



NORTH DAKOTA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2024 ANNUAL REPORT



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Photo source: Federal Highway Administration

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Disclaimer

Protection of Data from Discovery Admission into Evidence

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.”

23 U.S.C. 407 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

The North Dakota HSIP is administered through the Programming Division in the North Dakota Department of Transportation (NDDOT). Safety investments are based on the state's current Strategic Highway Safety Plan (SHSP). The current SHSP document is called ND Vision Zero Plan and has eleven priority emphasis areas:

- Impaired Driving
- Occupant Protection
- Young Drivers
- Older Drivers
- Distracted Driving
- Intersections
- Lane Departure
- Local System Roadways
- Speed Management
- Commercial/Heavy Vehicle-Involved
- Emergency Response/Medical Services and Traffic Records Coordinating Committee

Safety projects are developed by a reactive process (high crash listings, road safety reviews, fatal crash review teams) and a systemic process (local road safety plans). Project solicitation takes place every fall and HSIP applications are submitted from local agencies and NDDOT district offices. Projects are reviewed for eligibility and are then prioritized into the Statewide Transportation Improvement Program (STIP).

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The NDDOT solicits state and local agencies to submit safety project applications each year. Potential projects are identified through the traditional "reactive" approach that address high crash locations, fatal crash locations or areas where road safety reviews took place. Projects are also developed using a "systemic" approach that apply low-cost treatments over a large area. The NDDOT central office reviews applications and selects/prioritizes. After projects are programmed, they get designed and implemented with the same process as regular federally funded transportation projects. Overall evaluation of the program is done through monitoring of the fatal and serious injury statistics as part of this annual report.

Where is HSIP staff located within the State DOT?

Other-Programming

How are HSIP funds allocated in a State?

- Central Office via Statewide Competitive Application Process

Describe how local and tribal roads are addressed as part of HSIP.

The NDDOT addresses safety on local and tribal roads through the Local Road Safety Program (LRSP). Local public agencies and tribal nations can also submit applications for non-LRSP safety projects each year during the solicitation period. Selection of local and tribal road projects use the same methodology as State roads.

Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

- Design
- Districts/Regions
- Governors Highway Safety Office
- Local Aid Programs Office/Division
- Planning
- Traffic Engineering/Safety
- Other-Highway Safety Division, Local Government

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Describe coordination with internal partners.

Design

The Design Division is included in the distribution of the high crash listings. All road safety reviews require at least one member of the Design Division. Their participation and review of at-risk locations helps in the development of potential project countermeasures.

Planning

The Planning Division provides data for the development of the HSIP. Roadway features are collected and maintained in the Planning Division include: traffic volume, truck volumes, traffic projections, roadway features, roadway viewer (for state highways) and mapping. The Planning Division is also included in the distribution of the high crash listings.

Safety Highway Safety Office (SHSO)

The SHSO is the lead entity for the State's Strategic Highway Safety Plan (SHSP) and involves law enforcement and other partners in the process. In North Dakota, the behavioral strategies in the SHSP are largely funded through the National Highway Traffic Safety Administration (NHTSA) funds with funding going to various traffic safety partners including law enforcement agencies statewide for overtime enforcement of traffic safety laws. The SHSP process drives HSIP project priorities. Infrastructure strategies in the North Dakota SHSP are largely funded through HSIP and deployed through the State's Local Road Safety Program (LRSP) and State Road Safety Program (SRSP). These programs identify proven, low-cost road safety strategies and prioritize the road safety strategies for implementation at identified at-risk locations on the local and state road systems.

Local Government

Members of the Local Government Division provide project development through city, county and tribal agencies. The local government assists in the solicitation of safety projects. They also participate in road safety reviews.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-and other traffic safety advocates/partners

Describe coordination with external partners.

All the entities are involved at SHSP at some level (Executive Leadership Team, SHSP Steering Committee, SHSP Implementation Team or general SHSP stakeholder).

Regional Planning Organizations: North Dakota has 4 MPO's that must approve any HSIP applications that are submitted by their respective cities. North Dakota's largest MPO (Fargo-Moorhead) is now designated as a

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Transportation Management Area (TMA). The MPO's were also included in the team that developed the ND Local Road Safety Program (LRSP).

Local Government Agency, Tribal Agency: The cities, counties, and tribal agencies are solicited each year for potential safety projects. They are encouraged to submit projects directly from the LRSP or at high crash locations. The HSIP Program is discussed with the tribes annually during the STIP Tribal Coordination Meetings.

Law Enforcement Agency: Law enforcement and HSIP personnel are extensively involved in North Dakota's SHSP process. The Programming Division Director serves on the SHSP Steering Committee and as chairperson for two SHSP emphasis area teams (Lane Departure and Intersection implementation Teams). Law enforcement serve at all levels of the SHSP including the SHSP Executive Leadership Team, the SHSP Steering Committee and SHSP Implementation Teams.

Describe other aspects of HSIP Administration on which the State would like to elaborate.

Schedule for HSIP requests:

- Fall – send out HSIP solicitation letter, HSIP application forms (SFN 59959) are due by the end of the year
- Winter – NDDOT analysis of HSIP requests and Draft HSIP project listing
- Spring – verify the construction year for previously approved projects
- Summer – finalize HSIP project listing, send responses out on approvals (or non-approvals) for the HSIP applications and send out high crash location lists/maps
- August 31st – Final HSIP project list due to FHWA, HSIP online reporting due

Program Methodology

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

Yes

NDDOT has developed an HSIP Implementation Plan in coordination with FHWA.

Select the programs that are administered under the HSIP.

- HSIP (no subprograms)

Program: HSIP (no subprograms)

Date of Program Methodology: 3/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

- All crashes

Exposure

- Traffic

Roadway

- Horizontal curvature

What project identification methodology was used for this program?

