



TOWARD ZERO DEATHS

2020 HSIP SOLICITATIONS

Girma Feyissa | Programs Support Engineer
Mark Wagner | Assistant State Traffic Safety Engineer
September 10, 2020

m DEPARTMENT OF
TRANSPORTATION

mndot.gov

1

Agenda

- Presenter Intros
- HSIP Background
- Proactive Vs Reactive Projects
- Statewide Crash Data
- 2020 HSIP Solicitation/Application
- Questions

9/25/2020 mndot.gov 2

2

HSIP – Highway Safety Improvement Program

- Core Federal Aid Program
- Purpose is to Reduce K & A Crashes
- 2005 – First Funding – SAFETEA-LU
- Data Driven, Strategic Approach to Safety
 - Planning, Implementation & Evaluation
- Low Cost High Impact solution

9/25/2020mndot.gov3

3

HSIP Projects

- 90% Federal, 10% local contribution
- Subject to Federal Criteria for Contracting
 - DCP
 - EEO
 - DBE
 - Buy America
 - Environmental Justice, NPDES permit, PIF, etc.
 - Competitive bidding – acquisition of material & labor
- Competitive Process – Applying does not automatically mean you will be awarded

9/25/2020mndot.gov4

4

HSIP Eligible Projects

- Strategic Highway Safety Plan (SHSP)
 - Critical Emphasis Areas (Focus Areas)
- Stand Alone Safety Project
- Data Driven, Proactive, Systemic – Prioritized Plan
- Low Cost
- Project Max → \$400,000 per agency per location per project
 - (CRSP 1 project exception; if cleared before submission with HSIP Committee)

9/25/2020

mndot.gov

5

5

HSIP Not-Eligible Projects

- Highway Rail Crossing
- Projects driven by mobility/development/capacity
- Most new construction or reconstruction
- Interchange
- Changeable Message Signs, Ramp readers, cameras
- Replacing damaged or worn out guardrail
- Road safety audits, Overlays,...
- Research projects
- Projects, methods, etc. not used in Minnesota
- **RICWS!!** – Latest research shows little/no benefit

9/25/2020

mndot.gov

6

6

MN 2020-2024 Strategic Highway Safety Plan

4Es



<http://www.dot.state.mn.us/trafficeng/safety/shsp/mn-shsp-2020-24.pdf>

9/25/2020

mndot.gov

7

7

State Statistics - 2019

State

- Population 5.64 million
- Over 5 million registered motor vehicles
- Over 4 Million licensed drivers
- Over 60 billion Miles driven in MN

Crash

- 364 Deaths
- 1,520 Serious injuries
- 27,624 Injuries
- 80,636 Total crashes
- 23% in rural areas
 - <5,000 population

9/25/2020

mndot.gov

8

8

State Statistics

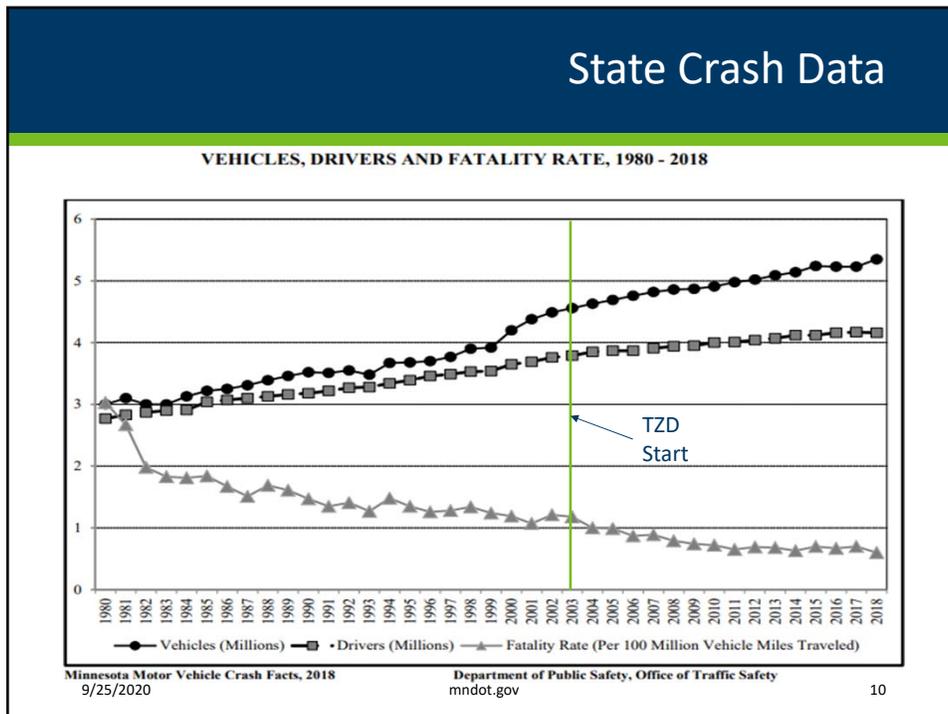
MINNESOTA TRAFFIC FATALITIES, 1910 - 2018
Since 1962: Vehicle Miles Traveled (Billions) and Fatality Rates (Per 100 Million VMT)

