

### **ILLINOIS**

## **HIGHWAY SAFETY IMPROVEMENT PROGRAM 2017 ANNUAL REPORT**



U.S. Department of Transportation Federal Highway Administration

Photo source: Federal Highway Administration

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#### **Disclaimer**

#### **Protection of Data from Discovery Admission into Evidence**

23 U.S.C. 148(h)(4) states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section [HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data."

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

#### **Executive Summary**

The Highway Safety Improvement Program (HSIP) is a data-driven, performance based, strategic approach targeted to infrastructure improvements administered by Federal Highways Administration (FHWA). Illinois has set its target to reduce the frequency of fatalities and serious injuries, as well as the exposure rates of fatalities and serious injuries per million vehicle miles traveled. In addition to these rates, Illinois Department of Transportation (IDOT) has identified and prioritized safety emphasis areas where performance measures are also narrowed down by functional class of roadways to understand the safety problems and implement appropriate countermeasures to curb the preventable fatalities and serious injuries with federal support.

The collaborative working efforts between the Strategic Highway Safety Plan (SHSP, FHWA approved on 7/28/2017) with Highway Safety Improvement Program (HSIP), Highway Safety Plan (HSP), Commercial Vehicle Safety Plan (CVSP), Statewide Transportation Improvement Plan (STIP) is envisioned to provide consistency of data collection and management, integrated safety initiatives, and identification of data-driven performance measures with safety performance assessment. This coordination of safety programs helps IDOT prioritize safety in the planning and programming stages, to utilize limited funding for maximum safety improvement potential, and to set effective goals and targets within a safety performance matrix.

HSIP is administered and monitored by the Illinois Department of Transportation Bureau of Safety Programs and Engineering (BSPE). IDOT works with safety partners to direct limited program dollars to areas with the greatest potential for safety improvement on the transportation system. IDOT uses safety performance functions and the systemic approach for identifying areas of improvement. Projects are selected based on their potential to reduce fatal and severe crashes economically using the IDOT benefit-cost evaluation tool.

Overall the program has seen a plateau in fatalities over the last few years. In 2016, Illinois lost 1,078 lives to transportation crashes. As of August 30, 2017, there are 3 fewer fatalities in 2017 relative to this time last year (2016) - 709 and 712 fatalities respectively. While the current provisional data can provide for insights, this report reflects analysis of complete and finalized crash data from years 2008 to 2015. Between 2014 (crash data from the last submitted HSIP report) and 2015, detailed crash data analysis has shown that fatalities and severe injuries on the state route system increased by less than 9%, and the local system fatalities and severe injuries increased by more than 9%.

The funding split between state and local routes remains the same as last year, 80/20, and IDOT continues to work with local agencies to increase obligation rates for HSIP projects approved. Illinois continues to monitor progress, evaluate programs and modify the screening, project identification and project approval approach to achieve Zero Fatalities on Illinois roadways.

#### Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

#### **Program Structure**

**Program Administration** 

Describe the general structure of the HSIP in the State.

The Illinois HSIP policy identifies the process for data analysis, project application, project review and approval. See the IDOT website for details. http://www.idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/highway-safety-improvement-program

The policy is being updated and will include analysis tools and resources as well as improved guidance to direct the program to projects that will have the greatest opportunity to reduce fatalities and serious injuries. The update will be implemented by December 31, 2017.

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

Other-Central Office - Bureau of Safety Programs and Engineering

Enter additional comments here to clarify your response for this question or add supporting information.

The HSIP program is managed within IDOT Central Office, Bureau of Safety Programs and Engineering. The Bureau is under the Office of Program Development.

http://www.idot.illinois.gov/Assets/uploads/files/About-IDOT/Maps-&-Charts/IDOT%20Org%20Chart.pdf

BSPE is responsible for management of transportation safety planning and engineering as well as behavioral programs. IDOT Districts support implementation of the transportation safety program, including programming, detailed design, construction, operations and maintenance. District engineers and planners develop the HSIP projects for application and review by BSPE and the Central Office Traffic Safety Committee. To address local road safety, local agencies work with District engineers and planners to develop HSIP applications for review by BSPE and the Central Office Traffic Safety Committee.

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

Central Office via Statewide Competitive Application Process

#### Enter additional comments here to clarify your response for this question or add supporting information.

Local agencies and state agencies have separate allocations and do not compete against each other for funds

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

Twenty percent of the HSIP roadway funding is allocated to local roadways. Prior to SAFETEA-LU, local agencies received less than \$1 million annually; in recent years, that amount has been increased to between \$12 - \$15 million annually. Each Illinois Department of Transportation (IDOT) District has a traffic safety committee that coordinates with the IDOT Bureau of Local Roads and local agencies to provide technical support. Illinois leads regular meetings with the MPOs to discuss safety performance targets and county SHSP development and implementation. The IDOT Bureau of Safety Programs and Engineering (BSPE) is an active participant of the Illinois Association of County Engineers Traffic and Safety Committee to discuss the SHSP, HSIP, data issues, and ways to advance transportation safety in Illinois on local roadways.

Since 2012, the Local Road Safety Initiative has provided tools, data, program training and facilitation to support the organization and implementation of local transportation safety committees. Each county is provided with County Strategic Highway Safety Plans (SHSP) Elements that include crash data trees, Emphasis Area tables, heat maps and effective countermeasures and strategies to make decisions based on the potential for safety improvements. The county SHSPs for major metropolitan areas were updated to reflect 2015 data. These counties represent the majority of the fatalities and serious injuries on Illinois roadways. IDOT developed local road safety performance functions for network screening that have been used to develop the Safer Road Index (SRI) and Safety Tiers that are used for project planning and programming of high priority and system-wide initiatives.

HSIP specialists provided technical support to review all HSIP applications. Specialists are experts in data analysis, benefit-cost analysis, the Highway Safety Manual (HSM), and countermeasure selections. Road Safety Assessments (RSAs) are provided to local agencies free-of-charge at the request of local agencies. IDOT Bureau of Safety Programs and Engineering (BSPE) coordinates team members and facilities, provides technical analysis, presents initial information and team findings at meetings, and prepares the RSA reports.

The DOT coordinates safety 4E workshops that encourage coordination and training local agencies on HSIP best practices. Based on the technical support provided, local agencies apply for HSIP funds for implementation. The HSIP applications are reviewed by the IDOT Central Office Traffic Safety Committee to approve projects, recommend changes or refinements, and consult with the local agencies to ensure safety investments address program goals.