- Crash frequency
- Equivalent property damage only (EPDO Crash frequency)
- Other-Systemic

Are local roads (non-state owned and operated) included or addressed in this program?

Yes

Are local road projects identified using the same methodology as state roads?

Yes

How are projects under this program advanced for implementation?

- Competitive application process
- selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Rank of Priority Consideration

Available funding:1

What percentage of HSIP funds address systemic improvements?

2

HSIP funds are used to address which of the following systemic improvements?

- Horizontal curve signs
- Install/Improve Signing

What process is used to identify potential countermeasures?

- Crash data analysis
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input
- Other-National Cooperative Highway Research Program (NCHRP) and other evidence-based practices

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

Describe how the State HSIP considers connected vehicles and ITS technologies.

ND has an improvement category for “Advanced Technology & ITS” on the HSIP application form. Any local jurisdiction may submit a potential ITS project to address their safety needs. The state currently has ITS projects under construction including wrong-way detection for vehicles on Interstate ramps, and an “Intersection Conflict Warning System”.

Does the State use the Highway Safety Manual to support HSIP efforts?

No

NDDOT is currently working on integrating the HSM into its HSIP process using AASHTO software.

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

North Dakota's primary seat belt law went into effect August 1, 2023.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal Fiscal Year

2024 Federal Fiscal Year (Oct 1, 2023 through September 30, 2024)

Enter the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$17,111,333	\$15,477,875	90.45%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	0%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	\$0	\$0	0%
Penalty Funds (23 U.S.C. 154)	\$0	\$0	0%
Penalty Funds (23 U.S.C. 164)	\$5,953,420	\$5,953,420	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$0	\$0	0%
State and Local Funds	\$0	\$0	0%
Totals	\$23,064,753	\$21,431,295	92.92%

Obligated numbers as of 6/30/24. NDDOT intends to obligate all HSIP by the end of FY2024.

How much funding is programmed to local (non-state owned and operated) or tribal safety projects?

\$685,686

How much funding is obligated to local or tribal safety projects?

\$161,350

How much funding is programmed to non-infrastructure safety projects?

\$360,000

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How much funding is obligated to non-infrastructure safety projects?

\$360,000

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

\$0

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

\$0

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

None

General Listing of Projects

List the projects obligated using HSIP funds for the reporting period.

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
22881: Cavalier County Signs	Roadway signs and traffic control	Roadway signs (including post) - new or updated	25	Locations	\$161350	\$179278	HSIP (23 U.S.C. 148)	Rural	Major Collector	335	55	County Highway Agency	Systemic	Lane Departure	
23007: US 2 State Line to US 85	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	3	Intersections	\$770702	\$856336	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,763	65	State Highway Agency	Spot	Intersections	
23141: ND 13 & Richland Co 1 Turn Lanes	Intersection geometry	Add/modify auxiliary lanes	2	Intersections	\$1461311	\$1623679	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,710	65	State Highway Agency	Spot	Intersections	
23142: ND 9 Grade Raise - Radial-T	Alignment	Vertical alignment or elevation change	0.58	Miles	\$52884	\$58760	HSIP (23 U.S.C. 148)	Rural	Major Collector	248	65	State Highway Agency	Spot	Lane Departure	
23193: ND 24 & BIA 31 - Ft. Yates Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$2513762	\$2513762	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,636	40	State Highway Agency	Spot	Intersections	
23378: Wrong Way Detection	Advanced technology and ITS	Wrong-way Driving Detection System	3	Locations	\$1493317	\$1659241	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0	55-70	State Highway Agency	Spot	Lane Departure	
24121: Statewide crash report evaluation	Miscellaneous	Data analysis	1	N/A	\$360000	\$400000	HSIP (23 U.S.C. 148)	Multiple/Varies	N/A	0			N/A	Varies	
24169: Var Hwys - Turtle Mtn Reservation	Roadway delineation	Longitudinal pavement markings remarking -	13	Miles	\$46889	\$46889	HSIP (23 U.S.C. 148)	Rural	N/A	0		State Highway Agency	Spot	Lane Departure	
24170: Var Hwys - Spirit Lake Reservation	Roadway delineation	Longitudinal pavement markings remarking -	1	Locations	\$148254	\$148254	HSIP (23 U.S.C. 148)	Rural	N/A	0		State Highway Agency	Spot	Lane Departure	
24172: Var Hwys - Standing Rock Reservation	Roadway delineation	Longitudinal pavement markings remarking -	1	Locations	\$203220	\$203220	HSIP (23 U.S.C. 148)	Rural	N/A	0		State Highway Agency	Spot	Lane Departure	

\$7,211,689 Total obligated projects from list above

+ \$8,438,888 Obligated with FY2024 funds for preliminary engineering and/or right-of-way acquisition for future safety projects.

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- \$ 172,703 Amount returned on previous projects.

