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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Kentucky's HSIP funds are administered from the Division of Traffic Operations in KYTC's Central Office. Each Highway District has an HSIP Coordinator that works closely with Central Office and District Personnel to conduct a Road Safety Audit (RSA) on potential improvement locations. The RSA teams are multi-disciplinary and represent the following highway functions; planning, highway design, traffic operations, maintenance, and construction. The Cabinet also requests that members from local Area Development Districts (ADDs) participate in the process. Highway Districts are encouraged to submit candidate projects after completing all established guidelines for funding consideration. Funding levels to date have been sufficient to implement projects submitted that meet the eligibility guidelines for the program.

The program methodology used by the Transportation Cabinet during the time period of this report was generally the same as in the previous years. With completion of the document titled "Kentucky Roadway Departure Safety Implementation Plan" in July 2010, there has been significant reliance on the recommended approach to supplement the traditional process directed to high-crash locations with systematic application of low-cost, cost-effective countermeasures. More specifically, the systematic approach could be characterized as the reverse of the traditional approach in that low-cost, effective countermeasures are first identified and then the crash database is queried to identify highway sections that have targeted crashes at or above a crash threshold that would insure cost-effective deployment of these countermeasures.

The HSIP supports Kentucky's Strategic Highway Safety Plan (SHSP). The mission of the SHSP is "to reduce Kentucky's highway fatalities and injuries". In conformance with program guidelines, the HSIP seeks to adhere to the SHSP through a data-driven approach for funding safety improvements.

Implementation of HSIP projects have been evaluated and results have been documented in the form of benefits and costs. Included were projects involving the following countermeasures, with their respective B/C ratios:

- Rumble Stripes: 14:1
- Cable Median Barrier: 1.3:1
- High-Friction Surfaces: 9:1
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.

A Safety Circuit Rider program continues to function as the primary means of identifying and implementing projects on local roads through the HSIP. The focus of this program is to provide technical assistance to improve safety on local roads and streets.

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

- Design
Briefly describe coordination with internal partners.

Kentucky's HSIP funds are administered from the Division of Traffic Operations in KYTC's Central Office. Each Highway District has a HSIP Coordinator who works closely with the Central Office and other Highway District personnel to conduct Road Safety Audits (RSAs) of potential improvement locations. The RSA teams are multidisciplinary and represent the following highway functions; planning, design, traffic operations, maintenance, and construction. Highway districts are encouraged to submit candidate projects after completing all established guidelines for funding considerations.

HSIP projects are selected and prioritized based on their correlation with Kentucky's Strategic Highway Safety Plan. There are presently 10 emphasis areas within the SHSP and efforts are made to implement projects consistent with the goals and objectives of the SHSP.

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

☒ Metropolitan Planning Organizations
☒ Governors Highway Safety Office
☐ Local Government Association
☐ Other:
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 - No changes since last year

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

HSIP staff also request that representatives from local Area Development Districts (ADDs) participate in the process of identifying potential projects through a RSA on local roads.

The Governor's Office of Highway Safety is responsible for development of the Strategic Highway Safety Plan and therefore directly associated with the required correlation between HSIP and SHSP. Efforts have been made to use data-driven analysis to identify emphasis areas of high potential to affect safety. Some of these emphasis areas, primarily "Roadway Departure" and "Intersections" are consistent with the HSIP project selection process.

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 ☐ Low-Cost Spot Improvements ☒ Sign Replacement And Improvement
☐ Local Safety ☐ Pedestrian Safety ☐ Right Angle Crash
☐ Left Turn Crash ☐ Shoulder Improvement ☐ Segments
☐ Other:
Program: Median Barrier
Date of Program Methodology: 7/1/2011

What data types were used in the program methodology?

