Vermont
Highway Safety Improvement Program
2015 Annual Report

Prepared by: VT
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.”
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Executive Summary

The development of Highway Safety Improvement Projects was implemented following the methodology established in 2005. The Agency further continued to work with local municipalities in the review of high risk local roads and in the constructions of low cost improvements.

For the Federal Fiscal year the total amount of funding that was obligated during the reporting period was $10105953. Of these, $7,096,325 was obligated from HSIP Section 148 and $3,009,628 was obligated from Section 164. 

During the reporting period, 37 projects were in a design stage and 27 were completed or being constructed.

Over the years, the HSIP and other related safety efforts have been efficient at reducing the number of major crashes (fatal + serious injury crashes). One of the principal measures of success that illustrates this is the reduction in the five-year average of major crashes which passed from 386 major crashes for the 2007-2011 period to 337 for the 2010-2014 period.
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 MAP-21 Reporting Guidance dated February 13, 2013 and consists of four sections: program structure, progress in implementing HSIP projects, progress in achieving safety performance targets, and assessment of the effectiveness of the improvements.

Program Structure

Program Administration

How are Highway Safety Improvement Program funds allocated in a State?

- Central
- District
- Other

Describe how local roads are addressed as part of Highway Safety Improvement Program.

Local roads that are part of the Federal Aid System are addressed the same way as state maintained roads, using the approved HSIP ranking methodology for the identification of locations with potential safety problems. The local roads that rank within the subset of top locations are reviewed through an engineering study. Low cost remedial actions are implemented via a statewide project, while high cost solutions are implemented by VTrans through the regular design process.

During the reporting period, rural local roads were considered for evaluation and improvement under our state high risk rural roads program. Locations were identified by the regional planning commissions...
using crash data as well as anecdotal information. For these locations, safety corridor reviews were performed to identify signing, markings and guardrail improvements. These low cost treatments will be designed and implemented via a statewide project. The methodology used to select the HRRR projects is attached as an uploaded document under the Program Methodology Section.

Upon the request of a municipality, VTrans will perform a road safety audit of any local road to assist the municipality with local safety concerns. A multidisciplinary team is put together, a site visit is performed and a report outlying recommendations is provided to the municipality.

**Identify which internal partners are involved with Highway Safety Improvement Program planning.**

- [x] Design
- [ ] Planning
- [x] Maintenance
- [x] Operations
- [ ] Governors Highway Safety Office
- [ ] Other:

**Briefly describe coordination with internal partners.**

Depending on the characteristics of the site to be reviewed, Design, Operations and/or Maintenance staff are asked to take part to the visit of the site and to formulate some recommendations. Key personal in Design and/or Maintenance are contacted several weeks in advance usually by email by the lead investigator. Along with a request to attend an on-site meeting, the lead investigator also sends relevant background information such as crash information and a general description of the problem.

**Identify which external partners are involved with Highway Safety Improvement Program planning.**

- [x] Metropolitan Planning Organizations
- [ ] Governors Highway Safety Office
- [ ] Local Government Association
Identify any program administration practices used to implement the HSIP that have changed since the last reporting period.

☐ Multi-disciplinary HSIP steering committee

☐ Other: Other-There has been no change since the last reporting period. We have almost completed the rewriting of our HSIP procedures.

Describe any other aspects of Highway Safety Improvement Program Administration on which you would like to elaborate.

There is a challenge in the deployment of HSIP countermeasure projects in that they follow the same design process as every other road and bridge project at VTrans. The solution may be identified quickly, however there is no priority put on an HSIP projects and therefore, implementation can several years as the project works through the same design process (PE, ROW and construction) as all VTrans projects.

This problem has also been an issue, to a lesser extent, with the delivery of low cost projects, such as the installation of signs or the upgrade of signal equipment on town highways.

While, since 2012, we have been developing and contracting regional projects to implement these low cost solutions on town and city owned roads (thus making sure that federal procurement procedures are followed), the time lag between the road reviews and the installation of the low cost improvements has been around two years. In addition, preparing formal plans for contacting purposes has also been time consuming.
Program Methodology

Select the programs that are administered under the HSIP.

- [ ] Median Barrier
- [ ] Intersection
- [ ] Safe Corridor
- [ ] Horizontal Curve
- [ ] Bicycle Safety
- [ ] Rural State Highways
- [ ] Skid Hazard
- [ ] Crash Data
- [ ] Red Light Running Prevention
- [ ] Roadway Departure
- [X] Low-Cost Spot Improvements
- [ ] Road Replacement And Improvement
- [X] Local Safety
- [ ] Pedestrian Safety
- [ ] Right Angle Crash
- [ ] Left Turn Crash
- [ ] Shoulder Improvement
- [ ] Segments
- [X] Other: Other-School Zone Safety

Program: Low-Cost Spot Improvements

Date of Program Methodology: 1/28/2005

What data types were used in the program methodology?

Crashes
- [X] All crashes
- [ ] Fatal crashes only
- [ ] Fatal and serious injury crashes only
- [ ] Other

Exposure
- [X] Traffic
- [ ] Volume
- [ ] Population
- [X] Lane miles

Roadway
- [ ] Median width
- [ ] Horizontal curvature
- [X] Functional classification
- [ ] Roadside features
What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Equivalent property damage only (EPDO Crash frequency)
- EPDO crash frequency with EB adjustment
- Relative severity index
- Crash rate
- Critical rate
- Level of service of safety (LOSS)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess expected crash frequency using method of moments
- Probability of specific crash types
- Excess proportions of specific crash types
- Other

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

- Yes
- No

If yes, are local road projects identified using the same methodology as state roads?

