MINNESOTA

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

Minnesota traffic safety outcomes are showing signs of success and continued struggles since 2020. Fatalities over the past three years have trended down 8 percent annually whereas the prior trend was toward stagnation (2017-2019 trend at up 0.8 percent per year). However serious injuries continue to rise: in the past three years the trend has been up 8% annually (compared to 9 percent per year decrease from 2017-2019). Minnesota distributes HSIP dollars geographically and between state and local partners based on fatal and serious injury crashes. The program emphasizes low-cost, high-impact strategies that are widely deployed using systemic planning; however site specific projects are considered using benefit-cost analysis similar to HSM techniques. Minnesota will continue initiatives to create safer roads for all road users; at this time, additional efforts are aimed at addressing underserved, vulnerable, or high risk crash types. Updates to both county level and district level systemic plans will help address these safety issues. Legislative changes in 2023 and upcoming are likely to impact traffic safety. Minnesota's 2024-2025 Transportation Omnibus Bill created an Advisory Council of Traffic Safety to advise the governor and state agencies on traffic safety, including the review and issuing of new state safety funds. In August 2023, recreational marijuana was legalized for use in Minnesota--continued monitoring of impact to impairment crashes will be needed. MnDOT does not see a need to drastically alter the HSIP Program and the mechanisms in place to ensure the funding is going to the facilities with the greatest needs and/or at the most risk for fatal and serious injury crashes. MnDOT does plan to continue to modify and improve the program over time by adjusting funding amounts per region, the split between local and trunk highway, and closely matching the funding with the overall SHSP focus area need. MnDOT published an Implementation Plan for HSIP in June 2024 outlining specific initiatives and programs in the coming years. (See link at https://edocs-public.dot.state.mn.us/edocs_public/DMResultSet/download?docId=38677055)

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 Minnesota HSIP program is split between Local and State projects. MnDOT Office of Traffic Engineering (OTE) solicits projects from local governing units for the next four years; a parallel solicitation for State projects is issued to the districts. These solicitations aim to fully program safety projects in the next two years, but projects three to four years out are awarded to ensure planning. A parallel process is conducted within the Minneapolis-Saint Paul Metro that is coordinated through the MPO. Funding is distributed between Local and State based on fatal and serious injury crashes; distribution between each district or Area Transportation Partnership is based on the location of these fatal and serious injury crashes.

OTE approves all State and Local HSIP projects before they are entered in the STIP: the award memo received is the basis for being allowed to enter the STIP.

Where is HSIP staff located within the State DOT?

Operations

How are HSIP funds allocated in a State?

- Central Office via Statewide Competitive Application Process
- Formula via Districts/Regions
- Formula via MPOs

The allocation of HSIP funds is based on the distribution of fatal and serious injury crashes. Funds are split geographically by District or ATP then again based on state versus local system based on fatal and serious injury crashes. In Greater Minnesota (i.e., outside the 8-county Twin Cities metro), these funds are managed by Central Office via Statewide Competitive Application in an annual solicitation. In the Metro, these funds are managed by Met Council (i.e., MPO) in a competitive solicitation every two years.

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

MnDOT distributes funds to local road agencies--counties and cities--through the annual Greater Minnesota Local Solicitation (i.e., outside 8-county Twin Cities Metro) and biannual Metro Local Solicitation. OTE with representatives from State-Aid and MnDOT District Traffic Engineers, prioritize the local HSIP projects for each Area Transportation Partnership (ATP). Districts are given the opportunity to comment on the prioritization of projects. The allocation of HSIP funds is based on the distribution of fatal and serious injury crashes. Funds

are distributed as follows: Step 1: Funds are split based on % of K and A crashes in each District. Step 2: Funds are split again based on % of K and A crashes occurring on State vs. local system. MnDOT continues to track changes in fatal and serious injury crashes; these changes are not uniform across all geographies or systems. As such, MnDOT revised the HSIP targets based on these updated crash outcomes. Prior targets distributed approximately 60 percent of federal HSIP funds to local agencies; targets beginning in 2026 have been revised to distribute over 70 percent of funds to local agencies. State Aid continues efforts to encourage participation by cities and tribal governments; similarly conversations around how to further streamline the process of federal funding requirements for agencies with smaller staffing or resources continue. MnDOT developed a County Road Safety Plan for all 87 counties within the state. These plans provide (1) systemic risk assessment, (2) countermeasure selection criteria, (3) application project sheets, and (4) outreach/engagement as a tool for local traffic safety programs. Analysis of fatal and serious injury crashes within the respective district provides a systemic risk assessment based on the site characteristics over-represented in these crashes. A site or corridor with high risk may have zero crashes at this time but has the characteristics for a proactive safety improvement--especially important for rural, low-volume areas. Based on these characteristics, a decision tree was developed to outline which safety countermeasures would be most effective for these conditions. One-page summaries of the risk factors, recommended projects, costs, and site characteristics are included for all high risk and county-nominated projects; these project summaries can be appended to solicitation materials to streamline the process considerably. Outreach with county and other safety staff helps in training and buy-in on the HSIP approach. A subset of counties has opted to join OTE in updating the County Road Safety Plan. This phased update is continuing. As part of this update, some plans have incorporated further safety assessments and project screening per SS4A guidance. These plans will better position communities to utilize Safe Streets For All (SS4A) program funds. Minnesota currently has 35 counties, cities, MPOs, and tribal communities with a SS4A grant. MnDOT is piloting two systemic safety plans for cities, focused primarily on the Municipal State Aid System to help cities to prioritize and apply for HSIP funds. While less exhaustive than the CRSPs, these are intended to provide a systemic safety approach to city roads that can be replicated easily for other interested agencies. MnDOT provided technical assistance and funding to White Earth Nation Tribe the development of a Tribal Transportation Safety Plan which led to selection for a 2024 SS4A Implementation Grant. MnDOT has also been working with more engagement with Tribal Nations. In partnership with OTE, White Earth Nation is developing a systemic safety plan using HSIP funds to improve traffic safety and to facilitate future applications for local HSIP funds. The local roadway system does not always have obvious "black-spots" of sustained crash locations. These systemic safety plans provide a method of proactively addressing fatal and serious injury crashes on the local and tribal system and are given priority in the HSIP project selection process.

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

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

Describe coordination with internal partners.

MnDOT's Office of Traffic Engineering (OTE) works closely with the State Aid for Local Transportation (SALT) office as well as district traffic engineers in the distribution of HSIP funds.

A representative from the State Aid office sits on the both the steering and selection committees for HSIP. The offices work together to educate local agencies and district personnel on the HSIP program. Once projects are selected the state aid office coordinates with the local agencies and provides support as necessary.

The HSIP project selection committee asks for input from the district traffic engineers during the selection and

award processes. District traffic engineers provide vital background information on proposed projects as well as adding the local perspective. Additionally, local partners are asked to provide some documentation that the district traffic engineer is aware of and supportive of their prospective project if it impacts MnDOT roadways.

MnDOT also holds quarterly TEO (Traffic Engineering Organization) Safety Subcommittee meetings, at which additional HSIP coordination occurs.

Identify which external partners are involved with HSIP planning.

- FHWA
- Governors Highway Safety Office
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-City Engineer Safety Committee
- Other-County Engineer Safety Committee

The recent 2024-2025 Transportation Omnibus Bill created of "Advisory Council of Traffic Safety" to advise governor and state departments on traffic safety and to review and issue grants, including additional state safety funds.

Describe coordination with external partners.

Districts and Counties collaborate extensively to develop and implement safety plans as funded by HSIP; a subset of Minnesota's 87 counties have opted in to updating these plans.

MPOs review the priorities of the HSIP selection committees to ensure compliance with long range goals. The annual HSIP solicitation briefings provide an overview of the process.

MnDOT planning staff and FHWA completed a review of coordination with MPOs across all programs. The report highlighted HSIP coordination in Greater Minnesota (i.e. outside Twin Cities metro) needs improvement. The HSIP solicitation guidance has been updated to place greater emphasis on early coordination with MPOs. To this end, MnDOT has clarified the procedure and is educating both Local Agencies and District staff on appropriate timing for engagement. For those projects that occur within planning boundaries, a review of the application by the MPO prior to submission is necessary: MPO staff provide a letter of support and prioritization ranking. Without this letter, a project cannot be further scored. All award letters are now provided to both the applicant and appropriate MPO to streamline processing of TIPs. OTE continues to discuss traffic safety trends with MPOs at update meetings and receive feedback about regional needs.

MnDOT Metro District solicits a biannual solicitation for HSIP funds. MnDOT Metro District and the Metropolitan Council have been working on modifying the timing of their HSIP Solicitation for Local Projects with the intent on better aligning with the regional solicitation and other federal funding programs administered by the Metropolitan Council. Additional selection committee members from OTE provide feedback and consistency with the Greater Minnesota solicitation. In both HSIP solicitations, feedback is encouraged with each iteration: both before and after project selection. Typically, a group of core selection members work with a rotating ground of selection team members, comprising MnDOT and Local Agencies to help ensure that projects selected reflect the needs, desires, and fairness that is necessary for a balanced program.

Minnesota's Toward Zero Deaths (TZD) program is the primary way local partners can integrate and become involved in Statewide safety programming. TZD regional coordinators build coalitions through outreach and workshops helping to direct action among local partners.

Describe HSIP program administration practices that have changed since the last reporting period.