<table>
<thead>
<tr>
<th>Crashes</th>
<th>Exposure</th>
<th>Roadway</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ All crashes</td>
<td>☐ Traffic</td>
<td>☑ Median width</td>
</tr>
<tr>
<td>☐ Fatal crashes only</td>
<td>☐ Volume</td>
<td>☐ Horizontal curvature</td>
</tr>
<tr>
<td>☑ Fatal and serious injury</td>
<td>☐ Population</td>
<td>☑ Functional classification</td>
</tr>
<tr>
<td>crashes only</td>
<td></td>
<td>☑ Roadside features</td>
</tr>
<tr>
<td>☐ Other</td>
<td>☐ Lane miles</td>
<td>☐ Other</td>
</tr>
<tr>
<td></td>
<td>☐ Other</td>
<td></td>
</tr>
</tbody>
</table>

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

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 2
Incremental B/C

Ranking based on net benefit 1

Cost Effectiveness

Program: Intersection

Date of Program Methodology: 9/1/2012

What data types were used in the program methodology?

<table>
<thead>
<tr>
<th>Crashes</th>
<th>Exposure</th>
<th>Roadway</th>
</tr>
</thead>
<tbody>
<tr>
<td>All crashes</td>
<td>Traffic</td>
<td>Median width</td>
</tr>
<tr>
<td>Fatal crashes only</td>
<td>Volume</td>
<td>Horizontal curvature</td>
</tr>
<tr>
<td>Fatal and serious injury</td>
<td>Population</td>
<td>Functional classification</td>
</tr>
<tr>
<td>crashes only</td>
<td>Lane miles</td>
<td>Roadside features</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
</tbody>
</table>

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

**How are highway safety improvement projects advanced for implementation?**

☐ Competitive application process
☐ selection committee
☒ Other - Prioritized list

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 | 2

Incremental B/C

Ranking based on net benefit | 1

Cost Effectiveness

Program: Skid Hazard

Date of Program Methodology: 3/1/2011

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
- Lane miles
- Other

Roadway
- Median width
- Horizontal curvature
- Functional classification
- Roadside features
- Other

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

Are local roads (non-state owned and operated) included or addressed in this program?
☐ Yes
☒ No

How are highway safety improvement projects advanced for implementation?
☐ Competitive application process
☐ selection committee
☒ Other-Prioritized list based on EB

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
<table>
<thead>
<tr>
<th>Program:</th>
<th>Roadway Departure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Program Methodology:</td>
<td>7/1/2011</td>
</tr>
</tbody>
</table>

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
- Lane miles
- Other

**Roadway**
- Median width
- Horizontal curvature
- Functional classification
- Roadside features
- Other

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

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

☐ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☐ Other-Prioritized list

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 2

Incremental B/C

Ranking based on net benefit 1

Cost Effectiveness

Program: Sign Replacement And Improvement

Date of Program Methodology: 7/1/2011

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
  - Lane miles
  - Other

- **Roadway**
  - Median width
  - Horizontal curvature
  - Functional classification
  - Roadside features
  - Other

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-Prioritized list

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 2
   - Incremental B/C
   - Ranking based on net benefit 1

 Cost Effectiveness

What proportion of highway safety improvement program funds address systemic improvements?

50

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

- Cable Median Barriers
- Rumble Strips
- Traffic Control Device Rehabilitation
- Pavement/Shoulder Widening
- Install/Improve Signing
- Install/Improve Pavement Marking and/or Delineation
- Upgrade Guard Rails
- Safety Edge
- Clear Zone Improvements
- Add/Upgrade/Modify/Remove Traffic Signal
- Install/Improve Lighting
- Other
What process is used to identify potential countermeasures?

- Engineering Study
- 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:

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

No additional comments.

Progress in Implementing Projects
**Funds Programmed**

Reporting period for Highway Safety Improvement Program funding.

