

Pembina County

The total project cost suggested for Pembina County is \$436,562. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-5. High-priority locations that received a project are shown in Figure 4-10. These locations are described in further detail in Appendix 4C along with priority rankings and suggested project sheets.

TABLE 4-5
Pembina County Project Costs

Project Type	Cost
Intersections	\$261,800
Roadway Segments	\$83,525
Curves	\$91,237
Total	\$436,562

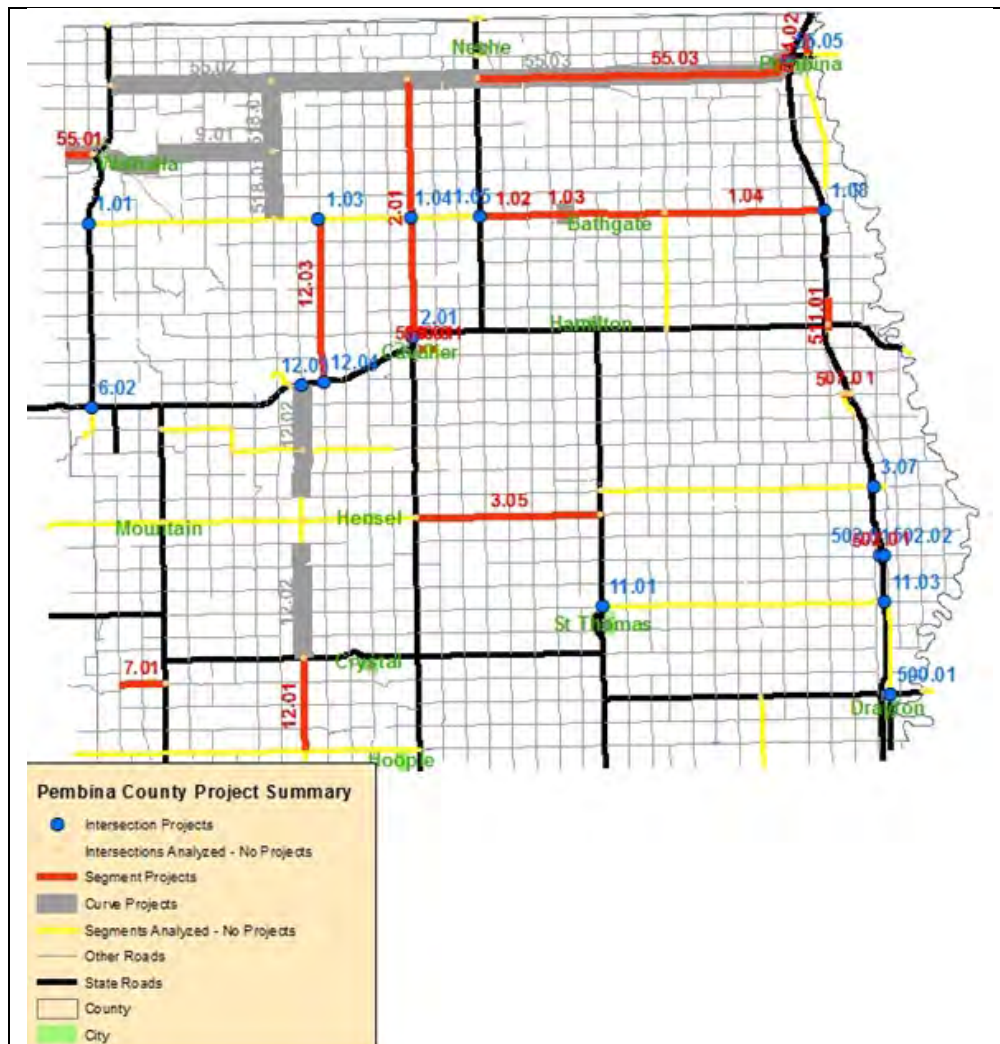


FIGURE 4-10
Pembina County Projects Location Map

23 USC 409
NDDOT Reserves All Objections

APPENDIX 4C
Pembina County

Pembina County
Rural Segment Projects

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	6" Edge Lines	Edge Rumble Strip	Project Cost (\$)
1	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Waihalla)	1.2	****	1.2	0.0	0.0	\$480.00
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	****	0.0	0.8	0.0	\$520.00
3	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	****	0.0	7.1	0.0	\$4,615.00
4	510.01	N/A	Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	***	1.0	0.0	0.0	\$400.00
5	1.04	Pembina 1	Bathgate east city limit (could be intersection with 148th Avenue)	Intersection with SB IH 29 Ramps	10.7	***	0.0	10.7	0.0	\$6,955.00
6	12.01	Pembina 12	Pembina / Walsh County Line	Intersection with ND 66	4.0	***	8.0	0.0	0.0	\$3,200.00
7	511.01	N/A	1345 feet south of ND 5	Intersection with 97th Street / Main Street	1.5	***	3.0	0.0	0.0	\$1,200.00
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	***	0.0	0.6	0.0	\$390.00
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	0.9	***	0.9	0.0	0.0	\$360.00
10	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	***	0.0	0.0	14.1	\$49,350.00
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	**	0.0	0.5	0.0	\$325.00
12	2.01	Pembina 2	*Y* Intersection with ND 5	Intersection with 107th Avenue	10.9	**	0.0	10.9	0.0	\$7,085.00
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	**	0.0	3.3	0.0	\$2,145.00
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	**	0.0	8.0	0.0	\$5,200.00
15	7.01	Pembina 7	Intersection with 127th Avenue	Intersection with ND 32&66 / 129th Avenue	2.0	**	0.0	2.0	0.0	\$1,300.00
							14.1	43.9	14.1	\$83,525.00