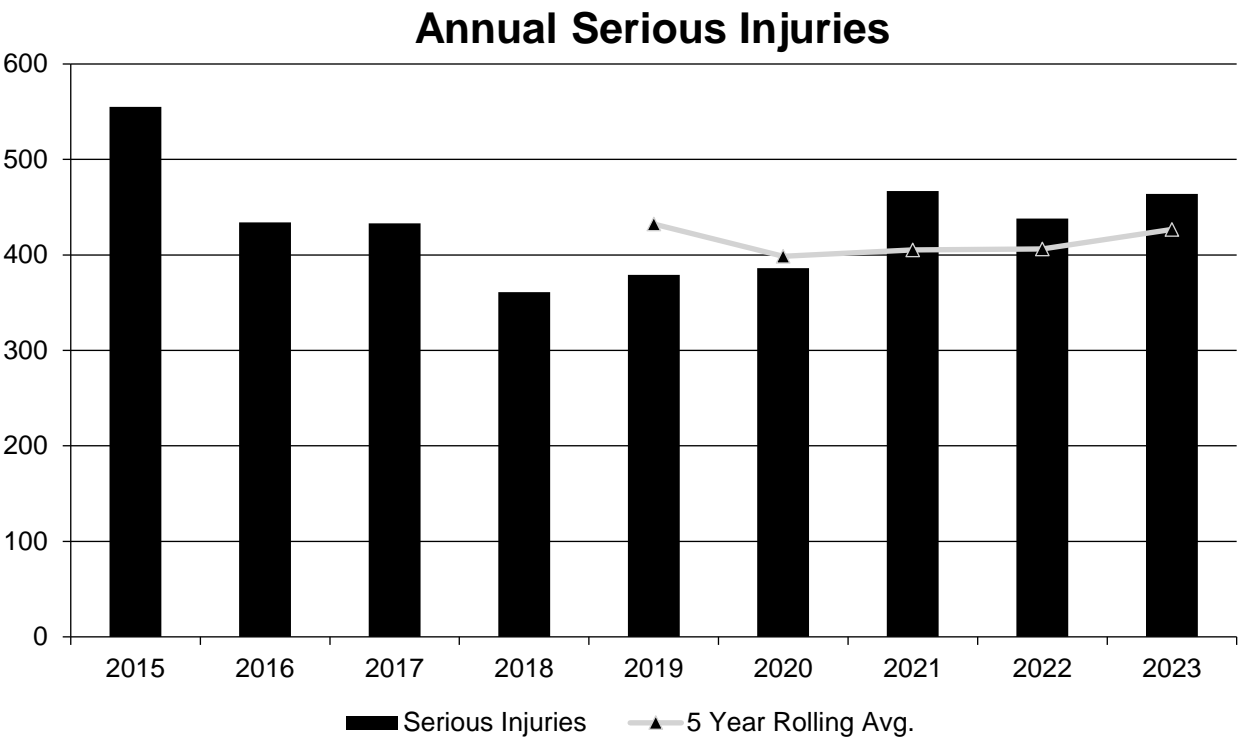
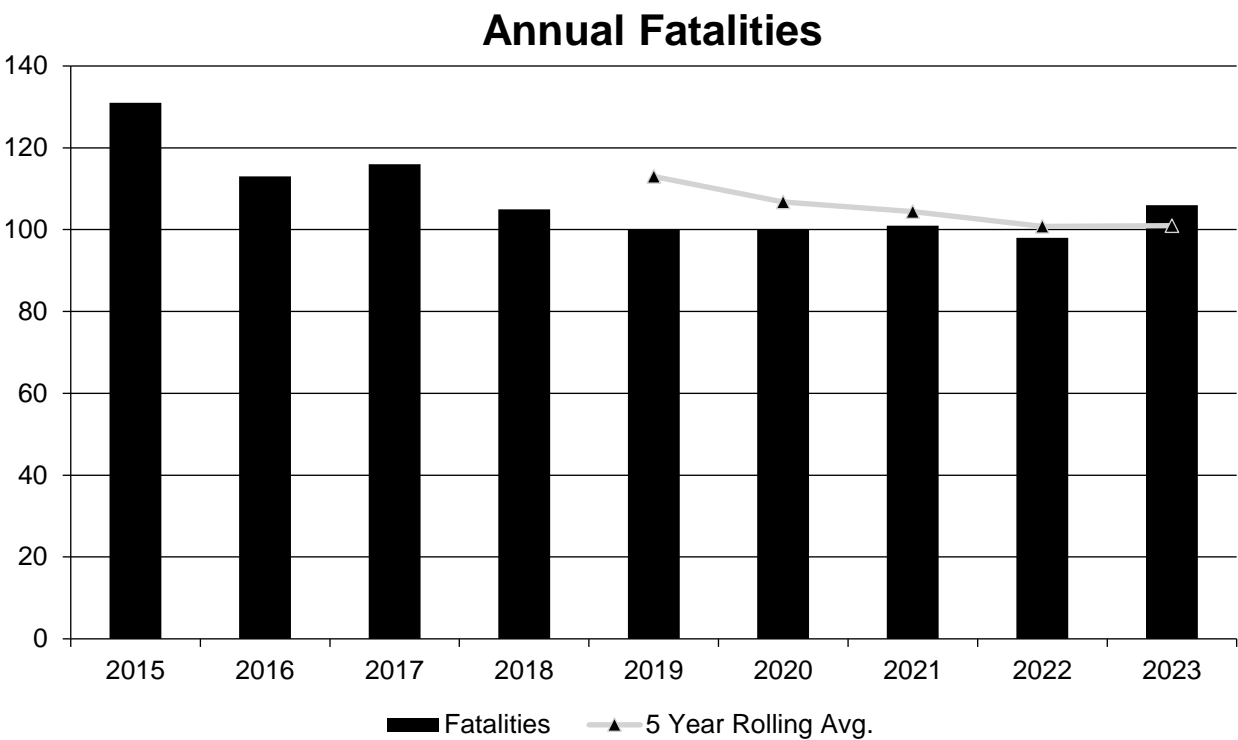
\$15,477,874 Total FY2024 Obligated (as of 6/30/24)

