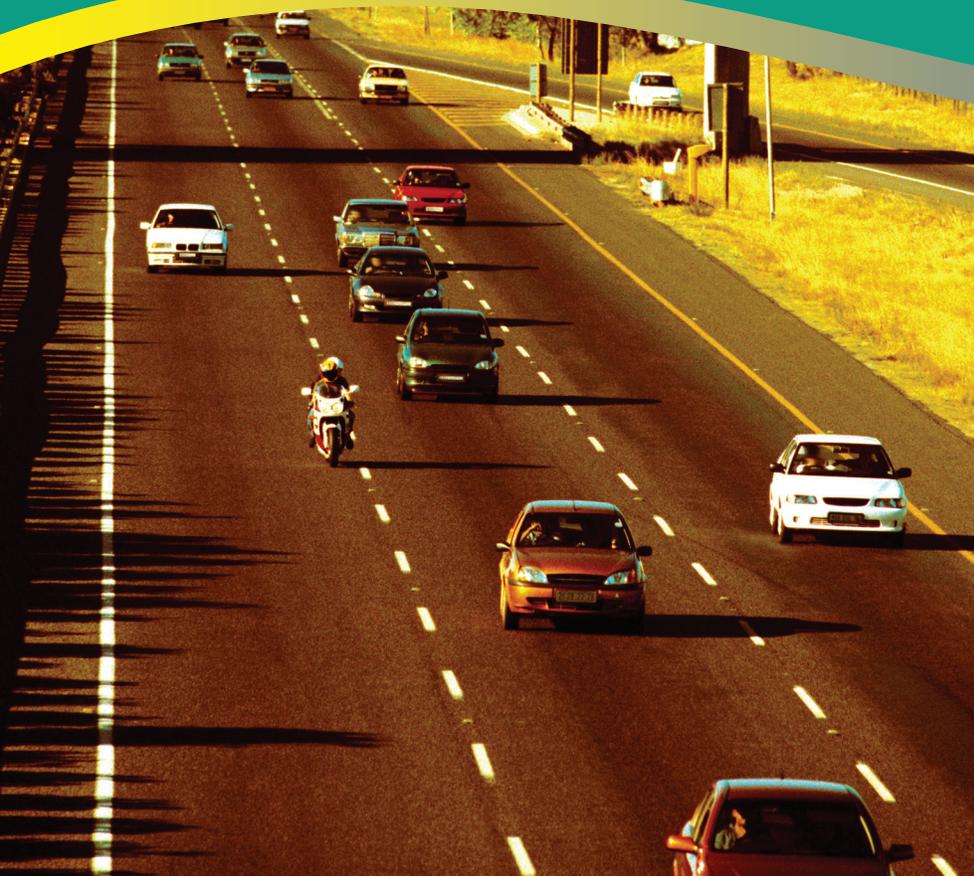


# Highway Safety Improvement Program National Summary Baseline Report 2009-2012



## FHWA Safety Program



U.S. Department of Transportation  
**Federal Highway Administration**



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## Background

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with an objective of achieving a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of highway safety improvement projects. The HSIP, similar to other Federal-aid programs, is a federally-funded, state administered program. The FHWA establishes the HSIP requirements via 23 CFR 924, and the States develop and administer a program to best meet their needs.

The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. To obligate HSIP funds, each State shall:

- Develop, implement, and update a State strategic highway safety plan;
- Produce a program of projects or strategies to reduce identified safety problems;
- Evaluate the SHSP on a regularly recurring basis; and
- Submit a report that describes the progress being made to implement highway safety improvement projects and the effectiveness of those improvements.

The Office of the Inspector General (OIG) conducted an audit of the Highway Safety Improvement Program (HSIP) in 2012. The audit found that “FHWA Provides Sufficient Guidance and Assistance to Implement the Highway Safety Improvement Program but Could Do More to Assess Program Results.” The OIG recommended that FHWA annually compile and report data, such as number, type, and cost of HSIP projects to compare the HSIP’s national impact across years.

The HSIP National Summary Baseline Report is not intended to compare states; rather to illustrate how the states are collectively implementing the HSIP to reduce fatalities and serious injuries on all public roads across the nation. The baseline report presents HSIP funding and project data from 2009 through 2012. The 2009-2012 time period aligns with the effective date of the most recent [HSIP Reporting Guidance](#), beginning May 15, 2009 and extending through SAFETEA-LU and related extensions, as well as corresponding FHWA efforts to compile HSIP project data nationally. The information collected in the 2009-2012 annual HSIP reports includes, in general, a discussion of each State’s:

- Program Structure
- Progress in Implementing the HSIP projects
- Assessment of the Effectiveness of the Improvements (Program Evaluation)
- High Risk Rural Roads Program (HRRRP)

The HSIP National Summary Baseline Report compiles and summarizes aggregate information related to the States progress in implementing HSIP projects. Progress in implementing HSIP projects is described based on the amount of HSIP funds available and the number and general listing of projects initiated during the reporting period. In future years, these national summaries may be expanded to include additional information of national interest.

