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 Washington state HSIP program funds both local safety (70%) and state highway safety (30%) programs. The program continues to be successful (25.86 B/C for projects closed in 2010). Projects going forward using HSIP funds target the top two (both priority one) infrastructure focus areas identified in the SHSP (Run-Off-the-Road and Intersections).

The HSIP program has had a major benefit and effect on road safety in Washington state. While state highways have allocated state funds to support safety efforts, in addition to HSIP funds, the majority of local road safety efforts are funded by the HSIP program. With 70% of fatal and serious injury crashes in the priority one focus areas, this is a desperately needed program for the state to have any possibility of achieving its Target Zero vision by 2030.
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.

The state uses a data-driven process to determine HSIP funding levels for state vs local roads. Our current SHSP (www.targetzero.com) has specific priority levels for types/causes/categories of fatal & serious injury crashes (some based on crash type, others based on driver behaviors, others based on user type). The top 2 infrastructure related priorities are Run-Off-the-Road crashes (priority 1) and Intersection crashes (priority 1). Evaluating crashes statewide for a 5 year period, we identify how many fatal & serious injury run-off-road crashes and how many fatal & serious injury intersection-related crashes occurred. That data is evaluated to see how many were on local agency responsibility roads compared to state responsibility roads. The HSIP funding is split by percentage based on that data.
Currently, that means that local agencies receive 70% of HSIP funds and the state receives 30% of HSIP funds.

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

- Design
- Planning
- Operations
- Governors Highway Safety Office
- Other: Other-Risk
- Other: Other-Program Management
- Other: Other-Local Programs

**Briefly describe coordination with internal partners.**

Oversight for the 70% of the HSIP funds that are directed to local agencies is assigned to the Local Programs division for management (to identify local agency priorities, distribution of funds to counties & cities, individual project selection, federal oversight, project delivery, etc.).

Oversight for the 30% of the HSIP funds that are directed to the state is managed by our Highway Safety Executive Committee (HSEC). We do not have a specific highway safety office within the DOT. Instead, safety is part of everyone’s responsibility. As such, safety oversight by HSEC provides an opportunity for major affected programs to provide input on safety issues. The HSEC is comprised of program directors from Design, Planning, Operations, Local Programs, Risk, and Program Management.

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

- Metropolitan Planning Organizations
- Governors Highway Safety Office
The Local Programs division oversees the planning of HSIP funds for local agencies. In developing program methodology, local agency representatives and representatives of local agency associations are included in the decision-making process for agreement with the criteria in evaluating the projects for the programs. Those local agency representatives are identified with assistance from local government associations (city & county) to reflect a cross-section of those agencies.

For the City Safety program, representation includes FHWA, AWC (Association of Washington Cities), and city representatives from eastern and western Washington and from large, medium, and small cities.

For the County Safety program, representation includes FHWA, WSACE (Washington State Association of County Engineers), CRAB (County Road Administration Board), and county representatives from eastern and western Washington and from large and small counties.

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 change

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

None
Program Methodology

Select the programs that are administered under the HSIP.

- [ ] Median Barrier
- [ ] Horizontal Curve
- [ ] Skid Hazard
- [ ] Roadway Departure
- [ ] Local Safety
- [ ] Left Turn Crash
- [ ] Other: Other-State - Collision Analysis Corridors
- [x] Other: Other-State - Collision Analysis Locations
- [x] Other: Other-Local - City Safety Program
- [x] Other: Other-Local - County Safety Program
- [ ] Intersection
- [ ] Bicycle Safety
- [ ] Crash Data
- [ ] Low-Cost Spot Improvements
- [ ] Pedestrian Safety
- [ ] Shoulder Improvement
- [ ] Right Angle Crash
- [ ] Segments
- [ ] Rural State Highways
- [ ] Red Light Running Prevention
- [ ] Sign Replacement And Improvement
- [ ] Safe Corridor
- [ ] Low-Cost Spot Improvements

The state HSIP program focuses on Collision Analysis Corridors (CACs), which are generally focused on Roadway Departure safety. The program also focuses on Collision Analysis Locations (CALs) and Intersection Analysis Locations (IALs) which are both generally related to Intersection safety.

The local HSIP program focuses on a County Safety Program - primarily Roadway Departure with some Intersection focus, and a City Safety Program - primarily an Intersection focus. It also funds the Corridor Safety Program on city & county roadways.