- Calendar Year
- ☑ State Fiscal Year
- ☐ 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>25205000</td>
<td>25205000</td>
</tr>
<tr>
<td>HRRRP (SAFETEA-LU)</td>
<td>4375000</td>
<td>4375000</td>
</tr>
<tr>
<td>HRRR Special Rule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penalty Transfer - Section 154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penalty Transfer – Section 164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentive Grants - Section 163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentive Grants (Section 406)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Federal-aid Funds (i.e. STP, NHPP)</td>
<td>22896000</td>
<td>22896000</td>
</tr>
<tr>
<td>State and Local Funds</td>
<td>53009000</td>
<td>53009000</td>
</tr>
<tr>
<td>Totals</td>
<td>105485000</td>
<td>105485000</td>
</tr>
</tbody>
</table>

*Programmed* and *Obligated* values represent the amount of funding programmed and obligated respectively.
How much funding is programmed to local (non-state owned and maintained) safety projects?

$2,047,000.00

How much funding is obligated to local safety projects?

$2,047,000.00

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

$858,515.00

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

$858,515.00

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

MAP-21 was enacted in 2012. With MAP-21 came new guidance, requirements and additional funding. The Kentucky Transportation Cabinet utilized Kentucky’s Strategic Highway Safety Plan to draft a Highway Safety Improvement Program Investment Plan to guide Transportation Safety obligations and spending. Once the Investment Plan was completed and shared with the FHWA Kentucky Division Kentucky moved forward with the implementation of the plan which includes emphasis areas for the obligation of HSIP funding for upcoming fiscal years and also to program and invest unobligated funds from previous fiscal years. For the past several years Kentucky has strived to put a program in place to fully implement programmed HSIP improvements through the federal procurement process instead of relying upon force account work to complete improvements. This came with several challenges including the amount of time it takes to put together a project for safety improvements that includes all of the federal requirements for advertised bid letting as well as the planning and coordination required to get projects included in KYTC’s Highway Plan for both internal communication and communication with the FHWA Kentucky Division.

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

No additional comments.
## 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>021 KY 36 MP 8.2-8.5</td>
<td>Intersection geometry Auxiliary lanes - add two-way left-turn lane</td>
<td>0.30 Miles</td>
<td>48000</td>
<td>48000</td>
<td>HSIP (Section 148)</td>
<td>Rural Minor Arterial</td>
<td>167 93</td>
<td>55</td>
<td>State Highway Agency</td>
<td>Improving the design and operation of highway intersections</td>
</tr>
<tr>
<td>002 US 31E MP 0-19.152</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>19.152 Miles</td>
<td>10000 00</td>
<td>10000 00</td>
<td>HSIP (Section 148)</td>
<td>Rural Minor Collector</td>
<td>461 2</td>
<td>55</td>
<td>State Highway Agency</td>
<td>Minimizing the consequences of leaving the road</td>
</tr>
<tr>
<td>005 US 68 MP 3.971-3.971</td>
<td>Intersection geometry Intersection geometrics - miscellaneous/other/un</td>
<td>0 Miles</td>
<td>11000 00</td>
<td>11000 00</td>
<td>HSIP (Section 148)</td>
<td>Rural Major Collector</td>
<td>340 6</td>
<td>55</td>
<td>State Highway Agency</td>
<td>Improving the design and operation of Highway intersections</td>
</tr>
</tbody>
</table>