## HSIP Funding

SAFETEA-LU authorized approximately \$1.2 billion annually for HSIP from 2006 through 2009, with similar amounts authorized via extension acts through 2012. HSIP funds are apportioned to States based on the following factors:

- 33⅓ % based on the ratio of lane miles of Federal-aid highways in each State to total lane miles of Federal-aid highways in all States.
- 33⅓ % based on the ratio of vehicle miles traveled on lanes on Federal-aid highways in each State to total vehicle miles traveled on lanes on Federal-aid highways in all States.
- 33⅓ % based the ratio of the number of fatalities on the Federal-aid system in each State to the number of fatalities on the Federal-aid system in all States.

Each State's SAFETEA-LU apportionment of HSIP funds was also subject to a set-aside for construction and operational safety improvements on *High-Risk Rural Roads*. HSIP apportionment data from 2009-2012 (consistent with the project data presented in the HSIP National Summary Baseline Report) is presented in Table 1 below. The apportionment figures represent the final HSIP apportionment after all set-asides and take-downs.

**Table 1: Final HSIP Apportionments 2009-2012**

Year	Final HSIP Apportionment
2009	\$ 1,273,360,813
2010	\$ 1,382,502,396
2011	\$ 1,456,740,847
2012	\$ 1,351,978,834

The final HSIP apportionment represents the amount of funding available to States for the advancement of highway safety improvement projects. A summary of HSIP projects obligated from 2009-2012 is provided in the next section.

### HSIP Project Summary

States provide project specific information for all projects obligated with HSIP funds during the state-defined reporting period in their annual HSIP reports. An obligation is a commitment – the Federal Government’s promise to pay the States for the Federal Share of a project’s eligible cost. The reporting period is defined by the State and can be calendar year, state fiscal year or federal fiscal year.

As per the HSIP Reporting Guidance, project specific information includes:

- Improvement Category (see Appendix A for complete descriptions)
- Project output (e.g., miles of rumble strips)
- Project cost
- Relationship to the State's strategic highway safety plan (SHSP) (i.e. emphasis area, strategy)

Limited analysis of the project information can be done because not all states have submitted reports in accordance with the HSIP Reporting Guidance. Full use of the HSIP online reporting tool and compliance with the most recent HSIP reporting guidance will enable more complete and accurate reporting of national HSIP project data. In addition, HSIP projects come in all shapes and sizes. For example, some HSIP projects may be much bigger in scope than others, countermeasure installations across multiple sites, or non-infrastructure projects (i.e. transportation safety planning, data improvements).

Based on the information contained in the 2009-2012 HSIP reports and summarized in Table 2 below, States obligated \$6.5B of HSIP funds for more than 9,000 projects over the four-year period. These

obligations include not only HSIP funds apportioned during the reporting period (2009-2012), but also HSIP funds available from previous years' apportionments. The average cost per project across all years is nearly \$750,000 per project.

**Table 2: Total Number and Cost of Projects by Year**

Year	2009	2010	2011	2012	Total
Number of Projects	1684	2386	2523	2429	9022
Number of Projects (with cost info.)	1609	2348	2449	2374	8780
Cost of projects	\$1.61B	\$1.46B	\$1.77B	\$1.65B	\$6.50B
Avg. Cost Per Project	\$1.00M	\$620,684	\$725,550	\$695,721	\$740,287

Note: Not all states provided cost data for all projects

A further disaggregation of the HSIP project data from 2009 to 2012 is provided in Appendix B (Number of Projects by Improvement Category) and Appendix C (Cost of Projects by Improvement Category). Figures 1 and 2 present this data and summarize the number and cost, respectively, of highway safety improvement projects by improvement category between 2009 and 2012. The improvement categories are consistent with example highway safety improvement projects included in 23 U.S.C. 148, 23 CFR 924 and the HSIP Reporting Guidance. The improvement categories related to railway-highway crossings include those projects obligated using HSIP funds. The HSIP National Summary Baseline Report does not include projects obligated with Railway-Highway Crossing Program funds available under 23 U.S.C. 130.

Please note that multiple improvement categories may apply to each project; however, improvement categories are selected based on the primary purpose of the project. For example, the State recently completed a pavement overlay at intersection A to improve the skid resistance on the approaches to the intersection. This project could be categorized as (1) intersection safety improvement, (4) installation of skid resistant surface and (11) improvement of highway signage and pavement markings. The State chose improvement category (4) installation of skid resistant surface since that was the primary purpose of the project.

For the number of projects per improvement category for all years (2009-2012), four out of five of the top improvement categories (Appendix B) used by the states were:

- (1) An intersection safety improvement project
- (2) Pavement and shoulder widening
- (11) Improvement of highway signage and pavement markings
- (17) Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road user and workers), and crash attenuators

The remaining top improvement category for 2009 was "(23) Other", for 2010 and 2011 "(3) Installation of rumble strips or other warning devices", and 2012 "(13) Installation of a traffic control or other warning device at a location with high crash potential".