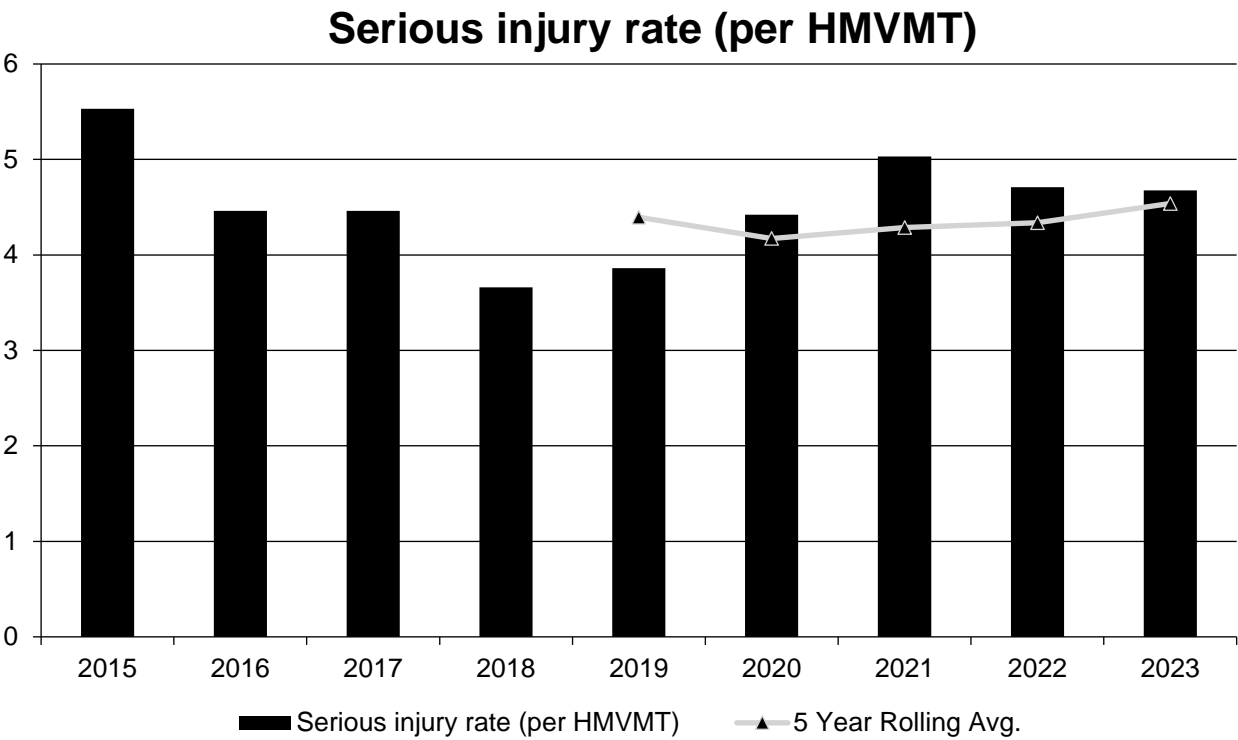
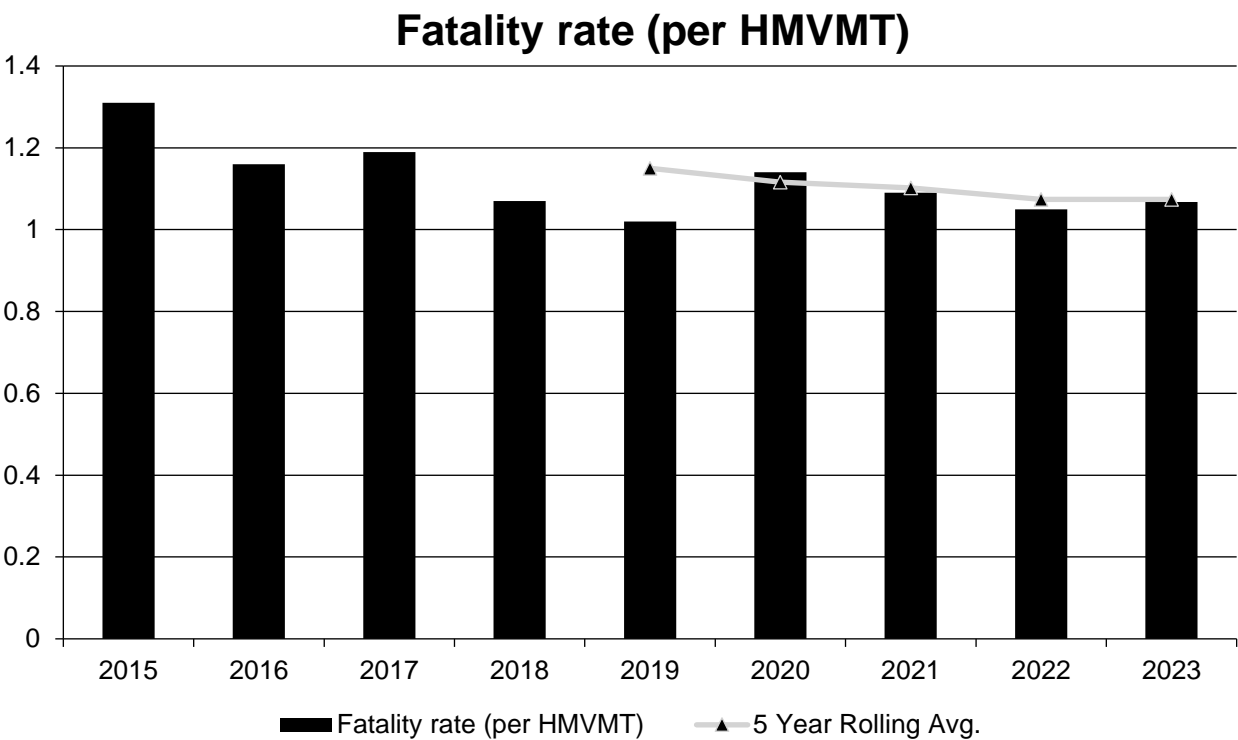
Safety Performance

