

Table of Contents

HIGHWAY SAFETY	1
IMPROVEMENT PROGRAM	1
Disclaimer	3
Protection of Data from Discovery Admission into Evidence	3
Executive Summary	4
Introduction	5
Program Structure	5
Program Administration	5
Program Methodology	6
Project Implementation	24
Funds Programmed	24
General Listing of Projects	26
Safety Performance	29
General Highway Safety Trends	29
Safety Performance Targets	34
Applicability of Special Rules	
Evaluation	37
Program Effectiveness	37
Effectiveness of Groupings or Similar Types of Improvements	37
Project Effectiveness	41
Compliance Assessment	42
Optional Attachments	45
Glossary	46

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

South Dakota's HSIP is used in support of the state's Strategic Highway Safety Plan.

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.

HSIP is managed by the Highway Safety Engineer within the Planning and Engineering Division. A portion of the funds are set aside for a countywide signing project, systemic improvements, and spot locations with improvements ranked by benefit/cost.

Where is HSIP staff located within the State DOT?

Other-Planning and Engineering

How are HSIP funds allocated in a State?

• Other-Central Office using SHSP Emphasis Area Data

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

The SDDOT administers a County wide signing program which conducts approximately four County wide signing projects each year. Counties are prioritized by crash rate based on serious injury and fatal crashes per million vehicle miles traveled.

Routes are also identified for improvements by conducting both RSR and RSA inspections and by an over representation of crash clusters and higher than average crash rates. Routes are also identified to deploy systemic improvements.

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

- Design
- Districts/Regions
- Local Aid Programs Office/Division
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety

Describe coordination with internal partners.

The SHSP is used along with crash record analysis and mapping to hold meetings with operation and maintenance personal to identify locations to apply safety improvements.

During the planning and design process of a project, the HSM and IHSDM software is used to compare options to increase safety.

Identify which external partners are involved with HSIP planning.

- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency

Describe coordination with external partners.

Coordination with the FHWA Division Office takes place throughout the year. HSIP staff take part in an annual Tribal Transportation Safety Summit which brings together several tribal agencies, engineering consultants, universities, city, county, township representatives. Coordination with the Highway Safety Office also takes place throughout the year.

Program Methodology

Select the programs that are administered under the HSIP.

- Bicycle Safety
- Horizontal Curve
- Intersection
- Left Turn Crash
- Local Safety
- Low-Cost Spot Improvements
- Median Barrier
- Pedestrian Safety
- Right Angle Crash
- Roadway Departure
- Rural State Highways
- Segments
- Shoulder Improvement
- Sign Replacement And Improvement
- Skid Hazard
- Vulnerable Road Users
- Wrong Way Driving

Program: Bicycle Safety

Date of Program Methodology:10/3/2022

What is the justification for this program?

FHWA focused approach to safety •

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
 All crashes 		

All crashes

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Probability of specific crash types

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?

Other-Other BC

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).

Program: Horizontal Curve

Date of Program Methodology: 3/1/2013

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

Exposure

Roadway

• All crashes

- Traffic
- Volume

Horizontal curvature

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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?

• Other-B/C ratio

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

Ranking based on B/C:1 Available funding:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Intersection

Date of Program Methodology:3/1/2013

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

Exposure

Roadway

• All crashes

TrafficVolume

• Other-Intersection Type

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Excess expected crash frequency using SPFs

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? No

Describe the methodology used to identify local road projects as part of this program. When ADT is available and intersects with State road.

How are projects under this program advanced for implementation?

• Other-B/C ratio

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

Ranking based on B/C:1 Incremental B/C:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Left Turn Crash

Date of Program Methodology:10/3/2022

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

Exposure

Roadway

Roadway

• All crashes

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Expected crash frequency with EB adjustment

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?

• Other-BC

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 Ranking based on B/C:1

Program: Local Safety

Date of Program Methodology:3/1/2015

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

• Traffic

All crashes

- Volume
 - Page 10 of 46

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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? No

Describe the methodology used to identify local road projects as part of this program. Crash rates and crash clusters

How are projects under this program advanced for implementation?

• Other-SDDOT Project Developement Personel

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

Ranking based on B/C:1 Available funding:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Low-Cost Spot Improvements

Date of Program Methodology:5/1/2014

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	Exposure
	Traffic
All crashes	 Volume

Page 11 of 46

Roadway

What project identification methodology was used for this program?

- Crash frequency
- Crash rate

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?

• Other-B/C ratio

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

Ranking based on B/C:1 Available funding:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Median Barrier

Date of Program Methodology:11/9/2021

What is the justification for this program?

• FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway			
All crashes	TrafficVolume	Median width			

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Expected crash frequency with EB adjustment

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

No

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

How are projects under this program advanced for implementation?

• Other-Other BC

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).

Program: Pedestrian Safety

Date of Program Methodology:10/3/2022

What is the justification for this program?

• FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

Roadway

• All crashes

What project identification methodology was used for this program?

Exposure

- Crash frequency
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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?

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 Ranking based on B/C:1

Program: Right Angle Crash

Date of Program Methodology:10/3/2022

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

Exposure

Roadway

• All crashes

TrafficVolume

What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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?

• Other-BC

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 Ranking based on B/C:1

Program: Roadway Departure

Date of Program Methodology:2/2/2014

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	Exposure	Roadway			
All crashes	TrafficVolume	Horizontal curvatureFunctional classificationRoadside features			

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using SPFs

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

No

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

How are projects under this program advanced for implementation?

• Other-B/C ratio

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

Ranking based on B/C:1 Available funding:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Rural State Highways

Date of Program Methodology:10/3/2022

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	Exposure	Roadway
All crashes	TrafficVolume	Horizontal curvature

What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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?

• Other-BC

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).

Program: Segments

Date of Program Methodology:10/3/2022

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

Exposure

Roadway

All crashes

TrafficVolume

- Horizontal curvature
- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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?

• Other-BC

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

Ranking based on B/C:1 Cost Effectiveness:2

Program: Shoulder Improvement

Date of Program Methodology: 5/1/2014

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

Roadway

All crashes

Traffic Volume

What project identification methodology was used for this program?

Exposure

•

- Crash frequency
- Crash rate

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?

Other-B/C ratio

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

Ranking based on B/C:4 Available funding:1 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Sign Replacement And Improvement

Date of Program Methodology:5/1/2017

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?

		07
Crashes	Exposure	Roadway
All crashes	TrafficVolume	

What project identification methodology was used for this program?

Crash rate

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?

• Other-B/C ratio

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

Ranking based on B/C:4 Available funding:1 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Skid Hazard

Date of Program Methodology:2/1/2016

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

Roadway

• All crashes

TrafficVolume

What project identification methodology was used for this program?

Exposure

Crash frequency

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?

• Other-B/C ratio

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

Ranking based on B/C:1 Available funding:4 Ranking based on net benefit:2 Cost Effectiveness:2

Program: Vulnerable Road Users

Date of Program Methodology:10/3/2022

What is the justification for this program?

• FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

Roadway

All crashes

What project identification methodology was used for this program?

Exposure

- Crash frequency
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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?

• Other-BC

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 Ranking based on B/C:1

Program: Wrong Way Driving

Date of Program Methodology:2/6/2023

What is the justification for this program?

• FHWA focused approach to safety

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes

All crashes

- Traffic
- Volume

What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Probability of specific crash types

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

No

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

How are projects under this program advanced for implementation?

• Other-BC

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).

What percentage of HSIP funds address systemic improvements?

50

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

- Cable Median Barriers
- Clear Zone Improvements
- Horizontal curve signs
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips

What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan

• Stakeholder input

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

ITS technologies such as variable speed limits, radar speed feedback signs, adaptive signal controls, and intersection conflict warning systems are installed within the HSIP program.

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

Yes

Please describe how the State uses the HSM to support HSIP efforts.

The HSM was used in the development of in-house software which is used to identify locations and improvement types for rural 2 lane segments and intersections. The HSM is also used during corridor planning studies to compare different design alternatives.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED			
HSIP (23 U.S.C. 148)	\$75,660,000	\$59,595,746	78.77%			
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)	\$5,679,000	\$6,282,579	110.63%			
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	\$81,339,000	\$65,878,325	80.99%			

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

\$10,551,000

How much funding is obligated to local or tribal safety projects? \$8,720,557

How much funding is programmed to non-infrastructure safety projects? \$200,000

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

\$180,000

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

\$37,800,000

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.

The way projects are reported is based on the amount obligated when the first 292 is submitted for the project. In a lot of cases that amount is not the total project cost so that funding amount is tough to compare to the programmed amount. Although a project is only programmed within one study period it could be obligated over multiple study periods. A multi-million dollar project could be let within this study period but only a couple hundred thousand dollars is obligated during the same study period.

Typical project obstacles such as estimating project costs to be programmed, projects time line slipping due to environmental impacts, right-of-way impacts, can all be expected on any type of project.