20
<table>
<thead>
<tr>
<th>Highway</th>
<th>Description</th>
<th>Length</th>
<th>Cost</th>
<th>Program</th>
<th>Agency</th>
<th>Purpose</th>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>007 US 25E MP 0-18.651</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>18.651 Miles</td>
<td>25000 0</td>
<td>HSIP (Section 148)</td>
<td>Rural Principal Arterial - Other</td>
<td>185 83</td>
<td>55</td>
</tr>
<tr>
<td>010 US 23 MP 10.895-20.938</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>10.043 Miles</td>
<td>31700 0</td>
<td>HSIP (Section 148)</td>
<td>Urban Principal Arterial - Other</td>
<td>197 90</td>
<td>45</td>
</tr>
<tr>
<td>019 Various</td>
<td>Roadway signs and traffic control Curve-related warning signs and flashers</td>
<td>0 Miles</td>
<td>30000</td>
<td>HSIP (Section 148)</td>
<td>State Highway Agency</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>022 KY 1947 MP 0-3.398</td>
<td>Roadside Drainage improvements</td>
<td>3.398 Miles</td>
<td>28900 0</td>
<td>HSIP (Section 148)</td>
<td>Rural Minor Collector</td>
<td>205 6</td>
<td>55</td>
</tr>
<tr>
<td>Project Number</td>
<td>Description</td>
<td>Length</td>
<td>Cost</td>
<td>Agency</td>
<td>Benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>--------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>024 I-24 MP 70.55-86.05</td>
<td>Roadside Barrier - cable</td>
<td>15.5 Miles</td>
<td>195000</td>
<td>HSIP (Section 148) Rural Principal Arterial - Interstate</td>
<td>283 23</td>
<td>State Highway Agency</td>
<td>Reducing head-on and across-median crashes</td>
</tr>
<tr>
<td>027 US 127 MP 11-20.967</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>9.967 Miles</td>
<td>522000</td>
<td>HSIP (Section 148) Rural Principal Arterial - Other</td>
<td>187 1</td>
<td>State Highway Agency</td>
<td>Minimizing the consequences of leaving the road</td>
</tr>
<tr>
<td>029 KY 61 MP 0-12.869</td>
<td>Roadway Rumble strips - edge or shoulder</td>
<td>12.869 Miles</td>
<td>203000</td>
<td>HSIP (Section 148) Rural Minor Arterial</td>
<td>199 8</td>
<td>State Highway Agency</td>
<td>Keeping vehicles in the roadway</td>
</tr>
<tr>
<td>034 US 60 MP 6.975-6.975</td>
<td>Intersection geometry Intersection geometrics - miscellaneous/other/un specified</td>
<td>1 Numbers</td>
<td>120000</td>
<td>HSIP (Section 148) Urban Principal Arterial - Other</td>
<td>239 79</td>
<td>State Highway Agency</td>
<td>Improving the design and operation of highway intersections</td>
</tr>
<tr>
<td>036 KY 979 MP 0-</td>
<td>Roadway Roadway - other</td>
<td>15.43 Miles</td>
<td>250000</td>
<td>HSIP (Section) Rural Major</td>
<td>188 3</td>
<td>State Highway</td>
<td>Keeping vehicles in the Roadway other</td>
</tr>
</tbody>
</table>