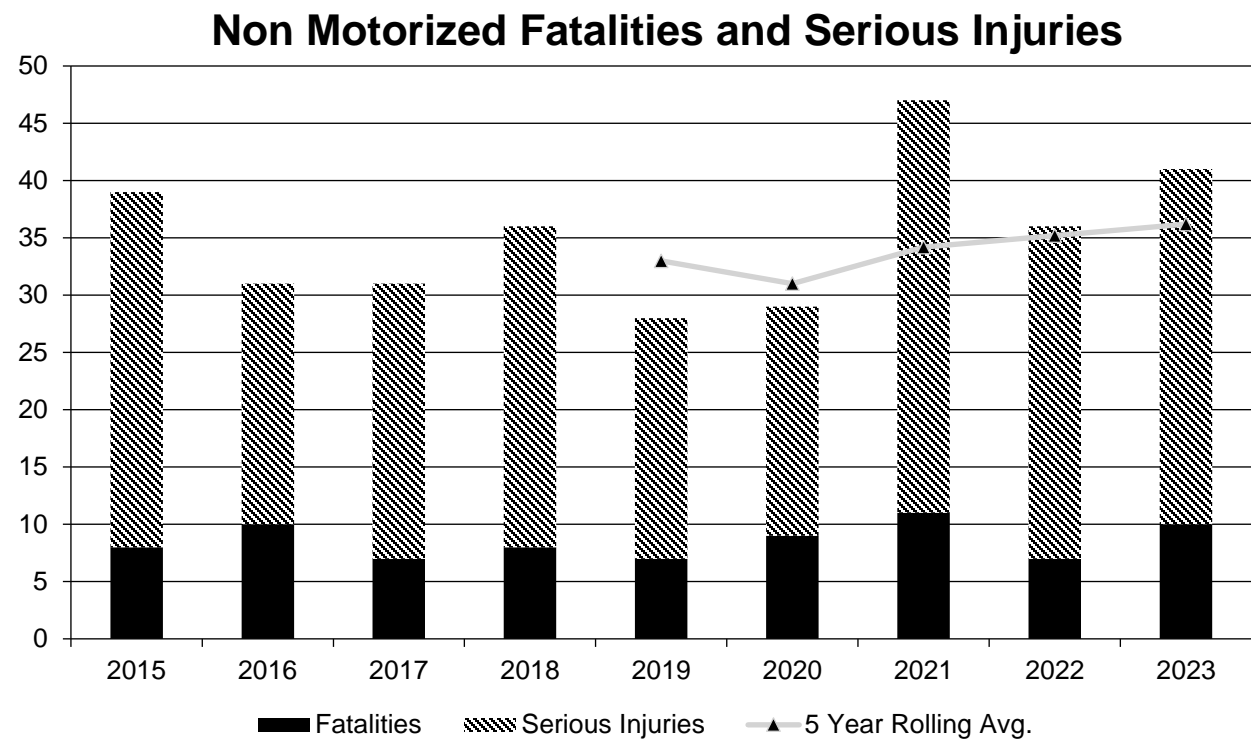
General Highway Safety Trends

Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fatalities	131	113	116	105	100	100	101	98	106
Serious Injuries	555	434	433	361	379	386	467	438	464
Fatality rate (per HMVMT)	1.310	1.160	1.190	1.070	1.020	1.140	1.090	1.050	1.068
Serious injury rate (per HMVMT)	5.530	4.460	4.460	3.660	3.860	4.420	5.030	4.710	4.677
Number non-motorized fatalities	8	10	7	8	7	9	11	7	10
Number of non-motorized serious injuries	31	21	24	28	21	20	36	29	31







Describe fatality data source.
State Motor Vehicle Crash Database

To the maximum extent possible, present this data by functional classification and ownership.

Year 2023				
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	8.2	32	0.54	2.11
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	25.4	78	1.24	3.83
Rural Minor Arterial	11.4	38	1.51	4.98
Rural Minor Collector				
Rural Major Collector	21	61.6	2.09	6.17

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Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Local Road or Street	16.2	61	1.45	5.5
Urban Principal Arterial (UPA) - Interstate	0.6	9.2		1.74
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other	6.8	60	0.81	7.14
Urban Minor Arterial	5.4	36	0.9	5.99
Urban Minor Collector				
Urban Major Collector	3	17	0.99	5.63
Urban Local Road or Street	2.6	22.4	0.4	3.47

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Year 2023

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	55.4	215		
County Highway Agency	19.2	64.2		
Town or Township Highway Agency	12.2	49.2		
City or Municipal Highway Agency	9.8	79		
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				
Other				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2025 Targets *

Number of Fatalities:96.0

Describe the basis for established target, including how it supports SHSP goals.

Review of historical data and expert group input.

Number of Serious Injuries:418.3

Describe the basis for established target, including how it supports SHSP goals.

Review of historical data and expert group input.

Fatality Rate:1.055

Describe the basis for established target, including how it supports SHSP goals.

Review of historical data and expert group input.

Serious Injury Rate:4.459

Describe the basis for established target, including how it supports SHSP goals.

Review of historical data and expert group input.

Total Number of Non-Motorized Fatalities and Serious Injuries:33.5

Describe the basis for established target, including how it supports SHSP goals.

Review of historical data and expert group input.

Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

The State Highway Safety Office (SHSO) resides in the NDDOT. The SHSO (i.e., the NDDOT Highway Safety Division) and other NDDOT Divisions including Local Government, Programming and planning/Asset Management review performance measure data and define the method to set the targets. Proposed targets are then shared by the NDDOT at a regular meeting between NDDOT and the MPOs.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2023 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	99.2	101.0
Number of Serious Injuries	397.1	426.8
Fatality Rate	1.080	1.074
Serious Injury Rate	4.201	4.539
Non-Motorized Fatalities and Serious Injuries	33.5	36.2

Only one of the performance measures showed a decrease. Part of this may be due to the increasing number of vehicles on the road—in 2023, the vehicle-miles traveled increased by nearly 8% compared to the previous year. With targets not being met, NDDOT developed an HSIP Implementation Plan in May 2024. This plan took a close look at the data and existing processes within NDDOT's HSIP. It identifies action items meant to change the trajectory of the performance measures.

Applicability of Special Rules

Does the HRRR special rule apply to the State for this reporting period?

No

Does the VRU Safety Special Rule apply to the State for this reporting period?

No

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2017	2018	2019	2020	2021	2022	2023
Number of Older Driver and Pedestrian Fatalities	14	19	17	16	13	18	20
Number of Older Driver and Pedestrian Serious Injuries	28	29	39	23	40	37	39

The older drivers and pedestrians special rule applies for North Dakota (per FHWA Special Rule Determination for CY 2022). The 2024 SHSP update includes strategies and actions to decrease older driver and pedestrian fatalities and serious injuries.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

Comparing 2022 to 2023—the number of fatalities and serious injuries increased. Part of this may be due to an increase in VMT. Looking at the rates (per hundred million vehicle miles traveled), the fatality rate went up, but the serious injury rate went down. Based on review of North Dakota's existing HSIP and proposed HSIP plan moving forward, several action items have been identified:

- Monitor progress in reduction in lane departure crashes
- Better data tracking of crashes aligning with emphasis areas.
- Examine ways to improve reactive process (high-crash listings)
- Develop more projects using systemic processes (update LRSP and SRSP)
- Consider new noteworthy practices (consider new/innovative countermeasure that other states may be doing)
- Reach out to stakeholders for more input on the program.
- Select projects and fund them based on the ratio of lane departure (1/2) and intersection crashes (1/3) and the remainder to other emphasis areas.
- Continue development and implementation of new action items:
 - Wider longitudinal pavement markings (4" to 6")
 - Cable median guardrail
 - AASHTOWare Safety
 - Potential roundabout lists
 - Safe systems approach
 - Safety corridors

What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

- # miles improved by HSIP
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs

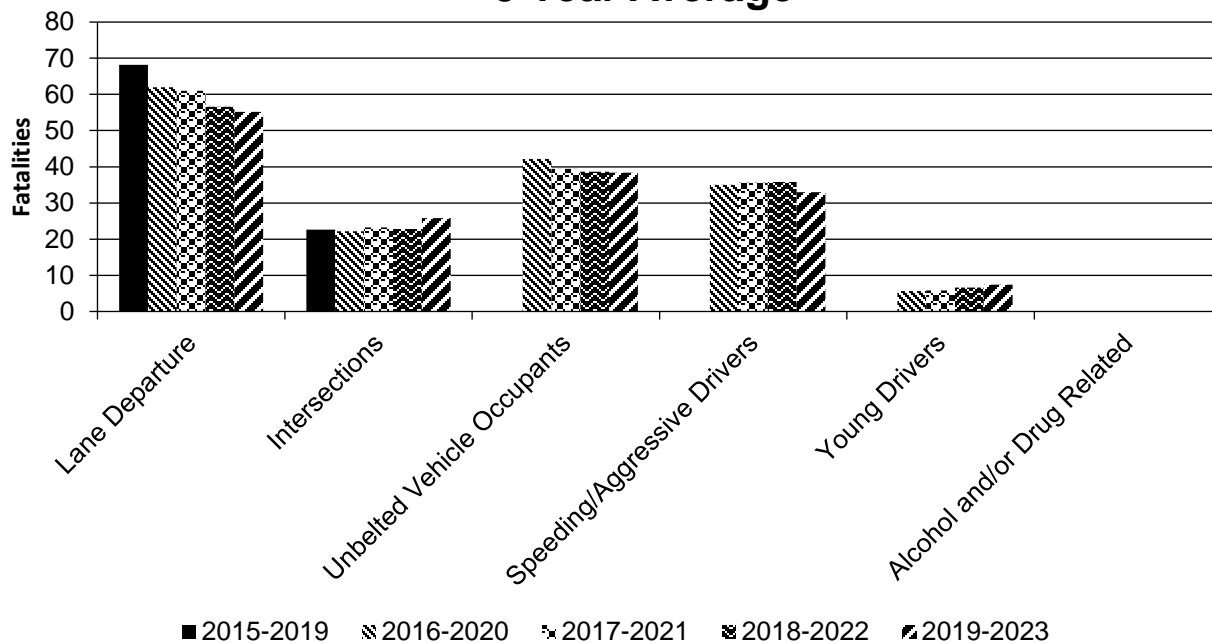
Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