**Pembina County
Rural Segment Listing**

*High Priority Segments Project Sheet Page Number

Project Sheet Page	Corridor	Route	Start	End	Length (miles)	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assesment
	1.01	Pembina 1	Intersection with ND 32	Intersection with ND 18 / 144th Avenue	16.9	5	339	0.06	7.8	0.00	1
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	0	265	0.00	7.9	0.00	2
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	0	240	0.00	28.5	3.88	2
5	1.04	Pembina 1	Bathgate east city limit (could be intersection with 148th Avenue)	Intersection with SB IH 29 Ramps	10.7	3	200	0.06	7.1	0.00	2
	1.05	Pembina 1	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	0	80	0.00	12.3	0.00	1
	1.06	Pembina 1	Intersection with NB IH 29 Ramps	Intersection with Old Highway 81	0.1	0	40	0.00	71.5	0.00	1
12	2.01	Pembina 2	"Y" Intersection with ND 5	Intersection with 107th Avenue	10.9	0	363	0.00	5.8	0.00	2
	3.01	Pembina 3	Pembina/Cavalier County Line	Intersection with ND 32 / 130th Avenue	3.0	2	109	0.13	6.7	0.00	1
	3.02	Pembina 3	Intersection with ND 32 / 130th Avenue	Hensel west limit	10.7	0	185	0.00	3.9	0.00	1
	3.03	Pembina 3	Hensel west limit	Hensel east limit	0.5	0	410	0.00	26.3	0.00	1
	3.04	Pembina 3	Hensel east limit	Intersection with ND 18 / 140th Avenue	1.7	0	343	0.00	12.2	0.00	1
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	1	264	0.02	5.0	0.00	2
	3.06	Pembina 3	Intersection with ND 81 / 148th Avenue	Intersection with SB IH 29 Ramps	11.7	0	87	0.00	4.9	0.00	2
	3.07	Pembina 3	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.1	0	65	0.00	22.5	0.00	1
	3.08	Pembina 3	Intersection with NB IH 29 Ramps	2624 feet east of interchange	0.5	0	35	0.00	18.1	0.00	1
	4.01	Pembina 4	Pembina / Walsh County Line	Intersection with ND 66	2.0	0	110	0.00	6.0	0.00	2
	4.02	Pembina 4	Intersection with ND 5	Intersection with 101st Street	5.0	0	130	0.00	5.6	0.00	1
	6.01	Pembina 6	Intersection with 92nd Street (on east side of 127th Avenue)	Intersection with ND 5 / 93rd Street	1.0	0	80	0.00	7.0	0.00	1
15	7.01	Pembina 7	Intersection with 127th Avenue	Intersection with ND 32866 / 129th Avenue	2.0	0	198	0.00	6.0	0.00	2
	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	7.6	1	458	0.03	6.5	0.26	1
	11.01	Pembina 11	Intersection with ND 81 / 148th Avenue	Interchange with IH 29	12.1	2	90	0.03	6.5	0.00	1
	11.02	Pembina 11	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	1	100	1.24	12.4	0.00	1
	11.03	Pembina 11	Intersection with NB IH 29 Ramps	Intersection with 161st Avenue	0.1	0	180	0.00	26.0	0.00	1
6	12.01	Pembina 12	Pembina / Walsh County Line	Intersection with ND 66	4.0	2	193	0.10	8.0	0.00	2
	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	9.9	0	130	0.00	5.9	0.20	1
3	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	2	409	0.06	8.1	0.14	1
1	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	1.2	0	375	0.00	19.6	0.85	2
	55.02	Pembina 55	Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	16.0	1	315	0.01	6.0	0.19	1
10	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	7	366	0.10	5.8	0.28	1
	500.01	N/A	Intersection with ND 66	Intersection with 84th Street	4.0	1	359	0.05	7.2	0.00	1
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	2	60	0.73	20.0	0.00	2
	503.01	N/A	Intersection with 133rd Avenue	Intersection with 139th Avenue	7.0	0	70	0.00	4.9	0.00	2
	504.01	N/A	Intersection with 91st Street	Intersection with 92nd Street	1.0	0	29	0.00	5.9	0.00	2
	505.01	N/A	SW to NE curve in trees	Intersection with 127th Avenue	0.5	0	70	0.00	13.5	0.00	0
	505.02	N/A	Intersection with ND 32 / 130th Avenue	Intersection with 133rd Avenue	3.5	0	15	0.00	4.8	0.00	2
	506.01	N/A	1460 feet south of 93rd Street	Intersection with 93rd Street	0.9	0	5	0.00	3.3	0.00	0
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	0	20	0.00	22.0	0.00	3
	508.01	N/A	Intersection with 92nd Street (on west side of 127th Avenue)	Intersection with 92nd Street (on east side of 127th Avenue)	0.1	0	80	0.00	22.9	0.00	1
	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	1.4	0	29	0.00	8.0	5.11	0
4	510.01	N/A	Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	0	280	0.00	26.0	0.00	2
7	511.01	N/A	1345 feet south of ND 5	Intersection with 97th Street / Main Street	1.5	0	190	0.00	9.0	0.00	2
	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	4.8	1	75	0.04	5.4	0.62	0
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	0.9	0	29	0.00	9.0	2.26	2
	516.01	N/A	Intersection with ND 18 / 144th Avenue	Neche south city limit	0.1	0	500	0.00	19.7	0.00	0
	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	6.0	0	275	0.00	7.8	0.66	1

194.7 31

Edge Risk Legend

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

Critical ADT Range - Lane Departure

150
500

	Access	Lane Departure	Critical Radius Curves
Total	1308	31	15
Total Mileage	194.7	194.7	194.7
Years		5	
Average Density (Total/Mile)	6.7	0.03	0.08

Pembina County
Rural Segment Prioritization - Lane Departure Priority

#	Corridor	Route	Start	End	Length	ADT	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals		Tiebreakers	
												Stars	Edge Risk	Edge Risk	ADT
1	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	1.2	375	*	*	*	*	*	*****	2	375	
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	240	*	*	*	*	*	*****	2	240	
3	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	409	*	*	*	*	*	*****	1	409	
4	510.01	N/A	Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	280	*	*	*	*	*	*****	2	280	
5	1.04	Pembina 1	Bathgate east city limit (could be intersection with 148th Avenue)	Intersection with SB IH 29 Ramps	10.7	200	*	*	*	*	*	*****	2	200	
6	12.01	Pembina 12	Pembina / Walsh County Line	Intersection with ND 66	4.0	193	*	*	*	*	*	*****	2	193	
7	511.01	N/A	1345 feet south of ND 5	Intersection with 97th Street / Main Street	1.5	190	*	*	*	*	*	*****	2	190	
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	60	*	*	*	*	*	*****	2	60	
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	0.9	29	*	*	*	*	*	*****	2	29	
10	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	366	*	*	*	*	*	*****	1	366	
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	20	*	*	*	*	*	***	3	20	
12	2.01	Pembina 2	"Y" Intersection with ND 5	Intersection with 107th Avenue	10.9	363	*	*	*	*	*	***	2	363	
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	265	*	*	*	*	*	***	2	265	
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	264	*	*	*	*	*	***	2	264	
15	7.01	Pembina 7	Intersection with 127th Avenue	Intersection with ND 32&66 / 129th Avenue	2.0	198	*	*	*	*	*	***	2	198	
16	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	7.6	458	*	*	*	*	*	**	1	458	
17	3.03	Pembina 3	Hensel west limit	Hensel east limit	0.5	410	*	*	*	*	*	**	1	410	
18	500.01	N/A	Intersection with ND 66	Intersection with 84th Street	4.0	359	*	*	*	*	*	**	1	359	
19	3.04	Pembina 3	Hensel east limit	Intersection with ND 18 / 140th Avenue	1.7	343	*	*	*	*	*	**	1	343	
20	1.01	Pembina 1	Intersection with ND 32	Intersection with ND 18 / 144th Avenue	16.9	339	*	*	*	*	*	**	1	339	
21	55.02	Pembina 55	Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	16.0	315	*	*	*	*	*	**	1	315	
22	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	6.0	275	*	*	*	*	*	**	1	275	
23	11.03	Pembina 11	Intersection with NB IH 29 Ramps	Intersection with 161st Avenue	0.1	180	*	*	*	*	*	**	1	180	
24	11.02	Pembina 11	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	100	*	*	*	*	*	**	1	100	
25	516.01	N/A	Intersection with ND 18 / 144th Avenue	Neche south city limit	0.1	500	*	*	*	*	*	**	0	500	
26	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	4.8	75	*	*	*	*	*	**	0	75	
27	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	1.4	29	*	*	*	*	*	**	0	29	
28	4.01	Pembina 4	Pembina / Walsh County Line	Intersection with ND 66	2.0	110	*	*	*	*	*	*	2	110	
29	3.06	Pembina 3	Intersection with ND 81 / 148th Avenue	Intersection with SB IH 29 Ramps	11.7	87	*	*	*	*	*	*	2	87	
30	503.01	N/A	Intersection with 133rd Avenue	Intersection with 139th Avenue	7.0	70	*	*	*	*	*	*	2	70	
31	504.01	N/A	Intersection with 91st Street	Intersection with 92nd Street	1.0	29	*	*	*	*	*	*	2	29	
32	505.02	N/A	Intersection with ND 32 / 130th Avenue	Intersection with 133rd Avenue	3.5	15	*	*	*	*	*	*	2	15	
33	3.02	Pembina 3	Intersection with ND 32 / 130th Avenue	Hensel west limit	10.7	185	*	*	*	*	*	*	1	185	
34	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	9.9	130	*	*	*	*	*	*	1	130	
35	3.01	Pembina 3	Pembina/Cavalier County Line	Intersection with ND 32 / 130th Avenue	3.0	109	*	*	*	*	*	*	1	109	
36	11.01	Pembina 11	Intersection with ND 81 / 148th Avenue	Interchange with IH 29	12.1	90	*	*	*	*	*	*	1	90	
37	1.05	Pembina 1	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	80	*	*	*	*	*	*	1	80	
38	508.01	N/A	Intersection with 92nd Street (on west side of 127th Avenue)	Intersection with 92nd Street (on east side of 127th Avenue)	0.1	80	*	*	*	*	*	*	1	80	
39	3.07	Pembina 3	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.1	65	*	*	*	*	*	*	1	65	
40	1.06	Pembina 1	Intersection with NB IH 29 Ramps	Intersection with Old Highway 81	0.1	40	*	*	*	*	*	*	1	40	
41	3.08	Pembina 3	Intersection with NB IH 29 Ramps	2624 feet east of interchange	0.5	35	*	*	*	*	*	*	1	35	
42	505.01	N/A	SW to NE curve in trees	Intersection with 127th Avenue	0.5	70	*	*	*	*	*	*	0	70	
43	4.02	Pembina 4	Intersection with ND 5	Intersection with 101st Street	5.0	130	*	*	*	*	*	*	1	130	
44	6.01	Pembina 6	Intersection with 92nd Street (on east side of 127th Avenue)	Intersection with ND 5 / 93rd Street	1.0	80	*	*	*	*	*	*	1	80	
45	506.01	N/A	1460 feet south of 93rd Street	Intersection with 93rd Street	0.9	5	*	*	*	*	*	*	0	5	