22
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Length</th>
<th>Cost</th>
<th>Agency</th>
<th>Roadway</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>037 US 127 MP 11-11.9</td>
<td>Roadway delineation Improve retroreflectivity</td>
<td>0.9 Miles</td>
<td>10000</td>
<td>Urban Minor Arterial</td>
<td>Collector</td>
<td>Keeping vehicles in the roadway, Reduce roadway departure crashes</td>
</tr>
<tr>
<td>037 KY 420 MP 0-2.145</td>
<td>Roadway Roadway - other</td>
<td>2.145 Miles</td>
<td>80000</td>
<td>Rural Minor Collector</td>
<td>Collector</td>
<td>Minimizing the consequences of leaving the road, Reduce roadway departure crashes</td>
</tr>
<tr>
<td>037 KY 151 MP 1.8-2.2</td>
<td>Intersection geometry Auxiliary lanes - add left-turn lane</td>
<td>0.4 Miles</td>
<td>69600</td>
<td>Rural Minor Arterial</td>
<td>Collector</td>
<td>Improving the design and operation of highway intersections, Roadway other</td>
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<tr>
<td>045 US 23 MP 0-28.76</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>28.76 Miles</td>
<td>56500</td>
<td>Rural Principal Arterial - Other</td>
<td>Collector</td>
<td>Minimizing the consequences of leaving the road, Improve recovery areas</td>
</tr>
</tbody>
</table>
| Project Number | Location | Description | Length | Milepost | Improvement Type | Project Division | Agency | Purpose | Other
|----------------|----------|-------------|--------|----------|------------------|-----------------|--------|---------|--------|
| 051 KY 351 MP 4.7-5.432 | Alignment Horizontal and vertical alignment | 0.732 Miles | 051 KY | 351 | 29500 0 | 29500 0 | HSIP (Section 148) | Rural Major Collector | 325 | 55 | State Highway Agency | Reducing road departure crashes
| 056 KY 2860 MP 0-0.981 | Roadway narrowing (road diet, roadway reconfiguration) | 0.981 Miles | 056 KY | 2860 | 28790 3 | 28790 3 | HSIP (Section 148) | Urban Minor Arterial | 144 | 31 | State Highway Agency | Reducing road departure crashes
| 059 KY 1501 MP 0-2.52 | Roadway delineation | 2.52 Miles | 059 KY | 1501 | 10000 0 | 10000 0 | HSIP (Section 148) | Rural Major Collector | 637 | 4 | State Highway Agency | Keeping vehicles in the roadway
| 059 KY 1486 MP 2.59-2.59 | Intersection geometry | 1 Numbers | 059 KY | 1486 | 25000 | 25000 | HSIP (Section 148) | Rural Major Collector | 203 | 9 | State Highway Agency | Improving the design and operation of highway intersections
| 061 US 25E MP 2-26 | Roadside Barrier end treatments (crash cushions, terminals) | 24 Miles | 061 US | 25E | 55000 0 | 55000 0 | HSIP (Section 148) | Rural Principal Arterial - Other | 158 | 05 | State Highway Agency | Reducing road departure crashes
<table>
<thead>
<tr>
<th>Route</th>
<th>Description</th>
<th>Length</th>
<th>Budget</th>
<th>Year</th>
<th>Section</th>
<th>Agency</th>
<th>Notes</th>
<th>Location</th>
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<tr>
<td>067 KY 931 MP 5.7-6.6</td>
<td>Roadside Removal of roadside objects (trees, poles, etc.)</td>
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<td>069 KY 78 MP 8.2-8.65</td>
<td>Alignment Alignment - other</td>
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<td>11840 00</td>
<td>11840 00</td>
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<td>Rural Major Collector</td>
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<td>069 KY 1194 MP 3.3-6.6</td>
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<td>3.3 Miles</td>
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<td>Rural Minor Collector</td>
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<td>069 KY 1273 MP 0-2.5</td>
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<td>Length</td>
<td>Cost</td>
<td>Funding Agency</td>
<td>Purpose</td>
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<td>071 US 68X MP 1.2-1.8</td>
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<td>38932 2</td>
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<td>074 US 27 MP 0-9.093</td>
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<td>081 KY 3170 MP 0-1.297</td>
<td>Roadside Barrier end treatments (crash cushions, terminals)</td>
<td>1.297 Miles</td>
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<td>082 KY 710 MP 0-</td>
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<td>Rural Minor</td>
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<td>Keeping vehicles in the Roadway other</td>
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Reduce roadway departure crashes.
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<th>Description</th>
<th>Miles</th>
<th>Cost</th>
<th>Section</th>
<th>Agency</th>
<th>Roadway</th>
<th>Notes</th>
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<td>0.865</td>
<td>25000</td>
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<td>Rural Principal Arterial - Other</td>
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<td>State Highway Agency</td>
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<td>088 KY 7 MP 3.65-3.84</td>
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<td>0.19</td>
<td>50000</td>
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<td>088 KY 519 MP 1.28-1.57</td>
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<td>10500</td>
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<tr>
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<td>13847 52</td>
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<td>Rural Minor Arterial</td>
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<tr>
<td>090 US 31E MP 25.8-</td>
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<td>1.3</td>
<td>10000</td>
<td>HSIP (Section 148)</td>
<td>Rural Minor Arterial</td>
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<td>crashes</td>
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<td>095 KY 30 MP 15.496-19.599</td>
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<td>100 KY 461 MP 0-8.441</td>
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<td>Improve recovery areas</td>
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<td>104 US 127 MP 0-19</td>
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<td>Improve recovery areas</td>
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<td>Project</td>
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<td>Total Cost</td>
<td>Federal Share</td>
<td>Non-Federal Share</td>
<td>Agency</td>
<td>Objective</td>
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<td>$10,000</td>
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<td>State Highway Agency</td>
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<td>21450 00</td>
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<td>State Highway Agency</td>
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<tr>
<td>Statewide</td>
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<td>50000 00</td>
<td>50000 00</td>
<td>HSIP (Section 148)</td>
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<td>90785 00</td>
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<tr>
<td>Safety Circuit Rider</td>
<td>Non-infrastructure Road safety audits</td>
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<td>35400 00</td>
<td>35400 00</td>
<td>HSIP (Section 148)</td>
<td>State Highway Agency</td>
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</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>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Number of fatalities</td>
<td>826</td>
<td>791</td>
<td>760</td>
<td>721</td>
<td>746</td>
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<tr>
<td>Number of serious injuries</td>
<td>4620</td>
<td>4491</td>
<td>4057</td>
<td>3873</td>
<td>3825</td>
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<td>Fatality rate (per HMVMT)</td>
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<td>1.68</td>
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<td>9.79</td>
<td>9.51</td>
<td>8.43</td>
<td>8.04</td>
<td>8.1</td>
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</table>