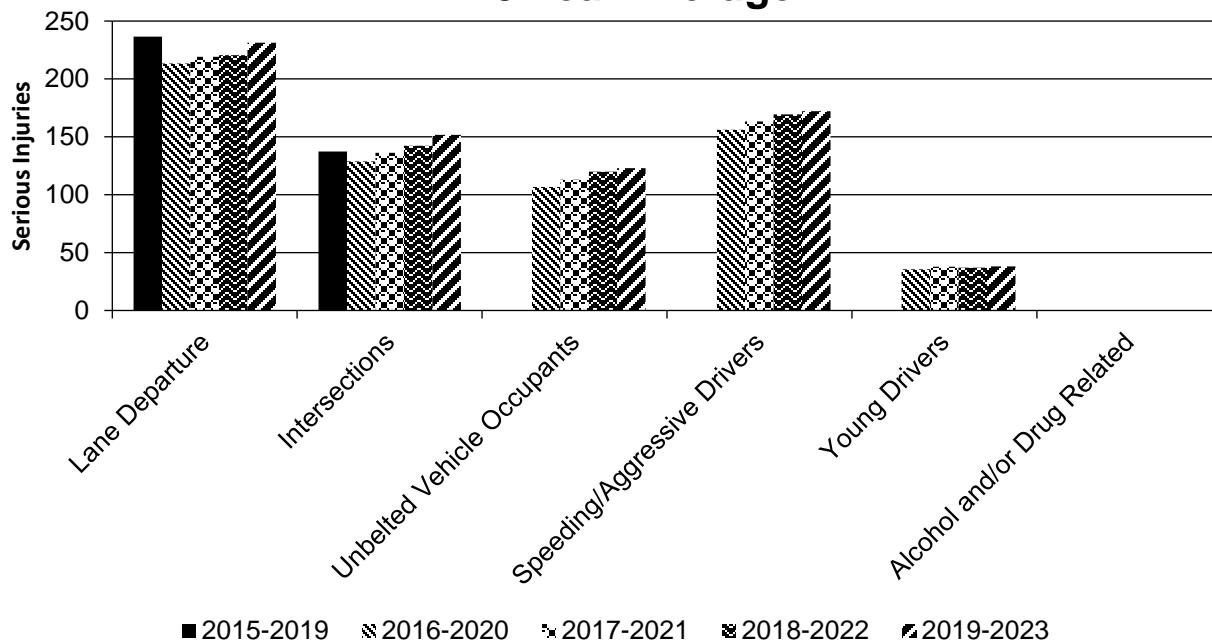
Year 2023

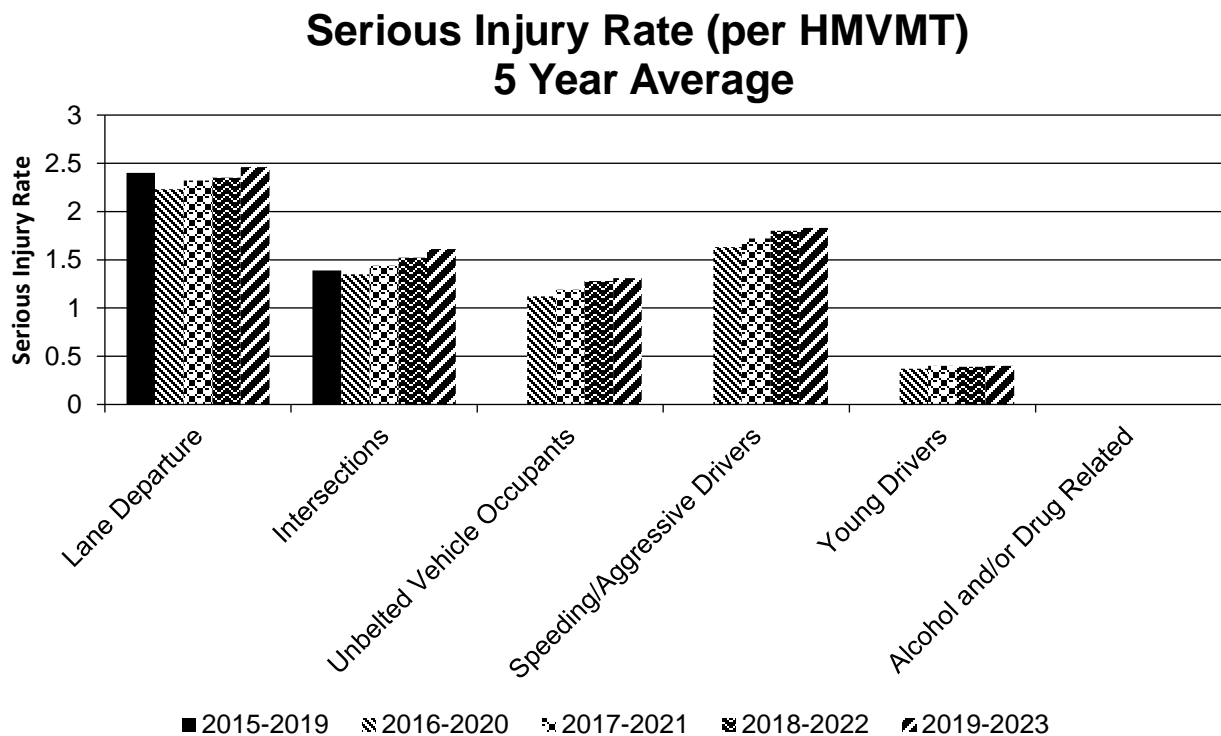
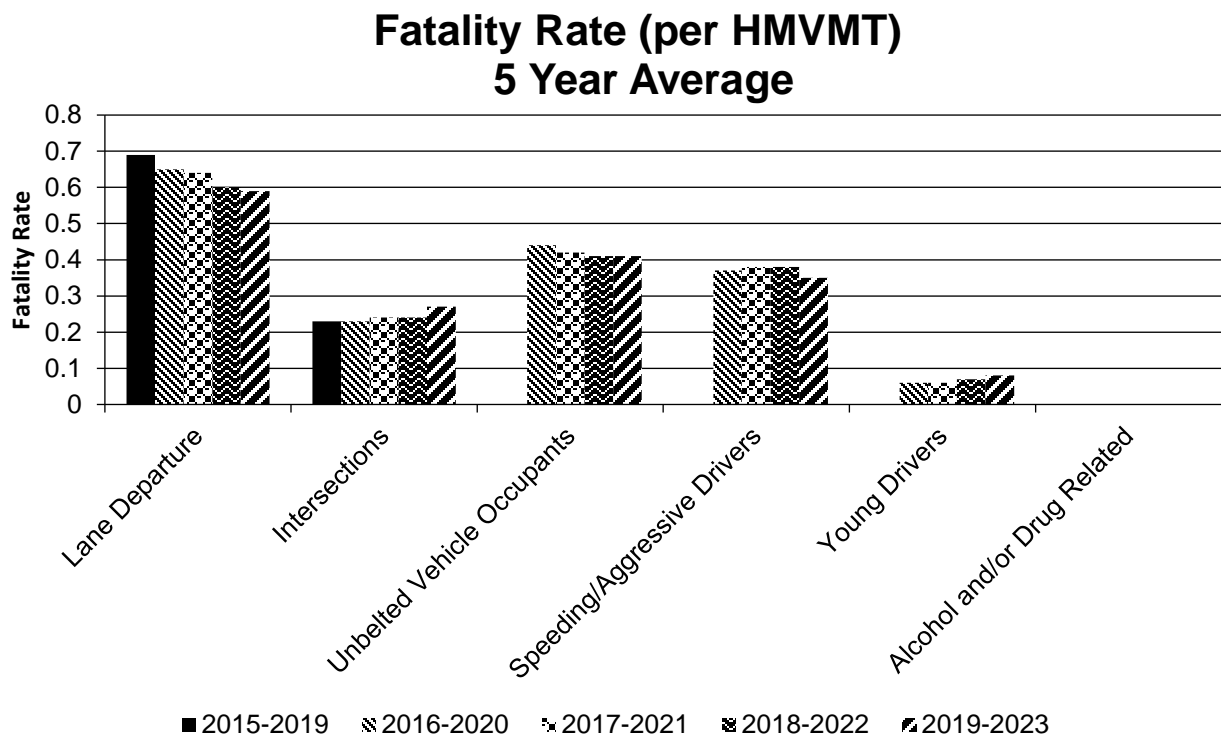
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure		55.2	231.2	0.59	2.46
Intersections		25.8	151.8	0.27	1.61
Unbelted Vehicle Occupants		38.4	123	0.41	1.31
Speeding/Aggressive Drivers		33	172.2	0.35	1.83
Young Drivers		7.4	38.2	0.08	0.4
Alcohol and/or Drug Related					