Total Stars -- 22
 % That Gets Star -- 49%

Stars	#	%	%
*****	0	0%	0%
*****	3	7%	5%
****	7	16%	17%
***	17	38%	43%
**	15	33%	32%
*	3	7%	4%
	45	100%	100%

Stars
 ADT Range | If segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)
 Lane Departure Density | If segment has higher lane departure density than the Northeast average (0.032).
 Access Density | If segment has access density than the nationwide average (8).
 Curve Critical Radius Density | If segment has higher density of curves with critical radius than the Northeast average (0.084).
 Edge Risk Assessment | Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 1 from Bathgate west city limit to Bathgate east city limit

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Bathgate west city limit
End: Bathgate east city limit
Facility Type: 2-Lane
ADT: 240
Road Type Rural Paved
County Road Pembina 1

Lane Width: 12'
Speed Limit: Low
Shoulder Width: 2'
Shoulder Type: Gravel
Length (miles): 0.8
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

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



	Value	Critical	Road
ADT Range	240	150≤ADT≤500	★
RD Density	0.000	0.032	
Access Density	28.5	8.0	★
Curve Critical Radius Density	3.880	0.084	★
Edge Risk	2	2 or 3	★

★★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Consider combining projects with segments 1.02 and 1.04. Curve projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 2
Segment ID: 1.03
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 12 from Intersection with ND 5 / 93rd Street to Intersection with 101st Street

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with ND 5 / 93rd St
End: Intersection with 101st Street
Facility Type: 2-Lane
ADT: 409
Road Type Rural Paved
County Road Pembina 12

Lane Width: 12'
Speed Limit: High
Shoulder Width: 2'
Shoulder Type: Paved
Length (miles): 7.1
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	5	2	0
Density (per mile per year)	0.14	0.06	0.00
Rate (per MVM)	0.94	0.38	0.00



	Value	Critical	Road
ADT Range	409	150≤ADT≤500	★
RD Density	0.057	0.032	★
Access Density	8.1	8.0	★
Curve Critical Radius Density	0.141	0.084	★
Edge Risk	1	2 or 3	★ ★ ★ ★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 3
Segment ID: 12.03
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

N/A from Intersection with 3rd Avenue to Intersection with 142nd Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with 3rd Avenue
End: Intersection with 142nd Avenue
Facility Type: 2-Lane
ADT: 280
Road Type Rural Paved
County Road N/A

Lane Width: 1
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.5
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

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

	Value	Critical	Road
ADT Range	280	150≤ADT≤500	★
RD Density	0.000	0.032	
Access Density	26.0	8.0	★
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Edge line cost includes 4" centerline marking. Qualifies for edge line rumble.
4" Edge Lines	Proactive	\$400	1.0	\$400	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$360
Local Match (10% of Total project cost)	\$40
Total Project Cost	\$400

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 510.01
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 1 from Bathgate east city limit (could be intersection with 148th Avenue) to Intersection with SB IH 29 Ramps

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Bathgate east city limit (could
End: Intersection with SB IH 29 Ra
Facility Type: 2-Lane
ADT: 200
Road Type Rural Paved
County Road Pembina 1

Lane Width: 12'
Speed Limit: High
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 10.7
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	5	3	0
Density (per mile per year)	0.09	0.06	0.00
Rate (per MVM)	1.28	0.77	0.00



	Value	Critical	Road
ADT Range	200	150≤ADT≤500	★
RD Density	0.056	0.032	★
Access Density	7.1	8.0	
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★
			★★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 1.04
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 12 from Pembina / Walsh County Line to Intersection with ND 66

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Pembina / Walsh County Line Lane Width: 12'
End: Intersection with ND 66 Speed Limit: High
Facility Type: 2-Lane Shoulder Width: 0'
ADT: 193 Shoulder Type: None
Road Type Rural Paved Length (miles): 4.0
County Road Pembina 12 Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	2	2	1
Density (per mile per year)	0.10	0.10	0.05
Rate (per MVM)	1.42	1.42	0.71



	Value	Critical	Road
ADT Range	193	150≤ADT≤500	*
RD Density	0.100	0.032	*
Access Density	8.0	8.0	
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	*

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Edge line cost includes 4" centerline marking. Qualifies for edge line rumble.
4" Edge Lines	Proactive	\$400	8.0	\$3,200	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$2,880
Local Match (10% of Total project cost)	\$320
Total Project Cost	\$3,200

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 12.01
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

N/A from 1345 feet south of ND 5 to Intersection with 97th Street / Main Street

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: 1345 feet south of ND 5
End: Intersection with 97th Street /
Facility Type: 2-Lane
ADT: 190
Road Type Rural Paved
County Road N/A

Lane Width: 1
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 1.5
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

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

	Value	Critical	Road
ADT Range	190	150≤ADT≤500	★
RD Density	0.000	0.032	
Access Density	9.0	8.0	★
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Edge line cost includes 4" centerline marking. Qualifies for edge line rumble.
4" Edge Lines	Proactive	\$400	3.0	\$1,200	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$1,080
Local Match (10% of Total project cost)	\$120
Total Project Cost	\$1,200

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 511.01
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

N/A from Intersection with 160th Avenue to 1013 feet east of interchange (east of intersection with Old North Dakota 44)

Agency Name: Pembina County
 Contact Name: Troy Kittelson
 Email Address: pembhwy@nd.gov

ND DOT District: 6
 Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with 160th Avenue
 End: 1013 feet east of interchange
 Facility Type: 2-Lane
 ADT: 60
 Road Type Rural Paved
 County Road N/A

Lane Width: 1'
 Speed Limit: Low
 Shoulder Width: 2'
 Shoulder Type: Paved
 Length (miles): 0.6
 Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	2	2	0
Density (per mile per year)	0.67	0.67	0.00
Rate (per MVM)	30.44	30.44	0.00

	Value	Critical	Road
ADT Range	60	150≤ADT≤500	
RD Density	0.727	0.032	★
Access Density	20.0	8.0	★
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★
			★★★



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Intersection projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

N/A from Pembina north city limit to 4670 feet north of ND 59

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Pembina north city limit
End: 4670 feet north of ND 59
Facility Type: 2-Lane
ADT: 29
Road Type Rural Paved
County Road N/A

Lane Width: 1
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.9
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

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

	Value	Critical	Road
ADT Range	29	150≤ADT≤500	
RD Density	0.000	0.032	
Access Density	9.0	8.0	*
Curve Critical Radius Density	2.259	0.084	*
Edge Risk	2	2 or 3	*



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes -
4" Edge Lines	Proactive	\$400	0.9	\$360	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$324
Local Match (10% of Total project cost)	\$36
Total Project Cost	\$360

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 514.02
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 55 from Intersection with ND 18 / 144th Avenue to Interchange with IH 29 SB Ramps