YEAR (1)	Fatalities (2)	YEAR (3)	Fatalities (4)	YEAR (5)	Fatalities (6)	YEAR (7)	Fatalities (8)	Vehicle Miles (9)	Fatal Rate (10)	YEAR (11)	Fatalities (12)	Vehicle Miles (13)	Fatal Rate (14)	YEAR (15)	Fatalities (16)	Vehicle Miles (17)	Fatal Rate (18)
1910	23	1929	505	1948	552	1962	692	15.1	4.58	1981	763	28.6	2.67	2000	625	52.4	1.19
1911	26	1930	561	1949	540	1963	798	15.3	5.22	1982	581	29.2	1.98	2001	568	53.2	1.07
1912	39	1931	622	1950	532	1964	841	16.2	5.19	1983	558	30.5	1.83	2002	657	54.4	1.21
1913	46	1932	486	1951	610	1965	875	16.8	5.21	1984	584	32.2	1.81	2003	655	55.4	1.18
1914	88	1933	525	1952	534	1966	977	17.7	5.52	1985	610	33.1	1.84	2004	567	56.5	1.00
1915	85	1934	641	1953	637	1967	965	18.7	5.16	1986	572	34.2	1.67	2005	559	56.5	0.99
1916	143	1935	596	1954	639	1968	1,060	19.9	5.33	1987	530	35.1	1.51	2006	494	56.6	0.87
1917	161	1936	649	1955	577	1969	988	20.8	4.75	1988	615	36.4	1.69	2007	510	57.4	0.89
1918	183	1937	630	1956	637	1970	987	22.4	4.41	1989	605	37.6	1.61	2008	455	57.3	0.79
1919	171	1938	609	1957	684	1971	1,024	23.4	4.38	1990	568	38.8	1.47	2009	421	56.9	0.74
1920	178	1939	576	1958	708	1972	1,031	24.9	4.14	1991	531	39.3	1.35	2010	411	56.8	0.72
1921	216	1940	577	1959	662	1973	1,024	25.2	4.06	1992	581	41.3	1.41	2011	368	56.7	0.65
1922	260	1941	626	1960	724	1974	852	24.6	3.46	1993	538	42.3	1.27	2012	495	57.0	0.69
1923	328	1942	439	1961	724	1975	777	25.6	3.04	1994	644	43.4	1.48	2013	587	57.0	0.68
1924	366	1943	274	1976	809	1976	809	27.0	3.00	1995	597	44.1	1.35	2014	561	57.0	0.63
1925	361	1944	356	1977	856	1977	856	28.1	3.05	1996	576	45.9	1.26	2015	411	59.1	0.70
1926	326	1945	449	1978	980	1978	980	28.8	3.40	1997	600	46.9	1.28	2016	392	58.9	0.67
1927	369	1946	536	1979	881	1979	881	29.0	3.04	1998	650	48.5	1.34	2017	358	57.2	0.63
1928	435	1947	572	1980	863	1980	863	28.5	3.05	1999	626	50.7	1.24	2018	381	60.4	0.63
														2019	364*		