Number of Fatalities 5 Year Average



Number of Serious Injuries 5 Year Average





Has the State completed any countermeasure effectiveness evaluations during the reporting period?

Yes

Please provide the following summary information for each countermeasure effectiveness evaluation.

CounterMeasures:	Roundabouts
Description:	Before/after crash data was compiled for roundabouts on the state system.
Target Crash Type:	Intersections
Number of Installations:	12
Number of Installations:	12
Miles Treated:	
Years Before:	5
Years After:	5
Methodology:	Simple before/after
	Note: the number of years data for before and after various depending on the locations.

Results:	The total crash rate reduced by 33%. Total crashes per year reduced by 36%. Fatal and serious injury crashes per year reduced by 59%.
-----------------	---

File Name:	0 Before-After Crash Data for State System Roundabouts, 2023-11-13
FINAL.pdf	

Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

Compliance Assessment

What date was the State’s current SHSP approved by the Governor or designated State representative?

09/01/2023

What are the years being covered by the current SHSP?

From: 2023 To: 2028

When does the State anticipate completing its next SHSP update?

2028

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	20	20								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100					100	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	100	100

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	20	20								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	100		
	Average Annual Daily Traffic (79) [81]	100	100					100	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]			100	100						
	Intersection/Junction Traffic Control (131) [131]			30	30						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					85	85				
	Location Identifier for Roadway at					85	85				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					85	85				
	Ramp Length (187) [177]					85	85				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					85	85				
	Roadway Type at End Ramp Terminal (199) [189]					85	85				
	Interchange Type (182) [172]					85	85				
	Ramp AADT (191) [181]					85	85				
	Year of Ramp AADT (192) [182]					85	85				
	Functional Class (19) [19]					85	85				
	Type of Governmental Ownership (4) [4]					85	85				
Totals (Average Percent Complete):		91.11	91.11	91.25	91.25	85.00	85.00	100.00	100.00	100.00	100.00

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

The NDDOT has developed the following goals to meet MIRE requirements and future road data management:

- The database for “Intersection/Junction Traffic Control (131-FDE)” need to be updated.
- Robust/integrated data warehouse will connect all geodatabases with each other.
- More efficiently and effectively extract information from the database:
 - Nested-Querying will be the initial capability of Datawarehouse.
 - Develop a framework that allows tools and models to be shared by NDDOT.
 - Capability of applying AI/ML-based techniques over the Datawarehouse.
- The Datawarehouse will be an efficient framework for data governance in NDDOT
 - Other geo-databases (safety, construction, maintenance, etc.) could be integrated into the Datawarehouse

Optional Attachments

Program Structure:

HSIP Guidebook 2021.pdf

Project Implementation:

Safety Performance:

Evaluation:

0 Before-After Crash Data for State System Roundabouts, 2023-11-13 FINAL.pdf

Compliance Assessment:

Glossary

5 year rolling average: means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).

Emphasis area: means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

Highway safety improvement project: means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

HMVMT: means hundred million vehicle miles traveled.

Non-infrastructure projects: are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

Older driver special rule: applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

Performance measure: means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

Programmed funds: mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

Roadway Functional Classification: means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

Strategic Highway Safety Plan (SHSP): means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

Systematic: refers to an approach where an agency deploys countermeasures at all locations across a system.

Systemic safety improvement: means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

Transfer: means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.