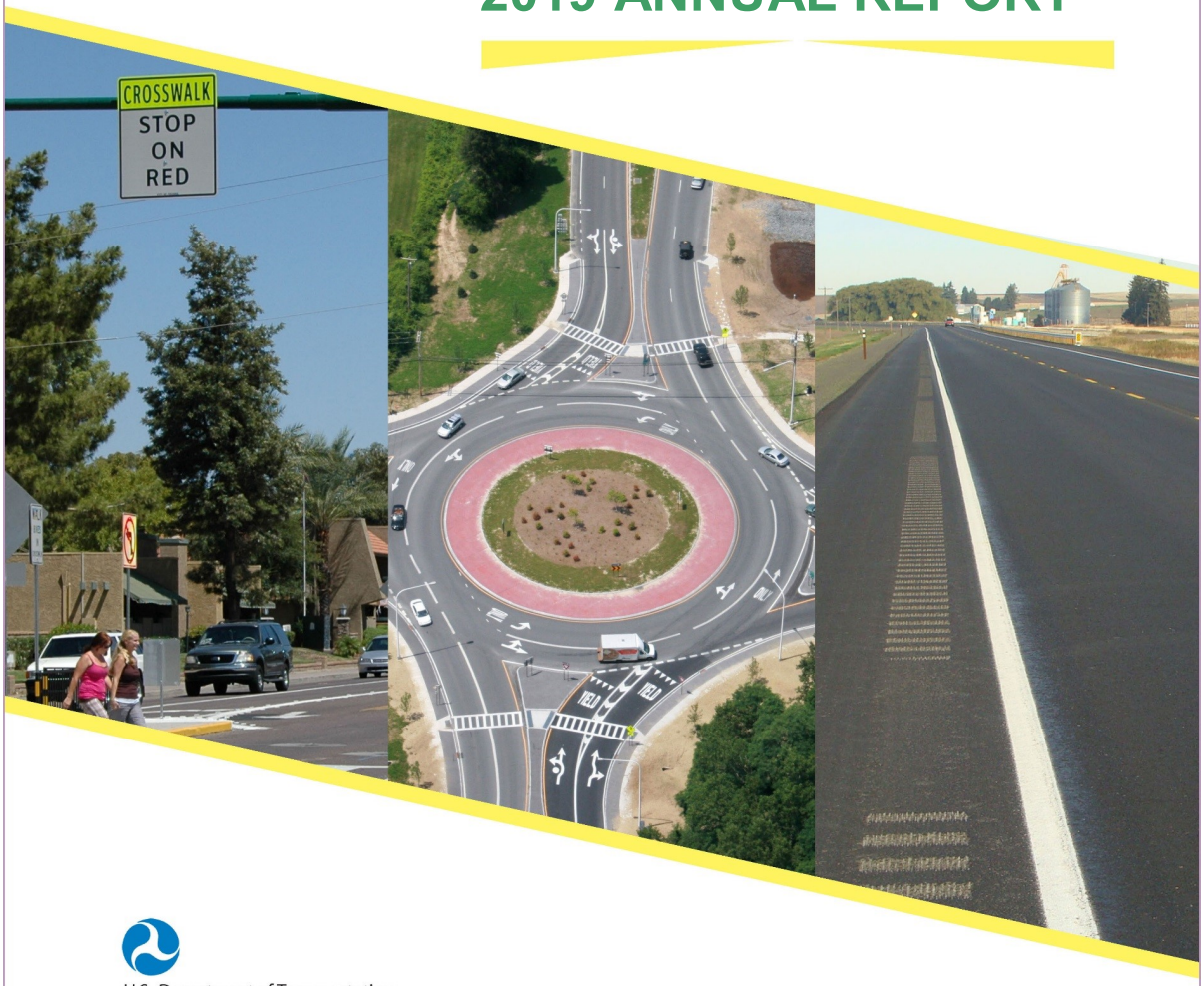
NEW HAMPSHIRE

# HIGHWAY SAFETY IMPROVEMENT PROGRAM

## 2019 ANNUAL REPORT




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

# Executive Summary

The overall purpose of this program is to achieve a significant reduction in fatalities and serious injuries on all public roads through the implementation of highway safety improvement projects. Infrastructure improvement projects are selected and justified by proven data-driven approaches. All highway safety improvement projects should be chosen and implemented with the goal of reducing fatalities and serious injuries on public roads and the achievement of state safety targets. Some projects will directly impact these performance measures through the implementation of engineering countermeasures, while others may advance the data systems and analysis capabilities of the state to more accurately identify locations with the highest potential for safety improvements, evaluate the performance of highway safety improvement projects, or identify high risk roadway characteristics and driver behaviors.

In 2006, FHWA established a new approach to advancing safety by focusing on performance. In order to effectively meet performance targets, States must apply limited resources to the areas that are most likely to achieve results. The requirement to develop and regularly update a Strategic Highway Safety Plan (SHSP) ensures that this approach is maintained. NH annually tracks and reports performance measures including the numbers and rates of fatalities and serious injuries. Several other performance measures of specific interest to the State are listed in the NH SHSP.

New Hampshire has embraced the goals and vision of the national Toward Zero Deaths (TZD) initiative. The State named its SHSP New Hampshire Driving Toward Zero in recognition of the national plan, and created a public outreach program with the same name to promote change in New Hampshire's safety culture (see nhdtz.com). The initiative recognizes that even one traffic death is unacceptable and sets the aggressive goal of reducing all deaths on the nation's highways, a goal virtually achieved in the aviation industry in the past several decades. Dozens of public and private stakeholders from across the State have come together in a collaborative effort to update and implement the strategies in the SHSP. The vision of Driving Toward Zero is embodied in NH's goal of reducing the number of fatalities and serious injuries by 50% by 2030, equaling an annual reduction of 3.4%. Maine and Vermont share this target, and to that end Maine DOT and VTrans have formed a tristate collaborative partnership with NHDOT to more effectively reach the collective regional goal. NHDOT has also incorporated the reduction of fatalities into our Balanced Scorecard, representing one of the twelve Strategic Objectives of the NHDOT.

The concept of a focused approach has been further reinforced with requirements for data-driven decision making and resource allocation. 23 USC 148(c)(2), as amended by 1401(a)(1) of SAFETEA-LU, Identification and Analysis of Highway Safety Problems and Opportunities, delineates specific requirements for identifying safety problems and evaluating countermeasures. NHDOT has implemented the guidelines of the Highway Safety Manual (HSM), part D, in the selection and evaluation of safety improvements, wherever applicable. MAP21 and the subsequent FAST ACT have continued building on the concept of a safety data system that has the capability to identify key safety problems, establish their relative severity, and then adopt strategic and performance based goals to maximize safety. Recent improvements to the NH data system include the recent migration from the former Crash Management System (CRMS) to the current crash and citation database known by the moniker VISION, the compilation of the Model Inventory of Roadway Elements (MIRE) fundamental data elements (FDE), and the completion of the National Highway Traffic Safety Administration (NHTSA) Traffic Records Assessment. One of the key findings of the Traffic Records Assessment was that performance measures for data quality are needed, including measures of timeliness, accuracy, completeness, uniformity, integration and accessibility in order to guide improvements to the data and data systems.

The States are required to define a clear linkage between the behavioral NHTSA-funded Highway Safety Program and the FHWA-funded HSIP via the State's SHSP. The 2012 version (2nd edition) of the NH SHSP identified nine critical emphasis areas (CEA) to be addressed by safety stakeholders in NH, listed below. In 2014, the Education and Public Outreach committee was created thus forming the tenth CEA. This committee has developed documentation that states the challenge, primary focus, and goals for this new emphasis area. Ten critical emphasis areas: Distracted Driving, Impaired Driving, Speeding, Vehicle Occupant Protection, Teen Traffic Safety, Older Drivers, Vulnerable Roadway Users, Comprehensive Safety Data Improvement,

Crash Locations, and Education and Public Outreach.

The 4 E's of safety (education, enforcement, engineering, and emergency medical services) should be considered in the selection and development of HSIP projects, however the primary intent of the HSIP is to target engineering improvements to infrastructure. Crash types of special interest have been identified in the crash locations CEA. The 3rd edition of the NH SHSP (2017-2021) has now been published, updating the 10 CEAs.

23 USC 148(a)(4) provides a sample listing of eligible highway safety improvement project types; however, it is important to note that only data-driven projects that target strategies identified in the State SHSP are eligible for funding in NH. Furthermore, given the limited funding available, funds should be prioritized to help ensure that projects with the greatest safety return will be the top priority. For example, addressing crashes involving animals is a possible eligible activity but since it is not addressed in the current version of the SHSP as a CEA or related strategy. Since higher safety needs have been identified, HSIP funds should not be used for that purpose in NH.

23 USC 148(e)(2) makes clear that other federal-aid funds are eligible to support and leverage the safety program. Improvements to safety features, such as guardrail, that are routinely provided as part of a broader Federal-aid project should be funded from the same source funds as the broader project when that safety feature is included in the broader project, not HSIP funds. This allows the HSIP funds to be reserved for stand-alone safety projects thereby allowing for true targeting of safety needs. This is consistent with the provision of separate funding for safety projects and with FHWA's long-standing position on the use of safety funds.

# 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 NH HSIP is governed by a committee chaired by the NHDOT Assistant Director of Project Development and includes representatives from the NHDOT Bureaus of Highway Design, Traffic, Highway Maintenance, Rail & Transit, and Planning; RPCs, MPOs, municipalities, and the FHWA NH Division. The monthly committee meetings review the selection and progress of HSIP projects and initiatives, and program finances. Regional Planning Commissions are encouraged to incorporate the HSIP tenet of data driven project selection in their Transportation Improvement Plan development.

### Where is HSIP staff located within the State DOT?

Design

### How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data

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

Municipally-maintained local roads and intersections are included in the screening with State-maintained sites and are evaluated using the same methodology. Traffic data are not available for the majority of rural collector or rural and urban local roads (functional class 8, 9, and 19), and therefore the volumes are estimated based on similar roads that have measured data. Urban and rural local roads are categorized separately from the other functional classes in network screening to account for the lower reliability of this estimated volume data. The State is working to improve volume data on the roads for which it is currently lacking. In addition, the State has involved municipal partners in two Every Day Counts 5 initiatives that will proceed in fiscal year 2020.