MnDOT intends to integrate the Safe System Approach into the project development process and agency policies and practices. This work is currently taking place with the goal of ensuring the SSA is incorporated through MnDOT. This work will incorporate SSA elements including Complete Streets, Performance Based Practical Design, Context Sensitive Solutions and other related efforts into the MnDOT project develop process. This may occur with the development of a Technical Memorandum and through adding SSA elements it to existing manuals and best practices. MnDOT Office of Traffic Engineering has been awarded funding from the State's non-State Road Construction budget allocation. The funding of $200,000 allowed MnDOT to hire a consultant to assist MnDOT staff in writing, reviewing, organizing, and promoting the implementation of the Safe System Approach into a Policy and Practices or Technical Memorandum for the whole Minnesota Department of Transportation. MnDOT anticipates legislative changes implemented this last legislative session and those anticipated in future sessions to impact traffic safety. Transportation Research Syntheses (TRS) were developed to understand the impact of legalized recreational marijuana in different jurisdictions. In August 2023, Minnesota legalized the use of recreational marijuana statewide: continued monitoring of the impact on impairment crashes will be needed. Similarly the Legislature has requested more information with a TRS on Speed Safety Cameras/Automated Speed Enforcement and the implementation concerns.

Program Methodology

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

Yes

See attachment "HSIP funding guide FINAL.pdf" for current guidance. Minnesota anticipates updating the HSIP manual to better reflect the process for how applicants will coordinate and solicit approval from our eight Metropolitan Planning Organizations.

Select the programs that are administered under the HSIP.

- HRRR
- HSIP (no subprograms)

Minnesota has had a considerable program with county roadway agencies to implement safety improvements on roads that meet this definition of High-Risk Rural Roads. The extensive development of the County Road Safety Plans has made planning and programming safety projects on these roads far more achievable. The solicitations emphasize low-cost, high-benefit countermeasures that are widely deployed: these sites are overwhelmingly rural in nature.

Program: HRRR

Date of Program Methodology:8/1/2015

What is the justification for this program?

- Other-Special Rule

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume • Lane miles	• Median width • Horizontal curvature • Roadside features • Other-distance to prior STOP sign;

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Other-Systemic safety plan risk analysis

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

Ranking based on B/C:5
Available funding:5
Cost Effectiveness:5
Other-Treatment effectiveness:5
Other-Site Selection: planning or spot location:5

Per discussion with MnDOT staff, while functional class is not part of the project review process, data is collected and used to code projects meeting the HRRR definition. Local HSIP solicitation emphasizes low-cost/high-benefit countermeasures that are widely deployed: these sites are overwhelming rural in nature.

Program: HSIP (no subprograms)

Date of Program Methodology:8/1/2015

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	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume • Lane miles	• Median width • Horizontal curvature • Roadside features • Other-distance to prior STOP sign; • Other-shoulder width

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Critical rate
- Excess proportions of specific crash types
- 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?

- 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

Ranking based on B/C:5
Available funding:5
Cost Effectiveness:5
Other-Treatment Effectiveness:5

Other-Site Selection: planning or spot location:5

Less than 10 percent of fatal and serious injury crashes occur at sustained, high crash locations. This speaks to the need for safety investments to be proactively and systemically deployed over many miles and many intersections to the greatest extent possible. However, MnDOT also recognizes that these high crash locations--while infrequent--require additional safety investment. HSIP solicitations encourage both of these project types. All projects are competitive across key areas, however the metrics to evaluate each project type (reactive vs. proactive) are designed to achieve parity in the final ranking.

What percentage of HSIP funds address systemic improvements?

62

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

- Cable Median Barriers
- Clear Zone Improvements
- High friction surface treatment
- Horizontal curve signs
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Wrong way driving treatments

What process is used to identify potential countermeasures?

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

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

Connected vehicle and ITS projects are considered for HSIP funding in Minnesota. Funds for these initiatives are available from multiple sources, so while the projects are competitive in HSIP solicitation, investments and investigations in Minnesota have been funded outside of HSIP. MnDOT has created a standalone Connected Autonomous Vehicle (CAV-X) office to advance connected and automated vehicle and other advanced ITS technologies in Minnesota. HSIP funds are no longer directly funding this program as it is supported by other state funds. www.mndot.gov/automated/index.html

The Minnesota CAV-X office is funded separate from HSIP with state money set aside by the Legislature. ITS projects will continue to be competitive in HSIP solicitation rather than program support.

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.

Minnesota does not use the more advanced, predictive methods in the HSM. However, CMFs are used to rank and select reactive safety projects.

Central Office performs a limited form of Highway Safety Manual analysis at the request of District Traffic Engineering staff. Reactive projects use a simplified form of HSM methods. Spot location projects are evaluated based on prior crash history weighted by the appropriate crash modification factor for the crash type and countermeasure proposed; the resulting benefit-cost ratio is used to prioritize which of these reactive projects receive funding. While training on the HSM predictive analysis continues, widespread use for proactive projects has not been adopted: Minnesota has developed risk factors for proactive projects rather than a prediction of total crashes.

Currently the full HSM predictive models and IHSDM software are used for corridor studies and larger MnDOT projects to evaluate 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)	$48,224,115	$26,436,073	54.82%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$3,056,305	$714,078	23.36%
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)	$3,939,564	$1,352,886	34.34%
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	$55,219,984	$28,503,037	51.62%

Minnesota has obligated the full amount for High Risk Rural Roads (HRRR) at the end of the federal fiscal year; this report is based on state fiscal year. The obligation rate for Minnesota has been trending up since 2020. These improvements are seen most significantly in the local HSIP projects. Year Total Rate Local Rate 2020 40.7% 13.1% 2021 53.3% 2.3% 2022 47.1% 25.8% 2023 30.4% 14.0% 2024 51.6% 31.5%

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

40%

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

24%

As of April 2024, 31 counties have completed an update to their County Road Safety Plan and many have already started using recommended projects from their latest plan to apply for HSIP funds. Currently, over 85 percent of counties are participating in HSIP Solicitation for funds from 2016-2026.

MnDOT project selection is based on programming targets; target distributions have been modified to approximately 70 percent of funds to local agencies. While these targets inform project selection it may not

follow through the life of the project. Examples include a prior history of local project costs being over-estimated or use of debt-based finance tools like Advanced Construction to pay for expenditures. These result in realized programmed funds being lower than the project selection targets used during solicitation.

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

7%

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

5%

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.

MnDOT programs HSIP funds to 100% apportionment and will monitor for effects on obligation rate. Whereas most specialty programs program to 80% to 90% of apportionment, this added programming of safety will continue to raise the obligation rate. OTE continues to have on-going discussions with MnDOT Districts on creating shelf ready safety projects to better capitalize on any cost-savings in the HSIP projects. Funding to Local safety projects continues to report at a lower obligation rate compared to programmed projects. Project estimates derived from prior published County and District Safety Plans are not necessarily consistent with bid prices: where the estimates are high (due to prior higher costs or recent efficiency advances), the obligation amount will show a lower rate reflecting reduced funding due to actual costs. is reduced. Outreach continues to encourage applications to review and revise any published estimates with current bids where appropriate. Prior analysis (2017) highlighted that many local HSIP projects were programmed but not awarded as projects on the time line as scheduled. MnDOT also tends to utilize Advanced Construction funds on local projects (i.e., financing a project but delaying the use of regular federal funding until times more closely match actual expenditures) to ensure that all federal funds available are used. While this process maximized the number of safety projects delivered by HSIP funds it depresses the reported obligation amounts. Current process attempts to improve estimates and project process which has led to the obligation rate for local projects rising from 13% in 2020 to 32% in 2024.

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
#6924(240) (SP 069-070-062) SAINT LOUIS COUNTY: 6 INCH WET REFLECTIVE EPOXY EDGLINES AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	36.1	Miles	$616070	$684522	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#6924(182) (SP 069-070-071) SAINT LOUIS COUNTY: HIGH FRICTION SURFACE TREATMENTS ON CSAH-29, CSAH-99, CSAH-100	Roadway	Pavement surface – high friction surface	5	Curves	$420992	$467768	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Keep vehicles on road
#6924(239) (SP 069-070-077) SAINT LOUIS COUNTY: 6 INCH GROUND IN WET REFLECTIVE AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	51.8	Miles	$67749	$75277	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#6924(238) (SP 069-070-078) SAINT LOUIS COUNTY: 6 INCH GROUND IN WET REFLECTIVE EDGELINES AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	45.8	Miles	$411284	$456983	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#0061(351) (SP 6926-57, 069-070-059) MNDOT/SAINT LOUIS COUNTY: J-TURN AT MN-61 AND CSAH-42	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	$1799460	$2012400	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	J-turns
#6924(008) (SP 6947-57, 069-070-058) MNDOT/SAINT LOUIS COUNTY: REALIGNMENT AND LEFT TURN	Intersection geometry	Intersection realignment	1	Intersections	$1613655	$1804950	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	Reduce rear-ends

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
LANES AT MN-37 AND CASH-5															
#8824(250) (SP 088-070-076) ATP-2 COUNTIES: 6 INCH EDGELINES ON VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	179.9	Miles	$186678	$207420	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#6024(222) (SP 6011-30, 060-070-020) MNDOT/POLK COUNTY: ROUNDABOUT AT US-75 AND CSAH-21	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$1970514	$2634135	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	Roundabout
#0524(277) (SP 005-070-009; -011; -012; -013) BENTON COUNTY: RUMBLE STRIPES AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	6.7	Miles	$257690	$342577	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#1824(233) (SP 018-070-022) CROW WING COUNTY: RURAL INTERSECTION LIGHTING AT VARIOUS SITES	Lighting	Intersection lighting	18	Intersections	$259200	$288000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Intersections	Intersection lighting
#4924(160) (SP 049-070-030) MORRISON COUNTY: SINUSOIDAL RUMBLE STRIPES AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	47	Miles	$461700	$582164	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#7124(021) (SP 071-070-044) SHERBURNE COUNTY: RURAL INTERSECTION LIGHTING AT VARIOUS SITES	Lighting	Intersection lighting	24.1	Miles	$527635	$586261	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Intersections	Intersection lighting
#7323(274) (SP 073-070-029) STEARNS COUNTY: UPGRADE SIGNAL	Pedestrians and bicyclists	Pedestrian signal - other	20	Intersections	$1359699	$1510777	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Pedestrians	Improve intersection crossings