- Yes
- No
How are highway safety improvement projects advanced for implementation?

☐ Competitive application process
☒ Selection committee
☐ Other

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).

☐ Relative Weight in Scoring
☒ Rank of Priority Consideration

☒ Ranking based on B/C 2
☒ Available funding 1
☐ Incremental B/C
☐ Ranking based on net benefit
☐ Other

Program: Local Safety

Date of Program Methodology: 3/12/2009

What data types were used in the program methodology?

Crashes Exposure Roadway
☒ All crashes ☐ Traffic ☐ Median width
What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Equivalent property damage only (EPDO Crash frequency)
- EPDO crash frequency with EB adjustment
- Relative severity index
- Crash rate
- Critical rate
- Level of service of safety (LOSS)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess expected crash frequency using method of moments
- Probability of specific crash types
- Excess proportions of specific crash types
- Other

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

- Yes
- No
If yes, are local road projects identified using the same methodology as state roads?

☑ Yes
☐ No

How are highway safety improvement projects advanced for implementation?

☑ Competitive application process
☐ selection committee
☐ Other

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).

☐ Relative Weight in Scoring
☑ Rank of Priority Consideration

☐ Ranking based on B/C
☑ Available funding 100
☐ Incremental B/C
☐ Ranking based on net benefit
☐ Other

Program: Other-School Zone Safety

Date of Program Methodology: 1/1/2014
What data types were used in the program methodology?

- **Crashes**
  - All crashes
  - Fatal crashes only
  - Fatal and serious injury crashes only
  - Other

- **Exposure**
  - Traffic
  - Volume
  - Population

- **Roadway**
  - Median width
  - Horizontal curvature
  - Functional classification
  - Lane miles
  - Other

- **Other**
  - Presence of a School

What project identification methodology was used for this program?

- Crash frequency
- Expected crash frequency with EB adjustment
- Equivalent property damage only (EPDO Crash frequency)
- EPDO crash frequency with EB adjustment
- Relative severity index
- Crash rate
- Critical rate
- Level of service of safety (LOSS)
- Excess expected crash frequency using SPF
- Excess expected crash frequency with the EB adjustment
- Excess expected crash frequency using method of moments
- Probability of specific crash types
- Excess proportions of specific crash types
- Other-Participation in the safe route to school program

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

No

If yes, are local road projects identified using the same methodology as state roads?

Yes

No

How are highway safety improvement projects advanced for implementation?

Competitive application process

selection committee

Other-All sites are advanced for signs and markings

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).

Relative Weight in Scoring

Rank of Priority Consideration

Ranking based on B/C

Available funding

Incremental B/C

Ranking based on net benefit

Other

All sites are advanced 1
What proportion of highway safety improvement program funds address systemic improvements?

Highway safety improvement program funds are used to address which of the following systemic improvements?

- [ ] Cable Median Barriers
- [ ] Traffic Control Device Rehabilitation
- [X] Install/Improve Signing
- [ ] Pavement/Shoulder Widening
- [ ] Rumble Strips
- [ ] Install/Improve Pavement Marking and/or Delineation
- [ ] Upgrade Guard Rails
- [ ] Install/Improve Lighting
- [ ] Safety Edge
- [ ] Install/Improve Lightining
- [ ] Add/Upgrade/Modify/Remove Traffic Signal
- [ ] Other

What process is used to identify potential countermeasures?

- [X] Engineering Study
- [X] Road Safety Assessment
- [ ] Other:
Identify any program methodology practices used to implement the HSIP that have changed since the last reporting period.

- Highway Safety Manual
- Road Safety audits
- Systemic Approach
- Other: Other-No change

Describe any other aspects of the Highway Safety Improvement Program methodology on which you would like to elaborate.

The main challenge concerning our HSIP ranking methodology for spot improvements continues to be that it does not address roads that are off the Federal Aid System. The current HSIP ranking methodology generates locations based on the high crash locations that are generated by VTrans’ Highway Safety Data Section. The data that the Highway Safety Data Section uses as input are only for the roads that fall under the Federal Aid highway system. Consequently, only locally maintained roads that are on the Federal Aid systems are considered as part of the ranking methodology of the HSIP.

Given that Vermont is a rural state with crashes that tend to be dispersed, another ongoing challenge with our current sport improvement methodology is that it tends to identify rural locations with very few crashes or urban locations with a large number of crashes at high traffic intersections.

A consultant has been reviewing our HSIP ranking process and has proposed a new process that will better align with the SHSP. We hope to be implementing this process in the next reporting period.
### Progress in Implementing Projects

**Funds Programmed**
Reporting period for Highway Safety Improvement Program funding.

- [ ] Calendar Year
- [ ] State Fiscal Year
- [x] Federal Fiscal Year

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

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>Programmed*</th>
<th>Obligated</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSIP (Section 148)</td>
<td>7096325.57</td>
<td>70 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7096325.57</td>
</tr>
<tr>
<td>HRRRP (SAFETEA-LU)</td>
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<tr>
<td>HRRR Special Rule</td>
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<td></td>
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<tr>
<td>Penalty Transfer - Section 154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penalty Transfer – Section 164</td>
<td>3009628.54</td>
<td>30 %</td>
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<td></td>
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<td>3009628.54</td>
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<td>Incentive Grants - Section 163</td>
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<tr>
<td>Incentive Grants (Section 406)</td>
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<td></td>
</tr>
<tr>
<td>Other Federal-aid Funds (i.e. STP, NHPP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State and Local Funds</td>
<td></td>
<td></td>
</tr>
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</table>
### Vermont Highway Safety Improvement Program

<table>
<thead>
<tr>
<th>Totals</th>
<th>10105954.11</th>
<th>100%</th>
<th>10105954.11</th>
<th>100%</th>
</tr>
</thead>
</table>

**How much funding is programmed to local (non-state owned and maintained) safety projects?**

26%

**How much funding is obligated to local safety projects?**

26%

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

1%

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

1%

**How much funding was transferred in to the HSIP from other core program areas during the reporting period?**

$0.00
How much funding was transferred out of the HSIP to other core program areas during the reporting period?