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with ND 18 / 144th
End: Interchange with IH 29 SB Ra
Facility Type: 2-Lane
ADT: 366
Road Type Rural Paved
County Road Pembina 55

Lane Width: 12'
Speed Limit: High
Shoulder Width: 2'
Shoulder Type: Paved
Length (miles): 14.1
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	16	7	0
Density (per mile per year)	0.23	0.10	0.00
Rate (per MVM)	1.70	0.74	0.00

	Value	Critical	Road
ADT Range	366	150≤ADT≤500	★
RD Density	0.099	0.032	★
Access Density	5.8	8.0	
Curve Critical Radius Density	0.283	0.084	★
Edge Risk	1	2 or 3	



Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Curve and intersection projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	14.1	\$49,350	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$44,415
Local Match (10% of Total project cost)	\$4,935
Total Project Cost	\$49,350

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 55.03
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

N/A from Intersection with 160th Avenue to Intersection with 160th Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with 160th Avenue
End: Intersection with 160th Avenue
Facility Type: 2-Lane
ADT: 20
Road Type Rural Paved
County Road N/A

Lane Width: 1
Speed Limit: Low
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 0.5
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	1	0	0
Density (per mile per year)	0.40	0.00	0.00
Rate (per MVM)	54.79	0.00	0.00



	Value	Critical	Road
ADT Range	20	150≤ADT≤500	
RD Density	0.000	0.032	
Access Density	22.0	8.0	*
Curve Critical Radius Density	0.000	0.084	
Edge Risk	3	2 or 3	*
			**

Describe Proposed Safety Improvements

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 507.01
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 1 from Intersection with ND 18 / 144th Avenue to Bathgate west city limit

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with ND 18 / 144th
End: Bathgate west city limit
Facility Type: 2-Lane
ADT: 265
Road Type Rural Paved
County Road Pembina 1

Lane Width: 12'
Speed Limit: High
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 3.3
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

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



	Value	Critical	Road
ADT Range	265	150≤ADT≤500	★
RD Density	0.000	0.032	
Access Density	7.9	8.0	
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★

★★

Describe Proposed Safety Improvements

Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets.
4" Edge Lines	Proactive	\$400	0.0	\$0	
6" Edge Lines	Proactive	\$650	0.0	\$0	
Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
6" Center Line	Proactive	\$650	0.0	\$0	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 1.02
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 3 from Intersection with ND 18 / 140th Avenue to Intersection with ND 81 / 148th Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with ND 18 / 140t Lane Width: 12'
End: Intersection with ND 81 / 148t Speed Limit: High
Facility Type: 2-Lane Shoulder Width: 0'
ADT: 264 Shoulder Type: None
Road Type Rural Paved Length (miles): 8.0
County Road Pembina 3 Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	2	1	0
Density (per mile per year)	0.05	0.03	0.00
Rate (per MVM)	0.52	0.26	0.00

	Value	Critical	Road
ADT Range	264	150≤ADT≤500	★
RD Density	0.025	0.032	
Access Density	5.0	8.0	
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★



Describe Proposed Safety Improvements

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

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Segment ID: 3.05
Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Pembina 7 from Intersection with 127th Avenue to Intersection with ND 32&66 / 129th Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Start: Intersection with 127th Avenue
End: Intersection with ND 32&66 /
Facility Type: 2-Lane
ADT: 198
Road Type Rural Paved
County Road Pembina 7

Lane Width: 12'
Speed Limit: High
Shoulder Width: 0'
Shoulder Type: None
Length (miles): 2.0
Rumble Installed: No

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

	Total	Road Dept	K+A
Crashes	1	0	0
Density (per mile per year)	0.10	0.00	0.00
Rate (per MVM)	1.38	0.00	0.00

	Value	Critical	Road
ADT Range	198	150≤ADT≤500	★
RD Density	0.000	0.032	
Access Density	6.0	8.0	
Curve Critical Radius Density	0.000	0.084	
Edge Risk	2	2 or 3	★
			★★



Describe Proposed Safety Improvements

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$0
Local Match (10% of Total project cost)	\$0
Total Project Cost	\$0

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 15
Segment ID: 7.01
Date: 10/23/2013

Pembina County Curves

Curve Count	ID	Corridor	Segment	Start	End	Speed			Crashes			Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
						Curve Advisory Sign	Advisory Sign	Chevrons	Total	K	A							
1	001A	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	No	No	No	-	-	-	555	240	No	Yes	Low	**	No
2	001B	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	No	No	No	-	-	-	215	240	No	No	Low	**	No
3	001C	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	No	No	No	-	-	-	150	240	No	Yes	Low	**	No
4	009A	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	Yes	No	No	2	-	-	785	458	No	No	High	**	Curve Advisory Sign
5	009B	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	No	No	No	1	-	-	540	458	No	No	High	**	No
6	012A	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	Yes	No	No	-	-	-	1100	130	No	No	High	*	Curve Advisory Sign
7	012B	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	Yes	No	No	-	-	-	1500	130	No	No	High	*	Curve Advisory Sign
8	012C	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	Yes	No	No	-	-	-	2050	409	No	No	High	*	Curve Advisory Sign
9	055A	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	Yes	No	No	-	-	-	1040	375	No	No	Low	**	Reverse Curve
10	055B	55.02	Pembina 55	Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	Yes	No	No	-	-	-	790	315	Yes	No	High	**	Winding Road
11	055C	55.02	Pembina 55	Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	Yes	No	No	1	-	-	1100	315	No	No	High	*	Winding Road
12	055D	55.02	Pembina 55	Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	Yes	No	No	-	-	-	785	315	No	No	High	*	Winding Road
13	055E	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	Yes	No	Yes	1	-	-	575	366	Yes	Yes	High	****	Curve Advisory Sign
14	055F	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	Yes	No	Yes	4	1	-	575	366	Yes	Yes	High	*****	Curve Advisory Sign
15	055G	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	Yes	No	Yes	-	-	-	825	366	No	No	High	**	Reverse Curve
16	055H	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	Yes	No	Yes	-	-	-	1000	366	No	No	High	**	Reverse Curve
17	509A	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	240	29	No	No	High		No Photos/Streetview
18	509B	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	200	29	No	No	High		No Photos/Streetview
19	509C	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	135	29	No	Yes	High	*	No Photos/Streetview
20	509D	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	90	29	Yes	Yes	High	**	No Photos/Streetview
21	509E	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	245	29	No	No	High	*	No Photos/Streetview
22	509F	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	145	29	No	Yes	High	*	No Photos/Streetview
23	509G	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-	-	-	265	29	Yes	Yes	High	**	No Photos/Streetview
24	514A	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-	-	-	3800	75	Yes	No	High	*	No Photos/Streetview
25	514B	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-	-	-	2220	75	Yes	No	High	*	No Photos/Streetview
26	514C	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-	-	-	2100	75	No	No	High		No Photos/Streetview
27	514D	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	No Photos/Streetview			-	-	-	1600	29	No	No	Low		No Photos/Streetview
28	514E	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	No Photos/Streetview			-	-	-	2900	29	No	No	Low		No Photos/Streetview
29	518A	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	No	-	-	-	1800	275	No	No	High	**	Winding Road
30	518B	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	-	-	-	1200	275	Yes	No	High	**	Winding Road
31	518C	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	-	-	-	575	275	Yes	No	High	**	Winding Road
32	518D	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	-	-	-	1150	275	No	No	High	*	Winding Road

Stars	Total	
	#	%
*****	1	3%
****	1	3%
***	0	0%
**	11	34%
*	10	31%
	9	28%
	32	100%

Critical Ranges	Min	Max
Radius	500	1,200
ADT	350	650

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 1 from Bathgate west city limit to Bathgate east city limit

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Bathgate west city limit End: Bathgate east city limit Facility Type: 2-Lane ADT: 240 Road Type Rural Paved County Road Pembina 1	Lane Width: 12' Speed Limit: Low Shoulder Width: 2' Shoulder Type: Gravel Length (miles): 0.8 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
001A	0	0	555	240	No	Yes	**	-	x	Chevron	-	-	x	40
001B	0	0	215	240	No	No		x	-	Chevron	-	-	x	Inspect Curve
001C	0	0	150	240	No	Yes	*	x	-	Chevron	-	-	x	Inspect Curve