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

- Design
- Districts/Regions
- Local Aid Programs Office/Division
- Maintenance

- Operations
- Planning
- Traffic Engineering/Safety
- Other-Administration

### Describe coordination with internal partners.

The State's HSIP is centrally administered. The NHDOT selects candidates for improvement using historical network screening results which are then corroborated with recent crash data. While this project identification and selection method is more 'naive' and less rigorous than desired, it is nevertheless data-driven. The candidate locations are then disseminated to the NHDOT's safety partners via the HSIP Committee for review and comment. For all the candidate locations, the Committee will consider the scope and cost of the anticipated improvements in relation to the overall program funding constraints, and the improvement's expected benefit/cost ratio. Candidates not selected into the HSIP may be recommended for consideration via other funding programs.

To address the NHDOT's present deficit in data analysis expertise the Bureau of Highway Design has been reorganized to create a dedicated Safety Section tasked with administering the HSIP including the selection, evaluation, and delivery of infrastructure safety projects, and stewardship of the SHSP. This will enhance the NHDOT's safety capabilities by providing the necessary staff focused on this core federal program. The Safety Section continues to work with the assistance of the FHWA NH Division to regain and sustain the necessary tools and expertise for a rigorous data-driven safety program.

### Identify which external partners are involved with HSIP planning.

- FHWA
- Governors Highway Safety Office
- Local Government Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)

### Describe coordination with external partners.

The HSIP committee meets monthly with internal and external partners. The NHDOT Bureau of Highway Design - Safety Section prepares and disseminates (by email) meeting agendas and notes, program financial data, and relevant project reports. This information is reviewed and discussed at the monthly meetings, with key items voted upon when necessary as dictated by the NHDOT HSIP Policy.

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

The FAST Act disqualified the use of HSIP funds for noninfrastructure projects. The NHDOT continues to work with our safety partners via the SHSP to advance non-infrastructure safety initiatives utilizing funding from NHTSA or other public or private sources.

## *Program Methodology*

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

Yes

2019 New Hampshire Highway Safety Improvement Program
FileName:
New Hampshire HSIP Guidance2013.doc

The NH HSIP Manual is planned to be updated in FY 2020 to incorporate changes instituted with the passage of the FAST ACT as well as to document the evolution of our HSIP.

## Select the programs that are administered under the HSIP.

- Bicycle Safety
- Horizontal Curve
- HRRR
- Intersection
- Left Turn Crash
- Local Safety
- Low-Cost Spot Improvements
- Median Barrier
- Pedestrian Safety
- Right Angle Crash
- Roadway Departure
- Rural State Highways
- Segments
- Shoulder Improvement
- Sign Replacement And Improvement

**Program: Bicycle Safety**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes<br>Other-EPDO | Traffic Volume | Other-Site Subtype |

## What project identification methodology was used for this program?

- Equivalent property damage only (EPDO Crash frequency)
- Expected crash frequency with EB adjustment

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

Yes

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

Yes

### How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

### 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:50
Available funding:50

The NHDOT is creating the second edition of the NH Pedestrian and Bicycle Transportation Plan, last published in 2000, to identify opportunities for improving the efficiency and safety of non-motorized travel throughout the state.

**Program: Horizontal Curve**

**Date of Program Methodology:10/1/2013**

### What is the justification for this program?

- Addresses SHSP priority or emphasis area

### What is the funding approach for this program?

Competes with all projects

### What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes | Traffic Volume | Functional classification |
| Other-Run Off the Road | | Other-Site Subtype |

### What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

**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:50
Available funding:50

**Program: HRRR**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run Off the Road | Traffic Volume | Other-site subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

**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:50
Available funding:50

**Program: Intersection**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes<br>Other-Run Off the Road | Traffic Volume | Functional classification<br>Other-Site Subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

**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:50
Available funding:50

**Program: Left Turn Crash**

**Date of Program Methodology:10/1/2013**

### What is the justification for this program?

- Addresses SHSP priority or emphasis area

### What is the funding approach for this program?

Competes with all projects

### What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run Off the Road | Traffic Volume | Other-site subtype |

### What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

### How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

**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:50
Available funding:50

**Program: Local Safety**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes | Traffic Volume | Functional classification |

## What project identification methodology was used for this program?

- Crash frequency
- Other-RSA local agency

## 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
- Other-HSIP Committee evaluation

**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:50
Available funding:50

**Program: Low-Cost Spot Improvements**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run Off the Road | Traffic Volume | Other-site subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment
- Other-RSA request from local agencies

## 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
- Other-HSIP Committee evaluation

## 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:50
Available funding:50

**Program: Median Barrier**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes<br>Other-Run Off the Road | Traffic Volume | Functional classification |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

No

## Describe the methodology used to identify local road projects as part of this program.

no medians on local roads

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

## 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:50
Available funding:50

**Program: Pedestrian Safety**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal crashes only<br>Fatal and serious injury crashes only | | |

## What project identification methodology was used for this program?

- Crash frequency
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using method of moments
- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Competitive application process
- Other-HSIP Committee evaluation

## 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).

Ranking based on B/C:50
Available funding:50

2019 New Hampshire Highway Safety Improvement Program
**Program: Right Angle Crash**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run Off the Road | Traffic Volume | Other-site subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

## 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:50
Available funding:50

2019 New Hampshire Highway Safety Improvement Program
**Program: Roadway Departure**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes<br>Other-EPDO | Traffic Volume | Other-Site Subtype |

## What project identification methodology was used for this program?

- Equivalent property damage only (EPDO Crash frequency)
- Expected crash frequency with EB adjustment

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

Yes

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

No

## Describe the methodology used to identify local road projects as part of this program.

EPDO

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

## 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:50
Available funding:50

**Program: Rural State Highways**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes | Traffic Volume | Horizontal curvature |
| Fatal and serious injury crashes only | | Roadside features |

## What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Competitive application process
- Other-HSIP Committee evaluation
- 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:50
Available funding:50

2019 New Hampshire Highway Safety Improvement Program
**Program: Segments**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run off the Road | Traffic Volume | Median width<br>Other-Site subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Competitive application process
- Other-HSIP Committee evaluation
- 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:50
Available funding:50

**Program: Shoulder Improvement**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Competes with all projects

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| All crashes<br>Fatal and serious injury crashes only | Traffic Volume | Roadside features |

## What project identification methodology was used for this program?

- Equivalent property damage only (EPDO Crash frequency)
- Expected crash frequency with EB adjustment

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Competitive application process
- Other-HSIP Committee evaluation
- 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:50
Available funding:50

**Program: Sign Replacement And Improvement**

**Date of Program Methodology:10/1/2013**

## What is the justification for this program?

- Addresses SHSP priority or emphasis area

## What is the funding approach for this program?

Funding set-aside

## What data types were used in the program methodology?

| Crashes | Exposure | Roadway |
|---|---|---|
| Fatal and serious injury crashes only<br>Other-Run Off the Road | Traffic Volume | Other-site subtype |

## What project identification methodology was used for this program?

- Expected crash frequency with EB adjustment
- Other-Run off the Road

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

Yes

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

Yes

## How are projects under this program advanced for implementation?

- Other-HSIP Committee evaluation

**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:50
Available funding:50

## What percentage of HSIP funds address systemic improvements?

50

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers
- Horizontal curve signs
- Install/Improve Signing
- Rumble Strips
- Upgrade Guard Rails

The percentage of funds applied to systemic improvements is not fixed but varies annually depending on the availability of funds after consideration of other competing projects.

Technologies that the NHDOT does not yet use, but plans to investigate, include high friction surface treatment and durable pavement markings - possibly to include wet reflective materials - on higher class highways.

NHDOT is reviewing its rumble strip guidelines with the aim of adopting a design that will provide the safety benefits of rumble strips while reducing the nuisance exterior noise. The guideline will implement sinusoidal rumble strips to achieve this goal.

## What process is used to identify potential countermeasures?

- Crash data analysis
- Engineering Study
- SHSP/Local road safety plan
- Stakeholder input

### Does the State HSIP consider connected vehicles and ITS technologies?

No

NHDOT has been following technological developments cooperatively with regional DOTs, but has not begun to implement specific infrastructure improvements to support connected vehicles and emerging ITS technologies.

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

Yes

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

The NHDOT uses the Highway Safety Manual, Part D, to support our project selection and evaluation of improvement alternatives. Crash modification factors are selected from the HSM and the CMF Clearinghouse website. The NHDOT strives to achieve an initial benefit-cost ratio of at least 2.0 for new projects to ensure that as the projects' scopes and costs evolve through the project development process, a favorable b-c ratio (greater than 1.0) can be sustained.

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

The NHDOT Bureau of Highway Design has recently been reorganized, one important objective of which was the creation of a Safety Section tasked with administering the HSIP including the selection, evaluation, and

delivery of infrastructure safety projects, and stewardship of the SHSP. This new structure will enhance the NHDOT's safety capabilities by expanding upon our staff focused on this core federal program. The new Safety Section will also continue to work closely with FHWA to develop and sustain the NHDOT's data analysis capabilities needed to support our HSIP.

# Project Implementation

## *Funds Programmed*

### Reporting period for HSIP funding.

Federal 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)** | $7,282,377 | $7,279,077 | 99.95% |
| **HRRR Special Rule (23 U.S.C. 148(g)(1))** | $157,624 | $157,624 | 100% |
| **Penalty Funds (23 U.S.C. 154)** | $0 | $0 | 0% |
| **Penalty Funds (23 U.S.C. 164)** | $0 | $0 | 0% |
| **RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))** | $1,303,559 | $1,303,559 | 100% |
| **Other Federal-aid Funds (i.e. STBG, NHPP)** | $0 | $0 | 0% |
| **State and Local Funds** | $0 | $0 | 0% |
| **Totals** | $8,743,560 | $8,740,260 | 99.96% |

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

0%

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

0%

Local safety projects are eligible for consideration for HSIP funding, but no specific program funding level has been established. Local projects are commonly identified via road safety audits.