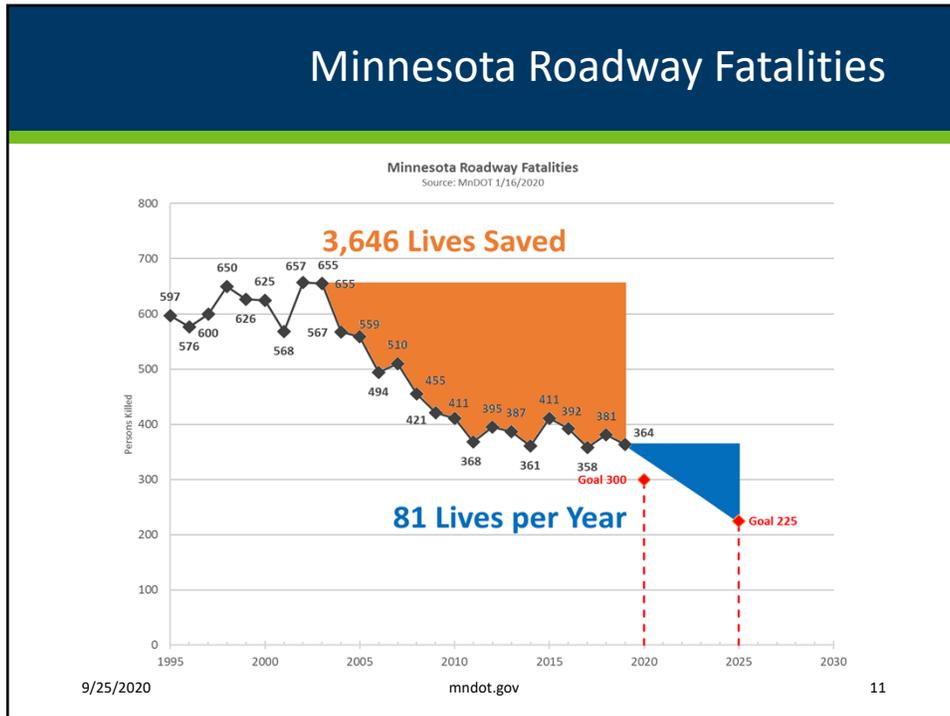
<https://dps.mn.gov/divisions/ots/reports-statistics/Documents/2018-crash-facts.pdf>

9/25/2020 mndot.gov 9

9



10



11

5 Year Average - 2019

SHSP Focus Area	Number of Fatalities	Number of Serious Injuries
Lane Departure	183	687
Intersections	156	811
Older Drivers	93	283
Motorcyclists	54	256
Pedestrians	47	169
Work Zones	9	35
Bicyclists	8	60

9/25/2020 12

12

Statewide Crash Data – 2015-2019

System	Fatalities	Serious Injuries	K Crashes	A Crashes
Trunk	924	2,312	836	1,816
County	671	3,130	621	2,609
City	205	2,181	200	1,963
Township	86	382	79	317
Other	20	143	19	128

9/25/2020

mndot.gov

13

13

HSIP Projects for Current Solicitation

Reactive

- Based on Crash Data – All Severity
- Needs to have a fatal and severe crash history
- Typically Higher Volume Intersections
- Deployed at a Single Location
- **Typically Higher Cost**
- Benefit/Cost > 1
- **Submit Crash data to OTE to perform B/C calculation**
 - Send to: SafetyProject.DOT@state.mn.us
 - Subject line: HSIP B/C Calculation request

B/C > 1 does not mean guaranteed funding

9/25/2020

mndot.gov

14

14

HSIP Projects for Current Solicitation

Proactive/Data Driven

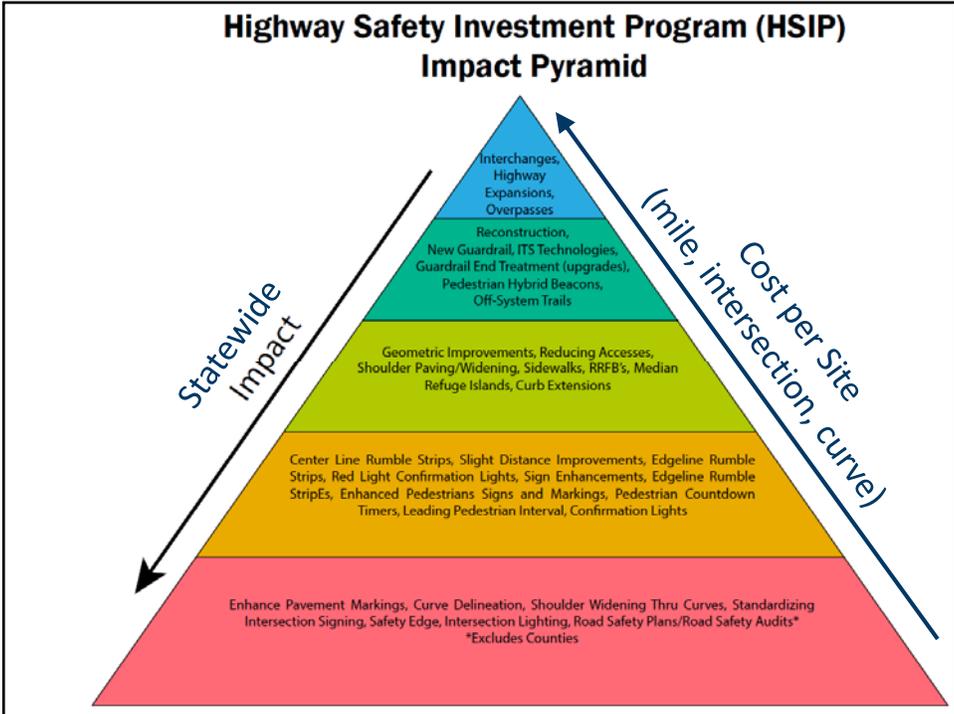
- Based on Crash Data – Fatal and serious Injury
- Deployed System Wide (or across much of the system)
- Typically Rural in Location
- Typically Lower Cost
- Benefit/Cost = N/A
- Focused on prevention