$0.00

Discuss impediments to obligating Highway Safety Improvement Program funds and plans to overcome this in the future.

Safety projects should have a quick turnaround to have a significant impact. Major construction projects that follow the rigid design process are an impediment to obligating funds. Producing more systemic projects with little or no right-of-way and little environmental impacts is one way to design and construct more projects and thus spending more money on safety.

Our updated Draft HSIP Manual, that is currently being worked on by a consultant, suggests that VTrans explores alternative contracting methods for low cost safety improvements.

Describe any other aspects of the general Highway Safety Improvement Program implementation progress on which you would like to elaborate.

A consultant has been helping us reviewing our HSIP methodology. As part of this review, a mechanism to track progress will be developed.
### General Listing of Projects

List each highway safety improvement project obligated during the reporting period.

<table>
<thead>
<tr>
<th>Project</th>
<th>Improvement Category</th>
<th>Output</th>
<th>HSIP Cost</th>
<th>Total Cost</th>
<th>Funding Category</th>
<th>Functional Classification</th>
<th>AADT</th>
<th>Speed</th>
<th>Roadway Ownership</th>
<th>Relationship to SHSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARRE CITY HES 037-1(8) - Design</td>
<td>Intersection geometry Auxiliary lanes - add left-turn lane</td>
<td>1 Numbers</td>
<td>16350 00</td>
<td>16350 00</td>
<td>Penalties Transfer – Section 164</td>
<td>Urban Major Collector</td>
<td>490</td>
<td>25</td>
<td>City of Municipal Highway Agency</td>
<td>Intersections Improve Geometry</td>
</tr>
<tr>
<td>BARRE TOWN HES STPG 6100(6) - Preliminary</td>
<td>Intersection geometry Auxiliary lanes - add left-turn lane</td>
<td>1 Numbers</td>
<td>16650 00</td>
<td>16650 00</td>
<td>PE: Penalties Transfer – Section 164, ROW: HSIP (Section 148)</td>
<td>Urban Minor Arterial</td>
<td>270</td>
<td>35</td>
<td>State Highway Agency</td>
<td>Intersections Improve Geometry</td>
</tr>
<tr>
<td>BERLIN STPG</td>
<td>Intersection traffic control Modify traffic</td>
<td>1 Numbers</td>
<td>20200</td>
<td>20200</td>
<td>HSIP (Section)</td>
<td>Urban Principal</td>
<td>114</td>
<td>50</td>
<td>State Highway</td>
<td>Intersections Improve Geometry</td>
</tr>
<tr>
<td>Project Description</td>
<td>Description</td>
<td>Numbers</td>
<td>Numb</td>
<td>Penalty Transfer – Section 164</td>
<td>Agency</td>
<td>Operations</td>
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<tr>
<td>SGNL(40) - Design</td>
<td>signal - modernization/replacement</td>
<td>00 00 n 148</td>
<td>Arterial - Other</td>
<td>59</td>
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<td>BRISTOL HES 021-1(28) - Design</td>
<td>Intersection traffic control Modify traffic signal - modernization/replacement</td>
<td>82000 0 82000 0</td>
<td>Rural Minor Arterial</td>
<td>590 0</td>
<td>30</td>
<td>Town or Township Highway Agency</td>
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<td>BURLINGTON HES 5000 (18) - Design</td>
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<td>28350 00 28350 00</td>
<td>Urban Principal Arterial - Other</td>
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<td>30</td>
<td>City of Municipal Highway Agency</td>
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<td>CAMBRIDGE STP 030-2(27) - Complete</td>
<td>Intersection traffic control Modify control - all-way stop to roundabout</td>
<td>22300 00 22300 00</td>
<td>Rural Minor Arterial</td>
<td>715 0</td>
<td>40</td>
<td>State Highway Agency</td>
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<td>COLCHESTER HES028-1(28) - Design</td>
<td>Intersection geometry Auxiliary lanes - add left-turn lane</td>
<td>85500 0 85500 0</td>
<td>Rural Principal Arterial - Other</td>
<td>114 50</td>
<td>55</td>
<td>State Highway Agency</td>
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<td>211 50</td>
<td>30</td>
<td>State Highway Agency</td>
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<td>ESSEX STPG SGNL(41) - Complete</td>
<td>Intersection traffic control Modify traffic signal - modernization/replacement</td>
<td>1 Numbers</td>
<td>38542 5</td>
<td>38542 5</td>
<td>HSIP (Section 148)</td>
<td>Urban Minor Arterial</td>
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<td>40</td>
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<td>ESSEX TOWN STPG HES 5400(5) - Complete</td>
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<td>10381 99</td>
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<td>Agency</td>
<td>Intersections</td>
<td>Improvement</td>
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<td>22800 00</td>
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<td>Rural Minor Arterial</td>
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<td>50</td>
<td>State Highway Agency</td>
<td>Improve Geometry</td>
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<td>MILTON HES 028-1(27) - Design</td>
<td>Roadway signs and traffic control Roadway signs and traffic control - other</td>
<td>0.3 Miles</td>
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<td>30000</td>
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<td>Rural Principal Arterial - Other</td>
<td>950 0</td>
<td>55</td>
<td>State Highway Agency</td>