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

$88,000

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

$88,000

This programmed figure is not a set-aside and varies annually depending on the priorities. Non-infrastructure safety projects during the reporting period were limited to road safety audits.

## 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

NHDOT does not transfer funds into or out of HSIP.

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

The State of New Hampshire Highway Fund, comprised of revenue from motor vehicle fuel taxes and other fees, is devoted to State-funded highway operations and maintenance. Thus New Hampshire's Federal highway funding, rather than being matched by State funds, is matched by Federal funds in the form of turnpike toll credits. The result is that highway safety funding in New Hampshire is entirely reliant on Federal funding. Any interruption of Federal highway funding would lead to a cessation of New Hampshire's highway safety program. Also, this lack of State highway funds also prevents the State of New Hampshire from being able to leverage the limited Federal safety funds by matching them with State funds, which could support an expanded safety program.

## Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

The NHDOT road safety audit application and selection process provides a predictable and objective means for communities to have their priority safety concerns addressed in a timely manner. Furthermore, the use of CMFs provides a data driven process for selecting and evaluating countermeasures.

## *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 | OWNERSHIP | METHOD FOR SITE SELECTION | SHSP EMPHASIS AREA | SHSP STRATEGY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Belmont 16203 | Intersection geometry | Auxiliary lanes - add left-turn lane | 1 | Intersections | $60,500 | $60,500 | HSIP (23 U.S.C. 148) | Rural | Principal Arterial-Other | 12,534 | 40 | State Highway Agency | Spot | Intersections | Reducing intersection crashes - offset turn lanes |
| Concord 24921 | Intersection traffic control | Modify traffic signal timing - signal coordination | 2 | Intersections | $190,311 | $190,311 | HSIP (23 U.S.C. 148) | Urban | Principal Arterial-Other | 14,580 | 40 | State Highway Agency | Spot | Intersections | Reduce intersection crashes - traffic signals |
| Canterbury-Northfield 41057 | Interchange design | Extend existing lane on ramp | 1 | Interchanges | $59,208 | $59,208 | HSIP (23 U.S.C. 148) | Rural | Minor Arterial | 5,800 | 25 | State Highway Agency | Spot | Intersections | Reduce intersection crashes |
| Statewide 41338 | Intersection traffic control | Modify traffic signal - add backplates with retroreflective borders | 192 | Intersections | $636,681 | $636,681 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Intersections | Reduce intersection crashes - traffic signals |
| Statewide 40803 | Roadside | Barrier- metal | 14,000 | Linear feet of guardrail replacements | $1,074,257 | $1,074,257 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |
| Rochester 41849 | Intersection geometry | Auxiliary lanes - add two-way left-turn lane | 0.5 | Miles | $550,450 | $550,450 | HSIP (23 U.S.C. 148) | Urban | Principal Arterial-Other | 15,128 | 50 | State Highway Agency | Spot | Intersections | Reduce intersection crashes |
| Derry 24861 | Intersection geometry | Auxiliary lanes - add left-turn lane | 1 | Intersections | $1,395,350 | $1,395,350 | HSIP (23 U.S.C. 148) | Urban | Minor Arterial | 12,868 | 45 | State Highway Agency | Road safety audit | Intersections | Reduce intersection crashes - Traffic signals & offset turn lanes |
| Carroll-Whitefield-Jefferson 41781 | Roadside | Barrier- metal | 9,000 | Linear feet of guardrail replacements | $750,399 | $750,399 | HSIP (23 U.S.C. 148) | Rural | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |
| Colebrook-Dixville 41783 | Roadside | Barrier- metal | 11,000 | Linear feet of guardrail replacements | $928,843 | $928,843 | HSIP (23 U.S.C. 148) | Rural | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |

| PROJECT NAME | IMPROVEMENT CATEGORY | SUBCATEGORY | OUTPUTS | OUTPUT TYPE | HSIP PROJECT COST($) | TOTAL PROJECT COST($) | FUNDING CATEGORY | LAND USE/AREA TYPE | FUNCTIONAL CLASSIFICATION | AADT | SPEED | OWNERSHIP | METHOD FOR SITE SELECTION | SHSP EMPHASIS AREA | SHSP STRATEGY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fitzwilliam 16211 | Access management | Raised island - install new | 1 | Intersections | $1,144,617 | $1,144,617 | HSIP (23 U.S.C. 148) | Rural | Principal Arterial-Other | 5,800 | 35 | State Highway Agency | Road Safety Audit | Intersections | Reduce intersection crashes - |
| Statewide 41604 | Roadside | Barrier- metal | 18,700 | Linear feet of guardrail replacements | $645,618 | $645,618 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrail & terminal units |
| Statewide 28139 | Roadway signs and traffic control | Curve-related warning signs and flashers | 1 | D6 - District wide | $165,000 | $165,000 | HSIP (23 U.S.C. 148) | Urban | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Curve warning signs & devices |
| Statewide 28134 | Roadway signs and traffic control | Curve-related warning signs and flashers | 1 | D1 - District wide | $220,000 | $220,000 | HSIP (23 U.S.C. 148) | Rural | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Curve warning signs & devices |
| Northumberland-Stratford 41898 | Roadside | Barrier- metal | 11,000 | Linear feet of guardrail replacements | $55,000 | $55,000 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Spot | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |
| Claremont 25621 | Access management | Change in access - close or restrict existing access | 2 | Access points | $33,000 | $33,000 | HSIP (23 U.S.C. 148) | Urban | Minor Arterial | 20,900 | 30 | City or Municipal Highway Agency | Road Safety Audit | Intersections | Reduce intersection crashes - Access management near intersections |
| Swanzey 40485 | Intersection traffic control | Modify control - two-way stop to roundabout | 1 | Intersections | $220,000 | $220,000 | HSIP (23 U.S.C. 148) | Rural | Major Collector | 5,700 | 30 | State Highway Agency | Spot | Intersections | Reduce intersection crashes - Roundabouts |
| Statewide 41899 | Roadside | Barrier- metal | 6,800 | Linear feet of guardrail replacements | $55,000 | $55,000 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |
| Statewide 41897 | Roadside | Barrier- metal | 14,600 | Linear feet of guardrail replacements | $55,000 | $55,000 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |

2019 New Hampshire Highway Safety Improvement Program

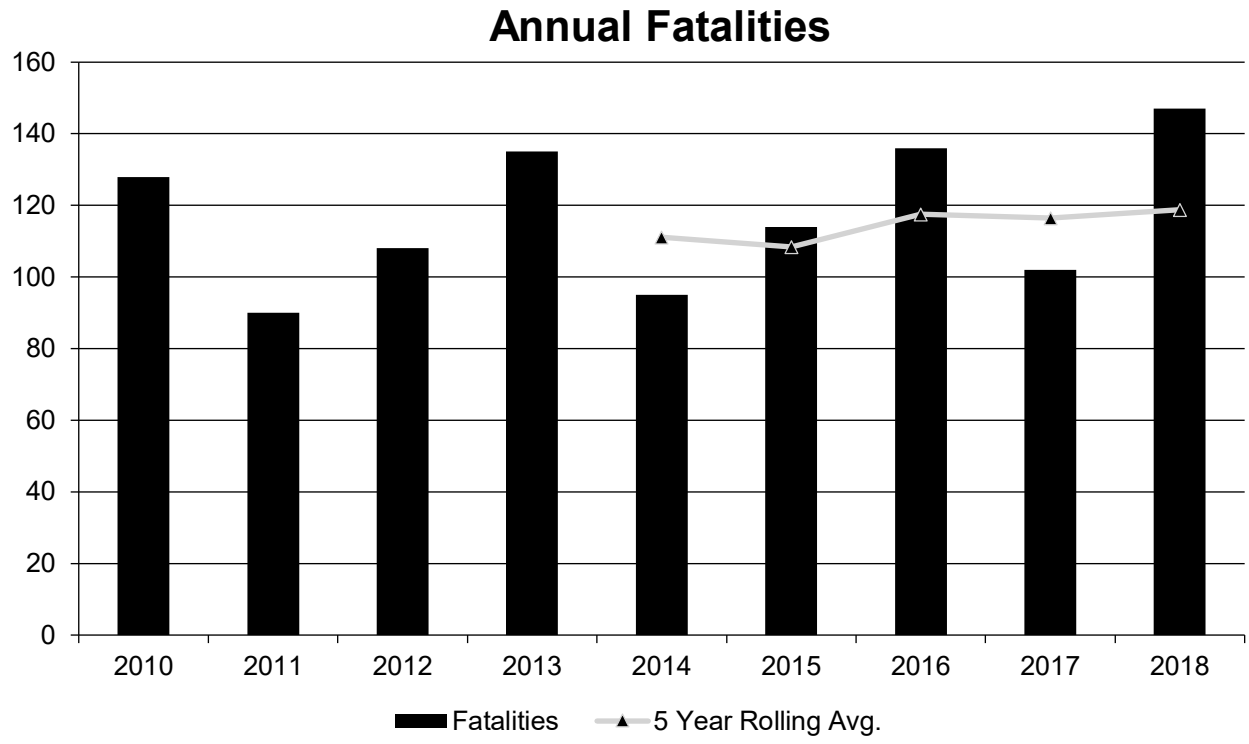
| PROJECT NAME | IMPROVEMENT CATEGORY | SUBCATEGORY | OUTPUTS | OUTPUT TYPE | HSIP PROJECT COST($) | TOTAL PROJECT COST($) | FUNDING CATEGORY | LAND USE/AREA TYPE | FUNCTIONAL CLASSIFICATION | AADT | SPEED | OWNERSHIP | METHOD FOR SITE SELECTION | SHSP EMPHASIS AREA | SHSP STRATEGY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tilton 29358 | Intersection traffic control | Intersection flashers - add overhead (continuous) | 1 | Intersections | $8,800 | $8,800 | HSIP (23 U.S.C. 148) | Urban | Principal Arterial-Other | 21,570 | 40 | State Highway Agency | Road Safety Audit | Intersections | Reduce intersection crashes - Flashing beacons |
| Chester 41848 | Intersection traffic control | Intersection traffic control - other | 1 | Intersections | $82,500 | $82,500 | HSIP (23 U.S.C. 148) | Rural | Major Collector | 6,736 | 30 | State Highway Agency | Road Safety Audit | Intersections | Reduce intersection crashes |
| Statewide 40921 | Non-infrastructure | Road safety audits | | | $60,500 | $60,500 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | | Systemic | Intersections | Reduce intersection crashes |
| Somersworth 42110 | Non-infrastructure | Road safety audits | 1 | Locations | $36,300 | $36,300 | HSIP (23 U.S.C. 148) | Urban | Minor Arterial | 5,000 | 40 | State Highway Agency | Road Safety Audit | Intersections | Reduce intersection crashes |
| Statewide 41269 | Roadside | Barrier- metal | 10500 | Linear feet of guardrail replacements | $3300 | $3300 | HSIP (23 U.S.C. 148) | Multiple/Varies | Multiple/Varies | 0 | | State Highway Agency | Systemic | Roadway Departure | Reduce lane departure crashes - Guardrails & terminal units |