At Least 70% of the Funded Projects must be Proactive

But just because a project is Proactive does not mean it will receive funding!

9/25/2020
mndot.gov
15

15



16

Funding HSIP in MN

- 60% of severe crashes on local roads
- Locals responsible for 90% of roadway miles
- Over 470 HSIP funded projects since 2006 in MN
- Over 370 projects in Greater MN
- Over \$110M local projects funded through HSIP

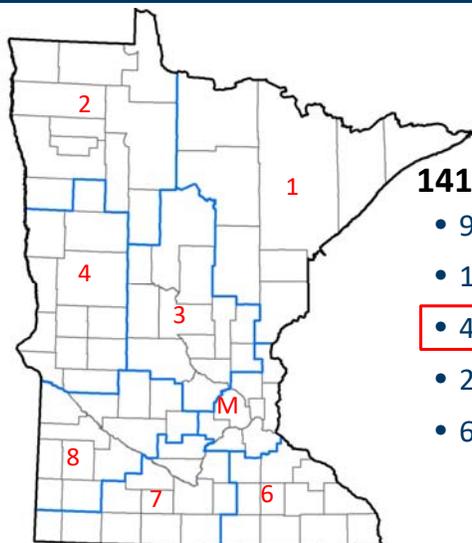
9/25/2020

mndot.gov

17

17

Minnesota



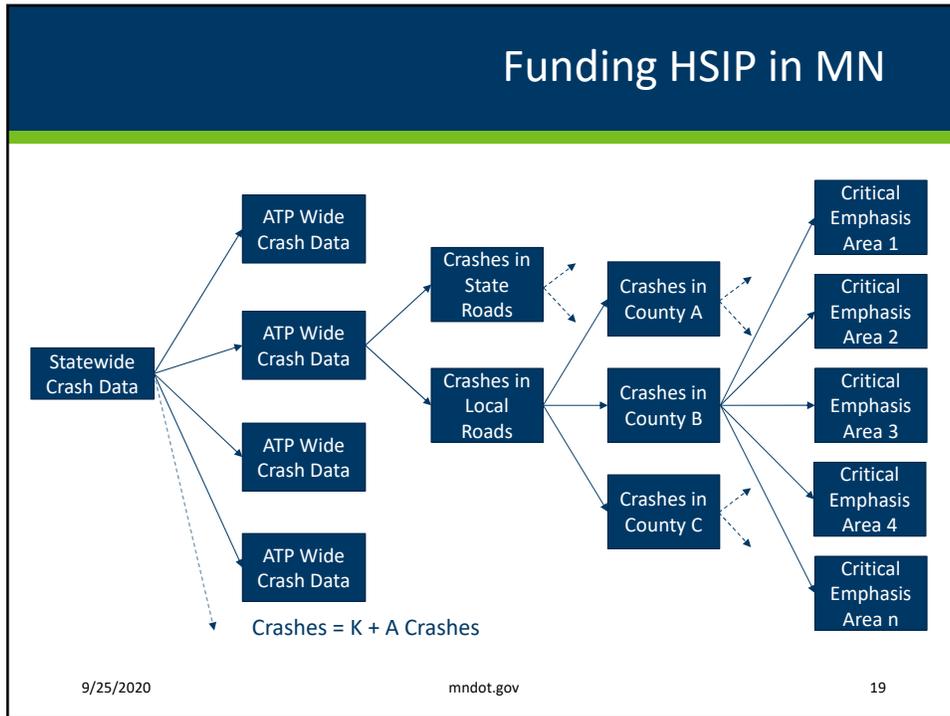
141,000 miles of Roadway

- 900 miles of Interstate
- 11k miles of Trunk Highway
- 45k miles of County Road
- 22k miles of City Streets
- 62k miles of Township/Other roads