Figure 1: Number of projects per improvement category (2009-2012)

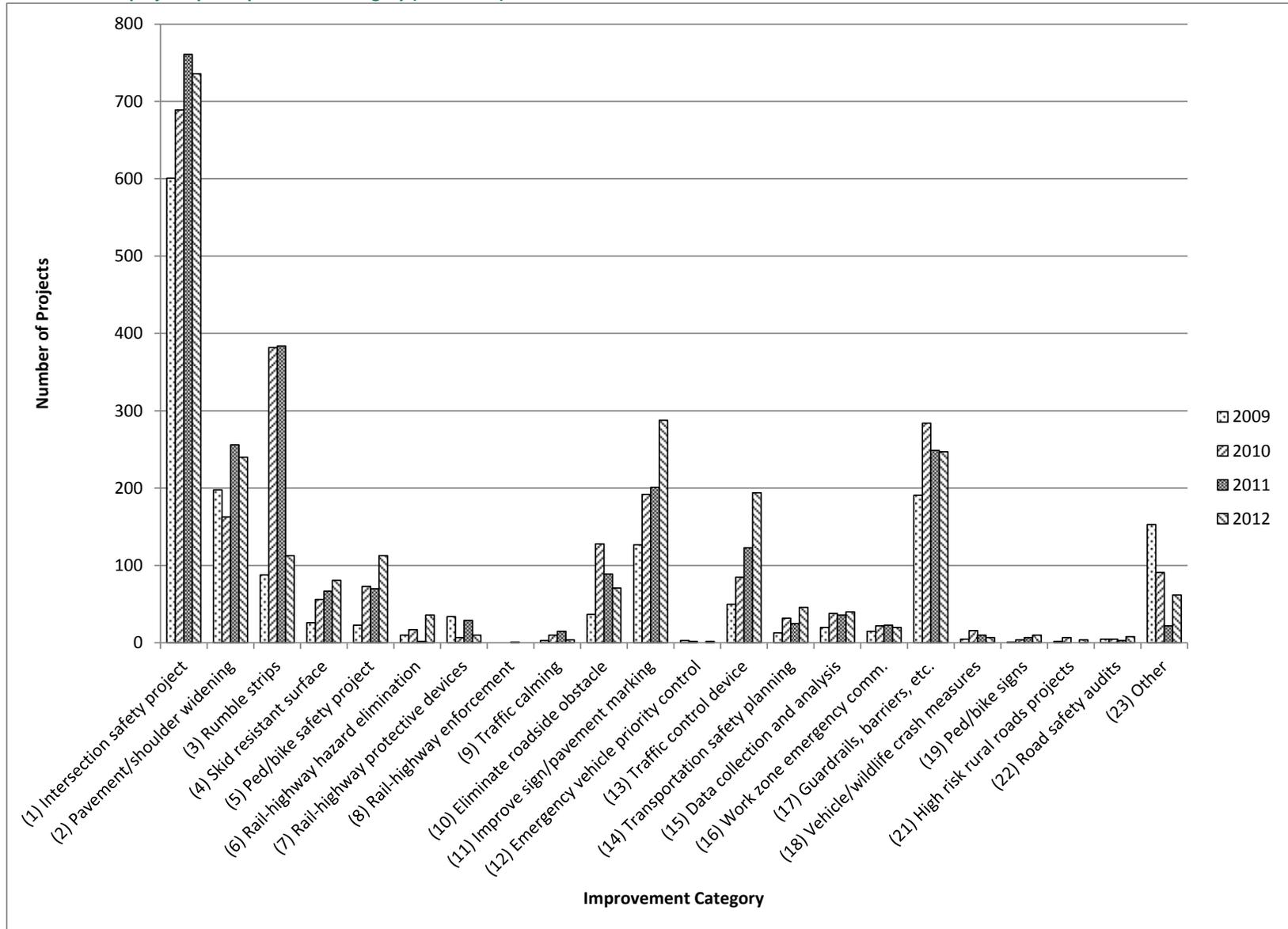
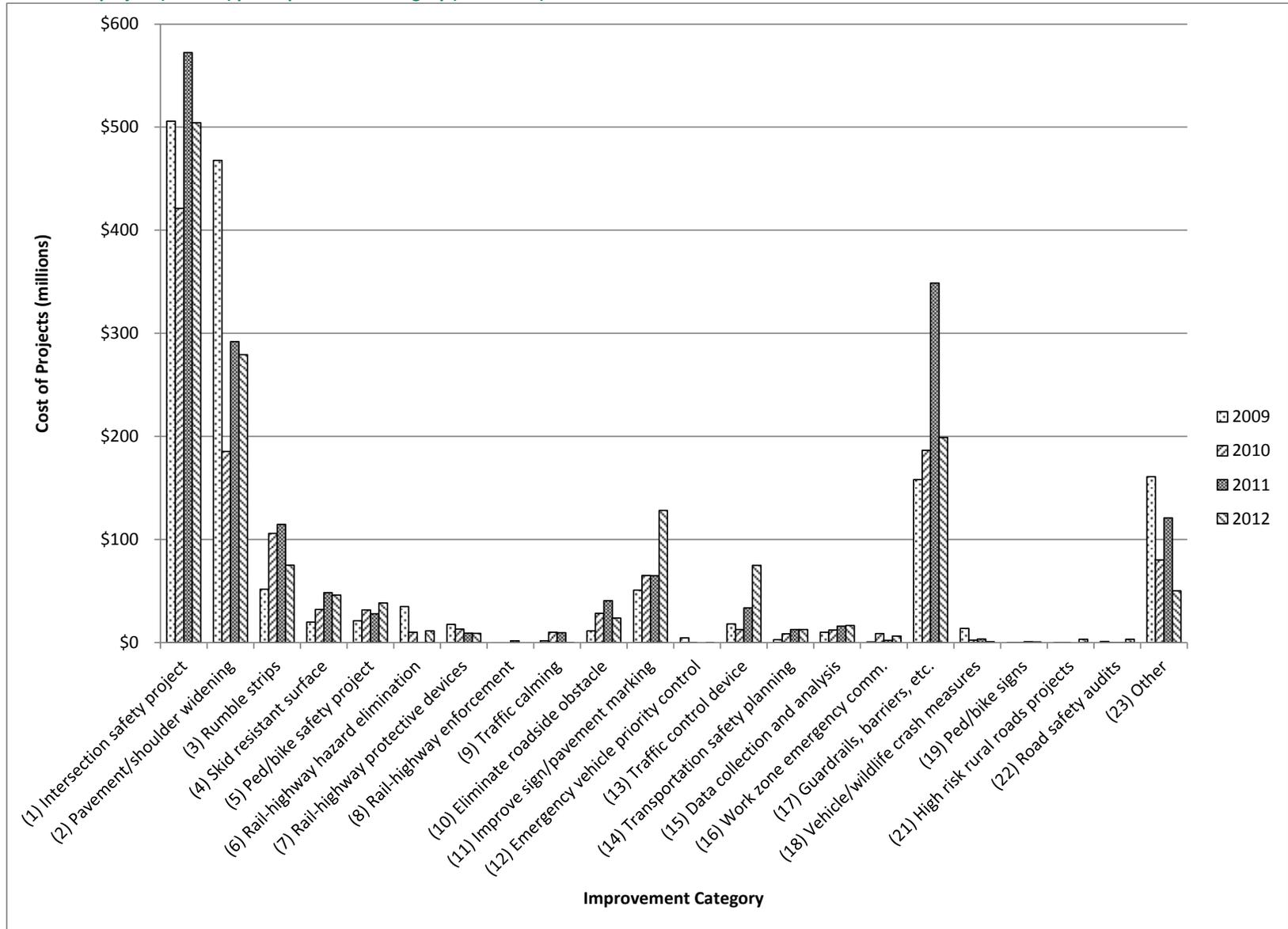