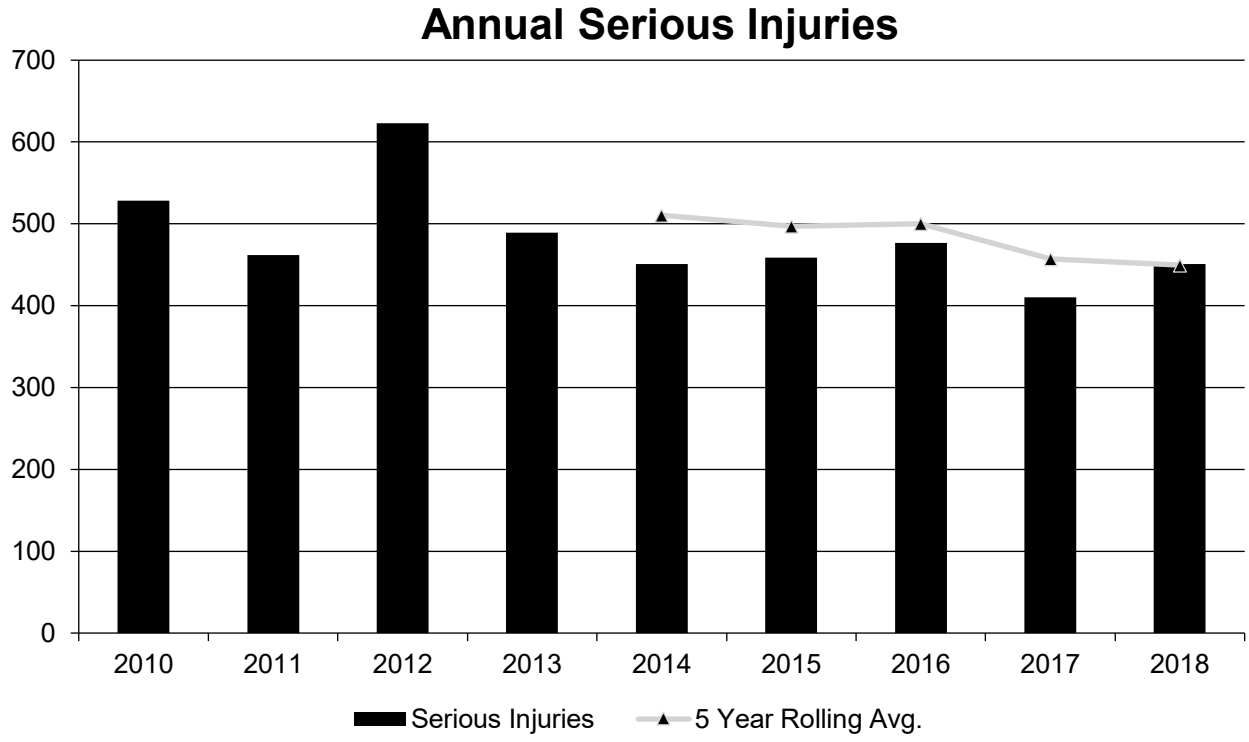
# Safety Performance

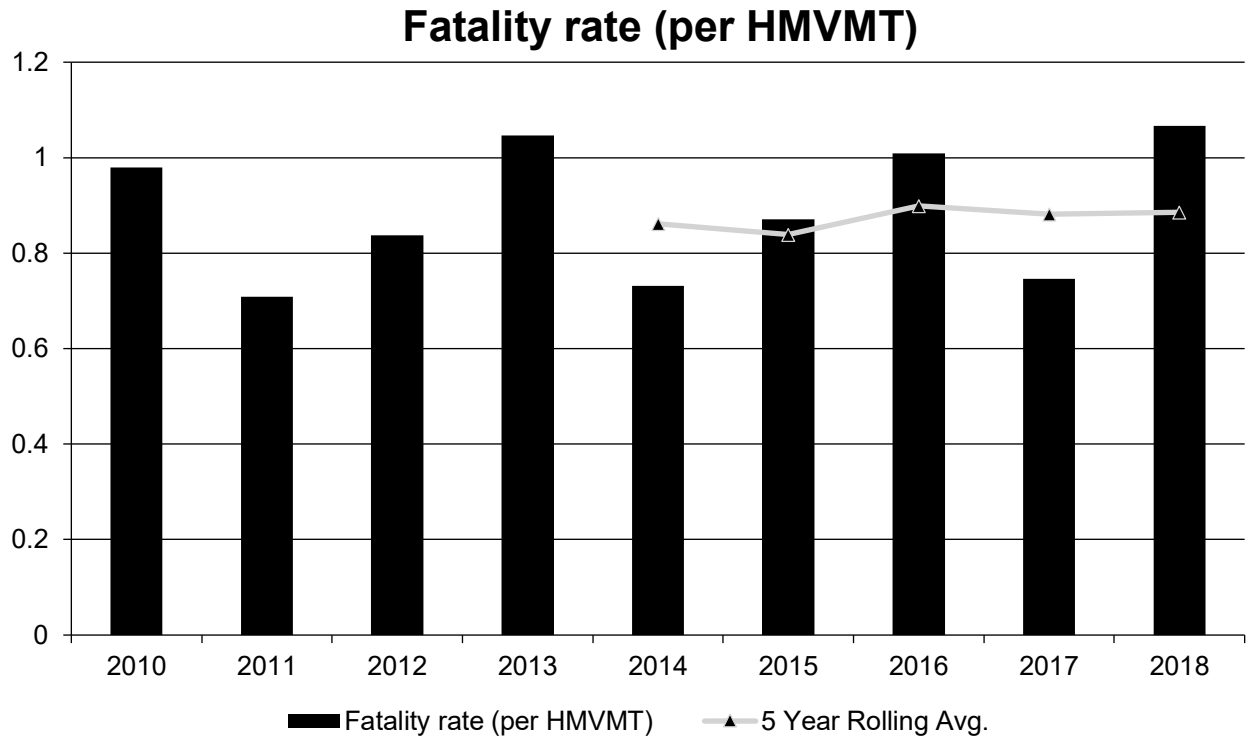
## *General Highway Safety Trends*

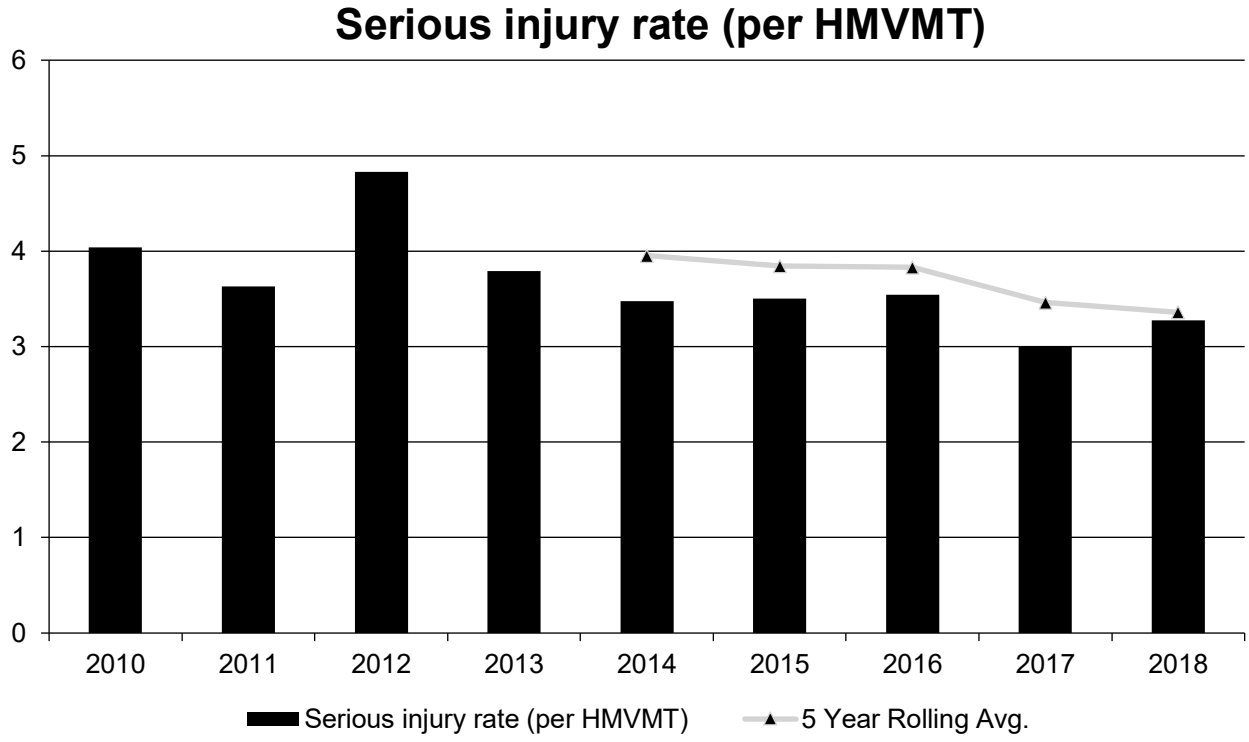
### Present data showing the general highway safety trends in the State for the past five years.