Program: Safe Corridor

Date of Program Methodology: 1/1/2004

What data types were used in the program methodology?
2014 Washington Highway Safety Improvement Program

### Crashes
- [ ] All crashes
- [x] Fatal crashes only
- [x] 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?**

- [x] 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-Agreement between program managers at WSDOT and the Governor’s Highway Safety Office, based on data & local leadership

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 3
- Incremental B/C
- Ranking based on net benefit
- Other
- Fatal & serious injury crash history 1
- Local leadership & interest 2
Program: Other-State - Collision Analysis Corridors

Date of Program Methodology: 1/1/2012

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 crashes only</td>
<td>☑ Population</td>
<td>☑ Functional classification</td>
</tr>
<tr>
<td>☑ Other-Fatal, serious, and evidently injury 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 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

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 1
☒ Available funding 2
☐ Incremental B/C
☐ Ranking based on net benefit
Program: Other-State - Collision Analysis Locations

Date of Program Methodology: 1/1/2012

What data types were used in the program methodology?

Crashes
- ☐ All crashes
- ☐ Fatal crashes only
- ☐ Fatal and serious injury crashes only
- ☒ Other-Fatal, serious, and evident injury crashes only

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

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 1
- Available funding 2
Program: Other-State - Intersection Analysis Locations

Date of Program Methodology: 1/1/2012

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 crashes only</td>
<td>☑ Population</td>
<td>☑ Functional classification</td>
</tr>
<tr>
<td>☑ Other-Fatal, serious, and evident injury 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

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
Program: Other-Local - City Safety Program

Date of Program Methodology: 1/1/2011

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

Roadway:
- Median width
- Horizontal curvature
- Functional classification
- Lane miles
- 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

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
- Incremental B/C
- Ranking based on net benefit
- Other

**Program:** Other-Local - County Safety Program

**Date of Program Methodology:** 1/1/2014

**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></td>
</tr>
<tr>
<td>Other</td>
<td>Lane miles</td>
<td>Roadside features</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 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

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-Allocation of funds to each county based on rate of fatal & serious injury crashes per mile
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 1
☐ Incremental B/C
☐ Ranking based on net benefit
☐ Other
☒ Completion of Local Road Safety Plan 1

All state programs make use of Safety Analyst for identification of locations to consider for improvement.

City Safety Program includes elements of both high-cost spot improvements and low-cost systemic safety improvements.

County Safety Program is focused on low-cost systemic safety improvements. Counties are now required to submit a local road safety plan to be eligible to apply for funds. Allocation of funds is based on available funding with counties being required to meet certain criteria for approval for project award.

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
- ✗ Traffic Control Device Rehabilitation
- ✔ Install/Improve Signing
- ✔ Upgrade Guard Rails
- ✔ Safety Edge
- ✗ Add/Upgrade/Modify/Remove Traffic Signal
- ✔ Rumble Strips
- ✗ Pavement/Shoulder Widening
- ✔ Install/Improve Pavement Marking and/or Delineation
- ✔ Clear Zone Improvements
- ✗ Install/Improve Lighting
- ✗ Other

50% is an estimate. The majority of county projects have been systemic. A dedicated portion of city projects are systemic, and some of the "high-cost" projects also implement systemic improvements. And a portion of state funds have also been used for systemic safety.

What process is used to identify potential countermeasures?

- ✔ Engineering Study
- ✔ Road Safety Assessment
- ✗ Other:

The majority of projects selected use engineering studies. A few projects use a road safety assessment process.
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
- [x] Other: Other-No change

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

While the County Safety Program has used a systemic safety approach in the past, the current requirement to develop a local road safety plan as part of the application process for HSIP funds is new.
# 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>74262986</td>
<td>58432514</td>
</tr>
<tr>
<td>HRRRP (SAFETEA-LU)</td>
<td></td>
<td></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>2617742</td>
<td>2617742</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>50290533</td>
<td>23434148</td>
</tr>
<tr>
<td>State and Local Funds</td>
<td>17007968</td>
<td>16608683</td>
</tr>
</tbody>
</table>
HSIP, Other Federal Funds (primarily STP Safety funds), and State and Local funds represent Calendar Year 2013. Programmed and obligated funds are both based on projects in the 2013 STIP (see additional details below). Note that most projects include some safety elements and countermeasures, in larger or smaller shares of other projects using federal funds. These projects are not captured here, in part because it would be very difficult to break out the safety funding versus non-safety funding within those projects. However, additional information and projects are available if requested. It should be noted that the local funds included in the table are what was "committed" to the projects as part of a match, but are not officially "obligated" as they are not federal funds.
Local Agency Projects: Programmed values are from the 2013 STIP. Obligated values are from SPORT (internal program) for projects in the 2013 STIP.