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
HEADS AND COUNTDOWN TIMERS AT VARIOUS SITES															
#8024(069) (SP 080-070-012) WADENA COUNTY: 6 INCH WET REFLECTIVE EPOXY EDGLINES AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	77.1	Miles	$175862	$346155	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#8824(303) (SP 088-070-087) ATP-3 COUNTIES: CENTERLINE AND EDGELINE MUMBLE STRIPS AND INTERSECTION LIGHTING AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	108.2	Miles	$843714	$843714	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#0023(326) (SP 4802-25) MNDOT: REALIGNMENT AND LEFT TURN LANES AT MN-23 AND 100TH AVE, MN-23 AND 90TH AVE	Intersection geometry	Intersection realignment	2	Intersections	$1406186	$1562429	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	Reduce rear-ends
#4824(118) (SP 4811-80) MNDOT: J-TURN AT US-169 AND CSAH-8	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	$937023	$1478054	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	J-turns
#4924(194) (SP 4903-76) MNDOT: J-TURNS AT US-10 AND MN-115	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	3	Intersections	$2413327	$2762153	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	J-turns
#8824(302) (SP 8816-3524) MNDOT: ROAD SAFETY AUDIT ON US-169 FROM ELK RIVER TO ZIMMERMAN	Miscellaneous	Road safety audits	1	Road safety audit	$8335	$8335	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	State Highway Agency	Spot	Data	Safety studies

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
#0325(073) (SP 003-070-019) BECKER COUNTY: PRELIMINARY ENGINEERING FOR COUNTYWIDE RURAL INTERSECTION LIGHTING PROJECT	Lighting	Intersection lighting	1	Preliminary engineering plans	$29700	$33000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Intersections	Intersection lighting
#5624(254) (SP 056-070-030) OTTER TAIL COUNTY: CENTERLINE RUMBLE STRIPS AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	70.1	Miles	$368107	$418983	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#5624(310) (SP 056-070-031) OTTER TAIL COUNTY: 6 INCH GROUND IN WET REFLECTIVE AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	369.3	Miles	$400000	$450000	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#5624(269) (SP 056-070-034) OTTER TAIL COUNTY: CONVERT TT INTERSECTIONS TO SINGLE-T INTERSECTIONS ON CSAH-5 AND CSAH-16	Intersection geometry	Intersection realignment	2	Intersections	$400000	$450000	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Intersections	Improve skewed intersection sight-lines
#5624(073) (SP 5607-44) MNDOT: J-TURN AT US-10 AND CSAH-60	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	$51557	$65446	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	J-turns
#5624(151) (SP 5623-39) MNDOT: SIGN PANEL AND STRUCTURE UPGRADES ON MN-108	Roadway signs and traffic control	Roadway signs (including post) - new or updated	25.8	Miles	$271713	$306348	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	Delineate intersection maneuvers

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
#5524(165) (SP 055-070-022) OLMSTED COUNTY: CENTERLINE RUMBLE STRIPS AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	35	Miles	$121531	$135035	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#7924(131) (SP 079-070-022) WABASHA COUNTY: 2-FT SHOULDER, 6-INCH GROUND IN WET REFLECTIVE, SHOULDER RUMBLE STRIPES ON CSAH-7	Roadway	Rumble strips – edge or shoulder	5.6	Miles	$314078	$348975	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#0014(349) (SP 2002-37) MNDOT: HIGH TENSION CABLE BARRIER ON US-14 FROM CSAH-9 TO CSAH-5	Roadside	Barrier – cable	1	Intersections	$2495345	$2772605	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Roadway Departure	High tension cable median barrier
#5524(181) (SP 5580-100) MNDOT: HIGH TENSION CABLE BARRIER ON I-90 FROM MN-42 TO CSAH-10	Roadside	Barrier – cable	4	Miles	$819858	$920954	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Roadway Departure	High tension cable median barrier
#3224(079) (SP 032-070-005) JACKSON COUNTY: ROUNDABOUT AT CSAH-29 AND CSAH-34	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$500000	$1637142	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Intersections	Roundabout
#0022(306) (SP 0714-35, 040-070-007) MNDOT/LE SUEUR COUNTY: ROUNDABOUT AT MN-22 AND CSAH-26	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$3779425	$4398401	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	Roundabout
#0724(050) (SP 0714-40) MNDOT: ROUNDABOUT AT	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$296958	$332398	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	Roundabout

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
MN-22 AND MSAS-157/AUGUSTA DR															
#0824(068) (SP 0804-119, 148-070-001) MNDOT/NEW ULM: ROUNDABOUT AT US-14 AND MSAS-122/HIGHLAND AVE	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$2149444	$2403833	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	Roundabout
#8324(172) (SP 083-070-016) WATONWAN COUNTY: SINUSOIDAL RUMBLE STRIPES AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	35	Miles	$211500	$235000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#3424(291) (SP 034-070-017) KANDIYOHI COUNTY: 6 INCH GROUND IN WET REFLECTIVE AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	50.7	Miles	$285743	$317492	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#4324(290) (SP 043-070-022) MCLEOD COUNTY: WET REFLECTIVE RUMBLE STRIPES AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	8.3	Miles	$100606	$111785	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#4324(290) (SP 043-070-022) MCLEOD COUNTY: WET REFLECTIVE RUMBLE STRIPES AT VARIOUS SITES	Roadway	Rumble strips – edge or shoulder	8.3	Miles	$160021	$177800	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Rumble stripEs
#4323(279) (SP 043-070-023) MCLEOD COUNTY: ROUNDABOUT AT CSAH-115 AND CSAH-25	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$860000	$2408535	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Spot	Intersections	Roundabout
#4323(287) (SP 043-070-024) MCLEOD COUNTY: 6 INCH GROUND IN	Roadway delineation	Wider Edge Lines (6 inch markings)	8.7	Miles	$115024	$127804	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines

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
WET REFLECTIVE STRIPING AT VARIOUS SITES															
#4724(226) (SP 047-070-016) MEEKER COUNTY: 6 INCH EDGELINES AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	107.2	Miles	$112470	$124967	HRRR Special Rule (23 U.S.C. 148(g)(1))	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#8824(003) (SP 8828-271) MNDOT: CENTERLINE RUMBLE STRIPS AON CONCRETE ROADWAYS	Roadway	Rumble strips – edge or shoulder	26	Miles	$2001315	$2223684	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Lane Departure	Rumble stripEs
#8825(214) (SP 8828-285) MNDOT: CHEVRON INSTALLATION DISTRICTWIDE	Roadway signs and traffic control	Curve-related warning signs and flashers	47	Curves	$336540	$376300	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Roadway Departure	Delinate curves
#8824(134) (SP 8816-3367) MNDOT: TRAFFIC SAFETY EVALUATIONS	Miscellaneous	Transportation safety planning	1	Program	$1500000	$1500000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	Non-infrastructure	Non-infrastructure	Data	Safety studies
#8825(042) (SP 8816-3371) MNDOT: SFY 2025 TZD COORDINATOR SALARIES AND EXPENSES	Miscellaneous	Transportation safety planning	8	Regional coordinators	$1000000	$1000000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	Non-infrastructure	Non-infrastructure	Traffic Safety Culture & Awareness	Improve outreach and coordination with safety partners
#8824(084) (SP 8816-3589) MNDOT: CRASH DATABASE ENHANCEMENTS	Miscellaneous	Data analysis	1	Program	$250000	$250000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	Non-infrastructure	Non-infrastructure	Data	Safety studies
#8824(110) (SP 8816-3601) MNDOT: PURCHASE AND IMPLEMENTATION OF SAFETY ANALYSIS COMPUTER SYSTEM	Miscellaneous	Data analysis	1	Program	$900000	$900000	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	Non-infrastructure	Non-infrastructure	Data	Safety studies

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
#0224(051) (SP 002-622-041) ANOKA COUNTY: ROUNDABOUT AT CSAH-22 AND CSAH-7	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$1350000	$2763865	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Spot	Intersections	Roundabout
#1024(279) (SP 010-030-012) CARVER COUNTY: 6 INCH EDGELINES AT VARIOUS SITES	Roadway delineation	Wider Edge Lines (6 inch markings)	44.1	Miles	$810000	$936000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Enhanced edgelines
#1024(081) (SP 010-640-016) CARVER COUNTY: SHOULDER WINDENING ON CSAH-40 FROM MN-25 TO CSAH-52	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	4.1	Miles	$2000000	$7477673	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Lane Departure	Recoverable roadside
#2724(071) (SP 027-617-033) HENNEPIN COUNTY: UPGRADE PEDESTRIAN RAMPS, REMOVE RIGHT TURN ISLANDS	Pedestrians and bicyclists	Modify existing crosswalk	0.7	Miles	$2000000	$2862000	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Systemic	Pedestrians	Improve intersection crossings
#7024(054) (SP 070-678-004) SCOTT COUNTY: ROUNDABOUT AT CSAH-78 AND CSAH-69	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$1191515	$2022845	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	County Highway Agency	Spot	Intersections	Roundabout
#8224(128) (SP 192-108-029) WOODBURY: 4-TO-3 LANE CONVERSION ON MSAS-108/LAKE RD	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	3.3	Miles	$1403192	$2370109	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	City or Municipal Highway Agency	Systemic	Pedestrians	Improve intersection crossings
#2524(065) (SP 2510-55, 025-070-020) MNDOT/GOODHUE COUNTY: ROUNDABOUT AT	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	$1634210	$1833567	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Intersections	Roundabout