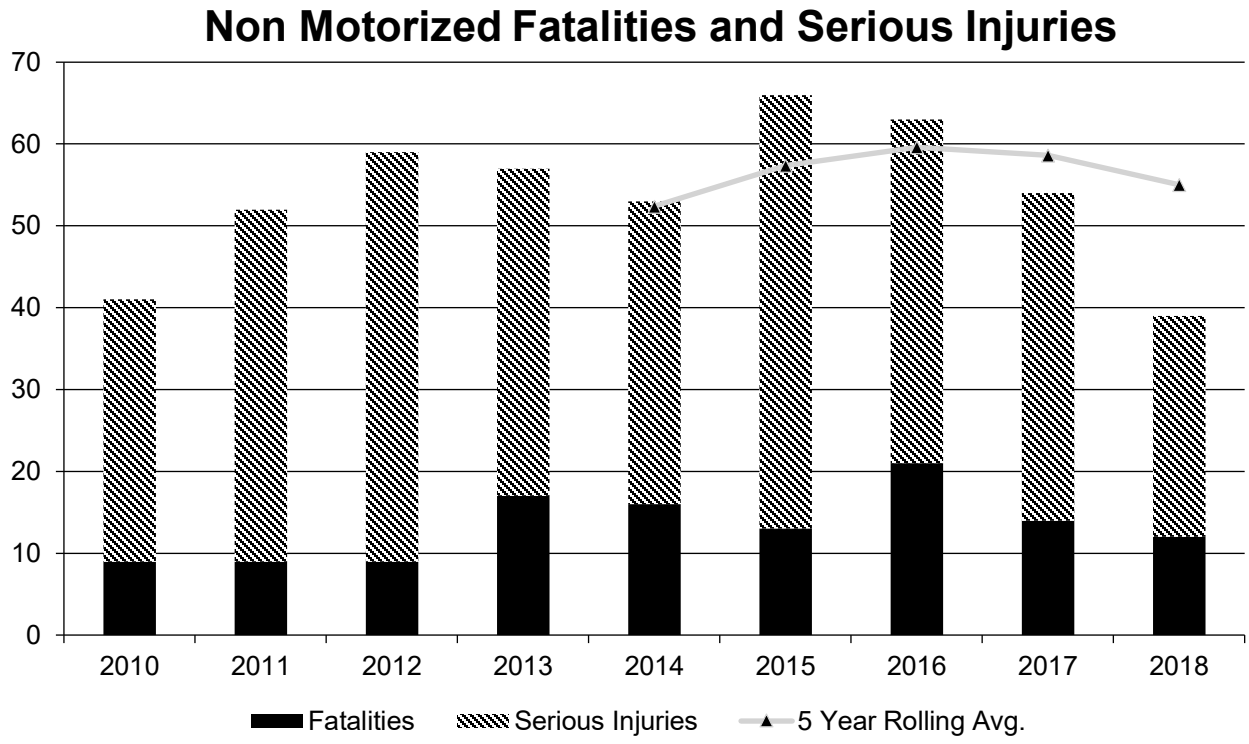
| PERFORMANCE MEASURES | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|
| Fatalities | 128 | 90 | 108 | 135 | 95 | 114 | 136 | 102 | 147 |
| Serious Injuries | 528 | 462 | 623 | 489 | 451 | 459 | 477 | 410 | 451 |
| Fatality rate (per HMVMT) | 0.980 | 0.708 | 0.838 | 1.046 | 0.732 | 0.871 | 1.009 | 0.746 | 1.067 |
| Serious injury rate (per HMVMT) | 4.041 | 3.632 | 4.832 | 3.790 | 3.477 | 3.505 | 3.540 | 2.997 | 3.275 |
| Number non-motorized fatalities | 9 | 9 | 9 | 17 | 16 | 13 | 21 | 14 | 12 |
| Number of non-motorized serious injuries | 32 | 43 | 50 | 40 | 37 | 53 | 42 | 40 | 27 |


Annual Fatalities
160
140
120
100
80
60
40
20
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
700
600
500
400
300
200
100
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.2
1
0.8
0.6
0.4
0.2
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious injury rate (per HMVMT)
5 Year Rolling Avg.




Data sources are prescribed by the regulations:

Fatalities: NHTSA Rate of Fatalities (HMVMT): NHTSA & HPMS Serious Injuries: NH Department of Safety (NHDOS) Rate of Serious Injuries (HMVMT): NHDOS & HPMS Non Motorized Fatalities & Serious Injuries: NHTSA & NHDOS

NHTSA – Fatality data is posted by NHTSA. The source is considered consistent and reliable. Data is available from 2007 allowing for the use of 5-yr averages for trend analysis.

HPMS – Traffic volume data is calculated by DOT and posted by FHWA. The source is considered consistent and reliable. Data is available from 2007 allowing for the computation of 5-yr averages for trend analysis.

DOS – Serious injury data for motorized and non-motorized crashes is gathered from the NHDOS Division of Motor Vehicle's VISION database and provided to the NHDOT. Sufficient annual data is available (via VISION and its predecessor, IDMS) to permit the computation of five-year averages for trend analysis. Some of the annual variation in the data may be due to the more subjective nature of determining what constitutes a serious injury crash. Model Minimum Uniform Crash Criteria (MMUCC) introduced in recent years have helped to standardize the definition and proper classification of serious injuries.

## Describe fatality data source.

FARS

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

**Year 2016**

| 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 | | | | |
| other | 0.35 | 2.36 | 0 | 0.02 |

**Year 2016**

| Roadways | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|---|---|---|---|---|
| State Highway Agency | | | | |
| County Highway Agency | 0 | 0 | 0 | 0 |
| Town or Township Highway Agency | | | | |
| City or Municipal Highway Agency | | | | |
| State Park, Forest, or Reservation Agency | 0 | 0 | 0 | 0 |
| Local Park, Forest or Reservation Agency | 0 | 0 | 0 | 0 |
| Other State Agency | | | | |
| Other Local Agency | 0 | 0 | 0 | 0 |
| Private (Other than Railroad) | | | | |
| Railroad | 0 | 0 | 0 | 0 |
| State Toll Authority | 0 | 0 | 0 | 0 |
| Local Toll Authority | 0 | 0 | 0 | 0 |
| Other Public Instrumentality (e.g. Airport, School, University) | 0 | 0 | 0 | 0 |
| Indian Tribe Nation | 0 | 0 | 0 | 0 |
| other | 0.35 | 2.36 | 0 | 0.02 |

Due to the NH Department of Safety's migration from their former crash records database (known as CRMS) to a new MMUCC-compliant system (known as VISION), geolocated serious injury data is not yet available for querying by functional classification. The NHDOT continues to coordinate with our safety partners within state government to make this vital safety data available.

In the reporting of serious injury crashes by road ownership, an additional six serious injury crashes occurred on roads without VMT data. These crashes have been omitted from the table above as the tool does not allow entry of a crash number without an accompanying crash rate.

# *Safety Performance Targets*

## Safety Performance Targets

### Calendar Year 2020 Targets *

***Number of Fatalities:118.8***

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

Trend analysis of the fatalities data produces mostly intuitive results. The 2018 five year average is 118.8 fatalities. Fatalities in the last decade have shown wide variation over a one to two year cycle, with the number of 2018 fatalities being the highest recorded value for the decade. The five year average of the number of fatalities also increased from 2017 to 2018, but with the five-year average trend line mostly attenuating the large annual increase. The annual fatalities rates and the five year averages exhibit similar patterns seen in the numbers of fatalities. The rising trend computed by the data is not acceptable as a target as it would be contrary to the core objective of the state's Driving Toward Zero initiative, thus a level trend has been selected as the target. A 2020 target of 118.8 fatalities (maintaining the 2018 five-year average) is recommended. The rising trend computed by the data is not acceptable as a target as it would be contrary to the core objective of the state's Driving Toward Zero initiative.

***Number of Serious Injuries:448.0***

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

Trend analysis shows reductions in both the number and rate of serious injuries. The computed 2020 targets represent 3.7% and 4.8% reductions respectively from the 2018 five year averages. The computed targets are substantially lower than any historical values within the analysis period (with the exception of 2017). A 2020 target of 448 serious injuries is recommended as it would be a more achievable goal consistent with the observed safety performance in recent years, yet would still represent the best serious injury performance in the decade. This target represents an annual reduction in the five year average of 0.2%.

***Fatality Rate:0.885***

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

Trend analysis of the fatalities data produces mostly intuitive results. The 2018 five year average fatality rate is 0.885 per HMVMT. Fatalities in the last decade have shown wide variation over a one to two year cycle, with the number of 2018 fatalities being the highest recorded value for the decade. The five year average of the number of fatalities also increased from 2017 to 2018, but with the five-year average trend line mostly attenuating the large annual increase. The annual fatalities rates and the five year averages exhibit similar patterns seen in the numbers of fatalities. A 2020 target fatality rate of 0.885 fatalities per HMVMT (maintaining the 2018 five-year average) is recommended. The rising trend computed by the data is not acceptable as a target as it would be contrary to the core objective of the state's Driving Toward Zero initiative, thus a level trend has been selected as the target.

***Serious Injury Rate:3.269***

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

Trend analysis shows reductions in both the number and rate of serious injuries. The computed 2020 targets represent 3.7% and 4.8% reductions respectively from the 2018 five year averages. The computed targets are substantially lower than any historical values within the analysis period (with the exception of 2017). A 2020 target serious injury rate of 3.269 fatalities per HMVMT is recommended as it would present a more achievable goal while still representing better performance than has been observed in the decade. This target represents an annual reduction in the five year average of 1.4%.

***Total Number of Non-Motorized Fatalities and Serious Injuries:51.6***

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

Trend analysis shows a slightly declining trend and a 2020 target value of 53.1 non-motorized fatalities and serious injuries. Although the trend line is declining, the computed target value is actually higher than the 2018 five-year average performance. In this instance, a more aggressive target value would be appropriate. A 2020 target of 51.6 fatalities and serious injuries (i.e., maintaining the 2018 performance) is recommended. This target would be consistent with the performance trend since 2015 and would represent a more aggressive, although still realistic, performance level.