State Projects: Programmed values are from the 2013 STIP for federal funds and from the state I2 (Safety) program for state & local & 164 funds. Obligated values are from the state I2 (Safety) program for expenditures in 2013.

Behavioral Projects: Behavioral funds are administered by the Washington Traffic Safety Commission (WTSC). These figures represent federal fiscal year 2014, including carry forward funds for some categories. Programmed reflects funds that have been transferred from NHTSA to the WTSC. Obligated reflects funds that have been allocated to specific projects.

How much funding is programmed to local (non-state owned and maintained) safety projects?
$82,374,758.00

How much funding is obligated to local safety projects?
$60,783,304.00

Note that the local funding shown in answer to this question does not include any of the behavioral funds/programs shown in Question 17. Only the split for infrastructure-related projects is shown.

Also note that for HSIP funds, the funding is split 70% programmed/obligated for local safety projects, 30% programmed/obligated for state safety projects.

How much funding is programmed to non-infrastructure safety projects?
$18,187,593.00

How much funding is obligated to non-infrastructure safety projects?
$12,517,281.00
Note that none of the HSIP funds are directed to non-infrastructure projects. These funds represent only the behavioral funds shown in Question 17.

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.

The biggest impediment to obligating HSIP funds has been getting realistic schedules for local agency projects. For future project awards, several additional scheduling milestones have been included on application forms, to help local agencies think through all of the parts of the project life. With MAP-21 requirements, projects will also be held to a strict project delivery schedule or will have funds rescinded.