<td>Improve Operations</td>
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<td>MORRISTOWN STP HES 030-2(28) Design</td>
<td>Intersection geometry Intersection geometrics - modify skew angle</td>
<td>1 Numbers</td>
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<td>14600 0</td>
<td>HSIP (Section 148)</td>
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2015 Vermont Highway Safety Improvement Program
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<td>HSIP</td>
<td>Urban Principal Arterial - Other</td>
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<td>019-3(60) -</td>
<td>Design</td>
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<td>Statewide Region</td>
<td>Roadway delineation</td>
<td>Longitudinal pavement markings - remarking</td>
<td>Miles</td>
<td>Project Number</td>
<td>Highway Agency</td>
<td>Departure</td>
<td>Delineation</td>
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<tr>
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<tr>
<td>North Region STPG MARK(302) - Construction</td>
<td>Roadway delineation</td>
<td>Longitudinal pavement markings - remarking</td>
<td>0</td>
<td>HSIP (Section 148)</td>
<td>State Highway Agency</td>
<td>Roadway Departure</td>
<td>Improve Highway Delineation</td>
<td></td>
<td></td>
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<tr>
<td>South Region STPG MARK(303) - Construction</td>
<td>Roadway delineation</td>
<td>Longitudinal pavement markings - remarking</td>
<td>0</td>
<td>HSIP (Section 148)</td>
<td>State Highway Agency</td>
<td>Roadway Departure</td>
<td>Improve Highway Delineation</td>
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<tr>
<td>IMG MARK(115) - Construction</td>
<td>Roadway delineation</td>
<td>Longitudinal pavement markings - remarking</td>
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<td>State Highway Agency</td>
<td>Roadway Departure</td>
<td>Improve Highway Delineation</td>
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<tr>
<td>HES MARK(404) - Construction</td>
<td>Roadway delineation</td>
<td>Longitudinal pavement markings - remarking</td>
<td>0</td>
<td>HSIP (Section 148)</td>
<td>Town or Township Highway</td>
<td>Roadway Departure</td>
<td>Improve Highway Delineation</td>
<td></td>
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<tr>
<td>On</td>
<td>Roadway signs and traffic control Roadway signs (including post) - new or updated</td>
<td>34 Miles</td>
<td>17000 00</td>
<td>17000 00</td>
<td>HSIP (Section 148)</td>
<td>Rural Principal Arterial - Interstate</td>
<td>0</td>
<td>65</td>
<td>State Highway Agency</td>
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<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------</td>
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<td>Rockingham - Hartford IMG SIGN(54) - Design</td>
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<td>Winooski - Cambridge STPG SIGN(55) - Design</td>
<td></td>
<td>23.9</td>
<td>30000 0</td>
<td>30000 0</td>
<td>HSIP (Section 148)</td>
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<td></td>
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<tr>
<td>Statewide - Northeast STPG SIGN(56) - Design</td>
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<td>56.3</td>
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<td>43500 0</td>
<td>HSIP (Section 148)</td>
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<td></td>
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<tr>
<td>Williston STP 5500(16) - Construction</td>
<td>Intersection traffic control Modify traffic signal - miscellaneous/other/uns specified</td>
<td>1 Numbers</td>
<td>90000</td>
<td>90000</td>
<td>HSIP (Section 148)</td>
<td>Urban Principal Arterial - Other</td>
<td>123 00</td>
<td>35</td>
<td>State Highway Agency</td>
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<tr>
<td>Williston - Essex STPG SGNL(46) - Design</td>
<td>Intersection traffic control Modify traffic signal - modernization/replacement</td>
<td>15 Numbers</td>
<td>11000 00</td>
<td>11000 00</td>
<td>HSIP (Section 148)</td>
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<tr>
<td>Ent</td>
<td>Description</td>
<td>Numbers</td>
<td>Numbers</td>
<td>Project Category</td>
<td>Benefit</td>
<td>Agency</td>
<td>Intersect.</td>
<td>Improve</td>
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<tr>
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<tr>
<td>Plainfield NH 028-3(41) - Design</td>
<td>Intersection traffic control Intersection traffic control - other</td>
<td>1</td>
<td>89000 0</td>
<td>89000 0</td>
<td>HSIP (Section 148)</td>
<td>Rural Principal Arterial - Other</td>
<td>700 0</td>
<td>30</td>
<td>State Highway Agency</td>
</tr>
<tr>
<td>Springfield STP 016-2(23) - Design</td>
<td>Intersection traffic control Intersection traffic control - other</td>
<td>2</td>
<td>60000 0</td>
<td>60000 0</td>
<td>HSIP (Section 148)</td>
<td>Rural Minor Arterial</td>
<td>990 0</td>
<td>40</td>
<td>State Highway Agency</td>
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<tr>
<td>Statewide HES RMBL(2) Complete</td>
<td>Roadway delineation Roadway delineation - other</td>
<td>0 Miles</td>
<td>20200 0</td>
<td>20200 0</td>
<td>Penalty Transfer – Section 164</td>
<td>Rural Minor Collector</td>
<td>0</td>
<td>0</td>
<td>State Highway Agency</td>
</tr>
</tbody>
</table>
Progress in Achieving Safety Performance Targets