In concert with the collaborative and data-driven Strategic Highway Safety Plan, the annual safety performance targets have as their basis the SHSP's fundamental goal of reducing fatal crashes by half by the year 2030, with the ultimate goal of zero fatalities. A similar motivating goal drives the targets for serious injuries, both for motorized and non-motorized modes. The process of target setting, likewise, emulates the SHSP in that it is collaborative, involving many of the same safety stakeholders who are instrumental in the SHSP, and uses objective data-driven methods wherever possible to derive and inform the safety targets.

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

Building upon the successful target-setting practices that had been developed and documented in prior years, the NHDOT began the annual target-setting with a meeting among the safety stakeholders. A meeting among the principal participants in the target setting, including the NHDOT, the NH Office of Highway Safety (NHOHS), a representative MPO, and the FHWA NH Division was held in April 2019 to review and confirm the target-setting process to be undertaken. Using data provided by the NH Department of Safety (NHDOS) and Division of Motor Vehicles, the NHDOT compiled the data, computed draft targets, modified the targets as appropriate to consider the influence of potential external factors, and composed narratives to document and defend the selected targets. These draft targets were reviewed with the NHDOT HSIP Committee and the NHOHS, as well as NHDOT and NHDOS leadership for concurrence. The accepted targets for the three common safety performance measures (number of fatalities, rate of fatalities, number of serious injuries) were published by the NHOHS in their annual Highway Safety Plan.

## Does the State want to report additional optional targets?

No

**Describe progress toward meeting the State's 2018 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.**

Comparison of 2018 targets (from 2017 HSIP annual report) vs actual performance
Fatalities: 2018 target = 113.2, 2018 actual = 118.8, 2017 actual = 116.4 [2018 did not achieve or make progress toward target]
Fatality rate: 2018 target = 0.866, 2018 actual = 0.885, 2017 actual = 0.882 [2018 did not achieve or make progress toward target]
Serious injuries: 2018 target = 499.8, 2018 actual = 449.6, 2017 actual = 457.2 [2018 performance achieved target]
Serious injury rate: 2018 target = 3.847, 2018 actual = 3.359, 2017 actual = 3.464 [2018 performance achieved target]
Non-motorized fatalities and serious injuries: 2018 target = 51.4, 2018 actual = 51.6, 2017 actual = 58.6 [2018 performance made significant progress toward target]

Discussion
NH fatal crash performance continues to show large variance on an annual or biannual cycle in recent years. The possible causes of the 2018 fatality spike have not been determined, although the same principal causes of fatalities are generally seen in both the higher and lower fatality years, namely impairment, distraction, speeding, and lack of restraint use. Safety stakeholders continue to work for the adoption of an adult seatbelt law as the most effective means of reducing the number of fatalities. The NHDOT is also investigating a potential shift in our infrastructure expenditures toward more systemic and fewer spot improvements, as a more effective application of our safety funds. It is also worth noting that NHDOT continues to not flex any HSIP funds.

Serious injury numbers continue to fall, but it should be acknowledged that some of this improvement is possibly due to better reporting accuracy resulting from the adoption of MMUCC standards. In the early years of this decade the large annual variation in serious injury numbers was believed to be at least partly attributed to inconsistencies in the diagnosis and reporting of serious injury crashes.

Non-motorized crash performance is showing favorable trends; however, because the crash numbers are relatively low they are subject to proportionally large statistical variation. NHDOT is embarking on a statewide effort to improve pedestrian crossings via the Every Day Counts 5 initiative.

## *Applicability of Special Rules*

### Does the HRRR special rule apply to the State for this reporting period?
**No**

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

| PERFORMANCE MEASURES | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|
| Number of Older Driver and Pedestrian Fatalities | 21 | 22 | 33 | 23 | 23 | 20 | 30 |
| Number of Older Driver and Pedestrian Serious Injuries | 60 | 65 | 57 | 72 | 80 | 80 | 67 |

# Evaluation

## *Program Effectiveness*

### How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries

Project locations are reviewed by 'naïve' evaluation of before/after safety performance.

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

NHDOT's HSIP program is data driven using crash data to select candidate locations for improvement and CMFs to select and evaluate countermeasures based on their benefit/cost ratios. This creates a program that relies heavily on data and improves locations based on the severity of crashes and cost effective improvements. The program's goal is to reduce fatal and serious injury crashes on NH roadways by improving safety with the proposed improvements.

NHDOT's HSIP program also includes systemic projects. These projects improve safety statewide and have included several types of projects including the following: construction of median barriers on divided highways, installation of horizontal curve warning signs to comply with MUTCD, installation of retroreflective backplates on traffic signals, installation of centerline and shoulder rumble strips, and replacement of deficient guardrail and terminal units to meet current safety standards.

NHDOT feels these programs have reduced fatalities and serious injuries on NH roadways because these are all proven safety countermeasures, but this has not been corroborated with system-wide data analysis.

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

- # RSAs completed
- HSIP Obligations
- Increased awareness of safety and data-driven process
- More systemic programs
- Organizational change

At the start of FY 2018 the NHDOT Bureau of Highway Design expanded its Safety Section, which historically been comprised of one or two individuals, to five individuals to provide a more robust level of program support.

The NHDOT aims to continue to expand our RSA program by encouraging communities, via the RPCs and MPOs, to apply for RSAs. The RSA candidates are screened according to crash history, and the program has delivered worthwhile projects. The NHDOT also continues to deliver systemic projects with a recent emphasis on installing rumble strips, improving deficient guardrail elements, installing MUTCD-compliant curve warning signs, and enhancing signalized intersections with retroreflective backplates.
A planned initiative will continue system signal improvements by installing flashing yellow arrows to control permissive left turns currently operating under a green ball signal indication. Both the flashing yellow arrows and retroreflective backplates initiatives are planned to be expanded to municipal roadways as well.

### Describe significant program changes that have occurred since the last reporting period.

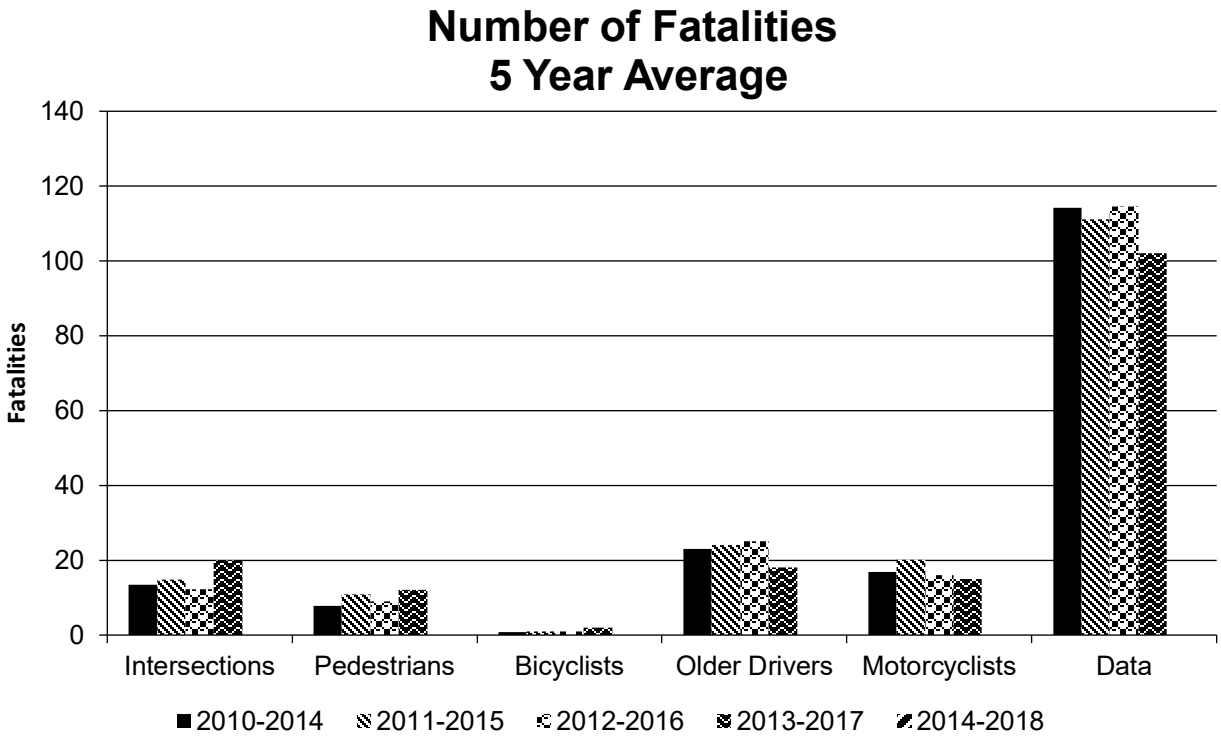
In response to frequent noise complaints related to 'standard' rumble strips, but in recognition of the proven safety value of rumble strips, NHDOT is updating our guidelines to incorporate 'sinusoidal' rumble strips in our standard practice. Using guidance from other State DOTs, the NHDOT was able to select a 'sinusoidal' design that provides the safety benefit proven to reduce lane departure crashes while reducing their undesirable exterior noise.