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

None
**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>City of Bellingham - Ohio/King St. Intersection Safety</td>
<td>Intersection traffic control</td>
<td>3 Numbers</td>
<td>315000</td>
<td>0</td>
<td>HSIP (Section 148)</td>
<td>Urban Minor Arterial</td>
<td>0</td>
<td>0</td>
<td>City of Municipal Highway Agency</td>
<td>Intersections</td>
</tr>
<tr>
<td>Franklin County - Countywide Safety Improvements</td>
<td>Roadside Barrier - metal</td>
<td>65 Miles</td>
<td>49820 0</td>
<td>6</td>
<td>HSIP (Section 148)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>County Highway Agency</td>
<td>Roadway Departure</td>
</tr>
<tr>
<td>WSDOT - US 2/SR 20 Corridor Safety</td>
<td>Intersection geometry modification</td>
<td>1 Numbers</td>
<td>46785 8</td>
<td>0</td>
<td>HSIP (Section 148)</td>
<td></td>
<td>0</td>
<td>0</td>
<td>State Highway Agency</td>
<td>Intersections</td>
</tr>
<tr>
<td>County</td>
<td>Problem Description</td>
<td>Mileage</td>
<td>Approx. Adj.</td>
<td>Program</td>
<td>Departure</td>
<td>Agency</td>
<td>Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------------</td>
<td>----------</td>
<td>-----------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln County</td>
<td>Roadway signs and traffic control</td>
<td>81</td>
<td>48122</td>
<td>HSIP</td>
<td>0</td>
<td>County Highway Agency</td>
<td>1.1 Improve roadway signing and shoulder delineation, especially in curves.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Countywide Low Cost</td>
<td>Roadway signs (including post) - new or updated</td>
<td>7</td>
<td>81</td>
<td>Rural Major Collector</td>
<td>0</td>
<td>0</td>
<td>County Highway Agency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td></td>
<td></td>
<td></td>
<td>Collector</td>
<td></td>
<td>County Highway Agency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Mount Vernon</td>
<td>Intersection traffic control</td>
<td>1</td>
<td>84030</td>
<td>HSIP</td>
<td>0</td>
<td>City of Municipal Highway Agency</td>
<td>1.1 Improve roadway signing and shoulder delineation, especially in curves.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College/Urban Signal</td>
<td>Intersection traffic control - other</td>
<td>0</td>
<td>84030</td>
<td>Urban Principal Arterial - Other</td>
<td>0</td>
<td>0</td>
<td>City of Municipal Highway Agency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pend Oreille County</td>
<td>Roadway signs and traffic control</td>
<td>13</td>
<td>31320</td>
<td>HSIP</td>
<td>0</td>
<td>County Highway Agency</td>
<td>1.1 Improve roadway signing and shoulder delineation, especially in curves.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deer Valley Road</td>
<td>Roadway signs (including post) - new or updated</td>
<td>0</td>
<td>31320</td>
<td>Rural Major Collector</td>
<td>0</td>
<td>0</td>
<td>County Highway Agency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HES</td>
<td></td>
<td></td>
<td></td>
<td>Collector</td>
<td></td>
<td>County Highway Agency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| City of Seattle - SR 99 @ N. 90th Street | Intersection traffic control
Modify traffic signal timing - left-turn phasing (permissive to protected-only) | 1 | 146427 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | City of Municipal Highway Agency | Intersections | 1.5 Convert permitted left turns to protected left turns at signals. |
| City of Seattle - 15th Avenue SW @ Roxbury | Intersection traffic control
Modify traffic signal timing - left-turn phasing (permissive to protected-only) | 1 | 152790 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | City of Municipal Highway Agency | Intersections | 1.5 Convert permitted left turns to protected left turns at signals. |
| City of Seattle - Harvard & Pike Signal | Intersection traffic control
Intersection traffic control - other | 1 | 786960 | 0 | HSIP (Section 148) | Urban Minor Arterial | 0 | 0 | City of Municipal Highway Agency | Intersections | 1.5 Convert permitted left turns to protected left turns at signals. |
<p>| City of Seattle - Rainier Ave. South Corridor Safety | Intersection traffic control Systemic improvements - signal-controlled | 1 Numbers | 125800 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | City of Municipal Highway Agency | Intersections | 4.3 Extend crossing times and implement pedestrian lead intervals. |
| City of Spokane - Wellesley &amp; Belt Signal | Intersection traffic control Intersection traffic control - other | 1 Numbers | 345000 | 0 | HSIP (Section 148) | Urban Minor Arterial | 0 | 0 | City of Municipal Highway Agency | Intersections | 1.5 Convert permitted left turns to protected left turns at signals. |
| Spokane County - Argonne Rd. @ Maringo Dr. | Intersection geometry Auxiliary lanes - add left-turn lane | 1 Numbers | 140549 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | County Highway Agency | Intersections | 1.3 Provide/improve left- and right-turn channelization. |
| City of Tacoma - So. 78th St/Tac Mall Blvd HES | Intersection traffic control Intersection traffic control - other | 1 Numbers | 157500 | 0 | HSIP (Section 148) | Urban Major Collector | 0 | 0 | City of Municipal Highway Agency | Intersections |  |
| City of Vancouver - NE 49th/122nd Intersection | Intersection traffic control | 1 Numbers | 22500 | 0 | HSIP (Section 148) | Urban Major Collector | 0 | 0 | City of Municipal Highway Agency | Intersections | 1.3 Provide/improve left- and right-turn channelization. |
| City of Vancouver - Evergreen Blvd: Blandford-Andresen | Shoulder treatments | 1 Numbers | 34200 | 0 | HSIP (Section 148) | Urban Minor Arterial | 0 | 0 | City of Municipal Highway Agency | Roadway Departure | 1.2 Improve roadway geometry. |
| City of Vancouver - Mill Plain Blvd Street Lighting | Lighting Continuous roadway lighting | 1 Numbers | 10000 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | City of Municipal Highway Agency | Roadway Departure | 1.5 Install/increase illumination at locations with night time crashes. |
| City of Vancouver - Fourth Plain: Ft. Vancouver to Falk | Pedestrians and bicyclists Medians and pedestrian refuge areas | 1 Numbers | 52500 | 0 | HSIP (Section 148) | Urban Principal Arterial - Other | 0 | 0 | City of Municipal Highway Agency | Pedestrians | 4.1 Improve safety at pedestrian crossings by installing refuge islands. |
| Walla Walla County - Five | Shoulder treatments | 2 Miles | 72452 | 0 | HSIP (Section | Rural Major | 0 | 0 | County Highway | Roadway | 1.2 Improve roadway |</p>
<table>
<thead>
<tr>
<th>Mile Road MP 0.0 to MP 2.0</th>
<th>Widen shoulder - paved or other</th>
<th>1</th>
<th>148)</th>
<th>Collector Agency Departure geometry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yakima County - High Risk Rural Corridors</td>
<td>Roadside Roadside grading</td>
<td>2 Miles 464963</td>
<td>0</td>
<td>HSIP (Section 148) Rural Major Collector 0 0 County Highway Agency Roadway Departure 2.3 Design safer slopes and ditches to prevent rollovers.</td>
</tr>
</tbody>
</table>