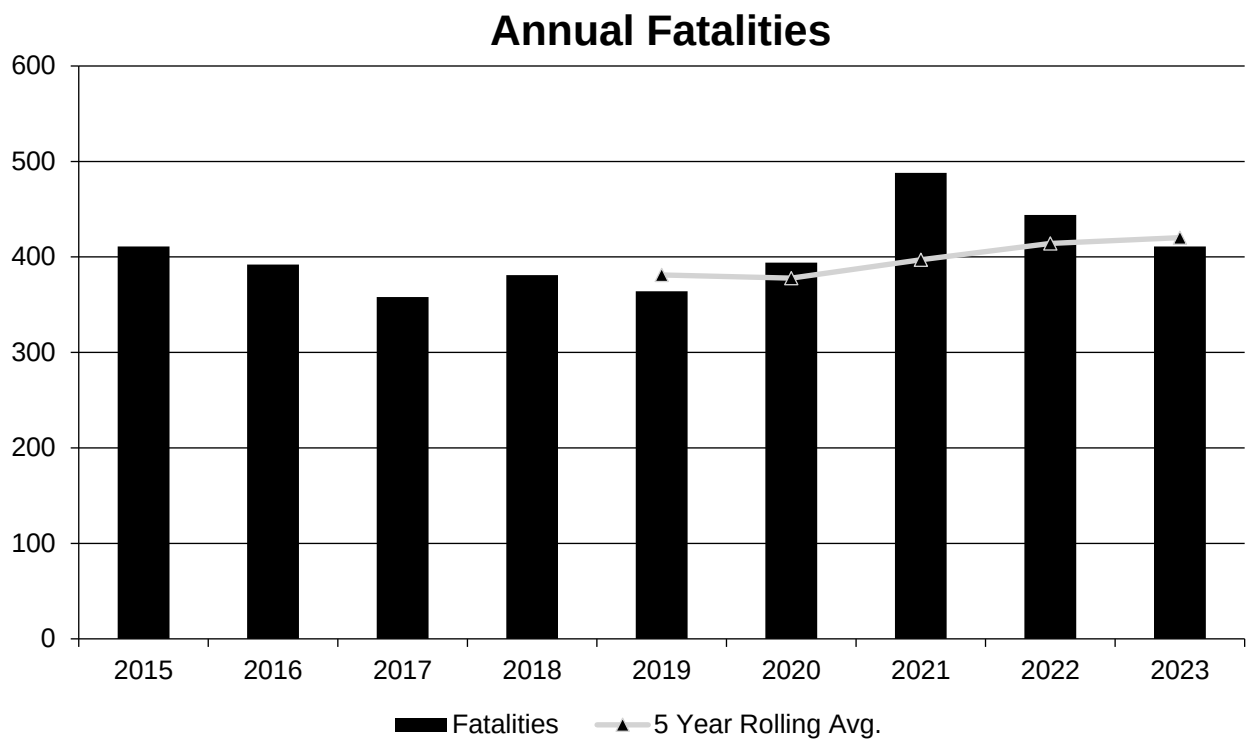
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
MN-58 AND CSAH-9															
#0055(320) (SP 2723-144) MNDOT: 3/4 INTERSECTIONS AND ACCESS MANAGEMENT ON MN-55 FROM FERNBROOK LN TO GENERAL MILLS BLVD	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	3	Intersections	$3300046	$3728253	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	J-turns
#6224(047) (SP 6215-117) MNDOT: 4-TO-3 LANE CONVERSION ON MN-51	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.4	Miles	$1892892	$2126215	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Spot	Pedestrians	Improve intersection crossings
#0169(354) (SP 7009-85) MNDOT: J-TURNS ON US-169 FROM MN-21 TO MN-41	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	2	Intersections	$1187635	$1319595	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	J-turns
#8824(133) (SP 8816-3525) MNDOT: METRO WRONG-WAY CRASH PLAN	Miscellaneous	Transportation safety planning	1	Program	$94551	$94551	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0	0	Non-infrastructure	Systemic	Intersections	Prevent wrong way driving
#8824(256) (SP 8825-1190) MNDOT: METRO DISTRICTWIDE SIGNAL CABINET REPLACEMENT ON TRUNK HIGHWAYS	Intersection traffic control	Systemic improvements – signal-controlled	49	Signal cabinets	$2788235	$3135070	HSIP (23 U.S.C. 148)	N/A	N/A	0	0	State Highway Agency	Systemic	Intersections	Modernize signal operations