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

![Graph showing the number of fatalities and serious injuries from 2008 to 2012.](image)

- **# Fatalities**
- **# Serious Injuries**

<table>
<thead>
<tr>
<th>Year</th>
<th># Fatalities</th>
<th># Serious Injuries</th>
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<tbody>
<tr>
<td>2008</td>
<td>826</td>
<td>5315</td>
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<td>2009</td>
<td>791</td>
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<td>2010</td>
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<td>4310</td>
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<td>2011</td>
<td>721</td>
<td>4065</td>
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<tr>
<td>2012</td>
<td>746</td>
<td>4024</td>
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</tbody>
</table>
Rate of Fatalities and Serious injuries for the Last Five Years

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

### Year - 2012

<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>
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<tr>
<td>RURAL PRINCIPAL ARTERIAL - INTERSTATE</td>
<td>48</td>
<td>748</td>
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<td>FREEWAYS AND EXPRESSWAYS</td>
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<td>RURAL PRINCIPAL ARTERIAL - OTHER</td>
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# Serious Injuries by Roadway Functional Classification

![Graph showing serious injuries by roadway functional classification from 2008 to 2012.](image-url)
Fatality Rate by Roadway Functional Classification

Roadway Functional Classification

Fatality Rate (per HMVHT)
### Year - 2012

<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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</thead>
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Number of Fatalities by Roadway Ownership

Roadway Functional Classification

# of Fatalities

- 2008
- 2009
- 2010
- 2011
- 2012
Number of Serious Injuries by Roadway Ownership

- 2008
- 2009
- 2010
- 2011
- 2012

# of Serious Injuries

Roadway Functional Classification

- STATE
- COUNTY
- TOWN
- CITY
- STATE PARK
- OTHER: LOCAL
- PRIVATE
- RAILROAD
- STATE TOLL
- LOCAL TOLL
- OTHER PUBLIC
- TRIBE
- OTHER
Describe any other aspects of the general highway safety trends on which you would like to elaborate.

Fatal crashes have decreased year to date in CY 2013 as compared to the same period for CY 2012.

**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 Performance Measures</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatality rate (per capita)</td>
<td>6.14</td>
<td>6.1</td>
<td>5.82</td>
<td>5.35</td>
<td>5.21</td>
</tr>
<tr>
<td>Serious injury rate (per capita)</td>
<td>27.41</td>
<td>26.01</td>
<td>24.85</td>
<td>23</td>
<td>22.1</td>
</tr>
<tr>
<td>Fatality and serious injury rate (per capita)</td>
<td>33.55</td>
<td>32.11</td>
<td>30.67</td>
<td>28.36</td>
<td>27.31</td>
</tr>
</tbody>
</table>

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

Averages calculated based on MAP-21, Section 142 guidance. Results when comparing the 5-year rolling averages ending in CY 2009 with CY 2011 indicate a decrease in all three performance measures when data is rounded to the tenths.
Rate of Fatalities and Serious injuries for the Last Five Years

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:
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: Other - Creation of KYTC HSIP Investment Plan
Briefly describe significant program changes that have occurred since the last reporting period.