Figure 2: Cost of project (millions) per improvement category (2009-2012)



For the cost of projects per improvement category for all years (2009-2012), four out of five of the improvement categories (Appendix C) for which states obligated the most HSIP funds were:

- (1) An intersection safety improvement project
- (2) Pavement and shoulder widening
- (3) Installation of rumble strips or other warning devices
- (17) Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road user and workers), and crash attenuators

The remaining top improvement category for 2009-2011 was “(23) Other and 2012 “(11) Improvement of highway signage and pavement markings”. The total cost of projects for all improvement categories has fluctuated each year with 2011 as the highest.

Table 3 shows the average cost per project by improvement category as well as the percentage of projects in each improvement category that reported cost. This percentage was calculated by dividing the total number of projects with cost information by the total number of projects with improvement category information. For example, in 2009 there were 601 projects categorized as (1) intersection safety project but only 572 of these projects had cost information. Therefore, the percentage of projects reporting cost is 95 percent. It is also important to reiterate that HSIP projects come in all shapes and sizes and that some may be much bigger in scope than others. These points might partly explain some of the variation in average cost across years, as shown in Table 3, below. Based on the cost of projects reported by the States, the lowest average cost projects are in the following categories:

- (19) Installation and maintenance of signs (including fluorescent yellow-green signs) at pedestrian-bicycle crossings and in school zones.
- (16) Planning integrated interoperable emergency communications equipment, operational activities or traffic enforcement activities (including law enforcement assistance) relating to work zone safety.
- (22) Conducting road safety audits
- (13) Installation of a traffic control or other warning device at a location with high crash potential
- (14) Transportation safety planning

Table 3: Average Cost per Project and Percentage of Cost Reported by Improvement Category