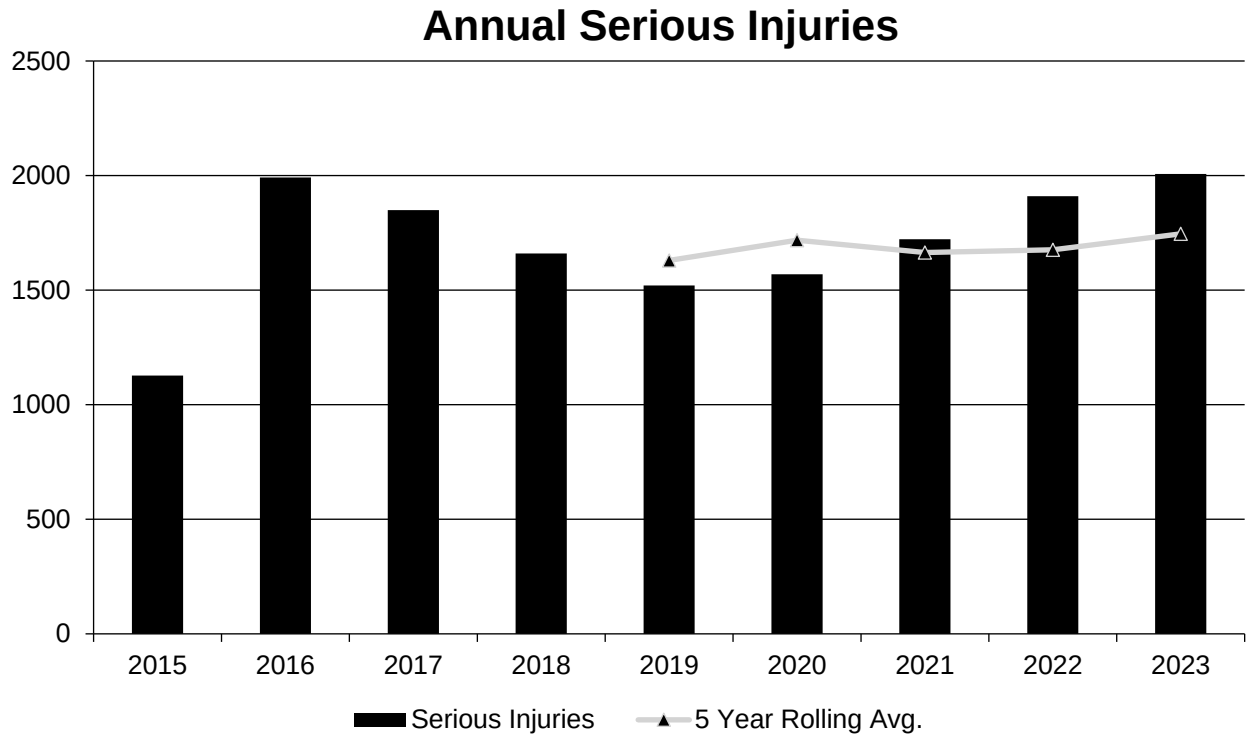
Safety Performance

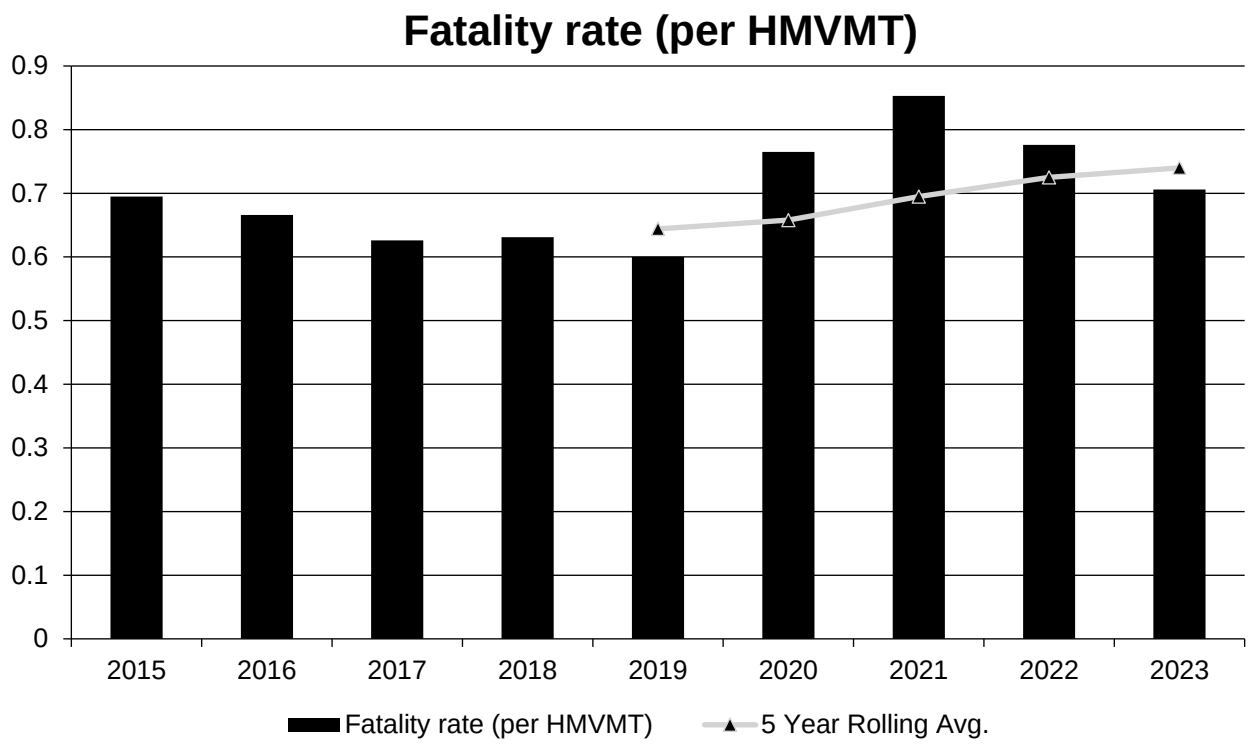
General Highway Safety Trends

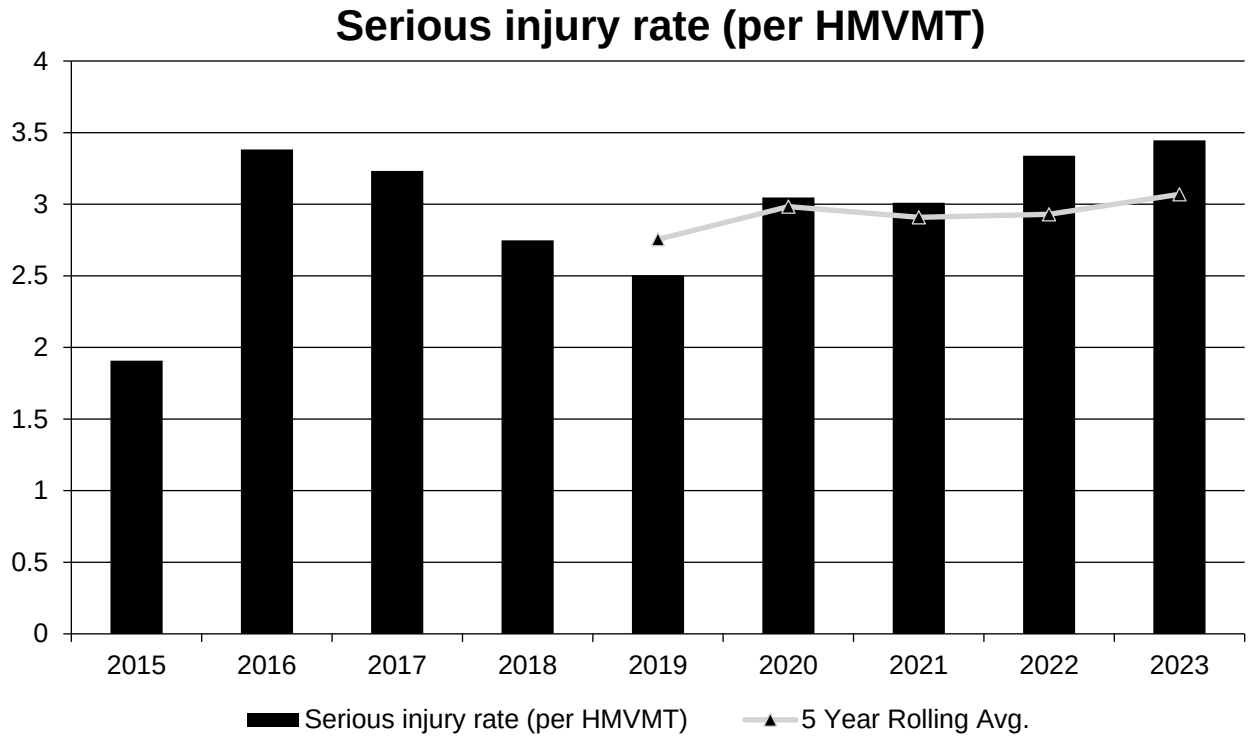
Present data showing the general highway safety trends in the State for the past five years.

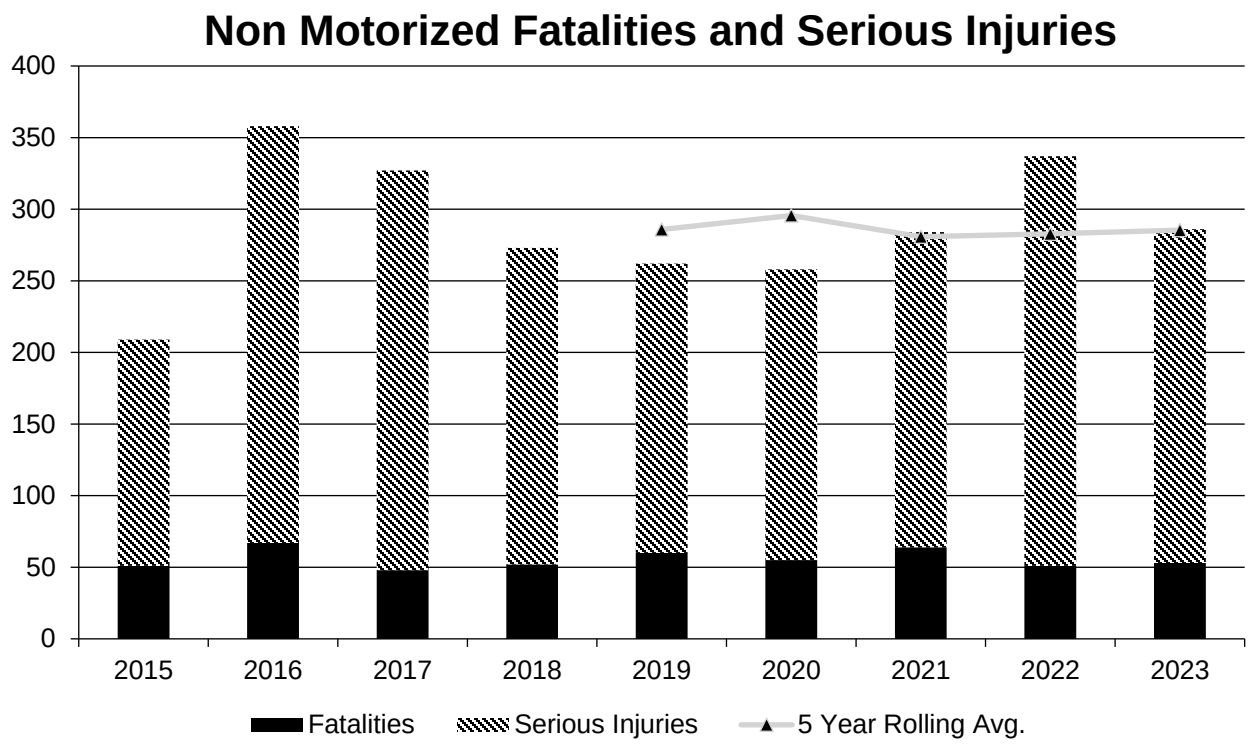
PERFORMANCE MEASURES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fatalities	411	392	358	381	364	394	488	444	411
Serious Injuries	1,127	1,992	1,849	1,660	1,520	1,569	1,722	1,910	2,007
Fatality rate (per HMVMT)	0.695	0.666	0.626	0.631	0.600	0.765	0.853	0.776	0.706
Serious injury rate (per HMVMT)	1.907	3.382	3.233	2.748	2.504	3.047	3.010	3.339	3.446
Number non-motorized fatalities	51	67	48	52	60	55	64	51	53
Number of non-motorized serious injuries	158	291	279	221	202	203	220	286	233


Annual Fatalities
600
500
400
300
200
100
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
2500
2000
1500
1000
500
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
4
3.5
3
2.5
2
1.5
1
0.5
0
2015
2016
2017
2018
2019
2020
2021
2022
2023
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

State Motor Vehicle Crash Database

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

Year 2020

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				
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other				
Rural Minor Arterial				
Rural Minor Collector				
Rural Major Collector				
Rural Local Road or Street				
Urban Principal Arterial (UPA) - Interstate				
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other				
Urban Minor Arterial				
Urban Minor Collector				
Urban Major Collector				
Urban Local Road or Street				

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	194	484.8	0.59	1.48
County Highway Agency	151.8	692.6	1.12	5.12
Town or Township Highway Agency	25.6	132.6	1.7	10.76
City or Municipal Highway Agency	48.8	435.6	0.53	4.66
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				

Minnesota does not currently monitor safety outcomes by functional class: the existing analytical tools are more resource intensive than the added benefit of these measures. Other metrics are utilized to screen urban and rural fatal and serious injury crashes to ensure positive safety outcomes.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2025 Targets *

Number of Fatalities:352.4

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

Overall from 2019 to 2023, fatalities increased on average 4% annually. Given this environment, it is not reasonable to apply the trend toward SHSP goals in 2025 (i.e., this would require 26% annual reductions in 2024 and 2025). However, Minnesota does not support setting targets greater than the prior year. The 2025 target is set equal to the 2024 target.

Number of Serious Injuries:1463.4

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

Overall from 2019 to 2023, serious injuries increased on average 8% annually. Given this environment, it is not reasonable to apply the trend toward SHSP goals in 2025 (i.e., this would require 30% annual reductions in 2024 and 2025). However, Minnesota does not support setting targets greater than the prior year. The 2025 target is set equal to the 2024 target.