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	3	\$9,900	Notes - Segment projects suggested on other sheets.
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	3	\$2,400	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$12,300	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$11,070
Local Match (10% of Total project cost)	\$1,230
Total Project Cost	\$12,300

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 9 from Walhalla east city limit to Intersection with 135th Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Walhalla east city limit End: Intersection with 135th Avenue Facility Type: 2-Lane ADT: 458 Road Type Rural Paved County Road Pembina 9	Lane Width: 12' Speed Limit: High Shoulder Width: 2' Shoulder Type: Paved Length (miles): 7.6 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
009A	0	0	765	458	No	No	**	-	x	Chevron	-	-	x	45
009B	0	0	540	458	No	No	**	-	x	Chevron	-	-	x	40

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	2	\$6,600	
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	2	\$1,600	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$8,200	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$7,380
Local Match (10% of Total project cost)	\$820
Total Project Cost	\$8,200

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 12 from Intersection with ND 66 to Intersection with ND 5 / 93rd Street

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Intersection with ND 66 End: Intersection with ND 5 / 93rd Street Facility Type: 2-Lane ADT: 130 Road Type Rural Paved County Road Pembina 12	Lane Width: 12' Speed Limit: High Shoulder Width: 2' Shoulder Type: Paved Length (miles): 9.9 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	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	1100	130	No	No	*	-	x	Chevron	-	-	x	-
012B	0	0	1500	130	No	No		x	-	Chevron	-	-	-	-

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	2	\$6,600	Notes - Intersection projects suggested on other sheets.
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$7,400	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$6,660
Local Match (10% of Total project cost)	\$740
Total Project Cost	\$7,400

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 55 from Pembina/Cavalier County Line to Intersection with Delano Ave (in Walhalla)

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Pembina/Cavalier County Line End: Intersection with Delano Ave (in Walhalla) Facility Type: 2-Lane ADT: 375 Road Type Rural Paved County Road Pembina 55	Lane Width: 12' Speed Limit: Low Shoulder Width: 4' Shoulder Type: Paved Length (miles): 1.2 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
055A	0	0	1040	375	No	No	**	-	x	Chevron	-	-	x	50

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	1	\$3,300	Notes - Segment projects suggested on other sheets.
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$4,100	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,690
Local Match (10% of Total project cost)	\$410
Total Project Cost	\$4,100

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 55 from Intersection with ND 32 / 128th Avenue to Intersection with ND 18 / 144th Avenue

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Intersection with ND 32 / 128th Avenue End: Intersection with ND 18 / 144th Avenue Facility Type: 2-Lane ADT: 315 Road Type Rural Paved County Road Pembina 55	Lane Width: 12' Speed Limit: High Shoulder Width: 4' Shoulder Type: Paved Length (miles): 16.0 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
055B	0	0	790	315	Yes	No	**	-	x	Chevron	-	-	x	45
055C	0	0	1100	315	No	No	*	-	x	Chevron	-	-	x	-
055D	0	0	785	315	No	No	*	-	x	Chevron	-	-	x	45

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	3	\$9,900	
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	3	\$2,400	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$12,300	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$11,070
Local Match (10% of Total project cost)	\$1,230
Total Project Cost	\$12,300

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on Pembina 55 from Intersection with ND 18 / 144th Avenue to Interchange with IH 29 SB Ramps

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Intersection with ND 18 / 144th Avenue End: Interchange with IH 29 SB Ramps Facility Type: 2-Lane ADT: 366 Road Type Rural Paved County Road Pembina 55	Lane Width: 12' Speed Limit: High Shoulder Width: 2' Shoulder Type: Paved Length (miles): 14.1 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012 5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
055E	0	0	575	366	Yes	Yes	★★★★	x	x	Chevron	Inside/Outside	Inside/Outside	x	40
055F	1	0	575	366	Yes	Yes	★★★★★	x	x	Chevron	Inside/Outside	Inside/Outside	x	40
055G	0	0	825	366	No	No	★★	x	x	Chevron	Inside/Outside	Inside/Outside	x	45
055H	0	0	1000	366	No	No	★★	x	x	Chevron	Inside/Outside	Inside/Outside	x	50

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	4	\$13,200	Notes - Segment and intersection projects suggested on other sheets.
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	4	\$3,200	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.4 miles	\$1,240	
Shoulder Paving	Proactive	\$37,000 per mile	.4 miles	\$15,297	
				\$32,937	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$29,644
Local Match (10% of Total project cost)	\$3,294
Total Project Cost	\$32,937

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

Curves on N/A from Intersection with 101st Street to Intersection with 107th Street

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description (Corridor Containing Curves)

Start: Intersection with 101st Street End: Intersection with 107th Street Facility Type: 2-Lane ADT: 275 Road Type Rural Paved County Road N/A	Lane Width: ' Speed Limit: High Shoulder Width: 0' Shoulder Type: Paved Length (miles): 6.0 Rumble Installed: No	<input type="checkbox"/> SHSP Emphasis Area (check all that apply) <input type="checkbox"/> Reduce Alcohol Impaired Driving <input type="checkbox"/> Increase the Use of Safety Restraints for all Occupants <input type="checkbox"/> Younger Driver/Older Driver Safety <input type="checkbox"/> Curb Aggressive Driving <input checked="" type="checkbox"/> Improvements to Address Lane Departure Crashes <input type="checkbox"/> Enhancing Emergency Medical Capabilities to Increase Survivability <input type="checkbox"/> Improve Intersection Safety
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Describe Current Safety Issues & Systemic Ranking Review

North Dakota Crashes, 2008 - 2012

5 years

Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
518A	0	0	1800	275	No	No		x	-	Chevron	-	-	-	-
518B	0	0	1200	275	Yes	No	**	x	x	Chevron	-	-	-	-
518C	0	0	575	275	Yes	No	**	x	x	Chevron	-	-	x	40
518D	0	0	1150	275	No	No	*	x	x	Chevron	-	-	-	-

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

Ranking Criteria

Criteria	Curves are selected for project if:
Severe Crashes > 0	- 3 or more *s
Radius 500 to 1200	- x in Proximity or Existing Chevron column
ADT 350 to 650	- within Critical Radius
Intersection on Curve Yes	
Visual Trap Yes	

Describe Proposed Safety Improvements

Description	Type	Unit Cost	Quantity	Total cost	Notes
Chevrons	Proactive	\$3,300 per curve	4	\$13,200	
Arrow Board Only	Proactive	\$500 per curve	0	\$0	
Advance Warning Sign/Speed Advisory Plaque	Proactive	\$800 per curve	1	\$800	
Shoulder Rumble Strip	Proactive	\$3,000 per mile	.0 miles	\$0	
Shoulder Paving	Proactive	\$37,000 per mile	.0 miles	\$0	
				\$14,000	

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$12,600
Local Match (10% of Total project cost)	\$1,400
Total Project Cost	\$14,000