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

Traffic Engineering/Safety
Design
Planning
Maintenance
Operations
Districts/Regions
Local Aid Programs Office/Division
Governors Highway Safety Office

Enter additional comments here to clarify your response for this question or add supporting information.

#### Describe coordination with internal partners.

The Central Office Traffic Safety Committee is responsible for reviewing, recommending changes and / or approving or declining HSIP applications. The Central Office Traffic Safety Committee includes members from BSPE, Design, Planning, Local Aid, and FHWA Division Office.

The Local Aid office works with each of the District Local Aid offices and local agencies to develop, review and submit HSIP applications to BSPE.

District traffic engineering and safety develop state route HSIP applications by using BSPE safety analysis tools to evaluate the roadway network, identify priority locations, assess crash data and contributing factors, determine recommended proven strategies, and prepare the HSIP application including benefit - cost assessment. District design, operations and maintenance are responsible for HSIP implementation. District traffic engineering and safety staff conduct basic evaluation assessments for HSIP projects.

District staff work closely with local agencies to develop their safety program and the District Local Aid office submits the applications to Central Office Local Aid.

Local agencies conduct analysis and utilize BSPE provided tools to support HSIP project development and applications. Local HSIP applications are submitted to the Local Aid District office for submittal to Central Office. In some cases the MPO supports local agency data analysis, application development and evaluation after implementation. BSPE manages the HSIP program and leads the coordination with all partners.

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

Regional Planning Organizations (e.g. MPOs, RPOs, COGs) Governors Highway Safety Office Local Technical Assistance Program Local Government Agency Law Enforcement Agency FHWA

Enter additional comments here to clarify your response for this question or add supporting information.

#### **Describe coordination with external partners.**

The state is committed to achieving a safer transportation system for the public. Stakeholder involvement and commitment is crucial. Stakeholders represent the 4E areas - engineering, enforcement, education, and emergency medical services and include multi-modal federal and state agencies, MPOs, regional safety coalitions, and local agencies. Working sessions with coalition stakeholders at executive meetings, forums, and workshops have captured the impacts of emerging technologies, the role of state and local agencies, and several safety issues. Stakeholders have provided input on the crash trends and strategies based on their knowledge and current initiatives. The FHWA Illinois Division office partners with Illinois on various safety initiatives, including review of HSIP applications for funding approval. The Illinois DOT meets with MPOs on a regular basis to support the safety program and the MPOs work with local agencies to provide leadership and technical expertise.

Have any program administration practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of HSIP Administration on which the State would like to elaborate?

Yes

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

The Districts submit HSIP applications through the HSIP SharePoint site and the local agencies submit paper copies for review and approval by a Central Office Traffic Safety Committee. Since 2013, the IDOT Districts have taken an active role in supporting the local roadway safety program. If there are large HSIP funding requests or longer term projects, the committee may recommend that a Road Safety Assessment be conducted to identify low cost safety improvements that could be implemented quickly along with verification of the longer term, high cost projects to ensure appropriate use of HSIP funds. The HSIP policy is being updated to improve project submittals and to encourage the use of highway safety tools such as Safety Tiers, the Highway Safety Manual and the Illinois State and Local Strategic Highway Safety Plans. Additional emphasis has been placed on project and program evaluation. The HSIP program database includes project letting, locations, project type and cost along with before and after crash data to be used for evaluation. Additional data is now required to develop project and program level evaluation assessments to maximize the program and achieve the greatest results.

#### Program Methodology

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

Yes

To upload a copy of the State processes, attach files below.

File Name:

SAFETY 1.06 - Safety Engineering Policy Memorandum.pdf

Select the programs that are administered under the HSIP.

Horizontal Curve Pedestrian Safety

Enter additional comments here to clarify your response for this question or add supporting information.

Both HRRR and local safety road index are under development and they will influence the next round reporting.

**Program:** Horizontal Curve

**Date of Program Methodology:** 8/1/2016

2017 Illinois Highway Safety Improvement Program What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area FHWA focused approach to safety

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes

Exposure

Median width

All crashes

Traffic

Fatal and serious injury crashes only

Volume

Traffic

Functional classification

Roadside features

What project identification methodology was used for this program? [Check all that apply]

Crash frequency Crash rate Other-Weighted crash rate

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

Yes

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

Yes

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

How are projects under this program advanced for implementation?

selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

Available funding: 2 Cost Effectiveness: 1

Enter additional comments here to clarify your response for this question or add supporting information.

**Program:** Pedestrian Safety

**Date of Program Methodology:** 8/1/2017

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area FHWA focused approach to safety

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes Exposure Roadway

Other-Pedestrian fatalities and Serious injuries Traffic Volume

What project identification methodology was used for this program? [Check all that apply]

Probability of specific crash types

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

Yes

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

Yes

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

How are projects under this program advanced for implementation?

Competitive application process selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical

rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Other-BC: 1

Enter additional comments here to clarify your response for this question or add supporting information.

What percentage of HSIP funds address systemic improvements?

40

HSIP funds are used to address which of the following systemic improvements? Please check all that apply.

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
Clear Zone Improvements
Install/Improve Lighting
Add/Upgrade/Modify/Remove Traffic Signal
Horizontal curve signs
High friction surface treatment
Wrong way driving treatments

Enter additional comments here to clarify your response for this question or add supporting information.

What process is used to identify potential countermeasures? [Check all that apply]

Engineering Study
Road Safety Assessment
Crash data analysis
SHSP/Local road safety plan
Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
Stakeholder input

Enter additional comments here to clarify your response for this question or add supporting information.

Does the State HSIP consider connected vehicles and ITS technologies?

No

Enter additional comments here to clarify your response for this question or add supporting information.

ITS strategies are considered for safety improvements. These may include changeable message signs, Smart Work Zones, improved communication to reduce secondary incidents among other proven and effective strategies. Connected vehicles and their safety impact are being considered throughout the Department, but much of the focus has been on addressing current needs through low cost proven effective safety treatments.

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

Yes

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

HSM safety performance functions are used to develop safety tiers for planning and programming of projects. Districts utilize the HSM to diagnose and analyze crash data to identify potential countermeasures. Countermeasure effectiveness is determined using the CMF Clearinghouse and projects are assessed using benefit cost approaches outlined in the HSM. Many of the projects are evaluated after implementation using HSM analysis approaches.