Fatality Rate:0.582

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

Overall from 2019 to 2023, the statewide fatality rate increased on average 3% annually. Given this environment, it is not reasonable to apply the trend toward SHSP goals in 2025. However, Minnesota does not support setting targets greater than the prior year. The 2025 target is set equal to the 2024 target.

Serious Injury Rate:2.470

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

Overall from 2019 to 2023, the statewide serious injury rate increased on average 8% annually. Given this environment, it is not reasonable to apply the trend toward SHSP goals in 2025. However, Minnesota does not support setting targets greater than the prior year. The 2025 target is set equal to the 2024 target.

Total Number of Non-Motorized Fatalities and Serious Injuries:258.4

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

Overall from 2019 to 2023, the number of people walking and biking killed or seriously injured increased on average 5% annually. Given this environment, it is not reasonable to apply the trend toward SHSP goals in 2025. However, Minnesota does not support setting targets greater than the prior year. The 2025 target is set equal to the 2024 target.

Minnesota supports setting aspirational targets but these must be achievable. Given the spike around 2021, a large, sustained reduction would be needed in all measures to maintain the prior methodology of progress toward the Strategic Highway Safety Plan (SHSP) goals of no more than 225 fatalities and 980 serious injuries by 2025. While using a data-driven approach, Minnesota does not support setting targets greater than the prior year. The 2025 targets are equal to the 2024 targets. To meet these targets, traffic fatalities and serious injuries must be reduced by 30 to 40 percent annually in 2024 and 2025. While these reductions are extraordinarily high, MnDOT is looking to align current annual reductions with historical averages prior to 2020 as an intermediate indicator of success.

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

Methodologies were coordinated between MnDOT and Department of Public Safety based on input from respective stakeholders. Given the recent safety challenges, it was recognized the targets should (1) take into account the pandemic spike in fatalities; (2) measure progress toward Strategic Highway Safety Plan goal rather than prior trends alone; and (3) not be set higher than prior years. This last point was particularly important to our MPO partners. Furthermore, we heard from stakeholders and leadership that targets should be set to inspire action but not be unachievable.

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	352.4	420.2
Number of Serious Injuries	1463.4	1745.6
Fatality Rate	0.582	0.740
Serious Injury Rate	2.470	3.069
Non-Motorized Fatalities and Serious Injuries	258.4	285.4

The recent 2021 spike in fatalities and serious injuries will continue to be a significant challenge for Minnesota in achieving performance targets. While fatalities continue to decrease annually, the number remains higher than prior baselines. Serious injuries continue to rise annually.

Minnesota does not anticipate meeting or making significant progress toward 2023 targets. There will not be an about-face in the state's traffic safety program, but upcoming changes to better address challenges are being incorporated. These include additional considerations for vulnerable users in annual HSIP solicitations, reinvigorating local road safety planning, and integrating Safe System approaches to reduce the severity of crashes.

Applicability of Special Rules

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

Yes

Minnesota CY 2021 Safety Performance Target Assessment and FY 2024 HSIP Special Rule Determination (April 20, 2023 memo from FHWA) determined special rule applies in this period. Required corresponding action: obligate in FY 2024 an amount equal to at least 200 percent of the FY 2009 high-risk rural roads set-aside in the amount of $3,620,110.

Minnesota has obligated the full amount for High Risk Rural Roads (HRRR) at the end of the federal fiscal year; this report is based on state fiscal year.

Minnesota has had a considerable program with county roadway agencies to implement safety improvements on roads that meet this definition of High-Risk Rural Roads. The extensive development of the County Road Safety Plans has made planning and programming safety projects on these roads far more achievable. MnDOT has been programmed considerable funding for these roadway types.

Until recently, MnDOT has not been currently tracking specific projects meeting the HRRR definition. However, with the special rule now applying, MnDOT OTE will work with Office of Transportation System Management to correctly identify and denote these projects within the FHWA Fiscal Management Information System (FMIS). Based on currently selected projects, MnDOT has already programmed over $27 Million from 2025-2028.

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

No

Minnesota CY 2021 Safety Performance Target Assessment and FY 2024 HSIP Special Rule Determination (April 20, 2023 memo from FHWA) determined special rule does not apply in this period. No actions required.

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	68	59	68	61	92	94	81
Number of Older Driver and Pedestrian Serious Injuries	164	150	174	130	166	185	204

Minnesota CY 2021 Safety Performance Target Assessment and FY 2024 HSIP Special Rule Determination (April 20, 2023 memo from FHWA) determined special rule does not apply in this period. No actions required.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries
- Other-Change in fatal and serious injury crashes

Minnesota measures success in the change of fatalities and serious injuries: this analysis is applied statewide as well as geographically to ensure no one segment of the state is left behind or burdened with more risk. In communicating the effect of our Toward Zero Deaths program, we will cite potential lives saved had the number of statewide fatalities remained unchanged since 2003. While this metric is compelling for communicating the impact, it is not used as a measure of effectiveness.

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

Minnesota's HSIP strategies and tactics (action items) from the current plan are still applicable. MnDOT and partners are still working on tactics and believe there are still opportunities to achieve "low hanging fruit" or low cost/high impact items. In addition, MnDOT and partners are looking toward what segments may have been underserved (e.g., vulnerable road users or environmental justice) and ensuring safety remains at the table as economic trade-offs need to be negotiated.

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

- Other-Under consideration

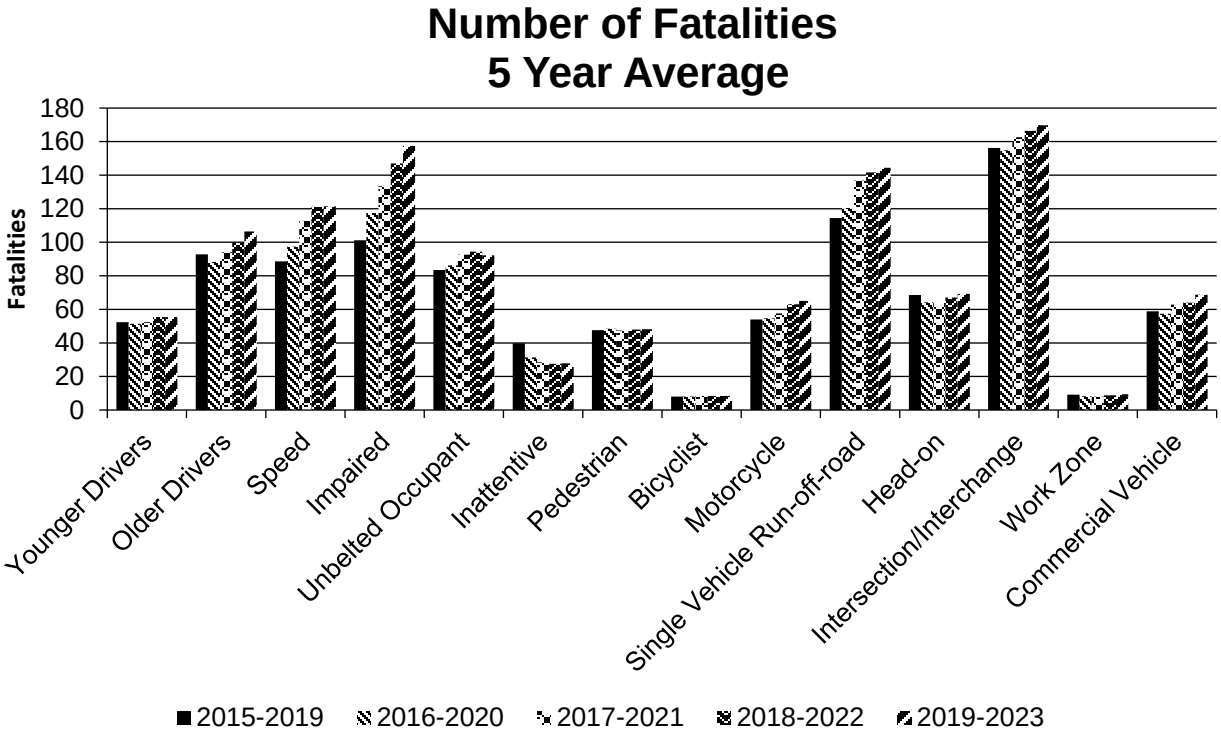
Minnesota demonstrates the success of the HSIP through reduction in fatalities and serious injuries. This is a "lagging indicator" (i.e., outcome based) that is also influenced by other environmental factors, as the last three years have demonstrated. As MnDOT shifts to a more Safe System approach, new "leading indicators" (i.e., metrics associated with expected improved safety) are under consideration.