mndot.gov

18

18



19

Funding HSIP in MN

Year	Programmed Local Safety	Percent of Total Programmed Safety
2019	\$ 23.3M	40%
2018	\$ 24.8M	50%
2017	\$ 23.2M	41%
2016	\$ 23.0M	56%
2015	\$ 18.8M	50%

9/25/2020 mndot.gov 20

20

2020 Greater Minnesota Application - Funds

ATP	2022	2023	2024	2025
1	\$ 0	\$ 0	\$ 350,000	\$ 1,700,000
2	\$ 0	\$ 0	\$ 420,000	\$ 800,000
3	\$ 320,000	\$ 1,200,000	\$ 2,900,000	\$ 3,200,000
4	\$ 780,000	\$ 0	\$ 930,000	\$ 1,300,000
6	\$ 540,000	\$ 2,300,000	\$ 2,300,000	\$ 2,300,000
7	\$ 600,000	\$ 0	\$ 1,400,000	\$ 1,400,000
8	\$ 360,000	\$ 980,000	\$ 1,100,000	\$ 1,100,000
Total	\$ 2,600,000	\$ 4,480,000	\$9,400,000	\$12,000,000

9/25/2020
mndot.gov
21

21

Fall 2020 HSIP Application

- Statewide Competitive Application Process

<https://www.mndot.gov/trafficeng/safety/hsip.html>

22

22

Fall 2020 HSIP Application

- Statewide Competitive Application Process

<http://www.dot.state.mn.us/stateaid/trafficsafety.html>

23

23

2020 Greater Minnesota Application - Timetable

Timeframe	Action
September 2020	Solicitation Open; Application Review available via State Aid
October 2020	Solicitation Open; Application Review available via State Aid
November 2020	Solicitation Open
25-Nov-2020	Applications DUE to SafetyProject.DOT@state.mn.us
December 2020	Selection Committee scoring
January 2021	Selection Committee scoring
February 2021	Finalization and Award Letters
5-Feb-2021	FINAL PROJECT AWARD RECOMMENDATIONS

Application guides: www.mndot.gov/trafficeng/safety/hsip.html.

24

24

2020 HSIP Application



DEPARTMENT OF
TRANSPORTATION

Greater Minnesota, Local HSIP Solicitation

Due Nov. 25, 2020

Application for Federal Safety Funds

1. Contact Information Details

Lead Agency [Enter agency name]	Contact Name [Enter application contact name]
------------------------------------	--

2. Funding Details

Federal Funds	Local Match	Total Cost
0	0	0

NOTE: maximum of \$400,000 in Federal Funds per agency per project.

Preferred Funding Year(s)
[Enter 2022, 2023, 2024, and/or 2025]

Funding Notes
None

3. Project Description

Project Description
[Enter description of the safety project.]

ATP	County or Counties	Metropolitan Planning Organization (MPO)
[Enter ATP]	[Enter county name]	None.

NOTE: if any portion of the project is located within MPO boundaries, a letter of support / priority from the MPO is needed.

Estimated Output	Units
0.0	Miles
0	Intersections
0	Curves

NOTE: estimate output for one of three metric: number of miles, number of intersections, or number of curves.

Application for Local HSIP Page 1 of 3

3. Selection Criteria

Describe how project was identified.
[Enter a brief description of how project was identified focusing on fatal and serious injury crashes. EXAMPLE: "Project identified in County Road Safety Plan as high risk; see attached project sheet(s)."]

Is this project in partnership with another agency?
[Enter Yes or No. If yes, list partner agencies. EXAMPLE: "Yes. MnDOT partnership; see attached letter of support."]]

4. Crash Data for Reactive Projects ONLY: Jan. 1, 2015 through Dec. 31, 2019

Number of Crashes	K	A	B	C	FOO	Total
All Crash Types	0	0	0	0	0	0

NOTE: set filters to 2015 through 2019 in MCHMAAT if you submit an Intersection Report or Section Report.