Have any program methodology practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of the HSIP methodology on which the State would like to elaborate?

Yes

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

Within the HSIP Policy Memorandum is reference to a safety analysis process for HSIP candidate projects that should be similar to the RSA/RSR process. An RSA/RSR is a data-driven systematic process that applies crash data and identified contributing factors in tying the target severe crashes to each countermeasure. The RSA/RSR safety analysis process has become a more prominent aspect for many HSIP submittals when larger dollar amounts would be involved. IDOT has a draft RSA Policy Memorandum in place that supports HSIP.

#### **Project Implementation**

**Funds Programmed** 

Reporting period for HSIP funding.

State Fiscal Year

Enter additional comments here to clarify your response for this question or add supporting information.

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$92,979,000	\$64,135,684	68.98%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$148,000	\$28,348	19.15%
Penalty Funds (23 U.S.C. 154)	\$0	\$0	0%
Penalty Funds (23 U.S.C. 164)	\$0	\$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$12,852,000	\$312,016	2.43%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$0	\$0	0%
State and Local Funds	\$0	\$15,948,830	0%
Totals	\$105,979,000	\$80,424,878	75.89%

Enter additional comments here to clarify your response for this question or add supporting information.

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

\$15,600,000

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

\$2,560,000

Enter additional comments here to clarify your response for this question or add supporting information.

The available amount for State FY 2017 was \$15.6 million to local public agencies.

In State FY 2017 we awarded \$23.76 million towards local public agency safety projects (includes carry over from previous years). Of those projects, we have obligated \$2.56 million towards individual projects (engineering and construction).

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

\$0

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

\$0

Enter additional comments here to clarify your response for this question or add supporting information.

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

\$0

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

\$0

Enter additional comments here to clarify your response for this question or add supporting information.

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

Local agencies have a variety of challenges that delay obligating federal funds, such as scoping and design and the overall federal aid process. The engineering agreement and joint funding agreement processes, when federal funds are involved, severely hamper the timeline for federal HSIP projects. Also, depending on the complexity of the project, the federal NEPA process for environmental review can impact the project timeline. Again, depending on the complexity of the project, obtaining some required permits can impact the project timeline. The Department is experimenting with a revised signature process for approval of project agreements, which should simplify and expedite this process. We are always looking for ways to expedite the environmental review process, when required.

Does the State want to elaborate on any other aspects of it's progress in implementing HSIP projects?

No

#### General Listing of Projects

#### List the projects obligated using HSIP funds for the reporting period.

													RELATIONSH	IIP TO SHSP
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
201202004	Shoulder treatments	Widen shoulder - paved or other	1.5	Miles	\$3206000	\$3800000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	9,700	50	State Highway Agency	Other	Driver Behavior & Awareness, Intersections, roadway departure	15-Pavement Treatments, 15- Pavement Treatments, 7- Pavement Marking, 9- Roadside
201202004	Roadway	Rumble strips - edge or shoulder	1.5	Miles	\$3206000	\$3800000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	9,700	50	State Highway Agency	Other	Driver Behavior & Awareness, Intersections, roadway departure	15-Pavement Treatments, 15- Pavement Treatments, 7- Pavement Marking, 9- Roadside
201203010	Intersection geometry	Auxiliary lanes - add left-turn lane	1	Intersections	\$1800000	\$2000000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	34,000	45	State Highway Agency	Other	Intersections	11-Signalization, 6-Pavement, 6- Pavement
201203014	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$1530000	\$1700000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	37,400	35	State Highway Agency	Other	Intersections	Signalization, Pavement, Misc, Intersection Geometry
201203017	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$7740000	\$8600000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	50,200	45	State Highway Agency	Other	Intersections	Signalization, Pavement, Misc, Intersection Geometry
201203018	Roadway	Rumble strips - unspecified or other	3.63	Miles	\$2745000	\$3050000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	89,500	55	State Highway Agency	Other	Roadway Departure	7-Pavement Marking, 7- Pavement Marking, 11- Signalization, 11- Signalization, 6- Pavement, 11- Signalization
201203018	Roadway signs and traffic control	Roadway signs and traffic control - other	3.63	Miles	\$2745000	\$3050000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	89,500	55	State Highway Agency	Other	Roadway Departure	7-Pavement Marking, 7- Pavement Marking, 11- Signalization, 11- Signalization, 6- Pavement, 11- Signalization
201212022	Intersection traffic control	Intersection traffic control - other	1	Intersections	\$967500	\$1075000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	26,300	45	State Highway Agency	Other	Intersections	4-Intersection Geometry, 11- Signalization, 11- Signalization
201311001	Roadside	Removal of roadside objects (trees, poles, etc.)	2.08	Miles	\$91000	\$91000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	2,000	55	State Highway Agency	Other	Roadway Departure	9-Roadside
201502006	Lighting	Lighting - other			\$250000	\$250000	HSIP (23 U.S.C. 148)	Urban	66	40	State Highway Agency	Systemic	Intersections	11-Signalization