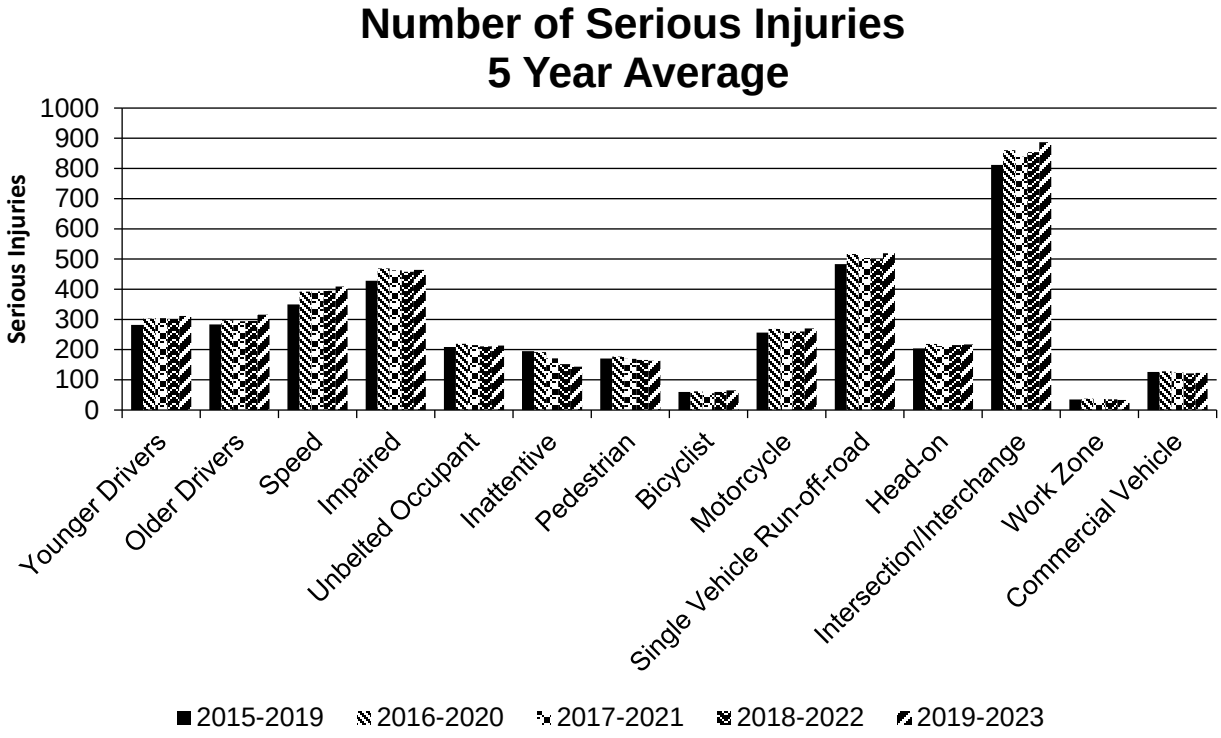
Effectiveness of Groupings or Similar Types of Improvements

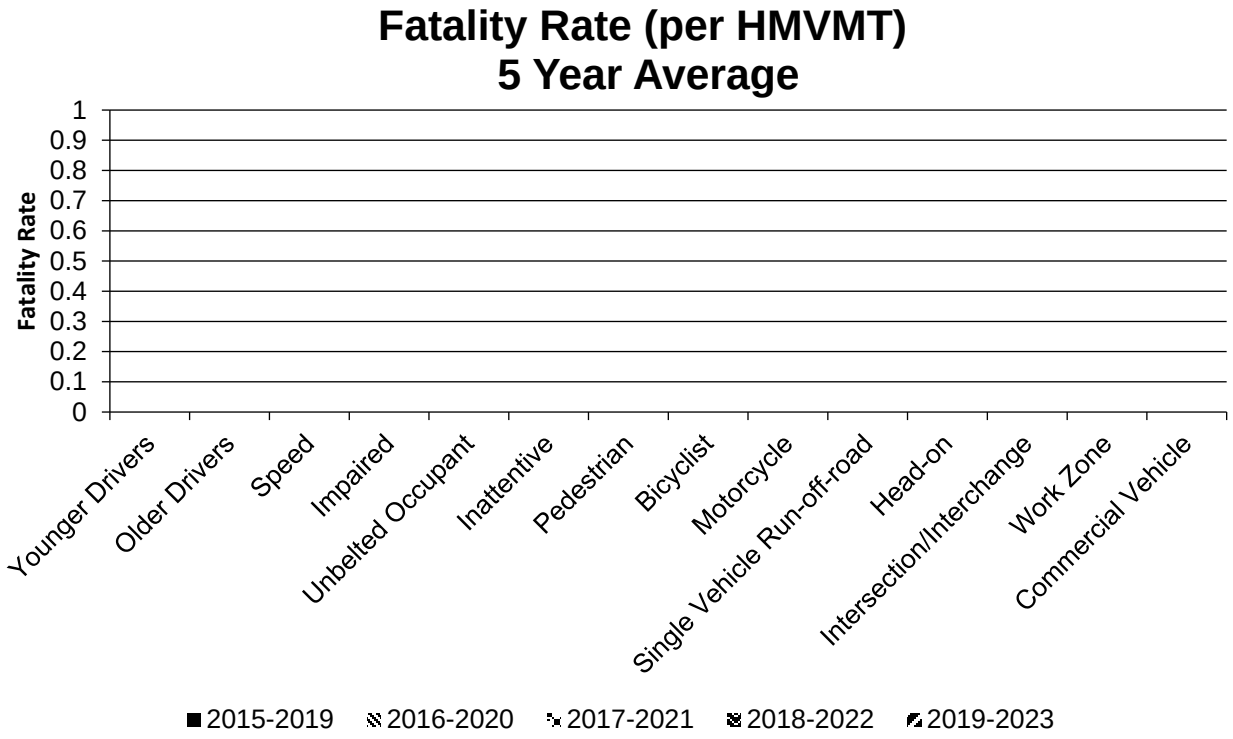
Present and describe trends in SHSP emphasis area performance measures.

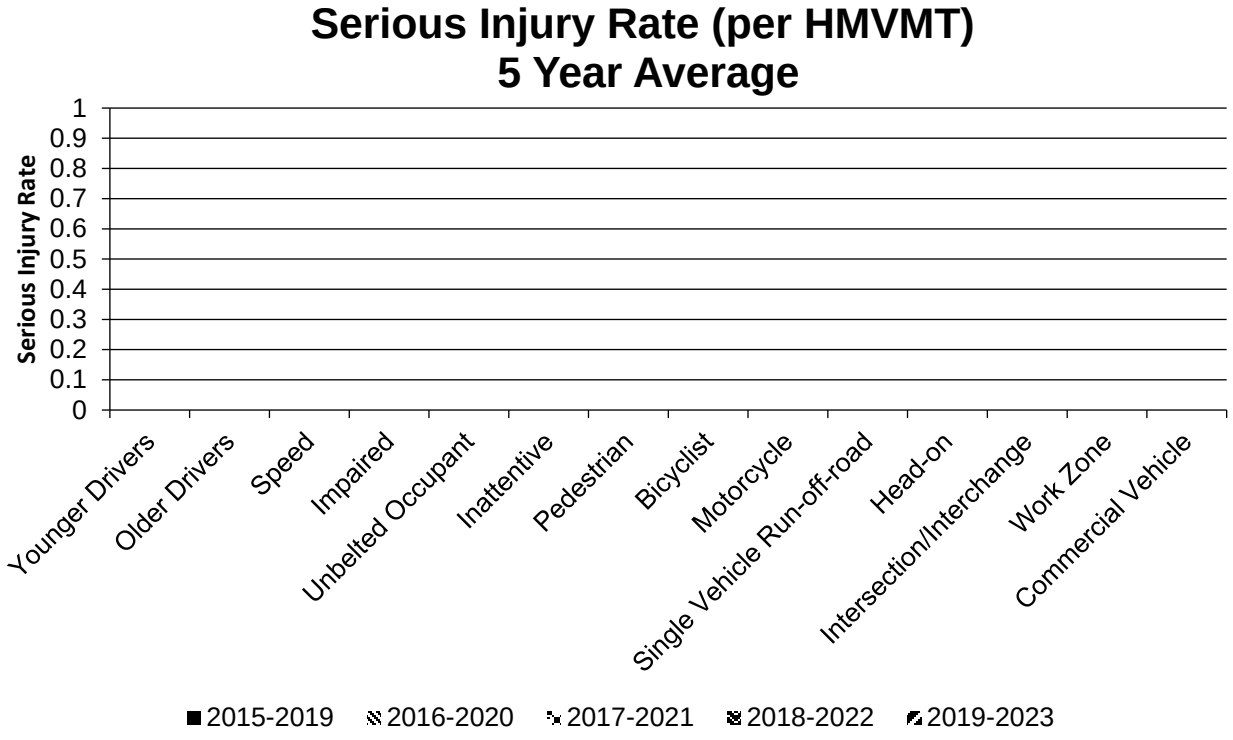
Year 2023

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)	NUMBER OF K CRASHES	NUMBER OF A CRASHES	NUMBER OF K AND A CRASHES
Younger Drivers		55.4	311.6			50.6	248.4	299
Older Drivers		106.4	315.8			96.6	257.6	354.2
Speed		121.4	409.2			110.6	320.2	430.8
Impaired		157.4	464.2			146.4	376.8	523.2
Unbelted Occupant		92.2	213.6			92.4	176.8	269.2
Inattentive		27.8	143.4			26.6	120.4	147
Pedestrian		48.2	163.4			47.8	159.6	207.4
Bicyclist		8.4	65			8.6	64.2	72.8
Motorcycle		65	270.4			63.6	250.8	314.4
Single Vehicle Run-off-road		144.4	519.4			138.2	457.8	596
Head-on		69.2	217.2			58.4	153	211.4
Intersection/Interchange		169.8	887.2			158.4	756.6	915
Work Zone		9.4	33.6			8.8	30.6	39.4
Commercial Vehicle		68.8	123			62.8	102	164.8


Number of Fatalities
5 Year Average
Fatalities
180
160
140
120
100
80
60
40
20
0
Younger Drivers
Older Drivers
Speed
Impaired
Unbelted Occupant
Inattentive
Pedestrian
Bicyclist
Motorcycle
Single Vehicle Run-off-road
Head-on
Intersection/Interchange
Work Zone
Commercial Vehicle
2015-2019
2016-2020
2017-2021
2018-2022
2019-2023


Number of Serious Injuries
5 Year Average
Serious Injuries
1000
900
800
700
600
500
400
300
200
100
0
Younger Drivers
Older Drivers
Speed
Impaired
Unbelted Occupant
Inattentive
Pedestrian
Bicyclist
Motorcycle
Single Vehicle Run-off-road
Head-on
Intersection/Interchange
Work Zone
Commercial Vehicle
2015-2019
2016-2020
2017-2021
2018-2022
2019-2023





Statewide, the 5-year rolling average number of fatal and serious injury crashes has been trending up in all SHSP emphasis areas (except inattentive and trains). In 2023, overall fatal and serious injury crashes were 12 percent greater than the prior 3-year average (2020-2022).