NDDOT Central Office Only

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

**Pembina County
Summary of Rural Intersection Projects**

Page	Intersection ID	Description	Risk Ranking	Mainline Dynamic Warning Sign	Install Street Lights	Signs & Markings	Project Cost (\$)
1	2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	★★★★★	x	-	x	\$51,850
2	1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)	★★★	-	x	x	\$9,700
3	6.02	ND 5 & 127th Ave NE (Pembina 6)	★★★	x	x	x	\$59,700
4	3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	★★★	-	-	x	\$3,700
5	1.01	101st St NE (Pembina 1) & 127th Ave NE	★★★	-	x	x	\$9,250
6	1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)	★★★	-	x	x	\$9,700
7	1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	★★★	-	-	x	\$3,700
8	502.01	86th St NE (Pembina 502) & Interstate 29 SB Ramps	★★★	-	-	x	\$3,700
9	1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)	★★★	-	x	x	\$9,000
10	11.01	84th St NE (Pembina 11) & US 81	★★★	-	-	x	\$3,000
11	11.03	84th St NE (Pembina 11) & Interstate 29 NB Ramps	★★★	-	-	x	\$3,700
12	12.03	ND 5 (W) & 137th Ave NE (Pembina 12)	★★★	-	x	x	\$9,000
13	12.04	ND 5 (E) & 137th Ave NE (Pembina 12)	★★★	-	x	x	\$9,000
14	55.05	107th St NE (Pembina 55) & Interstate 29 SB Ramps	★★★	x	x	x	\$65,700
15	500.01	ND 66 & 161st Ave NE (Pembina 500)	★★★	-	-	x	\$7,400
16	502.02	86th St NE (Pembina 502) & Interstate 29 NB Ramps	★★★	-	-	x	\$3,700
				3	8	17	\$261,800

**Pembina County
Rural Intersection Listing**

Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product > 100,000	Crash Cost
1.01	101st St NE (Pembina 1) & 127th Ave NE	No	No	No	No	1117	Yes	1	Yes	\$ 12,000
1.02	101st St NE (Pembina 1) & 135th Ave NE (Pembina 518)	No	No	No	No	645	Yes	0	No	\$ -
1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)	No	No	Yes	No	680	Yes	0	Yes	\$ -
1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)	No	No	No	No	670	Yes	1	Yes	\$ 412,000
1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)	No	No	No	No	740	Yes	1	Yes	\$ 12,000
1.06	101st St NE (Pembina 1) & 152nd Ave NE (Pembina 4)	No	No	No	No	285	Yes	1	No	\$ 12,000
1.07	101st St NE (Pembina 1) & Interstate 29 SB Ramps	No	Yes	No	No	140	Yes	0	No	\$ -
1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	Yes	No	No	No	100	Yes	1	No	\$ 12,000
2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	Yes	Yes	Yes	No	2463	Yes	0	Yes	\$ -
2.02	141st Ave NE (Pembina 2) & 107th St NE (Pembina 55)	No	No	No	No	490	Yes	0	No	\$ -
3.01	88th St NE (Pembina 3) & ND 32	No	No	No	No	603	Yes	0	No	\$ -
3.02	88th St NE (Pembina 3) & 135th Ave NE (Pembina 12)	No	No	No	No	435	Yes	0	No	\$ -
3.03	88th St NE (Pembina 3) & 140th Ave NE (ND 18)	No	No	No	No	1200	Yes	0	Yes	\$ -
3.04	88th St NE (Pembina 3) & 148th Ave NE (US 81) SOUTH	No	No	No	No	385	Yes	0	No	\$ -
3.05	89th St NE (Pembina 3) & 148th Ave NE (US 81) NORTH	No	No	No	No	482	Yes	0	No	\$ -
3.06	89th St NE (Pembina 3) & Interstate 29 SB Ramps	Yes	No	No	No	110	Yes	0	No	\$ -
3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	Yes	No	No	No	70	Yes	1	No	\$ 91,000
4.01	ND 66 & 155th Ave NE (Pembina 4)	No	No	No	No	465	Yes	1	No	\$ 12,000
4.02	ND 5 & 152nd Ave NE (Pembina 4)	No	No	No	No	957	Yes	1	No	\$ 12,000
6.01	92nd St NE (Pembina 6) & 127th Ave NE	No	No	No	No	90	No	0	No	\$ -
6.02	ND 5 & 127th Ave NE (Pembina 6)	No	No	No	No	1275	Yes	1	Yes	\$ 136,000
7.01	81st St NE (Pembina 7) & ND 32	No	No	No	No	862	Yes	1	No	\$ 12,000
9.01	104th St NE (Pembina 9) & 135th Ave NE (Pembina 12)	No	No	No	No	417	Yes	0	No	\$ -
11.01	84th St NE (Pembina 11) & US 81	Yes	Yes	No	No	635	Yes	0	No	\$ -
11.02	84th St NE (Pembina 11) & Interstate 29 SB Ramps	No	Yes	No	No	133	Yes	0	No	\$ -
11.03	84th St NE (Pembina 11) & Interstate 29 NB Ramps	No	Yes	No	Yes	180	Yes	0	No	\$ -
11.04	84th St NE (Pembina 11) & 161st Ave NE	No	No	No	Yes	245	No	0	No	\$ -
12.01	ND 66 & 135th Ave NE (Pembina 12)	No	No	No	No	510	Yes	0	No	\$ -
12.02	91st St NE & 135th Ave NE (Pembina 12)	No	No	No	No	1495	Yes	0	Yes	\$ -
12.03	ND 5 (W) & 137th Ave NE (Pembina 12)	No	Yes	No	No	1445	Yes	0	Yes	\$ -
12.04	ND 5 (E) & 137th Ave NE (Pembina 12)	No	No	Yes	No	1787	Yes	0	Yes	\$ -
55.02	107th St NE (Pembina 55) & ND 32	No	No	No	No	717	Yes	1	No	\$ 12,000
55.03	107th St NE (Pembina 55) & 135th Ave NE (Pembina 55)	No	No	No	No	415	Yes	0	No	\$ -
55.04	107th St NE (Pembina 55) & ND 18	No	No	No	No	955	Yes	0	Yes	\$ -
55.05	107th St NE (Pembina 55) & Interstate 29 SB Ramps	No	Yes	No	No	1938	Yes	0	Yes	\$ -
500.01	ND 66 & 161st Ave NE (Pembina 500)	No	No	Yes	Yes	3215	No	0	Yes	\$ -
502.01	86th St NE (Pembina 502) & Interstate 29 SB Ramps	No	Yes	No	No	85	Yes	1	No	\$ 12,000
502.02	86th St NE (Pembina 502) & Interstate 29 NB Ramps	Yes	Yes	No	No	103	Yes	0	No	\$ -
503.01	91st St NE (Pembina 503) & 133rd Ave NE	No	No	No	No	45	No	0	No	\$ -
504.01	92nd St NE (Pembina 504) & 133rd Ave NE	No	No	No	No	19	No	0	No	\$ -
505.01	92nd St NE (Pembina 505) & ND 32	No	No	No	No	555	Yes	0	No	\$ -
506.01	93rd St NE & 160th Ave NE	Yes	No	No	No	22	No	0	No	\$ -
507.01	93rd St NE & Interstate 29 SB Ramps	No	Yes	No	No	40	Yes	0	No	\$ -
507.02	93rd St NE & Interstate 29 NB Ramps	No	Yes	No	No	55	Yes	0	No	\$ -
509.01	ND 5 & 135th 1/2 Ave NE	No	Yes	No	No	1137	No	0	No	\$ -
511.01	ND 5 160th 1/2 Ave NE	No	No	No	Yes	498	Yes	0	No	\$ -
516.01	7th St & ND 18	Yes	No	No	No	775	No	0	Yes	\$ -