Ways to overcome these obstacles is to do a better job of estimating projects and when scheduling projects allow for the proper time to accomplish environmental and ROW activities.

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
06C1	Roadside	Fencing	0		\$18000	\$20000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Interstate	0	0	State Highway Agency		Roadway Departure	
05GF			0		\$180000	\$200000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	State Highway Agency		PE	
04L9	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$1571287	\$1835933	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
05GE	Miscellaneous		0		\$15000	\$15000	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0	0	County Highway Agency		Intersections	
04HR	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$1908086	\$2173721	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
05WN	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$891632	\$1166025	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
04LC	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$1140324	\$1346729	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
04L8	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$369000	\$527261	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
04KD	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0		\$1573783	\$1872105	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	
07X2	Roadway delineation	Longitudinal pavement markings - remarking	34	Miles	\$29288	\$29788	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0	0	County Highway Agency		Roadway Departure	
07X3	Roadway delineation	Longitudinal pavement markings - remarking	105	Miles	\$221867	\$222367	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0	0	County Highway Agency		Roadway Departure	
07X1	Roadway delineation	Longitudinal pavement markings - remarking	64	Miles	\$1000289	\$1001289	HSIP (23 U.S.C. 148)	Rural	Local Road or Street	200	65	County Highway Agency		Roadway Departure	

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
06U7	Roadway	Rumble strips – edge or shoulder	40	Miles	\$267667	\$278667	HSIP (23 U.S.C. 148)	Rural	Major Collector	0	0	State Highway Agency		Roadway Departure	
06JF	Intersection geometry	Intersection geometry - other	3.1	Miles	\$5108201	\$5957654	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,252	65	State Highway Agency		Intersections	
06UM	Roadway	Roadway widening - travel lanes	11.8	Miles	\$373758	\$11041665	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,170	65	State Highway Agency		Roadway Departure	
04KR	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	6.9	Miles	\$9156394	\$9818497	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,070	65	State Highway Agency		Roadway Departure	
04XC	Alignment	Horizontal and vertical alignment	13.4	Miles	\$8494961	\$17282289	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,306	65	State Highway Agency		Roadway Departure	
05ET	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	10.5	Miles	\$6161937	\$16095289	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,764	55	State Highway Agency		Roadway Departure	
04RT	Roadway delineation	Longitudinal pavement markings - remarking	29.4	Miles	\$530430	\$534430	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Interstate	200	65	State Highway Agency		Roadway Departure	
06TQ	Roadway	Pavement surface – high friction surface	0.4	Miles	\$798910	\$892678	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Interstate	10,030	80	State Highway Agency		Roadway Departure	
06K6	Intersection geometry	Intersection geometry - other	0		\$0	\$0	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	2,390	65	State Highway Agency		Intersections	
06K4	Intersection geometry	Intersection geometry - other	1.6	Miles	\$3436806	\$4034575	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	2,062	65	State Highway Agency		Intersections	
06K5	Intersection geometry	Intersection geometry - other	2.4	Miles	\$6417030	\$7478327	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	2,961	65	State Highway Agency		Intersections	
05G9	Roadway delineation	Longitudinal pavement markings - remarking	44.4	Miles	\$195234	\$196434	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	1,627	65	State Highway Agency		Roadway Departure	
06U3	Roadway	Pavement surface – high friction surface	4.1	Miles	\$2462855	\$2744006	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	5,883	80	State Highway Agency		Roadway Departure	

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 SHSP FOR SITE EMPHASI SELECTION AREA	SHSP STRATEGY
05GC	Roadway delineation	Longitudinal pavement markings - remarking	20.7	Miles	\$361068	\$365468	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	11,400	75	State Highway Agency	Roadway Departure	
05GG	Roadside	Barrier- metal	0		\$170113	\$177613	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	3,769	70	State Highway Agency	Roadway Departure	
06C7	Roadway	Roadway widening - add lane(s) along segment	19.7	Miles	\$6282578	\$11910000	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial- Other	4,710	65	State Highway Agency	Lane Departure	
06C7	Roadway	Roadway widening - add lane(s) along segment	19.7	Miles	\$6751825	\$11910000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	4,710	65	State Highway Agency	Lane Departure	

Safety Performance

General Highway Safety Trends

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

PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020	2021	2022
Fatalities	136	134	116	129	130	102	141	148	137
Serious Injuries	738	803	692	649	570	520	548	622	622
Fatality rate (per HMVMT)	1.480	1.440	1.230	1.340	1.340	1.029	1.427	1.477	1.348
Serious injury rate (per HMVMT)	8.010	8.620	7.310	6.744	5.870	5.248	5.535	6.207	6.121
Number non-motorized fatalities	11	6	6	10	12	8	14	14	16
Number of non- motorized serious injuries	39	35	30	40	36	24	28	34	31











Non Motorized Fatalities and Serious Injuries

Describe fatality data source.