In May of 2013 the KYTC HSIP Investment Plan was approved by KYTC Leadership and shared with the FHWA Kentucky Division. The plan includes the history of KYTC’s activities in the HSIP with information about the methodology, implementation, and benefits of each of the emphasis areas stemming from the Kentucky Strategic Highway Safety Plan including Roadway Departure and Intersections. Inside each of the emphasis areas are initiatives to accomplish significant reductions in traffic fatalities and serious injuries on public roads including high friction surface treatments, horizontal alignment signing, installation of cable barriers, markings and delineation, systematic intersection improvements and targeted intersection improvements based on prior safety performance. The plan clearly communicates how HSIP funds are to be programmed and invested in the upcoming years.
SHSP Emphasis Areas
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

### Year - 2012

<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>Curbing aggressive driving</td>
<td>failure to yield right of way, following too close, too fast for conditions, disregarding traffic control, exceeding speed limit, improper passing, weaving in traffic</td>
<td>242</td>
<td>12187</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reducing impaired driving</td>
<td>driving under the influence of alcohol or other drugs</td>
<td>147</td>
<td>3055</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Project Description</td>
<td>Crashes</td>
<td>Treatment</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
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<td>------</td>
</tr>
<tr>
<td>Increasing seat belt use and improving airbag effectiveness</td>
<td>Crashes involving unbelted drivers</td>
<td>270</td>
<td>600</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improving motorcycle safety and increasing motorcycle awareness</td>
<td>Crashes involving motorcycles</td>
<td>98</td>
<td>1490</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Making truck travel safer</td>
<td>Truck-related</td>
<td>76</td>
<td>1732</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minimizing the consequences of leaving the road</td>
<td>Roadway departure crashes</td>
<td>514</td>
<td>14739</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improving the design and operation of highway intersections</td>
<td>Crashes within limits of intersection</td>
<td>90</td>
<td>10634</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Number of Fatalities by SHSP Emphasis Area

Year 2008 to Year 2012

<table>
<thead>
<tr>
<th>SHSP Emphasis Area</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive driving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired driving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seat Belt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Number of Serious Injuries by SHSP Emphasis Area

Year 2008 to Year 2012

# of Serious Injuries

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive driving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impaired driving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seat Belt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motorcycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SHSP Emphasis Area
Fatality Rate by SHSP Emphasis Area

Year 2008 to Year 2012

SHSP Emphasis Area

Rate of Fatalities
Serious Injury Rate by SHSP Emphasis Area

Year 2008 to Year 2012

Rate of Serious Injury

Aggressive driving
Impaired driving
Seat Belt
Motorcycle
Truck
Fixed object
Intersections

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

**Year - 2012**

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Skid Hazard</td>
<td>Wet road</td>
<td>85</td>
<td>277</td>
<td>0</td>
<td>0</td>
<td>7439</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roadway Departure</td>
<td>Run-off-road</td>
<td>514</td>
<td>14739</td>
<td>0</td>
<td>0</td>
<td>40313</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Median Barrier</td>
<td>Cross median</td>
<td>12</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>284</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intersection</td>
<td>Crashes within intersection</td>
<td>90</td>
<td>10634</td>
<td>0</td>
<td>0</td>
<td>32186</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
# Fatalities by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

**Target Crash Type**

- # of Fatalities
- 2008
- 2009
- 2010
- 2011
- 2012

- All
- Angle
- Cross median
- Fixed object
- Sideswipe
- Head-on
- Left-turn
- Night-time
- Non-intersection
- Rear-end
- Right-turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Wet-road
#Serious Injuries by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