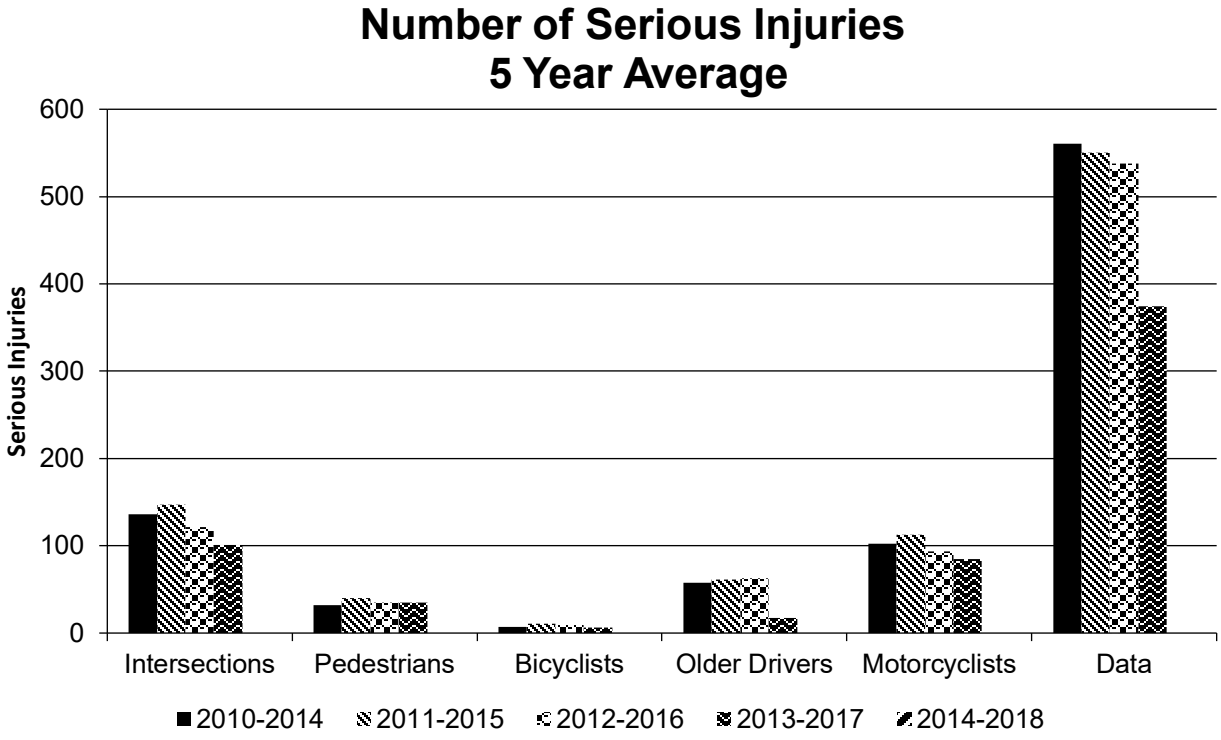
## *Effectiveness of Groupings or Similar Types of Improvements*

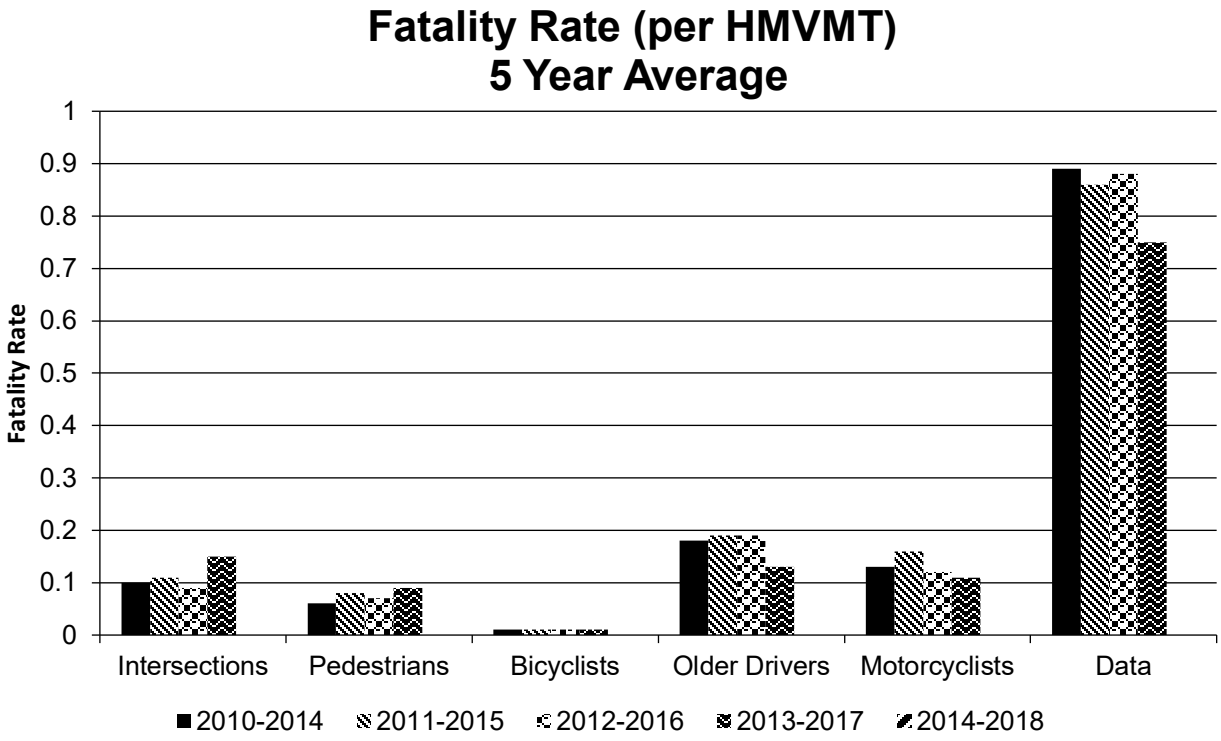
### Present and describe trends in SHSP emphasis area performance measures.

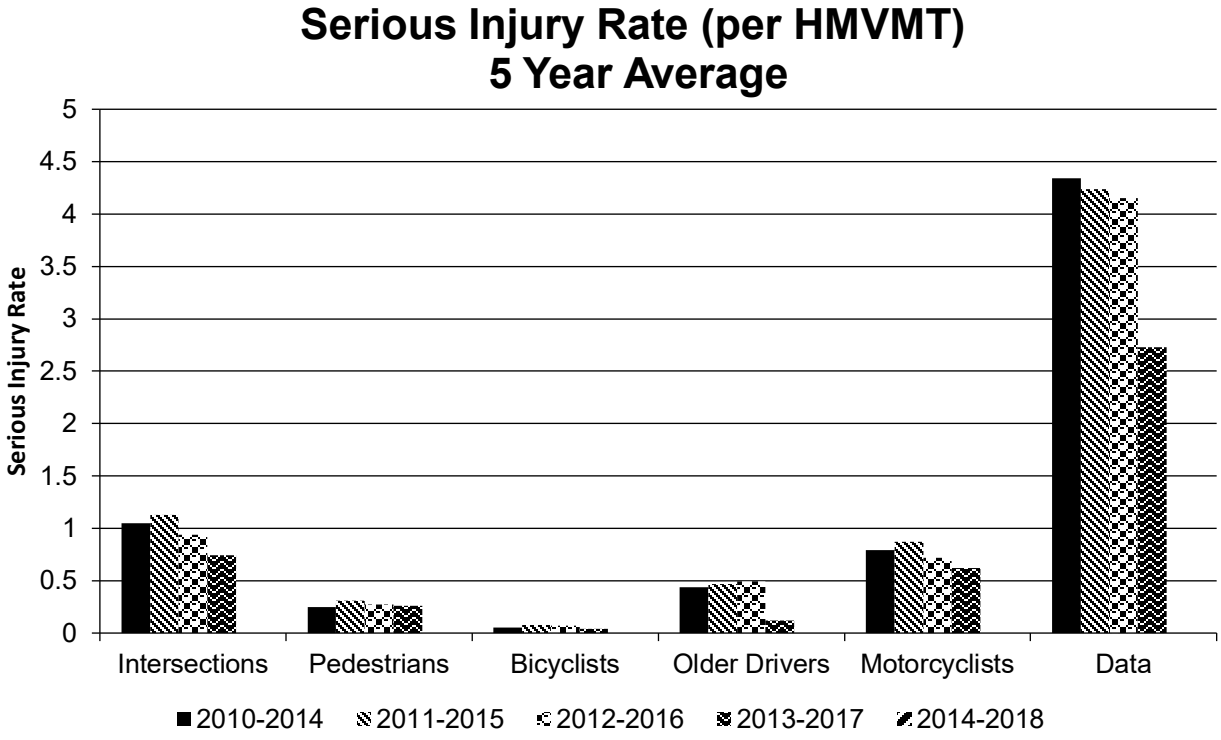
**Year 2017**

| 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) |
|---|---|---|---|---|---|
| Intersections | | 20 | 101 | 0.15 | 0.74 |
| Pedestrians | | 12 | 35 | 0.09 | 0.26 |
| Bicyclists | | 2 | 6 | 0.01 | 0.04 |
| Older Drivers | | 18 | 17 | 0.13 | 0.12 |
| Motorcyclists | | 15 | 85 | 0.11 | 0.62 |
| Data | | 102 | 374 | 0.75 | 2.73 |


Number of Fatalities
5 Year Average
Fatalities
140
120
100
80
60
40
20
0
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Data
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018


Number of Serious Injuries
5 Year Average
Serious Injuries
600
500
400
300
200
100
0
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Data
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018




Due to the NH Department of Safety's recent migration from their former crash records database (known as CRMS) to a new MMUCC-compliant system (known as VISION), geolocated serious injury data is not available for querying. Because of this data deficiency, the NHDOT is not able to provide actual 2018 counts for fatal crashes related to lane or roadway departure, or intersections, or serious injury crashes related to lane

departure. Rather than enter '0' for the missing data (and thereby skew the computed averages), 2018 values have been estimated to produce 5-year averages similar to the 2017 annual report.

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

No

The NHDOT does not presently have the resources to conduct rigorous evaluations of countermeasure effectiveness; however, the NHDOT is an active participant in the project advisory committee of the FHWA pooled fund study for the Evaluation of Low-Cost Safety Improvements, which provides valuable data to support program decisions.