Improvement Category	2009		2010		2011		2012		Average Cost (all years)
	Average Cost	%							
(1) Intersection safety project	\$884,351.35	95	\$627,896.59	97	\$768,401.82	98	\$692,653.61	99	\$737,805.14
(2) Pavement/shoulder widening	\$2,411,968.24	98	\$1,138,180.29	100	\$1,159,550.56	98	\$1,164,369.39	100	\$1,442,992.48
(3) Rumble strips	\$591,147.28	100	\$277,678.38	100	\$299,008.89	100	\$665,821.28	100	\$360,032.39
(4) Skid resistant surface	\$803,310.16	96	\$646,000.78	89	\$726,957.43	100	\$600,117.95	95	\$672,593.71
(5) Ped/bike safety project	\$925,071.78	100	\$460,968.26	95	\$407,154.96	99	\$363,937.87	94	\$448,518.98
(6) Rail-highway hazard elimination	\$3,515,048.60	100	\$597,711.76	100	\$144,863.00	100	\$318,095.06	100	\$877,734.37
(7) Rail-highway protective devices	\$524,169.06	100	\$1,899,480.00	100	\$318,804.93	100	\$918,084.20	100	\$619,303.66
(8) Rail-highway enforcement	n/a	n/a	n/a	n/a	\$2,000,000.00	100	n/a	n/a	\$2,000,000.00
(9) Traffic calming	\$661,545.00	100	\$1,021,726.20	100	\$656,738.53	100	\$92,366.50	100	\$700,701.28
(10) Eliminate roadside obstacle	\$317,696.97	97	\$223,563.56	100	\$464,126.14	99	\$343,520.54	99	\$325,909.21
(11) Improve sign/pavement marking	\$405,469.61	99	\$343,196.73	99	\$323,510.58	100	\$473,370.42	94	\$392,900.46
(12) Emergency vehicle priority control	\$2,404,366.50	67	\$37,401.50	100	n/a	n/a	\$114,300.00	100	\$852,022.67
(13) Traffic control device	\$413,192.47	88	\$153,491.01	99	\$273,956.79	100	\$401,091.28	96	\$319,119.79
(14) Transportation safety planning	\$224,932.77	100	\$272,905.69	100	\$508,930.60	100	\$278,791.33	100	\$320,730.81
(15) Data collection and analysis	\$507,085.50	100	\$327,867.32	100	\$444,720.22	100	\$420,979.56	100	\$413,804.31

Improvement Category	2009		2010		2011		2012		Average Cost (all years)
	Average Cost	%	Average Cost	%	Average Cost	%	Average Cost	%	
(16) Work zone emergency comm.	\$51,533.33	100	\$405,435.05	100	\$103,276.52	100	\$322,515.40	100	\$231,477.99
(17) Guardrails, barriers, etc.	\$828,400.60	100	\$666,369.41	99	\$1,401,261.02	100	\$819,354.02	98	\$927,128.74
(18) Vehicle/wildlife crash measures	\$2,805,356.80	100	\$154,303.94	100	\$361,946.52	100	\$145,896.63	100	\$556,220.75
(19) Ped/bike signs	\$22,412.00	100	\$147,516.25	100	\$137,096.86	100	\$86,986.50	100	\$111,000.91
(21) High risk rural roads projects	\$232,850.50	100	\$56,435.71	100	n/a	n/a	\$837,257.25	100	\$323,829.23
(22) Road safety audits	\$267,832.40	100	\$94,483.40	100	\$127,296.67	100	\$438,298.13	100	\$271,421.62
(23) Other	\$1,192,624.47	88	\$901,484.33	98	\$6,257,329.70	100	\$1,283,747.02	92	\$1,362,477.90

Note: Not all states provided cost data for all projects in a given improvement category. Therefore, the columns labeled as “%” are a calculation of the total number of projects that reported cost divided by the total number of projects in each improvement category.

Table 4 and Figure 3 present the number of HSIP projects categorized by SHSP emphasis area between 2009 and 2012. For consistency and national reporting purposes, each State's SHSP emphasis areas were assigned to the AASHTO SHSP emphasis areas. A complete description of each emphasis area is included in Appendix D. Please note that States often times categorize a single project by several SHSP Emphasis Areas. Therefore, for the purpose of Table 4 and Figure 3, a single project may be counted more than once. For example, the State recently completed an intersection improvement project that enhanced safety for pedestrians. This project could be categorized as EA 9 Making Walking and Street Crossing Safer as well as EA 17 Improving the Design and Operation of Intersections and is therefore counted once in each category.