		iiprovement Prog											RELATIONS	HIP TO SHSP
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
201502008	Shoulder treatments	Widen shoulder - paved or other	0.5	Miles	\$550000	\$550000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	5,400	55	State Highway Agency	Other	Roadway Departure	13-Curves, 15- Pavement Treatments
201502012	Shoulder treatments	Widen shoulder - paved or other	12.72	Miles	\$3325500	\$3695000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	11,800	55	State Highway Agency	Other	Roadway Departure	Pavement, Pavement Marking
201502012	Roadway	Rumble strips - edge or shoulder	12.72	Miles	\$3325500	\$3695000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	11,800	55	State Highway Agency	Other	Roadway Departure	Pavement, Pavement Marking
201502013	Intersection geometry	Intersection geometrics - modify skew angle	3	Intersections	\$2160000	\$4300000	HSIP (23 U.S.C. 148)	Urban Minor Arterial	0	45	State Highway Agency	Other	Intersections	Pavement, Intersection Geometry, Signalization
201502013	Roadside	Barrier end treatments (crash cushions, terminals)			\$2160000	\$4300000	HSIP (23 U.S.C. 148)	Urban Minor Arterial	0	45	State Highway Agency	Other	Intersections	Pavement, Intersection Geometry, Signalization
201503001	Roadway	Rumble strips - edge or shoulder	5.11	Miles	\$562500	\$625000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	90,500	55	State Highway Agency	Other	Roadway Departure	Roadside, Pavement Marking, Roadway
201505007	Roadway	Roadway - other	0.59	Miles	\$4230000	\$4700000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	52,700	40	State Highway Agency	Other	Driver Behavior & Awareness	10-Roadway, 0- Misc
201505021	Roadside	Barrier end treatments (crash cushions, terminals)	10.03	Miles	\$432000	\$480000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	141,600	55	State Highway Agency	Other	Large Trucks, Roadway Departures	9-Roadside, 9- Roadside, 9- Roadside
201506011	Intersection geometry	Auxiliary lanes - add right-turn lane	1	Intersections	\$562000	\$562000	HSIP (23 U.S.C. 148)	Urban Minor Arterial	26,350	40	State Highway Agency	Other	Intersections, Roadway Departures	6-Pavement, 11- Signalization, 11- Signalization
201506022	Roadside	Removal of roadside objects (trees, poles, etc.)			\$267000	\$267000	HSIP (23 U.S.C. 148)	Rural	0	0	State Highway Agency	Other	Roadway Departure	9-Roadside
201507048	Speed management	Radar speed signs			\$396000	\$440000	HSIP (23 U.S.C. 148)	Urban	0	55	State Highway Agency	Other	Roadway Departure	Curves, Signing, Pavement Marking
201507049	Roadway	Rumble strips - edge or shoulder			\$49000	\$49000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	6,740	55	State Highway Agency	Other	Roadway Departure	0-Misc
201507054	Shoulder treatments	Shoulder treatments - other			\$9000000	\$9000000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	42,500	65	State Highway Agency	Systemic	Roadway Departure	15-Pavement Treatments
201509001	Roadside	Removal of roadside objects (trees, poles, etc.)			\$2500000	\$2500000	HSIP (23 U.S.C. 148)	Rural	0	0	State Highway Agency	Other	Roadway Departure	9-Roadside, 9- Roadside
201509001	Roadside	Barrier end treatments (crash cushions, terminals)			\$2500000	\$2500000	HSIP (23 U.S.C. 148)	Rural	0	0	State Highway Agency	Other	Roadway Departure	9-Roadside, 9- Roadside
201511001	Shoulder treatments	Shoulder treatments - other	6.82	Miles	\$1530000	\$4589000	HSIP (23 U.S.C. 148)	Rural Major Collector	3,800	0	State Highway Agency	Other	Roadway Departure	7-Pavement Marking
201512001	Roadside	Barrier end treatments (crash	7.1	Miles	\$1000000	\$13104571	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	32,900	0	State Highway Agency	Other	Work Zones	9-Roadside

													RELATIONS	HIP TO SHSP
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
		cushions, terminals)												
201512002	Roadside	Removal of roadside objects (trees, poles, etc.)	1.88	Miles	\$390000	\$390000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	7,350	55	State Highway Agency	Other	Roadway Departure	9-Roadside
201512003	Advanced technology and ITS	Dynamic message signs			\$600000	\$600000	HSIP (23 U.S.C. 148)	Urban	0	70	State Highway Agency	Systemic	Driver Behavior	0-Misc
201512004	Advanced technology and ITS	Dynamic message signs			\$510000	\$510000	HSIP (23 U.S.C. 148)	Urban	0	70	State Highway Agency	Systemic	Work Zones	0-Misc
201601001	Shoulder treatments	Widen shoulder - paved or other	1.55	Miles	\$401000	\$456000	HSIP (23 U.S.C. 148)	Rural	5,300	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 7- Pavement Marking
201601001	Roadway	Rumble strips - edge or shoulder	1.55	Miles	\$401000	\$456000	HSIP (23 U.S.C. 148)	Rural	5,300	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 7- Pavement Marking
201602002	Advanced technology and ITS	Dynamic message signs			\$78300	\$87000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	8,680	0	State Highway Agency	Systemic	Large Trucks, Roadway Departures	0-Misc
201602003	Shoulder treatments	Widen shoulder - paved or other	2.78	Miles	\$295000		HSIP (23 U.S.C. 148)	Rural	2,700	55	State Highway Agency	Other	NA/UNK	0
201602004	Intersection geometry	Intersection geometry - other	2	Intersections	\$1200000	\$1200000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	2,200	70	State Highway Agency	Other	Roadway Departure	4-Intersection Geometry
201603001	Shoulder treatments	Widen shoulder - paved or other			\$1316000	\$1316000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	6,200	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 9- Roadside
201603001	Roadway	Rumble strips - transverse			\$1316000	\$1316000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	6,200	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 9- Roadside
201603001	Roadside	Barrier end treatments (crash cushions, terminals)			\$1316000	\$1316000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	6,200	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 9- Roadside
201604001	Shoulder treatments	Widen shoulder - paved or other	7.43	Miles	\$975000	\$975000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	5,200	55	State Highway Agency	Systemic	Roadway Departure	15-Pavement Treatments
201605001	Intersection geometry	Intersection geometry - other	1	Intersections	\$1500000	\$1500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	15,375	55	State Highway Agency	Other	Intersections	4-Intersection Geometry
201605006	Intersection geometry	Auxiliary lanes - add left-turn lane	1	Intersections	\$450000	\$450000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	5,525	55	State Highway Agency	Other	Intersections	4-Intersection Geometry
201605007	Roadway	Pavement surface - high friction surface	0.6	Miles	\$950000	\$950000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	11,600	45	State Highway Agency	Other	Roadway Departure	6-Pavement
201605009	Shoulder treatments	Widen shoulder - paved or other	6.3	Miles	\$1500000	\$1500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	6,925	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 0- Misc
201605010	Roadway	Pavement surface - high friction surface	7	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	18,675	70	State Highway Agency	Other	Roadway Departure	13-Curves