Overview of General Safety Trends

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

<table>
<thead>
<tr>
<th>Performance Measures*</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of fatalities</td>
<td>74</td>
<td>68</td>
<td>70</td>
<td>69</td>
<td>63</td>
</tr>
<tr>
<td>Number of serious injuries</td>
<td>419</td>
<td>399</td>
<td>385</td>
<td>361</td>
<td>339</td>
</tr>
<tr>
<td>Fatality rate (per HMVMT)</td>
<td>1</td>
<td>0.92</td>
<td>0.97</td>
<td>0.96</td>
<td>0.89</td>
</tr>
<tr>
<td>Serious injury rate (per HMVMT)</td>
<td>5.64</td>
<td>5.44</td>
<td>5.31</td>
<td>4.98</td>
<td>4.74</td>
</tr>
</tbody>
</table>

*Performance measure data is presented using a five-year rolling average.
Number of Fatalities and Serious Injuries for the Last Five Years

- **Fatalities:** 74, 68, 70, 69, 63
- **Serious Injuries:** 400, 400, 400, 70, 70

Legend:
- Red square: # Fatalities
- Blue bar: # Serious Injuries
Rate of Fatalities and Serious injuries for the Last Five Years

![Graph showing the rate of fatalities and serious injuries for the last five years.](image)

- **Fatalities Rate (per HMVMT)**
- **Serious Injuries Rate (per HMVMT)**
To the maximum extent possible, present performance measure* data by functional classification and ownership.

**Year - 2014**

<table>
<thead>
<tr>
<th>Function Classification</th>
<th>Number of fatalities</th>
<th>Number of serious injuries</th>
<th>Fatality rate (per HMVMT)</th>
<th>Serious injury rate (per HMVMT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RURAL PRINCIPAL ARTERIAL - INTERSTATE</td>
<td>4.28</td>
<td>12.6</td>
<td>5.67</td>
<td>27.89</td>
</tr>
<tr>
<td>RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS</td>
<td>0.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RURAL PRINCIPAL ARTERIAL - OTHER</td>
<td>8.8</td>
<td>18.8</td>
<td>6.4</td>
<td>10.78</td>
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<tr>
<td>RURAL MINOR ARTERIAL</td>
<td>7</td>
<td>28</td>
<td>8.14</td>
<td>40.05</td>
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<td>RURAL MINOR COLLECTOR</td>
<td>4.17</td>
<td>7.4</td>
<td>2.92</td>
<td>3.39</td>
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<tr>
<td>RURAL MAJOR COLLECTOR</td>
<td>12.57</td>
<td>41</td>
<td>11.67</td>
<td>28.83</td>
</tr>
<tr>
<td>RURAL LOCAL ROAD OR STREET</td>
<td>8.31</td>
<td>28.8</td>
<td>8.79</td>
<td>2.93</td>
</tr>
<tr>
<td>URBAN PRINCIPAL</td>
<td>2.39</td>
<td>2.4</td>
<td>1.11</td>
<td>0.59</td>
</tr>
<tr>
<td>ARTERIAL - INTERSTATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>URBAN PRINCIPAL ARTERIAL - OTHER FREeways AND EXPRESSWAYS</td>
<td>2.2</td>
<td>1.8</td>
<td>0.33</td>
<td>2.95</td>
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<tr>
<td>URBAN PRINCIPAL ARTERIAL - OTHER</td>
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<td>22</td>
<td>5.96</td>
<td>5.02</td>
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<tr>
<td>URBAN MINOR ARTERIAL</td>
<td>5.59</td>
<td>15.4</td>
<td>5.51</td>
<td>4.34</td>
</tr>
<tr>
<td>URBAN MINOR COLLECTOR</td>
<td>2.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>URBAN MAJOR COLLECTOR</td>
<td>5.31</td>
<td>12</td>
<td>3.32</td>
<td>5.38</td>
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<tr>
<td>URBAN LOCAL ROAD OR STREET</td>
<td>4.06</td>
<td>9</td>
<td>1.2</td>
<td>2.24</td>
</tr>
</tbody>
</table>
# Fatalities by Roadway Functional Classification

![Bar chart showing the number of fatalities by roadway functional classification from 2010 to 2014.](image)

- Major Collector (U)
- Minor Collector (R)
- Principal Arterial (R)
- Minor Arterial - Other (R)
- Local Road or Street (R)
- Principal Arterial - Other Freeways and Expressways (R)
- Principal Arterial - Interstate (U)
- Minor Arterial - Other (U)
- Major Collector (U)
- Principal Arterial - Other Freeways and Expressways (U)
# Serious Injuries by Roadway Functional Classification

![Bar chart showing the number of serious injuries by roadway functional classification for the years 2010 to 2014.](chart)

Roadway Functional Classification:

- MAJOR COLLECTOR (U)
- MINOR COLLECTOR (U)
- LOCAL ROAD OR STREET (R)
- PRINCIPAL ARTERIAL - OTHER (R)
- PRINCIPAL ARTERIAL - OTHER FREeways AND EXPRESSWAYS (R)
- PRINCIPAL ARTERIAL - INTERSTATE (R)
- PRINCIPAL ARTERIAL - OTHER (U)
- PRINCIPAL COLLECTOR (U)
- MINOR ARTERIAL - OTHER (U)

# of Serious Injuries:

- x-axis: Roadway Functional Classification
- y-axis: # of Serious Injuries

Legend:

- Orange: 2010
- Blue: 2011
- Maroon: 2012
- Red: 2013
- Green: 2014
Fatality Rate by Roadway Functional Classification
Serious Injury Rate by Roadway Functional Classification