The report template does not allow for any descriptors with the "numbers" outputs. So we are unable to help differentiate between intersections, corridors, lanes, curves, etc., using the table provided.
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>
</tr>
</thead>
<tbody>
<tr>
<td>Number of fatalities</td>
<td>588.2</td>
<td>573.2</td>
<td>535.4</td>
<td>499.6</td>
<td>474.2</td>
</tr>
<tr>
<td>Number of serious injuries</td>
<td>2779.2</td>
<td>2747.6</td>
<td>2670</td>
<td>2504</td>
<td>2400.4</td>
</tr>
<tr>
<td>Fatality rate (per HMVMT)</td>
<td>1.05</td>
<td>1.02</td>
<td>0.946</td>
<td>0.882</td>
<td>0.838</td>
</tr>
<tr>
<td>Serious injury rate (per HMVMT)</td>
<td>4.962</td>
<td>4.89</td>
<td>4.724</td>
<td>4.426</td>
<td>4.25</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

![Graph showing the number of fatalities and serious injuries from 2008 to 2012. The graph indicates a decrease in fatalities and serious injuries over the years.]
Rate of Fatalities and Serious injuries for the Last Five Years

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

### Year - 2013

<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>18.6</td>
<td>51.8</td>
<td>0.41</td>
<td>1.15</td>
</tr>
<tr>
<td>RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS</td>
<td>19.6</td>
<td>52.2</td>
<td>0.94</td>
<td>2.37</td>
</tr>
<tr>
<td>RURAL PRINCIPAL ARTERIAL - OTHER</td>
<td>34.2</td>
<td>107</td>
<td>1.38</td>
<td>4.25</td>
</tr>
<tr>
<td>RURAL MINOR ARTERIAL</td>
<td>38.2</td>
<td>113.4</td>
<td>1.83</td>
<td>5.42</td>
</tr>
<tr>
<td>RURAL MINOR COLLECTOR</td>
<td>19.6</td>
<td>82.2</td>
<td>1.74</td>
<td>7.3</td>
</tr>
<tr>
<td>RURAL MAJOR COLLECTOR</td>
<td>69.8</td>
<td>236.2</td>
<td>1.84</td>
<td>6.2</td>
</tr>
<tr>
<td>RURAL LOCAL ROAD OR STREET</td>
<td>18.2</td>
<td>74.6</td>
<td>1.57</td>
<td>6.38</td>
</tr>
<tr>
<td>URBAN PRINCIPAL</td>
<td>34.6</td>
<td>146.8</td>
<td>0.32</td>
<td>1.34</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>ARTERIAL - INTERSTATE</td>
<td>25</td>
<td>112.8</td>
<td>0.47</td>
<td>2.14</td>
</tr>
<tr>
<td>URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS</td>
<td>36.6</td>
<td>242</td>
<td>0.41</td>
<td>2.74</td>
</tr>
<tr>
<td>URBAN MINOR ARTERIAL</td>
<td>32.2</td>
<td>145</td>
<td>0.43</td>
<td>1.93</td>
</tr>
<tr>
<td>URBAN MINOR COLLECTOR</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>URBAN MAJOR COLLECTOR</td>
<td>8.8</td>
<td>49.2</td>
<td>0.28</td>
<td>1.57</td>
</tr>
<tr>
<td>URBAN LOCAL ROAD OR STREET</td>
<td>6</td>
<td>35.6</td>
<td>0.14</td>
<td>0.81</td>
</tr>
</tbody>
</table>
# Fatalities by Roadway Functional Classification

![Bar chart showing fatalities by roadway functional classification for years 2009 to 2013.](chart.png)
# Serious Injuries by Roadway Functional Classification

![Bar chart showing the number of serious injuries by roadway functional classification for the years 2009 to 2013 in Washington State.](chart)