													RELATIONSH	IP TO SHSP
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
201605012	Advanced technology and ITS	Congestion detection / traffic monitoring system			\$500000	\$500000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0	70	State Highway Agency	Systemic	Work Zones	2-Advanced Technology and ITS
201606001	Shoulder treatments	Widen shoulder - paved or other	6.5	Miles	\$1675000	\$1675000	HSIP (23 U.S.C. 148)	Rural Major Collector	2,100	55	State Highway Agency	Other	Roadway Departure	6-Pavement
201606002	Shoulder treatments	Widen shoulder - paved or other	4.18	Miles	\$580000	\$580000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	2,400	55	State Highway Agency	Other	NA/UNK	15-Pavement Treatments
201606003	Shoulder treatments	Widen shoulder - paved or other	7.07	Miles	\$980000	\$980000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	3,150	55	State Highway Agency	Other	Roadway Departure	15-Pavement Treatments
201606004	Shoulder treatments	Widen shoulder - paved or other	2.29	Miles	\$400000	\$400000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	3,200	55	State Highway Agency	Other	Roadway Departure	15-Pavement Treatments
201607001	Intersection geometry	Auxiliary lanes - add left-turn lane	2	Intersections	\$1500000	\$1500000	HSIP (23 U.S.C. 148)	Urban Minor Arterial	13,000	45	State Highway Agency	Other	Intersections	4-Intersection Geometry
201607002	Roadway	Pavement surface - high friction surface	3.79	Miles	\$1708000	\$1708000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	2,290	55	State Highway Agency	Other	Roadway Departure	Misc
201607002	Roadway	Rumble strips - center	3.79	Miles	\$1708000	\$1708000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	2,290	55	State Highway Agency	Other	Roadway Departure	Misc
201607003	Roadway	Pavement surface - high friction surface	4.55	Miles	\$1977000	\$1977000	HSIP (23 U.S.C. 148)	Rural	3,115	55	State Highway Agency	Other	Roadway Departure	Misc
201607003	Roadway	Rumble strips - center	4.55	Miles	\$1977000	\$1977000	HSIP (23 U.S.C. 148)	Rural	3,115	55	State Highway Agency	Other	Roadway Departure	Misc
201607004	Shoulder treatments	Widen shoulder - paved or other	5.6	Miles	\$1400000	\$1400000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	2,650	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 0- Misc
201607005	Shoulder treatments	Widen shoulder - paved or other	4.35	Miles	\$1000000	\$1000000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	4,000	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 0- Misc
201607006	Shoulder treatments	Widen shoulder - paved or other	8	Miles	\$2000000	\$2000000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	2,900	55	State Highway Agency	Other	Roadway Departure	6-Pavement, 0- Misc
201607007	Advanced technology and ITS	Dynamic message signs			\$500000	\$500000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0	0	State Highway Agency	Other	Work Zones	0-Misc
201607008	Roadway delineation	Raised pavement markers			\$110000	\$110000	HSIP (23 U.S.C. 148)	Rural	3,500	0	State Highway Agency	Other	Roadway Departure	7-Pavement Marking
201608003	Roadside	Barrier end treatments (crash cushions, terminals)			\$1000000	\$1000000	HSIP (23 U.S.C. 148)	Rural	0	0	State Highway Agency	Systemic	Roadway Departure	9-Roadside
201608004	Advanced technology and ITS	Advanced technology and ITS - other			\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	20,000	65	State Highway Agency	Other	NA/UNK	2-Advanced Technology and ITS
201608006	Roadside	Barrier end treatments (crash cushions, terminals)			\$2500000	\$2500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	18,000	70	State Highway Agency	Other	Roadway Departure	9-Roadside

													RELATIONS	HIP TO SHSP
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
201608007	Roadside	Barrier end treatments (crash cushions, terminals)			\$1500000	\$1500000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	0	70	State Highway Agency	Other	Roadway Departure	9-Roadside
201609001	Alignment	Vertical alignment or elevation change	2	Miles	\$1238000	\$1238000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Interstate	27,400	70	State Highway Agency	Other	Roadway Departure	13-Curves, 9- Roadside
201609002	Roadside	Barrier end treatments (crash cushions, terminals)			\$1000000	\$1000000	HSIP (23 U.S.C. 148)	Rural	0	55	State Highway Agency	Systemic	Roadway Departure	9-Roadside
201609003	Shoulder treatments	Widen shoulder - paved or other	2.42	Miles	\$2800000	\$2800000	HSIP (23 U.S.C. 148)	Rural Major Collector	4,452	55	State Highway Agency	Other	Intersections, Roadway Departures	15-Pavement Treatments, 4- Intersection Geometry
201609006	Speed management	Speed detection system / truck warning	0.84	Miles	\$320000	\$400000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	52,200	0	State Highway Agency	Other	Roadway Departure	15-Pavement Treatments, 13- Curves, 7- Pavement Marking
201609006	Roadway	Pavement surface - high friction surface			\$320000	\$400000	HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	52,200	0	State Highway Agency	Other	Roadway Departure	15-Pavement Treatments, 13- Curves, 7- Pavement Marking
201610005	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	460	Intersections	\$1050000	\$1050000	HSIP (23 U.S.C. 148)	Urban	0	0	State Highway Agency	Systemic	Intersections	0
201611003	Roadway	Rumble strips - center	2.94	Miles	\$294000	\$294000	HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	12,250	55	State Highway Agency	Other	Roadway Departure	7-Pavement Marking
201611004	Roadside	Barrier end treatments (crash cushions, terminals)			\$1497000	\$1497000	HSIP (23 U.S.C. 148)	Rural	0	55	State Highway Agency	Systemic	NA/UNK	9-Roadside

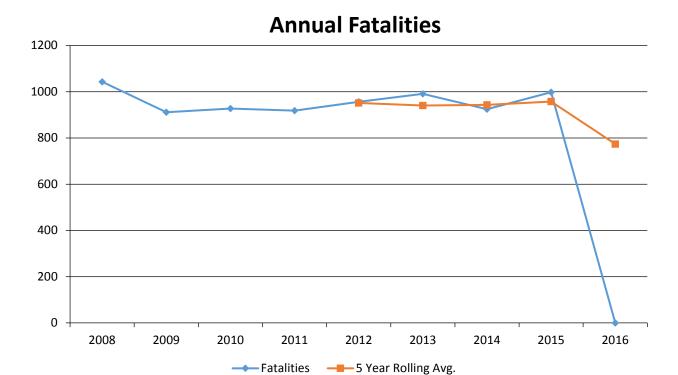
Enter additional comments here to clarify your response for this question or add supporting information.