Target Crash Type

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

# of Serious Injuries

2008
2009
2010
2011
2012
Fatality Rate by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

Target Crash Type

Rate of Fatalities

Air, Angle, Cross-median, Side-swipe, Head-on, Left-turn, Night-time, Non-intersection, Rear-end, Right-turn, Run-off-road, Speed-related, Vehicle/animal, Vehicle/bicyclist, Vehicle/pedestrian

2008 - 2012
Serious Injury Rate by Target Crash Type for Groups of Similar Projects

Year 2008 to Year 2012

Rate of Serious Injury

Target Crash Type

- Air
- Angle
- Cross median
- Fixed object
- Sideswipe
- Head-on
- Left turn
- Night-time
- Non-intersection
- Rear end
- Right turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Wet road
Systemic Treatments
Present the overall effectiveness of systemic treatments.

**Year - 2012**

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Rumble Strips</td>
<td>Run-off-road</td>
<td>514</td>
<td>14739</td>
<td>0</td>
<td>0</td>
<td>40313</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cable Median Barriers</td>
<td>Cross median</td>
<td>12</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>284</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
# Fatalities by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

Target Crash Type

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

# of Fatalities

0 200 400 600 800

2008 2009 2010 2011 2012
# Serious Injuries by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

Target Crash Type

- All
- Angle
- Crashed object
- Head on
- Left-turn
- Night-time
- Non-intersection
- Rear-end
- Right-turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Wet road

# of Serious Injuries

- 2008
- 2009
- 2010
- 2011
- 2012
Fatality Rate by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

Target Crash Type

Rate of Fatalities

-0.6 -0.4 -0.2 0 0.2 0.4 0.6
Serious Injury Rate by Target Crash Type for Systemic Safety Improvements

Year 2008 to Year 2012

Rate of Serious Injur

Target Crash Type

- Air
- Angle
- Cross median
- Fixed object
- Sideswipe
- Head on
- Left turn
- Night-time
- Non-intersection
- Rear-end
- Right-turn
- Run-off-road
- Speed-related
- Truck-related
- Vehicle/animal
- Vehicle/bicycle
- Wet road
Describe any other aspects of the overall Highway Safety Improvement Program effectiveness on which you would like to elaborate.

Systemic treatments have been implemented for rumble stripes, cable median barriers, and high-friction applications on curves. The following benefit-cost ratios have been calculated for the specific projects:

- Rumble Stripes: 14:1
- Cable Median Barriers: 1.3:1
- High-Friction Surfaces: 9:1
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-Other Injury</th>
<th>Bef-PDO</th>
<th>Aft-Fatal</th>
<th>Aft-Serious Injury</th>
<th>Aft-Other Injury</th>
<th>Aft-PDO</th>
<th>Aft-Total</th>
<th>Evaluation Results</th>
<th>Benefit/Cost Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>Rural Principal Arterial - Other</td>
<td>Roadway delineation</td>
<td>Roadway delineation - other</td>
<td>13.4</td>
<td>310</td>
<td>323.4</td>
<td>7.5</td>
<td>245</td>
<td>252.5</td>
<td>14:1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural Principal Arterial - Interstate</td>
<td>Roadside</td>
<td>Barrier - cable</td>
<td>0.4</td>
<td>10.6</td>
<td>15.6</td>
<td>26.6</td>
<td>0</td>
<td>2.67</td>
<td>9.33</td>
<td>12</td>
<td>1.3:1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statewide on various functional class roads</td>
<td>Roadway</td>
<td>Pavement surface - high friction surface</td>
<td>1.6</td>
<td>42.2</td>
<td>104</td>
<td>147.8</td>
<td>2.1</td>
<td>11.9</td>
<td>31.1</td>
<td>45.1</td>
<td>9:1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Optional Attachments

<table>
<thead>
<tr>
<th>Sections</th>
<th>Files Attached</th>
</tr>
</thead>
</table>

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.