Other If Other Please describe

FARS & South Dakota Accident Records System

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

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	13.6	56.4	0.61	2.55
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	35.8	107.4	1.81	5.44
Rural Minor Arterial	20.2	64.6	1.94	6.2
Rural Minor Collector	3.2	14.2	2.12	9.45

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 Major Collector	23	88	2.08	7.97
Rural Local Road or Street	11.6	60.6	2.55	13.31
Urban Principal Arterial (UPA) - Interstate	4.2	24.8	0.51	3.03
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other	7.6	45	1.6	9.39
Urban Minor Arterial	6.6	59.2	0.67	6.05
Urban Minor Collector				
Urban Major Collector	2.2	21.6	0.82	7.94
Urban Local Road or Street	3.6	34.2	1.3	12.36

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				
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
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	0	0	0	0
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Year 2021

Safety Performance Targets

Safety Performance Targets

Calendar Year 2024 Targets *

Number of Fatalities:120.0

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

• Reduce total fatalities by 5.4% to 123 from a current safety level of 130 by December 31, 2026. To meet this target, South Dakota will need to reduce annual fatalities from 148 in 2021 to 120 in 2024, 115 in 2025, and 110 in 2026.

Number of Serious Injuries:540.0

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

• Reduce serious traffic injuries by 7.1% to 540.0 from a current safety level of 581.2 by December 31, 2026. To meet this target, SDOHS will need to reduce annual serious injuries from 620 in 2021 to 540 in 2024, 515 in 2025, and 505 in 2026.

Fatality Rate:1.170

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

• Reduce fatality rate by 12.0% to 1.17 from a current safety level of 1.33 by December 31, 2026.

Serious Injury Rate:5.520

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

1. Serious Injuries per 100 million VMT: Maintain a serious injuries per 100 million VMT rate five-year average at 5.52 or less for 2020-2024.

Total Number of Non-Motorized Fatalities and Serious Injuries:42.0

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

1. Non-motorized fatalities: Maintain the non-motorized fatalities five-year average at 12 or fewer per year for 2020-2024.

2. Non-motorized serious injuries: Decrease the non-motorized serious injuries five-year average to 30 or fewer per year for 2020-2024.

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

A one day work shop was conducted on April 4th, 2017 with SDDOT, SD Office of Highway Safety, FHWA SD Division Office, Rapid City MPO, Sioux City MPO, and Sioux Falls MPO representatives in attendance. The work shop went through the 5 performance measures in detail and the reporting requirements. There was a lot of discussion on current crash trends and external factors such as VMT, laws, and investments. Everyone involved agreed that the targets shall be data driven, realistic and attainable.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2022 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	123.9	131.6
Number of Serious Injuries	646.2	576.4
Fatality Rate	1.210	1.324
Serious Injury Rate	6.330	5.796
Non-Motorized Fatalities and Serious Injuries	39.0	43.4

Based on the numbers inputted at reporting time the safety targets for Number of Serious Injuries and Serious Injury Rate were met. The Number of Fatalities, Fatality Rate, and Non-Motorized Fatalities and Serious Injuries were not met. There was a significant increase in impaired and speed related crashes in 2020 and 2021. There was a 67.9% increase in alcohol related Fatality Crashes in 2020 compared to 2019 an a 57.7% increase in speed related Fatality Crashes. 2021 had similar numbers to 2020. These numbers came back down in 2022. These increases were the primary reason the Number of Fatalities and Fatality Rate targets were not met.

Applicability of Special Rules

Does the VRU Safety Special Rule apply to the State for this reporting period? No

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

No

Based on the data reported in section 32, the 2016-2020 rate is 2.36 and the 2018-2022 rate is 2.21 so the HRRR special rule does not apply.

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	2016	2017	2018	2019	2020	2021	2022
Number of Older Driver and Pedestrian Fatalities	16	20	23	11	25	21	22
Number of Older Driver and Pedestrian Serious Injuries	62	53	55	44	54	67	82

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.