### **Safety Performance**

#### General Highway Safety Trends

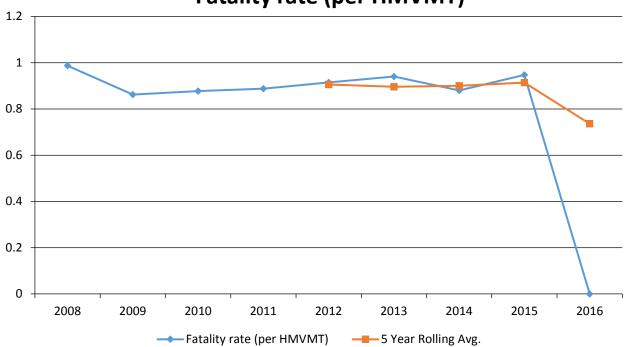
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fatalities	1,043	911	927	918	956	991	924	998	0
Serious Injuries	13,401	13,006	12,631	11,939	12,398	12,300	11,748	12,844	0
Fatality rate (per HMVMT)	0.987	0.862	0.877	0.888	0.915	0.940	0.880	0.947	0.000
Serious injury rate (per HMVMT)	12.686	12.301	11.945	11.550	11.869	11.661	11.185	12.190	0.000
Number non-motorized fatalities	162	131	139	162	168	155	154	176	0
Number of non-motorized serious injuries	1,421	1,437	1,374	1,304	1,329	1,281	1,284	1,568	0

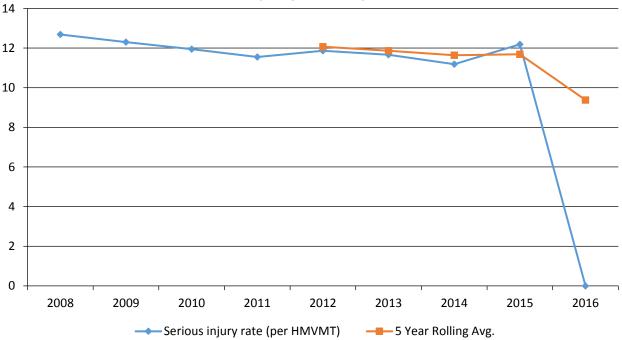


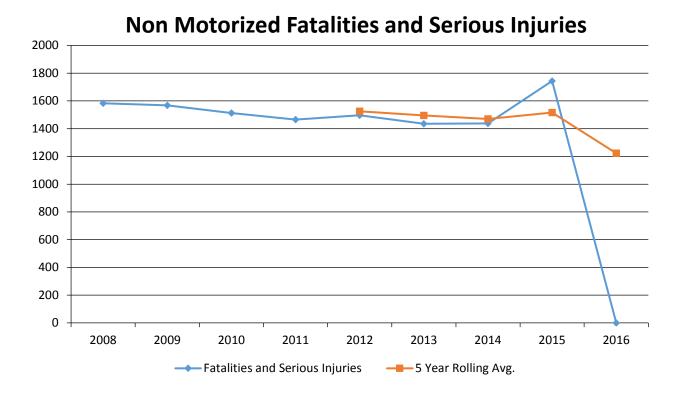
# Annual Serious Injuries

### **Fatality rate (per HMVMT)**



### Serious injury rate (per HMVMT)





Enter additional comments here to clarify your response for this question or add supporting information.

Describe fatality data source.

**FARS** 

Enter additional comments here to clarify your response for this question or add supporting information.

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

**Year 2015** 

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial - Interstate	126	1,183.6	0.4	3.76
Rural Principal Arterial - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial - Other	0	0	0	0
Rural Minor Arterial	99	705.4	2.22	15.79

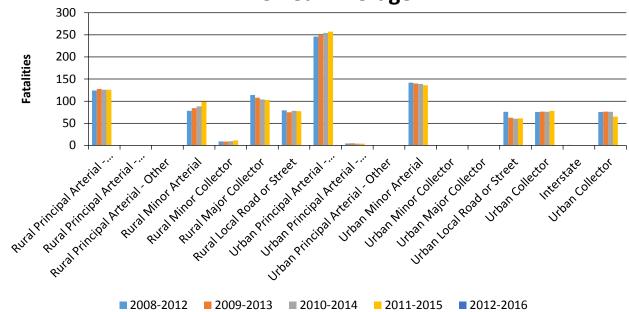
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Minor Collector	11.2	83	2.74	20.26
Rural Major Collector	102.8	843	2.19	17.96
Rural Local Road or Street	77.4	617.8	2.15	17.05
Urban Principal Arterial - Interstate	257.2	3,712	1.06	15.35
Urban Principal Arterial - Other Freeways and Expressways	3.8	57.6	0.33	5.03
Urban Principal Arterial - Other	0	0	0	0
Urban Minor Arterial	136.2	2,485.6	0.88	16.13
Urban Minor Collector	0	0	0	0
Urban Major Collector	0	0	0	0
Urban Local Road or Street	61.2	984.2	0.55	8.86
Urban Collector	78	1,276.4	0.97	15.84
Interstate				
Urban Collector	65.2	975.2	0.82	12.21

#### **Year 2015**

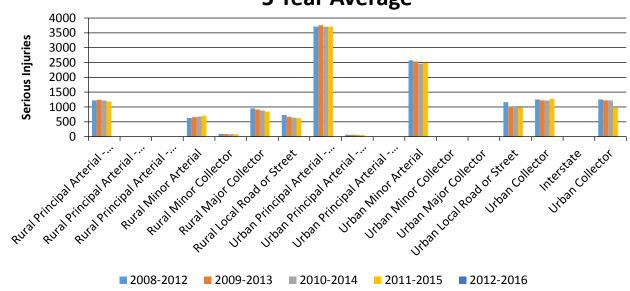
Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
County Highway Agency				
Illinois Division of Highways	273.2	1,990.6	0.49	3.56
State Highway Agency				
County Highway Agency				
Other State Agency	0.6	3.8	0.77	4.88
County	71.4	542.4	0.65	4.94
Town or Township Highway Agency				
City of Municipal Highway Agency				
Municipality	34.8	361.8	0.13	1.4
Federal Agency	0.8	1.8	2.91	6.58
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Adjacent County	0.2	1.8	0.89	8.06
Private (Including Toll Authorities)	16.6	157.6	0.2	1.88
Other State Agency				
Other Local Agency				
Adjacent Township or Road District	3.6	33.4	0.93	8.62
Township or Road District	68.8	506.2	1.11	8.17
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Indian Tribe Nation				
Adjacent County	0.2	1.2	0.89	5.38
Adjacent Township or Road District	2.4	26.2	0.62	6.77