- **2010**
- **2011**
- **2012**
- **2013**
- **2014**

### Serious Injury Rate (per HHVMT)

- **Roadway Functional Classification**
  - MAJOR COLLECTOR (U)
  - PRINCIPAL ARTERIAL (R)
  - MINOR COLLECTOR (R)
  - LOCAL ROAD OR STREET (R)
  - PRINCIPAL ARTERIAL - INTERSTATE (U)
  - MINOR ARTERIAL - OTHER (R)
  - PRINCIPAL ARTERIAL - OTHER (R)
  - INTERSTATE (U)
  - MINOR ARTERIAL - OTHER (U)
  - OTHER FREEWAYS AND EXPRESSWAYS (R)
  - MAJOR COLLECTOR (U)

40
## Year - 2014

<table>
<thead>
<tr>
<th>Roadway Ownership</th>
<th>Number of fatalities</th>
<th>Number of serious injuries</th>
<th>Fatality rate (per HMVMT)</th>
<th>Serious injury rate (per HMVMT)</th>
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<tbody>
<tr>
<td><strong>STATE HIGHWAY AGENCY</strong></td>
<td>33.4</td>
<td>160.8</td>
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<td><strong>COUNTY HIGHWAY AGENCY</strong></td>
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<td>0</td>
<td>0</td>
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<tr>
<td><strong>TOWN OR TOWNSHIP HIGHWAY AGENCY</strong></td>
<td>12</td>
<td>57.6</td>
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<td><strong>CITY OF MUNICIPAL HIGHWAY AGENCY</strong></td>
<td>3.6</td>
<td>32.4</td>
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<tr>
<td><strong>STATE PARK, FOREST, OR RESERVATION AGENCY</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>LOCAL PARK, FOREST OR RESERVATION AGENCY</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>OTHER STATE AGENCY</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>OTHER LOCAL AGENCY</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>PRIVATE (OTHER THAN RAILROAD)</strong></td>
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<td>0</td>
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<tr>
<td><strong>RAILROAD</strong></td>
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<tr>
<td><strong>STATE TOLL AUTHORITY</strong></td>
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<td><strong>LOCAL TOLL AUTHORITY</strong></td>
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<tr>
<td><strong>OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)</strong></td>
<td>0</td>
<td>0</td>
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<tr>
<td><strong>INDIAN TRIBE NATION</strong></td>
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<tr>
<td>OTHER</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Number of Fatalities by Roadway Ownership

Roadway Functional Classification

- State
- County
- Town
- City
- State Park
- Other State
- Private
- Railroad
- State Toll
- Local Toll
- Other

# of Fatalities

- 2010
- 2011
- 2012
- 2013
- 2014
Number of Serious Injuries by Roadway Ownership

- 2010
- 2011
- 2012
- 2013
- 2014

# of Serious Injuries

Roadway Functional Classification
Fatality Rate by Roadway Ownership

Roadway Functional Classification

- STATE
- COUNTY
- TOWN
- CITY
- STATE PARK
- OTHER STATE
- PRIVATE
- RAILROAD
- STATE TOLL
- LOCAL TOLL
- OTHER

2010 | 2011 | 2012 | 2013 | 2014
Serious Injury Rate by Roadway Ownership

Roadway Functional Classification

- State
- County
- City
- State Park
- Other State
- Other Local
- Railroad
- State Toll
- Local Toll
- Other
Describe any other aspects of the general highway safety trends on which you would like to elaborate.

The crash data analysis reviewed included reported crashes from the five-year periods between the years 2007-2011 and 2010-2014. Major crashes are defined as crashes that either resulted in a fatal injury or in an incapacitating injury.

The number of major crashes five-year average has declined from 386 major crashes for the 2007-2011 period to 337 for the 2010-2014 period. This represents a 12.7% reduction in the five-year average.

Over the same two periods, there has been a 7.4% decline in the five-year average of the total number of fatalities (from 68 to 63).

In a similar manner, there has been a 15.0% reduction in the five-year average of the total number of serious injuries (from 399 to 339).

These reductions are also reflected in the fatality rate per HMVMT and for the serious injury rate per HMVMT. While the five-year average fatality rate was 0.99 for the 2007-2011 period, it is now 0.95 for the 2010-2014 period. Similarly, the serious injury rate was 5.65 for the 2007-2011 period and it is now 5.22 for the 2010-2014 period.

Over the years, leaving the road and crashes taking place at intersections have been the two crash types that have typically accounted for a large proportion of major crashes.

Very small reductions in the number of fatalities and serious injuries for these two crash types have taken place. The respective five-year averages for fatalities and serious injuries at intersections were 9.8 fatalities and 83.6 injuries for 2007-2011 and 9.2 and 76.0 for 2010-2014. For Lane departure crashes, the five-year averages for fatalities and serious injuries at were 35.0 fatalities and 178.4 injuries for 2007-2011 and 35.2 and 157.8 for 2010-2014.

The five-year average for the number of fatalities involving a pedestrian increased between the 2007-2011 period and the 2010-2014 period from 3.6 to 5.6. Similarly, the average for the number of injuries involving a pedestrian also increased from 22.8 to 25.4. On the other hand, the five-year average for the number of bicycle fatalities remained the same at around 0.2 while the number of serious injuries involving a bicyclist decreased from 10.8 to 9.0 over the same two periods.

Application of Special Rules

Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.