Roadway Functional Classification:
- Major Collector (U)
- Minor Collector (R)
- Local Road or Street (R)
- Principal Arterial - Other (U)
- Principal Arterial - Expressway and Freeways (R)
- Principal Arterial - Interstate (R)
- Principal Arterial - Other Freeways and Expressways (R)

The chart illustrates the trend of serious injuries across different functional classifications, with data points for each year clearly visible.
Serious Injury Rate by Roadway Functional Classification

![Bar chart showing serious injury rate by roadway functional classification for 2009-2013 in Washington.]
## Year - 2013

<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>
</tr>
</thead>
<tbody>
<tr>
<td>STATE HIGHWAY AGENCY</td>
<td>224.8</td>
<td>892</td>
<td>0.71</td>
<td>2.83</td>
</tr>
<tr>
<td>COUNTY HIGHWAY AGENCY</td>
<td>137.6</td>
<td>568.6</td>
<td>1.48</td>
<td>6.13</td>
</tr>
<tr>
<td>TOWN OR TOWNSHIP HIGHWAY AGENCY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CITY OF MUNICIPAL HIGHWAY AGENCY</td>
<td>88.8</td>
<td>792.4</td>
<td>0.58</td>
<td>5.19</td>
</tr>
<tr>
<td>STATE PARK, FOREST, OR RESERVATION AGENCY</td>
<td>4.2</td>
<td>23.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LOCAL PARK, FOREST OR RESERVATION AGENCY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OTHER STATE AGENCY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OTHER LOCAL AGENCY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PRIVATE (OTHER THAN RAILROAD)</td>
<td>0.2</td>
<td>2.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RAILROAD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>STATE TOLL AUTHORITY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LOCAL TOLL AUTHORITY</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)</td>
<td>0</td>
<td>0.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>INDIAN TRIBE NATION</td>
<td>2.8</td>
<td>2.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td><strong>OTHER</strong></td>
<td>1.6</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>FEDERAL</strong></td>
<td>0.2</td>
<td>3.4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>NATIONAL PARK</strong></td>
<td>0.4</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Number of Fatalities by Roadway Ownership

Roadway Functional Classification

- State
- County
- Town
- City
- Local Park
- Other State
- Other Local
- Railroad
- State Toll
- Local Toll
- Other
Number of Serious Injuries by Roadway Ownership

- 2009
- 2010
- 2011
- 2012
- 2013
Fatality Rate by Roadway Ownership

Roadway Functional Classification

Fatality Rate (per HMVT)

- State
- County
- City
- Local Park
- Other State
- Other Local
- Railroad
- State Toll
- Local Toll
- Other
Serious Injury Rate by Roadway Ownership

Roadway Functional Classification

Serious Injury Rate (per HWVMT)

2009  2010  2011  2012  2013
The functional classification data ONLY includes state and county road data. Our state database does not include federal functional classification for crashes on city streets or miscellaneous roadways. So the rural information should be accurate. The urban information would change significantly with this missing data. This also means that the rate per facility type (especially for urban crashes) is not accurate either.

The jurisdiction type data does not split out the miscellaneous roadways into sub-categories for VMT. So the rates are only shown for state, county, and city roads.
Describe any other aspects of the general highway safety trends on which you would like to elaborate.

While the most recent update to the state Strategic Highway Safety Plan: Target Zero (updated in 2013) showed significant progress and downward trends for both fatalities and serious injuries, the most recent 2-3 years have showed a flattening of the curve. This might be counted as success, considering the majority of states showed an increase during these same years. However, continued progress will need to be made to achieve our goal of Target Zero.

**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>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatality rate (per capita)</td>
<td>0.684</td>
<td>0.614</td>
<td>0.628</td>
<td>0.614</td>
<td>0.46</td>
</tr>
<tr>
<td>Serious injury rate (per capita)</td>
<td>1.662</td>
<td>1.646</td>
<td>1.592</td>
<td>1.578</td>
<td>1.242</td>
</tr>
<tr>
<td>Fatality and serious injury rate (per capita)</td>
<td>2.344</td>
<td>2.258</td>
<td>2.218</td>
<td>2.19</td>
<td>1.7</td>
</tr>
</tbody>
</table>

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

FHWA shared the following information on population (# people 65+ per 1000 state population):

Calculate rate to 0.01, round final result to 0.1. Rate calculation example:

FARS (for fatalities) and WSDOT state collision repository (for serious injuries) shows older road users (65+) in crashes as:
2005 = 104 fatalities, 213 serious injuries
2006 = 69 fatalities, 195 serious injuries
2007 = 74 fatalities, 174 serious injuries
2008 = 92 fatalities, 202 serious injuries
2009 = 57 fatalities, 182 serious injuries
2010 = 73 fatalities, 226 serious injuries
2011 = 85 fatalities, 180 serious injuries
2012 = 74 fatalities, 187 serious injuries

The rates in the table above are calculated simply as \# / Pop = Rate.
2006-2010 Combined Rate (see equation above) = 2.26 or 2.3
2008-2012 Combined Rate (see equation above) = 2.19 or 2.2

Rate of Fatalities and Serious injuries for the Last Five Years

Does the older driver special rule apply to your state?
<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Program Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Washington</td>
<td>Highway Safety Improvement Program</td>
</tr>
</tbody>
</table>

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:


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:

Focus is already on fatal & serious injury crashes, and includes local roads.
Briefly describe significant program changes that have occurred since the last reporting period.

The only change is that counties are being required to submit a basic local road safety plan to be eligible to receive HSIP funds. The county safety focus was already on low-cost, widespread improvements. This change shifts that focus slightly into a more specific systemic safety approach.
**SHSP Emphasis Areas**
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

**Year - 2013**

<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>Roadway Departure</td>
<td>Run-off-road</td>
<td>192</td>
<td>670</td>
<td>0.34</td>
<td>1.18</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intersections</td>
<td>All</td>
<td>91</td>
<td>779</td>
<td>0.16</td>
<td>1.37</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>Vehicle/pedestrian</td>
<td>63</td>
<td>293</td>
<td>0.11</td>
<td>0.52</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>Vehicle/bicycle</td>
<td>10</td>
<td>106</td>
<td>0.02</td>
<td>0.19</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Older Drivers</td>
<td>All</td>
<td>42</td>
<td>118</td>
<td>0.07</td>
<td>0.21</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motorcyclists</td>
<td>All</td>
<td>72</td>
<td>396</td>
<td>0.13</td>
<td>0.7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Work Zones</td>
<td>All</td>
<td>2</td>
<td>38</td>
<td>0</td>
<td>0.07</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Impaired Driver Involved</td>
<td>All</td>
<td>218</td>
<td>486</td>
<td>0.38</td>
<td>0.86</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Speeding Involved</td>
<td>Speed-related</td>
<td>180</td>
<td>647</td>
<td>0.32</td>
<td>1.14</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Young Driver (16-25) Involved</td>
<td>All</td>
<td>153</td>
<td>833</td>
<td>0.27</td>
<td>1.46</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Category</td>
<td>Type</td>
<td>Count</td>
<td>Value</td>
<td>Probability</td>
<td>EMS and Trauma Care Systems</td>
<td>Heavy Truck Involved</td>
<td>Drowsy Driver Involved</td>
<td>Wildlife</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------</td>
<td>----------------------------</td>
<td>---------------------</td>
<td>----------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Distracted Driver Involved</td>
<td>All</td>
<td>132</td>
<td>315</td>
<td>0.23</td>
<td>0.55</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unrestrained Vehicle Occupants</td>
<td>All</td>
<td>108</td>
<td>238</td>
<td>0.19</td>
<td>0.42</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unlicensed Driver Involved</td>
<td>All</td>
<td>81</td>
<td>0</td>
<td>0.14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Opposite Direction</td>
<td>Head on</td>
<td>74</td>
<td>223</td>
<td>0.13</td>
<td>0.39</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>EMS and Trauma Care Systems</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heavy Truck Involved</td>
<td>Truck-related</td>
<td>35</td>
<td>80</td>
<td>0.06</td>
<td>0.14</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Drowsy Driver Involved</td>
<td>All</td>
<td>14</td>
<td>81</td>
<td>0.02</td>
<td>0.14</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wildlife</td>
<td>Vehicle/animal</td>
<td>3</td>
<td>22</td>
<td>0</td>
<td>0.04</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>School Bus Involved</td>
<td>All</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0.01</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vehicle-Train</td>
<td>Vehicle/Train</td>
<td>1</td>
<td>1</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 2009 to Year 2013

- Roadway Departure
- Intersections
- Pedestrians
- Bicyclists
- Older Drivers
- Motorcyclists
- Work Zones
- Data