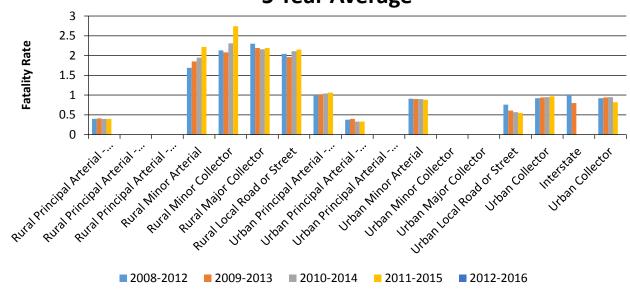
## Number of Fatalities by Functional Classification 5 Year Average



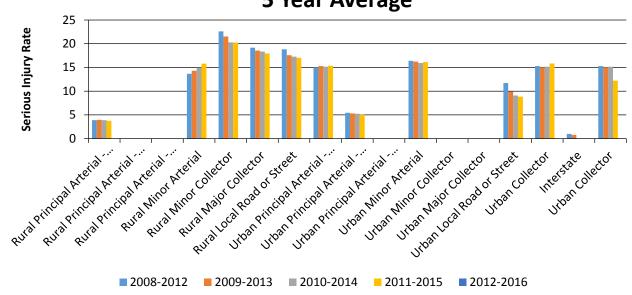
# Number of Serious Injuries by Functional Classification 5 Year Average



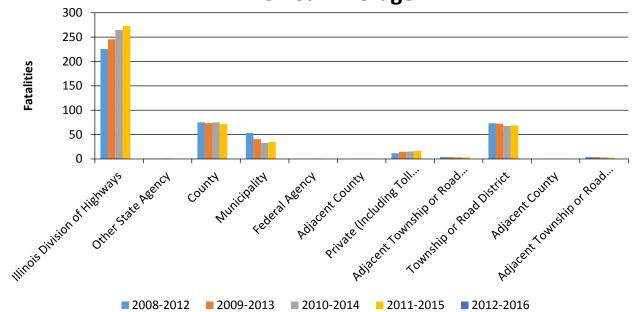
# Fatality Rate (per HMVMT) by Functional Classification 5 Year Average



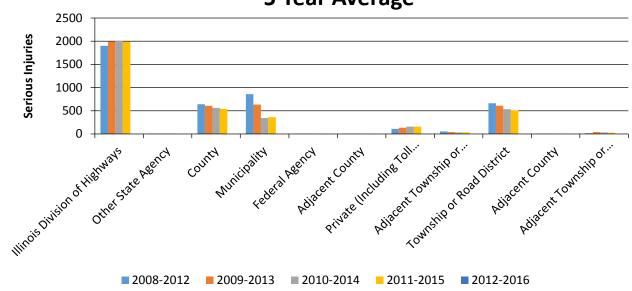
# Serious Injury Rate (per HMVMT) by Functional Classification 5 Year Average



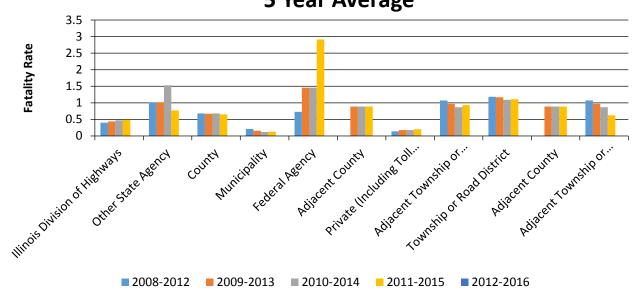
# Number of Fatalities by Roadway Ownership 5 Year Average



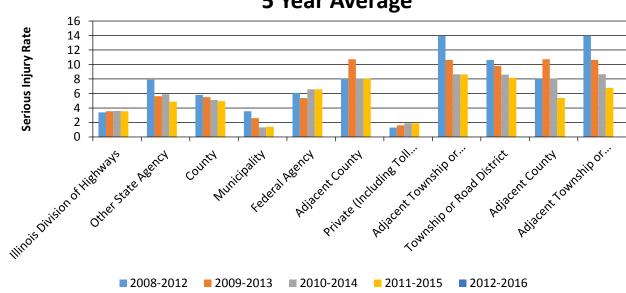
# Number of Serious Injuries by Roadway Ownership 5 Year Average



# Fatality Rate (per HMVMT) by Roadway Ownership 5 Year Average



# Serious Injury Rate (per HMVMT) by Roadway Ownership 5 Year Average



Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the general highway safety trends on which the State would like to elaborate?

Yes

Provide additional discussion related to general highway safety trends.

From 2011 to 2015, there is an 8.7% increase in fatalities (918 in 2011 to 998 in 2015). Similarly, there is a 7.6% increase in serious injuries (11,939 in 2011 to 12,844 in 2015) from 2011 to 2015.

Safety Performance Targets
Safety Performance Targets

Calendar Year 2018 Targets \*

**Number of Fatalities** 

951.0

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

Targets were set at a two percent annual reduction.

**Number of Serious Injuries** 

11231.1

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

Targets were set using ordinary Least Square Projections.

**Fatality Rate** 

0.900

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

Targets were set at a two percent annual reduction.

**Serious Injury Rate** 

10.830

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

Targets were set using ordinary Least Square Projections.

Total Number of Non-Motorized Fatalities and Serious Injuries

1508.6

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

Targets were set at a two percent annual reduction.

Enter additional comments here to clarify your response for this question or add supporting information.

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

Executive meetings and coordination sessions were held in December 2016, February, March and May 2017 with the stakeholders to discuss the safety performance and set targets for the measures.

Does the State want to report additional optional targets?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Applicability of Special Rules

Does the HRRR special rule apply to the State for this reporting period?

Yes

Enter additional comments here to clarify your response for this question or add supporting information.

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

PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015
Number of Older Driver and Pedestrian Fatalities	119	109	125	126	139	145	158
Number of Older Driver and Pedestrian Serious Injuries	907	905	854	892	932	905	1,016

## Number of Older Driver and Pedestrian Fatalities and Serious Injuries by Year.



Enter additional comments here to clarify your response for this question or add supporting information.

#### **Evaluation**

**Program Effectiveness** 

How does the State measure effectiveness of the HSIP?

Other-naive before-after studies for specific projects Other-Statewide fatal and serious injuries, local route fatal and serious injuries and performance measures by emphasis area

Enter additional comments here to clarify your response for this question or add supporting information.

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

The results include: 1) The number of fatalities and serious injuries, the percent change of fatalities and serious injuries. 2) Naive before-after studies for HSIP program investment. 3) Crash Modification Factor (CMF) for specific treatment.