<table>
<thead>
<tr>
<th>Older Driver</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Measures</td>
<td>Fatality rate (per capita)</td>
<td>0.09</td>
<td>0.096</td>
<td>0.088</td>
<td>0.084</td>
</tr>
<tr>
<td>Serious injury rate (per capita)</td>
<td>0.268</td>
<td>0.27</td>
<td>0.252</td>
<td>0.222</td>
<td>0.218</td>
</tr>
<tr>
<td>-------------------------------</td>
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<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Fatality and serious injury rate (per capita)</td>
<td>0.356</td>
<td>0.366</td>
<td>0.34</td>
<td>0.304</td>
<td>0.308</td>
</tr>
</tbody>
</table>

*Performance measure data is presented using a five-year rolling average.

The Injury A, Incapacitating Injury, category was used to represent Serious Injuries.

The number of people 65 years of age and older (per 1,000 total population) for each year was obtained from Attachment 2 of Section 142: Older Drivers and Pedestrians Special Rule Interim Guidance dated February 13, 2013.


For each period, the rate was calculated by summing up the fatal and serious injuries for a given year and dividing the total for that year by the population figure for the year. The rates for the period were then summed up and divided by 5 to obtain the five year average for the two ending year (2011 and 2013).

All rates were calculated to the hundredths after the decimal point and then rounded to the nearest tenths.

The 2011 rate was 0.3 and the 2013 rate was 0.3. There is no increase and therefore the rule does not apply.

The calculations are shown on the attached document to this question.
Does the older driver special rule apply to your state?

No
Assessment of the Effectiveness of the Improvements (Program Evaluation)

What indicators of success can you use to demonstrate effectiveness and success in the Highway Safety Improvement Program?

☐ None
☐ Benefit/cost
☐ Policy change
☒ Other: Other - A reduction in the number of crashes

What significant programmatic changes have occurred since the last reporting period?

☐ Shift Focus to Fatalities and Serious Injuries
☐ Include Local Roads in Highway Safety Improvement Program
☒ Organizational Changes
☐ None
☐ Other:

Briefly describe significant program changes that have occurred since the last reporting period.
The Office of Highway Safety was created within VTrans during the reporting period. The creation of this Office brought the Governor’s Highway Safety Program to VTrans from the Department of Public Safety and consolidated existing sections within VTrans that dealt with crash data and safety analyses. The formation of this Office brings under one roof, the 4E’s (Education, Engineering, Enforcement and Emergency Services) and creates efficiencies in implementing various programs.

Specifically, the Office of Highway Safety is composed of the Highway Safety Improvement Program (HSIP), Vermont Highway Safety Alliance (VHSA), Governor’s Highway Safety Program (GHSP) and Highway Data.
**SHSP Emphasis Areas**

For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

**Year - 2014**

<table>
<thead>
<tr>
<th>HSIP-related SHSP Emphasis Areas</th>
<th>Target Crash Type</th>
<th>Number of Fatalities</th>
<th>Number of Serious Injuries</th>
<th>Fatality Rate (per HMVMT)</th>
<th>Serious Injury Rate (per HMVMT)</th>
<th>Other-1</th>
<th>Other-2</th>
<th>Other-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Departure</td>
<td>All</td>
<td>35.2</td>
<td>157.8</td>
<td>0.49</td>
<td>2.21</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intersections</td>
<td>All</td>
<td>9.2</td>
<td>76</td>
<td>0.13</td>
<td>1.06</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>All</td>
<td>5.6</td>
<td>25.4</td>
<td>0.08</td>
<td>0.36</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Bicyclists</td>
<td>All</td>
<td>0.2</td>
<td>9</td>
<td>0</td>
<td>0.13</td>
<td>0</td>
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<tr>
<td>Older Drivers</td>
<td>All</td>
<td>59</td>
<td>31.4</td>
<td>0.16</td>
<td>0.44</td>
<td>0</td>
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<tr>
<td>Motorcyclists</td>
<td>All</td>
<td>7.6</td>
<td>40</td>
<td>0.11</td>
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<td>Work Zones</td>
<td>All</td>
<td>0.4</td>
<td>1.6</td>
<td>0.01</td>
<td>0.02</td>
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</table>
Number of Fatalities by SHSP Emphasis Area

Year 2010 to Year 2014

SHSP Emphasis Area

# of Fatalities

Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
Fatality Rate by SHSP Emphasis Area

Year 2010 to Year 2014

SHSP Emphasis Area

Rate of Fatalities

- Lane Departure
- Roadway Departure
- Intersections
- Pedestrians
- Bicyclists
- Older Drivers
- Motorcyclists
- Work Zones
- Data
Serious Injury Rate by SHSP Emphasis Area

Year 2010 to Year 2014

Rate of Serious Injury

SHSP Emphasis Area
**Groups of similar project types**  
Present the overall effectiveness of groups of similar types of projects.

### Year - 2014

<table>
<thead>
<tr>
<th>HSIP Sub-program Types</th>
<th>Target Crash Type</th>
<th>Number of Fatalities</th>
<th>Number of Serious Injuries</th>
<th>Fatality rate (per HMVMT)</th>
<th>Serious Injury rate (per HMVMT)</th>
<th>Other-1</th>
<th>Other-2</th>
<th>Other-3</th>
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</thead>
<tbody>
<tr>
<td>Low-Cost Spot Improvements</td>
<td>Run-off-road</td>
<td>35.2</td>
<td>157.8</td>
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</table>
# Fatalities by Target Crash Type for Groups of Similar Projects

Year 2010 to Year 2014

[Bar chart showing the number of fatalities by target crash type from 2010 to 2014, with different colors for each year.]
#Serious Injuries by Target Crash Type for Groups of Similar Projects