OPTIONAL: Crashes by Basic Type

	K	A	B	C	FOO	Total
Pedestrian	0	0	0	0	0	0
Bicyclist	0	0	0	0	0	0
Single-Vehicle Run-off-road	0	0	0	0	0	0
Single-Vehicle Other	0	0	0	0	0	0
Sideways Same Direction	0	0	0	0	0	0
Sideways Opposing Direction	0	0	0	0	0	0
Rear End	0	0	0	0	0	0
Head On	0	0	0	0	0	0
Left Turn	0	0	0	0	0	0
Angle	0	0	0	0	0	0
Other	0	0	0	0	0	0

OPTIONAL: Description of any unique characteristics.
None.

Reactive projects must have a benefit-cost ratio greater than 1.00; to simplify this analysis, OTE will conduct the calculation. An electronic copy of the analysis output will be available upon request.

9/25/2020

mndot.gov

25

25

2020 HSIP Application

3. Project Description

Project Description
[Enter description of the safety project.]

ATP	County or Counties	Metropolitan Planning Organization (MPO)
[Enter ATP.]	[Enter county name.]	None.

NOTE: if any portion of the project is located within MPO boundaries, a letter of support / priority from the MPO is needed.

7. Submission Information

Submit this application via PDF to SafetyProject.DOT@state.mn.us by **November 25, 2020.**

Please include the following as necessary:

- Map of project location(s)
- County Road Safety Plan project sheet(s)
- Letters of support
 - a. Metropolitan Planning Organization (MPO) if within borders
 - b. MnDOT District Traffic Engineer if work performed in MnDOT right-of-way

9/25/2020

mndot.gov

26

26

Reminder

- **Application ≠ Selection**
- Encouraged to submit projects even if the target for the ATP may be exceeded
- Unallocated money from other ATPs or FY may be awarded to projects from other ATPs
- If project is within MPO boundaries, coordinate and get letter of support from them
- If working with District, you need a letter of support from your District Traffic Engineer for projects involving MnDOT highways
- Partnering with other LPAs (multi county project scored higher)
- Flexibility in year of funding, or being able to deliver early looked at favorably

9/25/2020

mndot.gov

27

27

HSIP Future in Minnesota

- **County Road Safety Plan I (2010-2014)**
 - Providing Prioritized list of projects for future Local HSIP project development and selection.
 - Original CRSP Projects still preferred
- **County Road Safety Plan II Update**
 - Finishing Phase 1 counties; forthcoming RFP for Phase 2
 - Solicitation for Phase 3 coming in 2021 after Phase 2 completion
 - Data Driven
 - County Driven Customized Plan
 - Funding split 80% fed / 20% LPA

9/25/2020

mndot.gov

28

28

Summary

- Competitive Process – No guarantees
- Project Max → \$400,000 per agency per location per project
- Proactive Projects
 - CRSP I, CRSP II
 - County Nominated – Provide justification memo
 - B/C by OTE
- Reactive Projects
 - Provide justification memo
 - B/C by OTE

9/25/2020
mndot.gov
29

29

Summary

The diagram illustrates the SHSP (Statewide Highway Safety Plan) and HSIP (Highway Safety Improvement Plan) processes. The SHSP process includes three main steps: Review and Incorporate SHSP Data/Analysis, Goals, & Emphasis Areas; Demonstrate Consistency with SHSP Strategies; and Align Projects with SHSP Priorities & Action Plans. The HSIP process is divided into three phases: Planning, Implementation, and Evaluation. The Planning phase includes Problem Identification, Countermeasure Identification, Project Prioritization, HSIP Project List, and STIP. The Implementation phase involves Scheduling and Implementing projects. The Evaluation phase focuses on determining the effects of highway safety improvements. A feedback loop connects the Evaluation phase back to the SHSP and HSIP Planning phases, involving Data/Design Standards.

9/25/2020
mndot.gov
30

<https://safety.fhwa.dot.gov/legislationandpolicy/fast/guidance.cfm>

30



Questions?

Contact Information:

- Eric DeVoe – eric.devoe@state.mn.us
- Derek Leuer – derek.leuer@state.mn.us
- Mark Wagner – mark.wagner@state.mn.us
- Girma Feyissa – girma.feyissa@state.mn.us
- Rashmi Brewer - rashmi.brewer@state.mn.us

9/25/2020 mndot.gov 31

31



Thank you again!

9/25/2020 mndot.gov 32

32