## *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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pittsfield 24842 | Rural Minor Arterial | Intersection geometry | Auxiliary lanes - modify left-turn lane offset | | | | | | | | | | | |
| Whitefield P2953 | Rural Principal Arterial (RPA) - Other | Roadway | Roadway - other | 29.00 | 13.00 | 1.00 | | 2.00 | | 4.00 | 4.00 | 36.00 | 17.00 | 1.48 |
| Statewide 15358 | Rural Principal Arterial (RPA) - Other | Roadway | Rumble strips - center | | | 4.00 | | | | | | 4.00 | | |
| Derry 13249 | Urban Principal Arterial (UPA) - Other | Intersection traffic control | Modify traffic signal - modernization/replacement | 62.00 | 114.00 | | 1.00 | | 4.00 | 12.00 | 12.00 | 74.00 | 131.00 | 0.78 |
| New London 14451A | Rural Principal Arterial (RPA) - Other | Roadway | Roadway narrowing (road diet, roadway reconfiguration) | 23.00 | 56.00 | 1.00 | | 3.00 | | 6.00 | 6.00 | 33.00 | 62.00 | 19.05 |
| Boscawen 13957A | Rural Principal Arterial (RPA) - Other | Intersection geometry | Intersection geometry - other | 2.00 | 2.00 | | | 2.00 | | 4.00 | 4.00 | 8.00 | 6.00 | 0.32 |
| Holderness 15309 | Rural Principal Arterial (RPA) - Other | Intersection geometry | Intersection geometrics - modify skew angle | 7.00 | | | | | | 1.00 | 1.00 | 8.00 | 1.00 | 3.61 |
| Pittsfield 15622 | Rural Principal Arterial (RPA) - Other | Intersection traffic control | Modify traffic signal - modernization/replacement | 13.00 | 2.00 | | | | | 7.00 | 7.00 | 20.00 | 9.00 | 1.65 |
| Brentwood 15619 | Rural Principal Arterial (RPA) - Other | Intersection traffic control | Modify traffic signal - modernization/replacement | 9.00 | 12.00 | 1.00 | | 1.00 | | 14.00 | 14.00 | 25.00 | 26.00 | 36.86 |
| Greenland 15618 | Urban Principal Arterial (UPA) - Other | Intersection geometry | Auxiliary lanes - add left-turn lane | 26.00 | 20.00 | | | | 1.00 | 7.00 | 7.00 | 33.00 | 28.00 | 3.02 |
| Boscawen 15621 | Rural Principal Arterial (RPA) - Other | Intersection traffic control | Modify control - two-way stop to roundabout | 14.00 | 16.00 | | | | | 6.00 | 6.00 | 20.00 | 22.00 | 0.55 |
| Hampstead-Atkinson 15663 | Urban Minor Collector | Intersection geometry | Auxiliary lanes - add right-turn lane | 15.00 | 11.00 | 1.00 | | | | 3.00 | 3.00 | 19.00 | 14.00 | 6.78 |

| 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) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lyme 15695 | Rural Minor Collector | Intersection geometry | Intersection geometrics - modify skew angle | 2.00 | 1.00 | | | | | 1.00 | 1.00 | 3.00 | 2.00 | 1.39 |
| Effingham 16041 | Rural Principal Arterial (RPA) - Other | Intersection traffic control | Intersection signing - add enhanced regulatory sign (double-up and/or oversize) | 6.00 | 1.00 | 3.00 | | | | 2.00 | 2.00 | 11.00 | 3.00 | 532.64 |
| Epping 15693 | Rural Principal Arterial (RPA) - Other | Intersection geometry | Through lanes - add additional through lane | 56.00 | 49.00 | | | 1.00 | 1.00 | 18.00 | 18.00 | 75.00 | 68.00 | 1.16 |
| Keene 20812 | Urban Principal Arterial (UPA) - Other | Intersection traffic control | Modify control - two-way stop to roundabout | 12.00 | 1.00 | | | 1.00 | | 1.00 | 1.00 | 14.00 | 2.00 | 0.93 |
| Swanzey 15697A | Rural Minor Arterial | Roadside | Removal of roadside objects (trees, poles, etc.) | 9.00 | 3.00 | | | | | 9.00 | 9.00 | 18.00 | 12.00 | 375.83 |
| Barrington 16201 | Rural Principal Arterial (RPA) - Other | Intersection geometry | Auxiliary lanes - add left-turn lane | 12.00 | 4.00 | | | 1.00 | | 6.00 | 6.00 | 19.00 | 10.00 | 0.90 |
| Barnstead 16200 | Rural Principal Arterial (RPA) - Other | Intersection geometry | Auxiliary lanes - add left-turn lane | 17.00 | 1.00 | | | 2.00 | | 4.00 | 4.00 | 23.00 | 5.00 | 1.58 |
| Candia 16413 | Rural Minor Collector | Intersection geometry | Intersection geometrics - re-assign existing lane use | 3.00 | 12.00 | | | 1.00 | | 3.00 | 3.00 | 7.00 | 15.00 | 5.9 |

## Compliance Assessment

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

07/19/2017

**What are the years being covered by the current SHSP?**

From: 2017 To: 2021

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

2021

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

| 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | |
| ROADWAY SEGMENT | Segment Identifier (12) | 100 | 100 | | | | | 100 | 100 | 100 | 100 |
| | Route Number (8) | 100 | 100 | | | | | | | | |
| | Route/Street Name (9) | 100 | 100 | | | | | | | | |
| | Federal Aid/Route Type (21) | 100 | 100 | | | | | | | | |
| | Rural/Urban Designation (20) | 100 | 100 | | | | | 100 | 100 | | |
| | Surface Type (23) | 100 | 100 | | | | | 100 | 100 | | |
| | Begin Point Segment Descriptor (10) | 100 | 100 | | | | | 100 | 100 | 100 | 100 |
| | End Point Segment Descriptor (11) | 100 | 100 | | | | | 100 | 100 | 100 | 100 |
| | Segment Length (13) | 100 | 100 | | | | | | | | |
| | Direction of Inventory (18) | 100 | 100 | | | | | | | | |
| | Functional Class (19) | 100 | 100 | | | | | 100 | 100 | 100 | 100 |
| | Median Type (54) | 80 | 2 | | | | | | | | |
| | Access Control (22) | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | |
| | One/Two Way Operations (91) | 100 | 100 | | | | | | | | |
| | Number of Through Lanes (31) | 100 | 100 | | | | | 100 | 100 | | |
| | Average Annual Daily Traffic (79) | 100 | 100 | | | | | 100 | 100 | | |
| | AADT Year (80) | 100 | 100 | | | | | | | | |
| | Type of Governmental Ownership (4) | 100 | 100 | | | | | 100 | 100 | 100 | 100 |
| **INTERSECTION** | Unique Junction Identifier (120) | | | 100 | 100 | | | | | | |
| | Location Identifier for Road 1 Crossing Point (122) | | | 100 | 100 | | | | | | |
| | Location Identifier for Road 2 Crossing Point (123) | | | 100 | 100 | | | | | | |
| | Intersection/Junction Geometry (126) | | | 100 | 100 | | | | | | |
| | Intersection/Junction Traffic Control (131) | | | 5 | 5 | | | | | | |
| | AADT for Each Intersecting Road (79) | | | 100 | 100 | | | | | | |
| | AADT Year (80) | | | 100 | 100 | | | | | | |
| | Unique Approach Identifier (139) | | | 100 | 100 | | | | | | |
| **INTERCHANGE/RAMP** | Unique Interchange Identifier (178) | | | | | 5 | | | | | |
| | Location Identifier for Roadway at Beginning of Ramp Terminal (197) | | | | | 100 | 100 | | | | |
| | Location Identifier for Roadway at Ending Ramp Terminal (201) | | | | | 100 | 100 | | | | |
| | Ramp Length (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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | STATE | NON-STATE | |
| | Roadway Type at Beginning of Ramp Terminal (195) | | | | | 100 | 100 | | | | |
| | Roadway Type at End Ramp Terminal (199) | | | | | 100 | 100 | | | | |
| | Interchange Type (182) | | | | | 5 | | | | | |
| | Ramp AADT (191) | | | | | 100 | 100 | | | | |
| | Year of Ramp AADT (192) | | | | | 100 | 100 | | | | |
| | Functional Class (19) | | | | | 100 | 100 | | | | |
| | Type of Governmental Ownership (4) | | | | | 100 | 100 | | | | |
| **Totals (Average Percent Complete):** | | **98.89** | **94.56** | **88.13** | **88.13** | **82.73** | **81.82** | **100.00** | **100.00** | **100.00** | **100.00** |

*Based on Functional Classification

NHDOT has completed data collection for all but four of the Fundamental Data Elements. Those elements are median type, intersection / junction traffic control, unique interchange identifier, and interchange type. All FDEs will be collected on roads of Function Class 1 through 7. Work is nearing completion on median types for State roads, while the data collection efforts are in their early stages for the remaining FDEs.

### 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.

NHDOT has completed data collection for all but four of the Fundamental Data Elements. Those remaining elements are median type, intersection/junction traffic control, unique interchange identifier, and interchange type. All FDEs will be collected on roads with function class 1 through 7. Data collection is nearing completion for median types on State roads, while the data collection is in its early stages for the remaining incomplete FDEs. Much of the data for the incomplete FDEs is available, but in formats incompatible with GIS. The collection and management of the MIRE FDEs occurs within the NHDOT's Bureau of Planning and Community Assistance - GIS Section and is stored in the roadway data inventory. We use an ArcGIS environment along with an Oracle database. This data is also shared on 'NH GRANIT', which is NH's statewide GIS clearinghouse. Most elements are collected and updated on an annual basis by staff in the Planning and Community Assistance Bureau. Existing collection methodologies include collection by visiting sites and entering data into a laptop, or using aerial imagery and other forms of imagery to locate elements. Nightly scripts are run to aggregate the data. We continue to investigate the use of more modern methods of data collection such as with tablets and mobile devices, via Lidar, and with other emerging technologies. All data collection and entry is currently done by NHDOT staff. The Bureau of Planning and Community Assistance assigns one staff person at approximately 50% of their time plus a supervisor. NHDOT will continue to maintain the MIRE data and fund the collection of the data leveraging existing GIS tools and within the limitations of our resources.

### Did the State conduct an HSIP program assessment during the reporting period?

No

Two assessments, a program self assessment and a safety data capabilities assessment, are scheduled for early FY 2019. The results will be reported next year.

**When does the State plan to complete its next HSIP program assessment.**

2019

## Optional Attachments

Program Structure:

New Hampshire HSIP Guidance2013.doc
Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

## Glossary

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

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

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

**HMVMT:** means hundred million vehicle miles traveled.

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

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

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

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

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

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

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

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

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