**Pembina County
Rural Intersection Prioritization**

Rank	Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	Previous STOP (>5mi)	Total Crashes	ADT Cross Product > 100,000	Priority	Crash Cost
1	2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	*	*	*		*	*	*	*****	\$ -
2	1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)					*	*	*	***	\$ 412,000
3	6.02	ND 5 & 127th Ave NE (Pembina 6)					*	*	*	***	\$ 136,000
4	3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	*				*	*	*	***	\$ 91,000
5	1.01	101st St NE (Pembina 1) & 127th Ave NE					*	*	*	***	\$ 12,000
6	1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)					*	*	*	***	\$ 12,000
7	1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	*				*	*	*	***	\$ 12,000
8	502.01	86th St NE (Pembina 502) & Interstate 29 SB Ramps		*			*	*	*	***	\$ 12,000
9	1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)			*		*	*	*	***	\$ -
10	11.01	84th St NE (Pembina 11) & US 81	*	*			*	*	*	***	\$ -
11	11.03	84th St NE (Pembina 11) & Interstate 29 NB Ramps		*		*	*	*	*	***	\$ -
12	12.03	ND 5 (W) & 137th Ave NE (Pembina 12)		*			*	*	*	***	\$ -
13	12.04	ND 5 (E) & 137th Ave NE (Pembina 12)			*		*	*	*	***	\$ -
14	55.05	107th St NE (Pembina 55) & Interstate 29 SB Ramps		*			*	*	*	***	\$ -
15	500.01	ND 66 & 161st Ave NE (Pembina 500)			*	*	*	*	*	***	\$ -
16	502.02	86th St NE (Pembina 502) & Interstate 29 NB Ramps	*	*			*	*	*	***	\$ -
17	1.06	101st St NE (Pembina 1) & 152nd Ave NE (Pembina 4)					*	*	*	**	\$ 12,000
18	4.01	ND 66 & 155th Ave NE (Pembina 4)					*	*	*	**	\$ 12,000
19	4.02	ND 5 & 152nd Ave NE (Pembina 4)					*	*	*	**	\$ 12,000
20	7.01	81st St NE (Pembina 7) & ND 32					*	*	*	**	\$ 12,000
21	55.02	107th St NE (Pembina 55) & ND 32					*	*	*	**	\$ 12,000
22	1.07	101st St NE (Pembina 1) & Interstate 29 SB Ramps		*			*	*	*	**	\$ -
23	3.03	88th St NE (Pembina 3) & 140th Ave NE (ND 18)					*	*	*	**	\$ -
24	3.06	89th St NE (Pembina 3) & Interstate 29 SB Ramps	*				*	*	*	**	\$ -
25	11.02	84th St NE (Pembina 11) & Interstate 29 SB Ramps		*			*	*	*	**	\$ -
26	12.02	91st St NE & 135th Ave NE (Pembina 12)					*	*	*	**	\$ -
27	55.04	107th St NE (Pembina 55) & ND 18					*	*	*	**	\$ -
28	507.01	93rd St NE & Interstate 29 SB Ramps		*			*	*	*	**	\$ -
29	507.02	93rd St NE & Interstate 29 NB Ramps		*			*	*	*	**	\$ -
30	511.01	ND 5 160th 1/2 Ave NE				*	*	*	*	**	\$ -
30	516.01	7th St & ND 18	*				*	*	*	**	\$ -
32	1.02	101st St NE (Pembina 1) & 135th Ave NE (Pembina 518)					*	*	*	*	\$ -
33	2.02	141st Ave NE (Pembina 2) & 107th St NE (Pembina 55)					*	*	*	*	\$ -
34	3.01	88th St NE (Pembina 3) & ND 32					*	*	*	*	\$ -
35	3.02	88th St NE (Pembina 3) & 135th Ave NE (Pembina 12)					*	*	*	*	\$ -
36	3.04	88th St NE (Pembina 3) & 148th Ave NE (US 81) SOUTH					*	*	*	*	\$ -
37	3.05	89th St NE (Pembina 3) & 148th Ave NE (US 81) NORTH					*	*	*	*	\$ -
38	9.01	104th St NE (Pembina 9) & 135th Ave NE (Pembina 12)					*	*	*	*	\$ -
39	11.04	84th St NE (Pembina 11) & 161st Ave NE				*	*	*	*	*	\$ -
40	12.01	ND 66 & 135th Ave NE (Pembina 12)					*	*	*	*	\$ -
41	55.03	107th St NE (Pembina 55) & 135th Ave NE (Pembina 55)					*	*	*	*	\$ -
42	505.01	92nd St NE (Pembina 505) & ND 32					*	*	*	*	\$ -
43	506.01	93rd St NE & 160th Ave NE	*				*	*	*	*	\$ -
44	509.01	ND 5 & 135th 1/2 Ave NE		*			*	*	*	*	\$ -
45	6.01	92nd St NE (Pembina 6) & 127th Ave NE					*	*	*	*	\$ -
46	503.01	91st St NE (Pembina 503) & 133rd Ave NE					*	*	*	*	\$ -
47	504.01	92nd St NE (Pembina 504) & 133rd Ave NE					*	*	*	*	\$ -

Totals

Total Stars --	8	12	4	4	39	12	14
% That Gets Star --	17%	26%	9%	9%	83%	26%	30%

*****	0	0%
*****	0	0%
*****	1	2%
****	0	0%
***	15	32%
**	15	32%
*	13	28%
-	3	6%
	47	100%

Stars

- Skew - If intersection is skewed at an angle of 20 degrees or greater.
- On/Near Curve - If intersection is on or within 1,000 feet of curve.
- Development - If intersection aerial shows a commercial development with access near intersection.
- RR Xing - If intersection has a railroad crossing on any approach within 500 feet.
- Previous STOP (>5 mi) - If vehicles approaching the stop control have not had a previous stop along the roadway within 5 miles
- Total Crashes - If intersection has at least 1 crash.
- ADT Cross Product - If intersection has an ADT cross product >100,000.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

141st Ave NE (Pembina 2) & Division Ave NE (ND 5)

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: T Traffic Control Device: Thru/Stop
Configuration (2): Undivided Street Lights: Yes
Urban/Rural: Rural Flashers: No
County: Pembina Major Entering ADT: #N/A
Entering ADT: 2463 Minor Entering ADT: #N/A

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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

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

★★★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	Installed	\$0.00	
Upgrade Stop Sign	\$350 per sign	1	\$350.00	
Upgrade Junction Sign	\$350 per sign	1	\$350.00	
Upgrade Stop Ahead Sign	\$450 per sign	1	\$450.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$51,850.00	

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	\$46,665
Local Match (10% of Total project cost)	\$5,185
Total Project Cost	\$51,850

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: #N/A
 Entering ADT: 670 Minor Entering ADT: #N/A

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

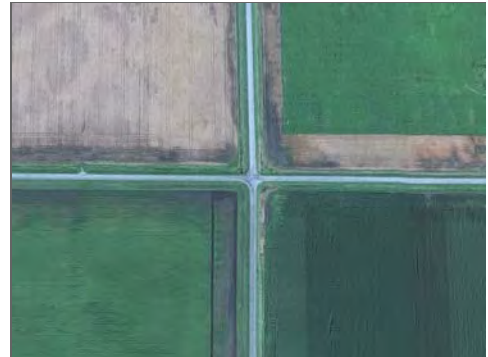
Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

	Total	Angle	K+A
Crashes	1	1	1.00
Rate (per MVM)	0.8	0.8	0.8

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$9,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$8,730
Local Match (10% of Total project cost)	\$970
Total Project Cost	\$9,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

ND 5 & 127th Ave NE (Pembina 6)

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Pembina Major Entering ADT: 870
Entering ADT: 1275 Minor Entering ADT: 405

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	0.4	0.0	0.0

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$59,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$53,730
Local Match (10% of Total project cost)	\$5,970
Total Project Cost	\$59,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

89th St NE (Pembina 3) & Interstate 29 NB Ramps

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 35
 Entering ADT: 70 Minor Entering ADT: 35

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	7.8	0.0	0.0



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

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$3,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,330
Local Match (10% of Total project cost)	\$370
Total Project Cost	\$3,700

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

101st St NE (Pembina 1) & 127th Ave NE

Agency Name: Pembina County

Contact Name: Troy Kittelson

Email Address: pembhwy@nd.gov

ND DOT District: 6

Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 995
 Entering ADT: 1117 Minor Entering ADT: 122

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

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



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

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000	per intersection	0	\$0.00
Directional Median	\$750,000	per intersection	0	\$0.00
Mainline Dynamic Warning Sign	\$50,000	per intersection	0	\$0.00
Close Median	\$25,000	per intersection	0	\$0.00
Installing Street Lights	\$6,000	per street light	1	\$6,000.00
Upgrade Stop Sign	\$350	per sign	2	\$700.00
Upgrade Junction Sign	\$350	per sign	2	\$700.00
Upgrade Stop Ahead Sign	\$450	per sign	2	\$900.00
Upgrade Stop Ahead Marking	\$450	per marking	1	\$450.00
Upgrade Stop Bar	\$250	per marking	2	\$500.00
Review Signs and CST	\$2,450	per intersection	0	\$0.00
				\$9,250.00