SHSP Emphasis Area
Number of Serious Injuries by SHSP Emphasis Area

Year 2009 to Year 2013

# of Serious Injuries

<table>
<thead>
<tr>
<th>Roadway Departure</th>
<th>Intersections</th>
<th>Pedestrians</th>
<th>Bicyclists</th>
<th>Older Drivers</th>
<th>Motorcyclists</th>
<th>Work Zones</th>
<th>Dita</th>
</tr>
</thead>
</table>

SHSP Emphasis Area
Fatality Rate by SHSP Emphasis Area

Year 2009 to Year 2013

- 2009
- 2010
- 2011
- 2012
- 2013

Rate of Fatalities

SHSP Emphasis Area

Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
All priority areas in the latest version of the SHSP are listed.

Year-by-year data is tracked starting with 2008. Therefore, 5-year rolling average data is only available starting with 2012.

Note that Roadway Departure focus area is Run-Off-the-Road, Older Driver data includes drivers 75+ in the state emphasis area (and in this table), and Opposite Direction includes both head on and other opposite direction crash types.

Serious injury data is not available for Unlicensed Drivers.
Traffic Data Systems and EMS & Trauma Care Systems focus areas do not have specific crash data associated with them.

SHSP Focus Area Priorities:
Priority 1: Impaired Driver Involved, Run-Off-the-Road, Speeding Involved, Young Driver (16-25) Involved, Distracted Driver Involved, Intersection Related, and Traffic Data Systems
Priority 2: Unrestrained Vehicle Occupants, Unlicensed Driver Involved, Opposite Direction, Motorcyclists, Pedestrians, and EMS & Trauma Care Systems
Priority 3: Older Driver (75+) Involved, Heavy Truck Involved, Drowsy Driver Involved, Bicyclists, Work Zone, Wildlife, School Bus Involved, Vehicle-Train
Groups of similar project types
Present the overall effectiveness of groups of similar types of projects.

<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></td>
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</tr>
</tbody>
</table>
# Fatalities by Target Crash Type for Groups of Similar Projects

Year 2009 to Year 2013

[Graph showing fatalities by target crash type for different years from 2009 to 2013.]
# Serious Injuries by Target Crash Type for Groups of Similar Projects

Year 2009 to Year 2013

- 2009
- 2010
- 2011
- 2012
- 2013

Target Crash Type
Fatality Rate by Target Crash Type for Groups of Similar Projects

Year 2009 to Year 2013

Rate of Fatalities

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

Year 2009 to Year 2013

Rate of Serious Injuries

Target Crash Type

2009 2010 2011 2012 2013
**Systemic Treatments**

*Present the overall effectiveness of systemic treatments.*

<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>
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</tr>
</tbody>
</table>
# Fatalities by Target Crash Type for Systemic Safety Improvements

Year 2009 to Year 2013

Target Crash Type

# of Fatalities

0 0.2 0.4 0.6 0.8 1 1.2

2009 2010 2011 2012 2013
# Serious Injuries by Target Crash Type for Systemic Safety Improvements

Year 2009 to Year 2013

- 2009
- 2010
- 2011
- 2012
- 2013
Fatality Rate by Target Crash Type for Systemic Safety Improvements

Year 2009 to Year 2013
Serious Injury Rate by Target Crash Type for Systemic Safety Improvements

Year 2009 to Year 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Serious Injuries</td>
<td>1.2</td>
<td>1</td>
<td>0.8</td>
<td>0.6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

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

As stated in the executive summary, the HSIP program has had a major benefit and effect on road safety in Washington state. While state highways have allocated state funds to support safety efforts, in addition to HSIP funds, the majority of local road safety efforts are funded solely by the HSIP program. With 70% of fatal and serious injury crashes in the priority one focus areas, this is a desperately needed program for the state to make continued progress toward achieving its Target Zero vision by 2030.

The HSIP program has provided a matching effort corresponding to the behavioral programs run through NHTSA to help Washington State make progress toward our vision of Target Zero (zero deaths and serious injuries by 2030). Funds from this program directly target various emphasis areas within the SHSP. And again, this program is the primary way that local agencies make progress toward implementing infrastructure safety improvements on their road networks.
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>Bef-Total</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 (Benefit/Cost Ratio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
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</tbody>
</table>

Overall results compiled to answer the previous question on B/C for the HSIP program.
## 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.