengers.

The foundation of enacting a primary seat belt law begins with developing grassroots, local-level support. Local community support, when thoughtfully and strategically applied, gets the attention of state elected officials. A community shift toward supporting primary seat belt occurs incrementally, one step at a time. Following are some initial steps and resources to launch the Grand Forks region's efforts.

#### 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, such as unbelted crashes, in the SHSP.
- Establish a local seat belt coalition or advocacy group to strengthen grassroots support for upgrading North Dakota's secondary belt law to primary seat belt enforcement. Following the national model of engaging multiple disciplines for traffic safety, support for primary enforcement can be found and strengthened throughout the community, including:
  - Enforcement: District State Patrol, county sheriff, and city police enforcement personnel
  - Emergency Medical Response/Medical Community: EMS, fire, and rescue departments; local county health and injury prevention organizations; injury prevention advocacy groups; ER doctors and nurses, and other health care professionals

- Education Outreach: DOT District, county, and city public affairs/media outreach professionals; local school boards, PTAs, school administrators, Mothers Against Drunk Driving [MADD], Students Against Destructive Decision (SADD), North Dakota Safety Council, AAA North Dakota
- Engineering: NDDOT District, county, and city traffic safety and road maintenance personnel
- Employers/Business Leaders: Chambers of commerce, leading local companies/major employers, insurance companies, auto dealers and manufacturers
- Suggested local contacts in the the Grand Forks region include:
  - Altru Health System
     Bill Vasicek, Community Safety Coordinator
     bvasicek@altru.org, 701-780-5939
  - North Dakota Emergency Nurses Association
     President: Mary Jagim MS, RN, CEN, FAEN mkjagim@gmail.com
     President-Elect: Jodi Sherve BSN, RN, CEN j.sherve@yahoo.com
     Secretary: Vicki Black BSN, RN, EM vblack@altru.org
  - Safe Kids Grand Forks
     Carma Hanson, Coordinator
     chanson@altru.org, 701-780-1489
- Engage advocacy group members to develop unified key messages for a consistent and clear message of support for primary seat belt (key unbelted crash facts, primary belt benefits, employer and societal costs of unbelted crashes, key community supporters of primary).
   Seek example outreach resources from neighboring "primary" states and states who've passed primary seat belt law.
- Create advocacy web portal of information in support of primary seat belt (key unbelted crash facts, primary seat belt benefits, employer and societal costs of unbelted crashes).
- Identify key local champions to help carry the message to local elected officials (city council, county board, mayoral offices) and key community influencers (for example, business leaders).
- Conduct legislative outreach in support of primary seat belt using interdisciplinary team from primary advocacy group (enforcement, engineering, health/injury prevention).

#### Implementation Resources:

- For crash data and analysis to focus seat belt enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- Upgrading Minnesota's secondary seat belt law to a primary law resulted in an estimated
  68 to 92 fewer deaths, between 320 and 550 fewer incapacitating injuries, and \$45 million in
  avoided hospital charges in the 2 years since the primary law was enacted and enforced. See
  Impacts of Minnesota's Primary Seat Belt Law at:
  <a href="https://dps.mn.gov/divisions/ots/seat-belts-air-bags/Documents/dps-eval-primary-seat-belt-law.pdf">https://dps.mn.gov/divisions/ots/seat-belts-air-bags/Documents/dps-eval-primary-seat-belt-law.pdf</a>

- For Minnesota Seat Belt Coalition's Primary Seat Belt legislative talking point booklet
  addressing key questions about Primary Seat Belt, facts sheets, and unbelted fatalities and
  serious injuries by legislative district, contact the Minnesota Safety Council at 651-291-9150
  or msc@minnesotasafetycouncil.org.
- Florida's statewide belt usage leaped from 80.9 percent in May 2009 to 87.4 percent after the 2010 May seat belt enforcement campaign and the passage of the state's primary seat belt law. See *Impact of Implementing a Primary Enforcement Seat Belt Law in Florida: A Case Study* at: http://ntl.bts.gov/lib/45000/45800/45875/811656.pdf
- For seat belt key messages see NHTSA CIOTI web site: http://www.nhtsa.gov/nhtsa/2013ciot/stats.html
- Center for Disease Control and Prevention seat belt briefing: http://www.cdc.gov/motorvehiclesafety/seatbeltbrief/
- For example tribal council primary seat belt law: <a href="http://staging.dl-online.com/content/white-earth-council-passes-seat-belt-law">http://staging.dl-online.com/content/white-earth-council-passes-seat-belt-law</a>
- For North Dakota road safety information including facts sheets, issue briefs, and other education and outreach resources, visit the NDSU Rural Transportation Safety and Security Center (RTSSC) at:

http://www.ugpti.org/rtssc/resources/

The NDSU Upper Great Plains Transportation Institute at: <a href="http://www.ugpti.org/resources/">http://www.ugpti.org/resources/</a>

# 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 30 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 30.

#### 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 county employees, county

officials, law enforcement, transportation engineering, public health, schools, businesses, nonprofit agencies, media, and other entities.

#### 5.5.3 Traffic Records/Crash Data

#### Traffic and Criminal Software (TraCS)

The quality of traffic safety issue 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 (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, and is located at:

http://www.dot.nd.gov/divisions/safety/docs/crash-summary.pdf

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