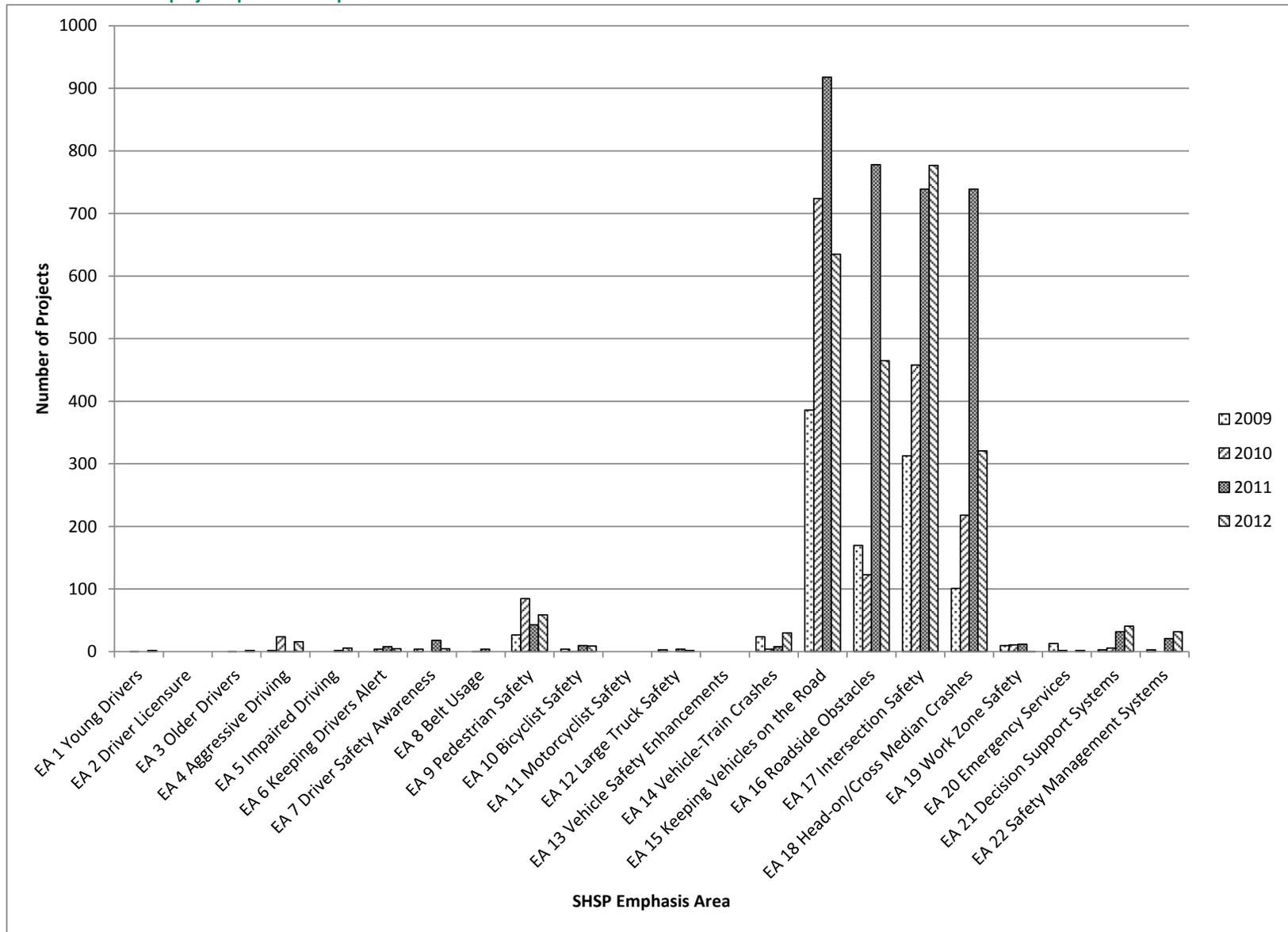
For the number of projects per SHSP Emphasis Area for all years (2009-2012), the top five SHSP Emphasis Areas guiding HSIP investments are:

- EA 15 Keeping Vehicles on the Roadway
- EA 17 Improving the Design and Operation of Intersections
- EA 16 Minimizing the Consequences of Leaving the Roadway
- EA 18 Reducing Head-on and Cross Median Crashes
- EA 9 Making Walking and Street Crossing Safer

**Table 4: Number of HSIP Projects by SHSP Emphasis Area per Year**

SHSP Emphasis Area	2009	2010	2011	2012	Total
EA 1 Young Drivers	0	1	0	2	3
EA 2 Driver Licensure	0	0	0	0	0
EA 3 Older Drivers	0	1	0	2	3
EA 4 Aggressive Driving	2	24	1	16	43
EA 5 Impaired Driving	0	0	2	6	8
EA 6 Keeping Drivers Alert	0	4	8	5	17
EA 7 Driver Safety Awareness	4	0	18	5	27
EA 8 Belt Usage	0	1	4	0	5
EA 9 Pedestrian Safety	27	85	43	59	214
EA 10 Bicyclist Safety	4	1	10	9	24
EA 11 Motorcyclist Safety	0	0	0	0	0
EA 12 Large Truck Safety	3	0	4	2	9
EA 13 Vehicle Safety Enhancements	0	0	0	0	0
EA 14 Vehicle-Train Crashes	24	4	8	30	66
EA 15 Keeping Vehicles on the Road	386	724	918	635	2,663
EA 16 Roadside Obstacles	170	123	778	465	1,536
EA 17 Intersection Safety	313	458	739	777	2,287
EA 18 Head-on/Cross Median Crashes	101	218	739	321	1,379
EA 19 Work Zone Safety	10	11	12	1	34
EA 20 Emergency Services	13	2	0	2	17
EA 21 Decision Support Systems	3	6	32	41	82
EA 22 Safety Management Systems	3	0	21	32	56

Figure 3: Number of HSIP projects per SHSP emphasis area



## Conclusion

The HSIP is a strategic program that uses data and analysis to target safety resources. This aggregate HSIP National Summary Baseline Report shows that between 2009 and 2012, States directed HSIP funds to address the predominant infrastructure-related crash types - roadway departure, intersection and pedestrian crashes.