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	\$8,325
Local Match (10% of Total project cost)	\$925
Total Project Cost	\$9,250

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

101st St NE (Pembina 1) & 144th Ave NE (ND 18)

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 518
 Entering ADT: 740 Minor Entering ADT: 223

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

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



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

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$9,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$8,730
Local Match (10% of Total project cost)	\$970
Total Project Cost	\$9,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

101st St NE (Pembina 1) & Interstate 29 NB Ramps

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 60
 Entering ADT: 100 Minor Entering ADT: 40

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	5.5	0.0	0.0

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$3,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,330
Local Match (10% of Total project cost)	\$370
Total Project Cost	\$3,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

Page: 7

Intersection ID: 1.08

Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

86th St NE (Pembina 502) & Interstate 29 SB Ramps

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 60
 Entering ADT: 85 Minor Entering ADT: 25

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

	Total	Angle	K+A
Crashes	1	0	0.00
Rate (per MVM)	6.4	0.0	0.0

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$3,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,330
Local Match (10% of Total project cost)	\$370
Total Project Cost	\$3,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 450
 Entering ADT: 680 Minor Entering ADT: 230

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$9,000.00	

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	\$8,100
Local Match (10% of Total project cost)	\$900
Total Project Cost	\$9,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

84th St NE (Pembina 11) & US 81

Agency Name: Pembina County

Contact Name: Troy Kittelson

Email Address: pembhwy@nd.gov

ND DOT District: 6

Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 530
 Entering ADT: 635 Minor Entering ADT: 105

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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

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

★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000	per intersection	0	\$0.00
Directional Median	\$750,000	per intersection	0	\$0.00
Mainline Dynamic Warning Sign	\$50,000	per intersection	0	\$0.00
Close Median	\$25,000	per intersection	0	\$0.00
Installing Street Lights	\$6,000	per street light	0	\$0.00
Upgrade Stop Sign	\$350	per sign	2	\$700.00
Upgrade Junction Sign	\$350	per sign	2	\$700.00
Upgrade Stop Ahead Sign	\$450	per sign	2	\$900.00
Upgrade Stop Ahead Marking	\$450	per marking	1	\$450.00
Upgrade Stop Bar	\$250	per marking	1	\$250.00
Review Signs and CST	\$2,450	per intersection	0	\$0.00
				\$3,000.00

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	\$2,700
Local Match (10% of Total project cost)	\$300
Total Project Cost	\$3,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

84th St NE (Pembina 11) & Interstate 29 NB Ramps

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 140
 Entering ADT: 180 Minor Entering ADT: 40

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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

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

★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000	per intersection	0	\$0.00
Directional Median	\$750,000	per intersection	0	\$0.00
Mainline Dynamic Warning Sign	\$50,000	per intersection	0	\$0.00
Close Median	\$25,000	per intersection	0	\$0.00
Installing Street Lights	\$6,000	per street light	0	\$0.00
Upgrade Stop Sign	\$350	per sign	2	\$700.00
Upgrade Junction Sign	\$350	per sign	2	\$700.00
Upgrade Stop Ahead Sign	\$450	per sign	2	\$900.00
Upgrade Stop Ahead Marking	\$450	per marking	2	\$900.00
Upgrade Stop Bar	\$250	per marking	2	\$500.00
Review Signs and CST	\$2,450	per intersection	0	\$0.00
				\$3,700.00

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,330
Local Match (10% of Total project cost)	\$370
Total Project Cost	\$3,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

ND 5 (W) & 137th Ave NE (Pembina 12)

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Pembina Major Entering ADT: 1360
Entering ADT: 1445 Minor Entering ADT: 85

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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



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

Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Curve projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$9,000.00	

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	\$8,100
Local Match (10% of Total project cost)	\$900
Total Project Cost	\$9,000

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

ND 5 (E) & 137th Ave NE (Pembina 12)

Agency Name: Pembina County
Contact Name: Troy Kittelson
Email Address: pembhwy@nd.gov

ND DOT District: 6
Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
Configuration (2): Undivided Street Lights: No
Urban/Rural: Rural Flashers: No
County: Pembina Major Entering ADT: 1650
Entering ADT: 1787 Minor Entering ADT: 137

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

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

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	1	\$6,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	1	\$450.00	
Upgrade Stop Bar	\$250 per marking	1	\$250.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$9,000.00	

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	\$8,100
Local Match (10% of Total project cost)	\$900
Total Project Cost	\$9,000

NDDOT Central Office Only

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

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

107th St NE (Pembina 55) & Interstate 29 SB Ramps

Agency Name: Pembina County

Contact Name: Troy Kittelson

Email Address: pembhwy@nd.gov

ND DOT District: 6

Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 1085
 Entering ADT: 1938 Minor Entering ADT: 853

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

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

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment and curve projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	1	\$50,000.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	2	\$12,000.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$65,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$59,130
Local Match (10% of Total project cost)	\$6,570
Total Project Cost	\$65,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

ND 66 & 161st Ave NE (Pembina 500)

Agency Name: Pembina County

Contact Name: Troy Kittelson

Email Address: pembhwy@nd.gov

ND DOT District: 6

Telephone Number: 701-265-4208

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: Yes
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 1763
 Entering ADT: 3215 Minor Entering ADT: 1453

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012

5 years

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

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



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes -
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	Installed	\$0.00	
Upgrade Stop Sign	\$350 per sign	4	\$1,400.00	
Upgrade Junction Sign	\$350 per sign	4	\$1,400.00	
Upgrade Stop Ahead Sign	\$450 per sign	4	\$1,800.00	
Upgrade Stop Ahead Marking	\$450 per marking	4	\$1,800.00	
Upgrade Stop Bar	\$250 per marking	4	\$1,000.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$7,400.00	

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	\$6,660
Local Match (10% of Total project cost)	\$740
Total Project Cost	\$7,400

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION

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

86th St NE (Pembina 502) & Interstate 29 NB Ramps

Agency Name: Pembina County

ND DOT District: 6

Contact Name: Troy Kittelson

Telephone Number: 701-265-4208

Email Address: pembhwy@nd.gov

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

Location Description

Configuration: X Traffic Control Device: Thru/Stop
 Configuration (2): Undivided Street Lights: No
 Urban/Rural: Rural Flashers: No
 County: Pembina Major Entering ADT: 70
 Entering ADT: 103 Minor Entering ADT: 33

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

Describe Current Safety Issues & Systemic Ranking Review

North Dakota TBD, 2008 - 2012 5 years

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

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

★★★



Describe Proposed Safety Improvements

Description	Unit Cost	Units	Cost	Notes - Segment projects suggested on other sheets.
Roundabout	\$1,000,000 per intersection	0	\$0.00	
Directional Median	\$750,000 per intersection	0	\$0.00	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0	\$0.00	
Close Median	\$25,000 per intersection	0	\$0.00	
Installing Street Lights	\$6,000 per street light	0	\$0.00	
Upgrade Stop Sign	\$350 per sign	2	\$700.00	
Upgrade Junction Sign	\$350 per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2	\$900.00	
Upgrade Stop Ahead Marking	\$450 per marking	2	\$900.00	
Upgrade Stop Bar	\$250 per marking	2	\$500.00	
Review Signs and CST	\$2,450 per intersection	0	\$0.00	
			\$3,700.00	

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

Project Cost Estimate (attach detailed copy)

Proposed Year of Construction

Federal Funds	\$3,330
Local Match (10% of Total project cost)	\$370
Total Project Cost	\$3,700

NDDOT Central Office Only

Project Accepted? Yes No Reference Number ID Number

Notes