The goal of the 2019 SHSP is to reduce traffic fatalities to 100 and serious injuries to 400 by 2024. There were 148 traffic fatalities and 621 serious injuries in 2021. Although based on the 2020 and 2021 numbers they are trending the in the wrong direction, the 2019 numbers set a record low for fatalities and serious injuries. The measures taken with the HSIP program are showing positive results when looking at a 5 year average trend. The nationwide increase in speed and impairment related fatalities has been very significant in the increases in South Dakota as well. In 2022, South Dakota saw the number of fatalities drop for the first time since 2019.

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

HSIP Obligations

Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

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		21.8	39	0.2	0.4
Roadway Departure		52.6	234.6	0.57	2.39
Intersections		28.6	159.8	0.28	1.63
Pedestrians		12.2	24.6	0.12	0.25
Bicyclists		0.8	6.4	0.01	0.07
Older Drivers		20.4	61.6	0.21	0.63
Motorcyclists		18.6	138.6	0.22	1.41
Work Zone		2.2	15.6	0.02	0.16
Horizontal Curves		28.4	105.8	0.32	1.08

Year 2022

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)
Local Safety		47	271.4	0.5	2.77





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? 08/19/2019

What are the years being covered by the current SHSP?

From: 2019 To: 2024

When does the State anticipate completing it's next SHSP update?

2024

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	MIRE NAME (MIRE NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVE ROADS - INTERSE	D CTION	NON LOCAL PAVE ROADS - RAMPS	D	LOCAL PAVED RO	ADS	UNPAVED ROADS	UNPAVED ROADS	
	NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	
ROADWAY SEGMENT	Segment Identifier (12) [12]	1	1					1	1	1	1	
	Route Number (8) [8]	1	1									
	Route/Street Name (9) [9]	1	1									
	Federal Aid/Route Type (21) [21]	1	1									
	Rural/Urban Designation (20) [20]	1	1					1	1			
	Surface Type (23) [24]	1	1					1	1			
	Begin Point Segment Descriptor (10) [10]	1	1					1	1	1	1	
	End Point Segment Descriptor (11) [11]	1	1					1	1	1	1	
	Segment Length (13) [13]	1	1									
	Direction of Inventory (18) [18]	1	1									
	Functional Class (19) [19]	1	1					1	1	1	1	

ROAD TYPE	*MIRE NAME (MIRE	NON LOCAL PAVE ROADS - SEGMEN	ED IT	NON LOCAL PAVI ROADS - INTERSE	ED ECTION	NON LOCAL PAVE ROADS - RAMPS	Ð	LOCAL PAVED ROADS UNPAVED RO			
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	1	1								
	Access Control (22) [23]	1	1								
	One/Two Way Operations (91) [93]	1	0.95								
	Number of Through Lanes (31) [32]	1	1					1	1		
	Average Annual Daily Traffic (79) [81]	1	1					1	1		
	AADT Year (80) [82]	1	1								
	Type of Governmental Ownership (4) [4]	1	1					1	1	1	1
INTERSECTION	Unique Junction Identifier (120) [110]			1	1						
	Location Identifier for Road 1 Crossing Point (122) [112]			1	1						
	Location Identifier for Road 2 Crossing Point (123) [113]			1	1						
	Intersection/Junction Geometry (126) [116]			1	1						
	Intersection/Junction Traffic Control (131) [131]			1	1						
	AADT for Each Intersecting Road (79) [81]			1	1						
	AADT Year (80) [82]			1	1						
	Unique Approach Identifier (139) [129]			1	1						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					1					
	Location Identifier for Roadway at					1					

ROAD TYPE	*MIRE NAME (MIRE	NON LOCAL PAVE ROADS - SEGMEN	ED IT	NON LOCAL PAVE ROADS - INTERSE	ED ECTION	NON LOCAL PAV ROADS - RAMPS	ED	LOCAL PAVED RO	DADS	UNPAVED ROADS	
	10.)	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]					1					
	Ramp Length (187) [177]					1					
-	Roadway Type at Beginning of Ramp Terminal (195) [185]					1					
	Roadway Type at End Ramp Terminal (199)[189]					1					
	Interchange Type (182) [172]					1					
	Ramp AADT (191) [181]					1					
	Year of Ramp AADT (192) [182]					1					
	Functional Class (19) [19]					1					
	Type of Governmental Ownership (4) [4]					1					
Totals (Average Percer	it Complete):	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00

*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.

South Dakota is aggressively collecting the needed data for the MIRE fundamental data elements. South Dakota will continue on this path as only a few data elements remain incomplete on the list. South Dakota is aggressively gathering intersection control types from the local system in order to not only get more complete data, but also to help develop state SPFs.

Optional Attachments

Program Structure:

Project Implementation:

Safety Performance:

Evaluation:

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.