Safety performance is measured by a reduction in the rate and number of fatalities and serious injuries on all public roads. There are many complexities associated with directly attributing reductions in fatalities and serious injuries at a national level to any one program. Existing modeling tools cannot isolate the safety effect of specific infrastructure and behavioral programs. However, we know that the programmatic activities to drive down fatalities and serious injuries need to be as varied as the causes of the crashes themselves. That is why, at the U.S. Department of Transportation, we continue to aggressively pursue a holistic approach to safety that includes engineering, enforcement, education, and emergency medical services.

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OIG, FHWA Provides Sufficient Guidance and Assistance to Implement the Highway Safety Improvement Program but Could Do More to Assess Program Results. Report Number: MH-2013-055. March 26, 2013.

## Appendix A: Full Description of HSIP Improvement Categories

- (1) An intersection safety improvement project
- (2) Pavement and shoulder widening
- (3) Installation of rumble strips or other warning devices
- (4) Installation of skid resistant surface at an intersection or other location with a high frequency of crashes
- (5) An improvement for pedestrian or bicyclist safety or for the safety of persons with disabilities
- (6) Construction of any project for the elimination of hazards at a railway-highway crossing that is eligible for funding under 23 U.S.C 130, including the separation or protection of grades at railway-highway crossings.
- (7) Construction of railway-highway crossing safety feature, including installation of highway-railway grade crossing protective devices
- (8) The conduct of an effective traffic enforcement activity at a railway-highway crossing
- (9) Construction of a traffic calming feature
- (10) Elimination of a roadside obstacle or roadside hazard
- (11) Improvement of highway signage and pavement markings
- (12) Installation of a priority control system for emergency vehicles at signalized intersections
- (13) Installation of a traffic control or other warning device at a location with high crash potential
- (14) Transportation safety planning
- (15) Improvement in the collection and analysis of data
- (16) Planning integrated interoperable emergency communications equipment, operational activities or traffic enforcement activities (including law enforcement assistance) relating to work zone safety.
- (17) Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road user and workers), and crash attenuators.
- (18) The addition of retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife
- (19) Installation and maintenance of signs (including fluorescent yellow-green signs) at pedestrian-bicycle crossings and in school zones.
- (21) Construction and operation improvements on high risk rural roads.
- (22) Conducting road safety audits
- (23) Other

## Appendix B: Number of highway safety improvement projects per improvement category

Improvement Category	Total Number Projects – 2009	Total Number Projects – 2010	Total Number Projects – 2011	Total Number Projects – 2012
(1)An intersection safety improvement project	601	689	761	736
(2)Pavement and shoulder widening	198	163	256	240
(3)Installation of rumble strips or other warning devices	88	382	384	113
(4)Installation of skid resistant surface at an intersection or other location with a high frequency of crashes	26	56	67	81
(5)An improvement for pedestrian or bicyclist safety or for the safety of persons with disabilities	23	73	70	113
(6)Construction of any project for the elimination of hazards at a railway-highway crossing that is eligible for funding under 23 U.S.C. 130, including the separation or protection of grades at railway-highway crossings.	10	17	2	36
(7)Construction of railway-highway crossing safety feature, including installation of highway-railway grade crossing protective devices	34	7	29	10
(8)The conduct of an effective traffic enforcement activity at a railway-highway crossing	none	none	1	none
(9)Construction of a traffic calming feature	3	10	15	4
(10)Elimination of a roadside obstacle or roadside hazard	37	128	89	71
(11)Improvement of highway signage and pavement markings	127	192	201	288
(12)Installation of a priority control system for emergency vehicles at signalized intersections	3	2	none	2

Improvement Category	Total Number Projects – 2009	Total Number Projects – 2010	Total Number Projects – 2011	Total Number Projects – 2012
(13)Installation of a traffic control or other warning device at a location with high crash potential	50	85	123	194
(14)Transportation safety planning	13	32	25	46
(15)Improvement in the collection and analysis of data	20	38	36	40
(16)Planning integrated interoperable emergency communications equipment, operational activities or traffic enforcement activities (including law enforcement assistance) relating to work zone safety.	15	22	23	20
(17)Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road user and workers), and crash attenuators.	191	284	249	247
(18)The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife	5	16	10	7
(19)Installation and maintenance of signs (including fluorescent yellow-green signs) at pedestrian-bicycle crossings and in school zones.	1	4	7	10
(21)Construction and operational improvements on high risk rural roads. [Do not use for the HRRRP portion of the report.]	2	7	none	4
(22)Conducting road safety audits.	5	5	3	8
(23)Other	153	91	22	62
<b>Total</b>	<b>1605</b>	<b>2303</b>	<b>2373</b>	<b>2332</b>