Only five emphasis areas increased by more indicating an increase in prevalence: older driver (+25%), bicyclist (+18%), commercial vehicle (+16%), intersection/interchange (+13%) and younger driver (+12%). While head-

on crashes in 2023 were 6 percent greater than the prior 3-year average, this was still less than overall fatal and serious injury crash increases. Other emphasis areas were less than the prior 3-year average.
Traffic fatalities in 2023 were 8% lower than 2022, similarly the fatality rate was 9% lower. While continuing to have year-over-year decreases since a spike in 2021, statewide fatalities remain higher than 2020 (equivalent to approximately 2015). On the other hand, serious injuries in 2023 were 5% greater than 2022, with a similar 4% increase in serious injury rate. Serious injuries remain at the highest levels since revisions of the crash reporting system injury standards in 2016.

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:	Sinusoidal Rumble Strips
Description:	This evaluation determined the change in crash frequency, type or severity associated with longitudinal sinusoidal rumble strips on rural two-lane undivided Minnesota roadways constructed between 2018 and 2022.
Target Crash Type:	
Number of Installations:	
Number of Installations:	
Miles Treated:	327
Years Before:	
Years After:	
Methodology:	Regression cross-section
Results:	Crash modification factors (CMFs) were estimated using cross-sectional analysis to compare crash experience of locations with sinusoidal rumble strips (i.e., centerline only, centerline and shoulder, or shoulder only) compared to roads with rectangular rumble strips. The cross-sectional analysis matched sites with sinusoidal and rectangular rumble strips using matched-pair comparisons. Overall, the results of the models indicated no significant differences in crash rates between rural two-lane undivided roads with sinusoidal rumble strips, and rural two-lane undivided roads with rectangular rumble strips; the study provides no evidence that sinusoidal rumble strips are better or worse at preventing crashes than rectangular rumble strips.

File Name: Urban Segment Safety Performance Evaluation-37962626-v1.PDF

Countermeasures:	Speed Limit Change (55 MPH to 60 MPH)
Description:	Safety impacts of increasing the speed limit from 55 mph to 60 mph on two-lane, two-way state highway segments in Minnesota for both segments and intersections.
Target Crash Type:	
Number of Installations:	
Number of Installations:	
Miles Treated:	3074.0

Years Before:

Years After:

Methodology: Before/after using empirical Bayes or Full Bayes

Results: The segment analysis showed an 8 percent reduction in total crashes that was statistically significant, alongside a significant 15 percent increase in combined fatal, serious injury, and minor injury (KAB) injury crashes. The range of most of the segment CMFs hovered close to 1. The aggregate estimated crash safety effects (for total and injury crashes) for combined segments and intersection sites showed a reduction in total crashes but an increase in the KAB injury crashes.

File Name: SPEED-LIMITS_55-TO-60_EVALUATION-REPORT.pdf

Countermeasures: Roundabout at High VRU Traffic Sites

Description: The purpose of this evaluation is to determine if the safety effects seen in the 2017 evaluation still apply to roundabouts with higher levels of use by pedestrians and bicyclists. This evaluation conducts a before-after analysis of 95 roundabouts in Minnesota and an analysis comparing roundabouts to untreated intersections.

Target Crash Type: Vehicle/pedestrian

Number of Installations: 95

Number of Installations: 95

Miles Treated:

Years Before:

Years After:

Methodology: Before/after using comparison group

Results: With the installation of a roundabout, this study finds that the before-after analysis results in a 40% decrease in all severity injury crashes for all roadway users, a 70% decrease in fatal and serious injury crashes for bikes and pedestrians, and a 15% decrease in total pedestrian bike and pedestrian crashes. The results of the comparison analyses suggest roundabouts have better safety performance than through-stop and traffic signal-controlled intersections and similar safety performance to locations with all-way stop control. The results of this evaluation thus indicate that roundabouts can be an effective safety treatment for pedestrian and bicycle crashes.

File Name: VRU-AT-ROUNDABOUTS_EVALUATION-REPORT.PDF

Countermeasures: Urban 2-, 3-, and 4-lane Segments

Description: The objective of this study was to explore the historic crash frequency, crash severity and crash rate on urban 2-lane undivided (2U), urban 3-lane (3L), urban 4-lane undivided (4U), and urban 4-lane divided (4D) roads across Minnesota. The analysis was conducted on all crash types combined.

Target Crash Type:

Number of Installations:

Number of Installations:

Miles Treated:

Years Before:

Years After:

Methodology:	Other (define)
Results:	This evaluation hade some mixed results, but identified four lane divided roads as the facility type with the lowest urban fatal and serious injury crash rate.

File Name: Urban Segment Safety Performance Evaluation-37962626-v1.PDF

Countermeasures:	Roundabout for Commercial Vehicles
Description:	Further evaluate the safety of CMV at roundabouts, whether rollover crashes are more likely to occur, and break down the most common characteristics for CMV crashes at roundabouts. Includes analysis comparing roundabouts to signalized intersections.
Target Crash Type:	Truck-related
Number of Installations:	107
Number of Installations:	107
Miles Treated:	
Years Before:	
Years After:	
Methodology:	Case-control
Results:	Roundabouts have lower rates of fatal and serious injury, minor injury, possible injury, and total CMV crashes compared to similar signalized sites. While there was a fatal rollover crash at a roundabout, it is unclear if or to what extend the roundabout was a contributing factor due to a medical event.

File Name: CMV at RAB 2024-14.pdf

Countermeasures:	Retroreflective Backplate Borders at Signalized Intersections
Description:	Retroreflective backplates are FHWA Proved Safety Countermeasures with benefit of 15% total crash reduction. This report includes a before-after analysis at signal for change in crash rates from similar sites with no backplates. This evaluation does not create a policy, practice, or care within MnDOT: at this time is purely exploratory,
Target Crash Type:	Intersections
Number of Installations:	116
Number of Installations:	116
Miles Treated:	
Years Before:	
Years After:	
Methodology:	Before/after using comparison group
Results:	The results of the analyses conducted show that the addition of retroreflective signal backplates on MnDOT signalized intersections did not result in impacts to crash rates that were statistically significantly different from similar signalized intersections without retroreflective signal backplates. These findings contradict what was expected since backplates with retroreflective borders are listed as an FHWA Proven Safety Countermeasure. It is possible that MnDOT signals were already designed with enough features to make them visible, so that adding retroreflective borders to the backplates did little to increase conspicuity.

File Name: BACKPLATES 2024-04.pdf

Countermeasures:	Lane Constrictor Intersections
Description:	The lane constrictor design narrows the lane width for mainline approaches via striped median and centerline rumble strips at stop-controlled intersections; the goal is to encourage mainline traffic to slow as it approaches the intersection. This evaluation does not create a policy, practice, or care within MnDOT; the purpose was purely exploratory.
Target Crash Type:	
Number of Installations:	66
Number of Installations:	66
Miles Treated:	
Years Before:	
Years After:	
Methodology:	Before/after using comparison group
Results:	Following the installation of lane constrictors, overall crash rates saw little change, but 10% decrease in fatal/serious injury crashes and 22% decrease in all injury crashes compared to increases at control sites.

File Name: LANE CONSTRICTORS 2024-03.pdf

Project Effectiveness

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
PROJECT SPECIFIC EVALUATIONS NOT CONDUCTED														

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

Despite recent upticks in traffic fatalities, Minnesota continues to believe the focus of the HSIP is effective. The core of the safety program remains to reduce fatalities and serious injuries on all roads: with 70 percent of severe crashes occurring on the local system, the continued distribution of HSIP funds to local agencies remains important. The program is data driven, responding to both sustained crash locations and proactive, risk based methodologies. By prioritizing safety projects that implement cost-effective (e.g., benefit-cost ratio greater than 1.00), widely deployed, proven countermeasures with a prior systemic plan or safety analysis, Minnesota is able to provide the most safety benefit for the investment.

Compliance Assessment

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

07/01/2020

What are the years being covered by the current SHSP?

From: 2020 To: 2024

When does the State anticipate completing its next SHSP update?

2025

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]	100	100								
	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
	Median Type (54) [55]	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
	Access Control (22) [23]	100	100								
	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]			100	100						
	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]					100	100				
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					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
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100	100				
	Roadway Type at End Ramp Terminal (199) [189]					100	100				
	Interchange Type (182) [172]					100	100				
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

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

Minnesota has attributes for each of these MIRE elements: prior self-assessments were based on an estimate of data quality. Systems are in place to improve data quality and integrate updates from local partners.

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.

Minnesota will meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026. MnDOT anticipates there will be a process for reformatting these data elements into a standard but has not begun work on these details at this time.

Optional Attachments

Program Structure:

HSIP funding guide FINAL.pdf
Project Implementation:

Safety Performance:

Evaluation:

SINUSOIDAL-RUMBLE-STRIPS_EVALUATION-REPORT.pdf
VRU-AT-ROUNDABOUTS_EVALUATION-REPORT.PDF
SPEED-LIMITS_55-TO-60_EVALUATION-REPORT.pdf
Lane Constrictor Intersections evaluation 2024.pdf
CMV at RAB 2024-14.pdf
BACKPLATES 2024-04.pdf
LANE CONSTRICTORS 2024-03.pdf
Urban Segment Safety Performance Evaluation-37962626-v1.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.