Year 2010 to Year 2014

Target Crash Type

- All
- Angle
- Cross-median
- Fixed object
- Sideswipe
- Head-on
- Left-turn
- Night-time
- Intersection
- Rear-end
- Right-turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Wet-road

# of Serious Injuries
Fatality Rate by Target Crash Type for Groups of Similar Projects

Year 2010 to Year 2014

Target Crash Type:
- All
- Angle
- Cross-median
- Fixed object
- Sideswipe
- Head-on
- Left-turn
- Night-time
- Intersections
- Non-intersection
- Rear-end
- Right-turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Weather

Rate of Fatalities:
- 2010
- 2012
- 2012
- 2013
- 2014
Serious Injury Rate by Target Crash Type for Groups of Similar Projects

Year 2010 to Year 2014

Rate of Serious Injuries

Target Crash Type

2010 2011 2012 2013 2014
Systemic Treatments  
Present the overall effectiveness of systemic treatments.

Year - 2014

<table>
<thead>
<tr>
<th>Systemic improvement</th>
<th>Target Crash Type</th>
<th>Number of fatalities</th>
<th>Number of serious injuries</th>
<th>Fatality rate (per HMVMT)</th>
<th>Serious injury rate (per HMVMT)</th>
<th>Other-1</th>
<th>Other-2</th>
<th>Other-3</th>
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<tbody>
<tr>
<td>Install/Improve Signing</td>
<td>All</td>
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<td>76.4</td>
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<td>3.29</td>
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# Fatalities by Target Crash Type for Systemic Safety Improvements

Year 2010 to Year 2014

![Bar chart showing fatalities by target crash type from 2010 to 2014.](chart.png)
# Serious Injuries by Target Crash Type for Systemic Safety Improvements

Year 2010 to Year 2014

<table>
<thead>
<tr>
<th>Target Crash Type</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td>All</td>
<td>120</td>
<td>100</td>
<td>90</td>
<td>80</td>
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<td>Angle</td>
<td>70</td>
<td>60</td>
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<td>40</td>
<td>30</td>
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<tr>
<td>Cross-median</td>
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<td>20</td>
<td>10</td>
<td>5</td>
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<tr>
<td>Fixed object</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
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<td>Sideswipe</td>
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<td>15</td>
<td>10</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Head-on</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Left-turn</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Night-time</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Intersections</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non-intersection</td>
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<td>0</td>
<td>0</td>
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<td>Rear-end</td>
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<tr>
<td>Right-turn</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Run-off-road</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Speed-related</td>
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<td>0</td>
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</tr>
<tr>
<td>Truck-related</td>
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<tr>
<td>Vehicle/animal</td>
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<td>Vehicle/pedestrian</td>
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<tr>
<td>War road</td>
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</table>
Fatality Rate by Target Crash Type for Systemic Safety Improvements

Year 2010 to Year 2014

Target Crash Type

Rate of Fatalities

0.0 0.2 0.4 0.6 0.8 1.0

All Angle Cross-median Fixed object Sideswipe Head-on Left-turn Night-time Intersections Non-intersection Rear-end Right-turn Run-off-road Speed-related Truck-related Vehicle Animal Vehicle/bicycle War road
Serious Injury Rate by Target Crash Type for Systemic Safety Improvements

Year 2010 to Year 2014

Rate of Serious Injuries

Target Crash Type
Describe any other aspects of the overall Highway Safety Improvement Program effectiveness on which you would like to elaborate.

Of the seven emphasis areas identified in the SHSP, lane departure crashes and intersection crashes are the two areas that specifically relate to engineering and the HSIP.

The current SHSP has target reductions for intersection and lane departure major crashes that have been set at 10% of 2012 thresholds. In terms of numbers, this represents a five-year target of 72 major crashes for intersection crashes and a five-year average target of 186 major crashes for lane departure crashes.

The latest five-year average (2010-2014) for lane departure crashes is 173 major crashes, which is below the SHSP target of 186 major crashes.

For the emphasis area concerning intersections, the latest five-year average is 73 major crashes. This five-year average is just above the SHSP target of 72 major crashes at intersections.

Overall, the SHSP has the goal of reducing major crashes by 10% by 2016. The baseline five-year average from the 2008-2012 period for fatal and serious injury crashes is 376 major crashes. The current five-year average (2010-2014) is 337 major crashes and is just below the 2016 five-year target of 338 major crashes.
**Project Evaluation**

Provide project evaluation data for completed projects (optional).

<table>
<thead>
<tr>
<th>Location</th>
<th>Functional Class</th>
<th>Improvement Category</th>
<th>Improvement Type</th>
<th>Bef-Fatal</th>
<th>Bef-Serious Injury</th>
<th>Bef-All Injuries</th>
<th>Bef-PDO</th>
<th>Bef-Total</th>
<th>Aft-Fatal</th>
<th>Aft-Serious Injury</th>
<th>Aft-All Injuries</th>
<th>Aft-PDO</th>
<th>Aft-Total</th>
<th>Evaluation Results (Benefit/Cost Ratio)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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### Optional Attachments

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<thead>
<tr>
<th>Sections</th>
<th>Files Attached</th>
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<tbody>
<tr>
<td><strong>Program Structure: Program Methodology</strong></td>
<td>2014 HRRR TPI Task Prioritization Methodology.pdf</td>
</tr>
<tr>
<td>Progress in Achieving Safety Performance Targets:</td>
<td>Question 27 Calculations.xls</td>
</tr>
<tr>
<td>Application of Special Rules</td>
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</tbody>
</table>
Glossary

5 year rolling average means the average of five individual, 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.

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.