## Appendix C: Cost of highway safety improvement projects per improvement category

Improvement Category	Cost of Projects – 2009	Cost of Projects – 2010	Cost of Projects – 2011	Cost of Projects – 2012
(1)An intersection safety improvement project	\$505,848,973.24	\$421,318,611.37	\$572,459,357.81	\$504,251,826.19
(2)Pavement and shoulder widening	\$467,921,838.26	\$185,523,386.57	\$292,206,740.31	\$279,448,653.30
(3)Installation of rumble strips or other warning devices	\$52,020,961.04	\$106,073,140.95	\$114,819,414.77	\$75,237,804.17
(4)Installation of skid resistant surface at an intersection or other location with a high frequency of crashes	\$20,082,754.00	\$32,300,039.00	\$48,706,147.50	\$46,209,081.83
(5)An improvement for pedestrian or bicyclist safety or for the safety of persons with disabilities	\$21,276,651.00	\$31,806,809.78	\$28,093,691.94	\$38,577,414.70
(6)Construction of any project for the elimination of hazards at a railway-highway crossing that is eligible for funding under 23 U.S.C. 130, including the separation or protection of grades at railway-highway crossings.	\$35,150,486.00	\$10,161,100.00	\$289,726.00	\$11,451,422.04
(7)Construction of railway-highway crossing safety feature, including installation of highway-railway grade crossing protective devices	\$17,821,748.00	\$13,296,360.00	\$9,245,343.00	\$9,180,842.00
(8)The conduct of an effective traffic enforcement activity at a railway-highway crossing	none	none	\$2,000,000.00	none
(9)Construction of a traffic calming feature	\$1,984,635.00	\$10,217,262.00	\$9,851,078.00	\$369,466.00
(10)Elimination of a roadside obstacle or roadside hazard	\$11,437,090.81	\$28,616,135.75	\$40,843,100.00	\$24,046,437.72
(11)Improvement of highway signage and pavement markings	\$51,089,170.88	\$65,207,379.00	\$65,025,627.02	\$128,283,384.74
(12)Installation of a priority control system for emergency vehicles at signalized intersections	\$4,808,733.00	\$74,803.00	none	\$228,600.00

Improvement Category	Cost of Projects – 2009	Cost of Projects – 2010	Cost of Projects – 2011	Cost of Projects – 2012
(13)Installation of a traffic control or other warning device at a location with high crash potential	\$18,180,468.58	\$12,893,245.00	\$33,696,684.60	\$75,004,068.75
(14)Transportation safety planning	\$2,924,126.00	\$8,732,982.00	\$12,723,265.00	\$12,824,401.00
(15)Improvement in the collection and analysis of data	\$10,141,710.00	\$12,458,958.00	\$16,009,928.00	\$16,839,182.20
(16)Planning integrated interoperable emergency communications equipment, operational activities or traffic enforcement activities (including law enforcement assistance) relating to work zone safety.	\$773,000.00	\$8,919,571.00	\$2,375,360.00	\$6,450,308.00
(17)Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of road user and workers), and crash attenuators.	\$158,224,513.96	\$186,583,436.16	\$348,913,995.13	\$199,103,027.60
(18)The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife	\$14,026,784.00	\$2,468,863.00	\$3,619,465.24	\$1,021,276.43
(19)Installation and maintenance of signs (including fluorescent yellow-green signs) at pedestrian-bicycle crossings and in school zones.	\$22,412.00	\$590,065.00	\$959,678.00	\$869,865.00
(21)Construction and operational improvements on high risk rural roads. [Do not use for the HRRRP portion of the report.]	\$465,701.00	\$395,050.00	none	\$3,349,029.00
(22)Conducting road safety audits.	\$1,339,162.00	\$472,417.00	\$381,890.00	\$3,506,385.00
(23)Other	\$161,004,303.34	\$80,232,105.59	\$121,213,594.00	\$50,380,801.91
<b>Total</b>	<b>\$1,556,545,222.11</b>	<b>\$1,218,341,720.17</b>	<b>\$1,723,434,086.32</b>	<b>\$1,486,633,277.58</b>

## Appendix D: Full Description of SHSP Emphasis Areas

- EA 1 Instituting Graduated Licensing for Young Drivers
- EA 2 Ensuring Drivers are Fully Licensed and Competent
- EA 3 Sustaining Proficiency in Older Drivers
- EA 4 Aggressive Driving
- EA 5 Reducing Impaired Driving
- EA 6 Keeping Drivers Alert
- EA 7 Increasing Driver Safety Awareness
- EA 8 Increasing Safety Belt Usage and Improving Air Bag Effectiveness
- EA 9 Making Walking and Street Crossing Safer
- EA 10 Ensuring Safer Bicycle Travel
- EA 11 Motorcycle Safety Awareness
- EA 12 Making Truck Traffic Safer
- EA 13 Increasing Safety Enhancements in Vehicles
- EA 14 Reducing Vehicle-Train Collisions
- EA 15 Keeping Vehicles on the Roadway
- EA 16 Minimizing the Consequences of Leaving the Roadway
- EA 17 Improving the Design and Operation of Intersections
- EA 18 Reducing Head-on and Cross Median Crashes
- EA 19 Design Safer Work Zones
- EA 20 Enhancing Medical Capabilities to Increase Survivability
- EA 21 Improving Information and Decision Support Systems
- EA 22 Creating More Effective Processes and Safety Management Systems

**For More Information:**

Visit <http://safety.fhwa.dot.gov/hsip>

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