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

Other-Improving and coordinating infrastructure and behavior strategies to maximize benefits

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any significant programmatic changes that have occurred since the last reporting period?

No

Effectiveness of Groupings or Similar Types of Improvements

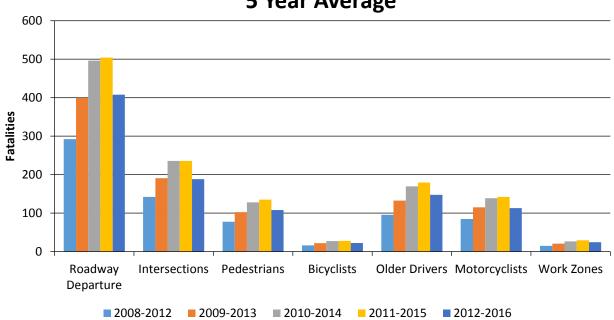
Present and describe trends in SHSP emphasis area performance measures.

#### **Year 2016**

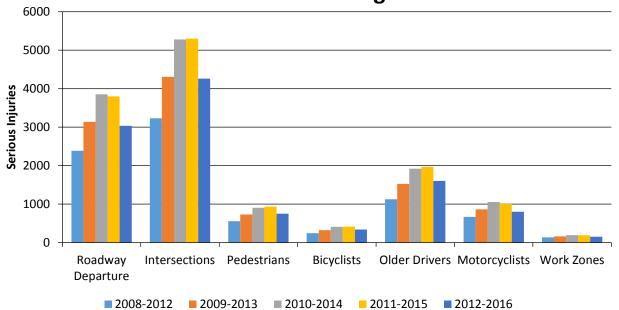
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Roadway Departure		408	3,035.8	0.39	2.89			

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Intersections		188.4	4,262.6	0.18	4.06			
Pedestrians		108.2	750.2	0.1	0.71			
Bicyclists		22.4	342.2	0.02	0.32			
Older Drivers		147.4	1,605.4	0.14	1.53			
Motorcyclists		113	801.2	0.11	0.76			
Work Zones		24.6	154.2	0.02	0.15			

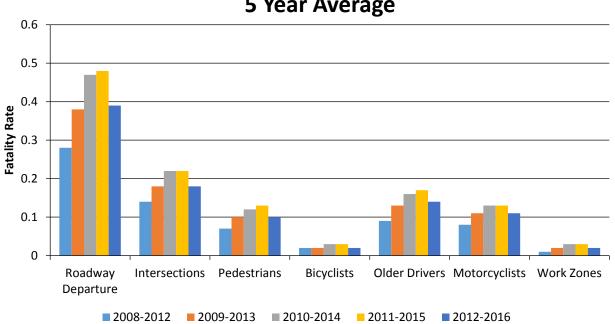
## Number of Fatalities 5 Year Average



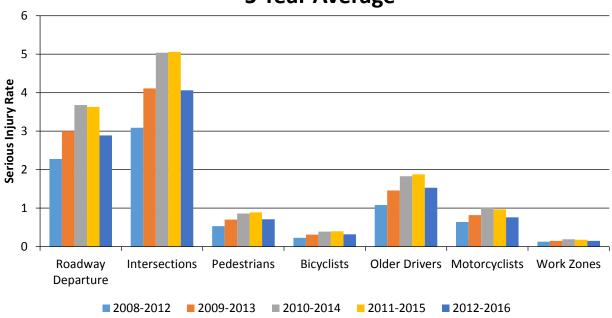
# Number of Serious Injuries 5 Year Average







## Serious Injury Rate (per HMVMT) 5 Year Average



Enter additional comments here to clarify your response for this question or add supporting information.

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

Yes

Please provide the following summary information for each countermeasure effectiveness evaluation.

**CounterMeasures:** Flashing Yellow Arrow

Central Illinois District 4 had systemically replaced all state

**Description:** jurisdiction left turn signal heads with a flashing yellow arrow

during the permissive left turn phase of the signal cycle.

**Target Crash** 

**Type:** 

Left-turn

Number of Installations: Number of

Installations:

**Miles Treated:** 

Years Before: 3 Years After: 3

**Methodology:** Before/after using empirical Bayes or Full Bayes

CMF=.857 for left turns

Safety Effects of Traffic Signing for Left Turn Flashing Yellow

Arrow Signals Schattler et al.

www.sciencedirect.com/science/article/pii/S0001457514003467

**Results:** 

Safety effects of traffic signing for left turn flashing

www.sciencedirect.com

Safety effects of traffic signing for left turn flashing yellow arrow

signals

File Name: Hyperlink

**CounterMeasures:** Modify Approach Angle

Intersections islands and or right turn radius was

modified to adjust the drivers angle to the

**Description:** intersection to improve line of sight when making a

right turn.

**Target Crash Type:** Other (define)

Number of

9 in District 4

**Installations:** 

9 in District 4

Number of

**Installations:** 

**Miles Treated:** 

**Years Before:** 5

Years After: 3 and more

**Methodology:** Before/after using empirical Bayes or Full Bayes

CMF=0.397 for right turn crashes

Safety Impacts of a Modified Right Turn Lane

**Design at Intersections** 

https://www.ideals.illinois.edu/handle/2142/90226

IDEALS @ Illinois: Effectiveness Evaluation of a

**Results:** Modified ...

www.ideals.illinois.edu

Title: Effectiveness Evaluation of a Modified Right-Turn Lane Design at Intersections: Author(s):

Schattler, Kerrie L.; Hanson, Trevor; Maillacheruvu,

Krishnanand

File Name: Hyperlink

#### Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

Enter additional comments here to clarify your response for this question or add supporting information.

Crash data is currently being collected for HSIP projects tracking and evaluation. Before and after evaluations were performed for projects implemented in 2011 and 2012 using crash data from 2008 to 2015. The number of fatal and serious injury crashes decreased by nearly 9 percent for projects on all routes, and it decreased by 15 percent for projects on state routes only. On all routes, the number of fatal and serious injury crashes showed a reduction of over 21 percent for roadway departure projects.

Are there any other aspects of the overall HSIP effectiveness on which the State would like to elaborate?

No

## **Compliance Assessment**

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

07/28/2017

What are the years being covered by the current SHSP?

From: 2017 To: 2022

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

2022

Enter additional comments here to clarify your response for this question or add supporting information.

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

	NON LOC ROADS -	AL PAVED SEGMENT	NON LOC ROADS - INT	AL PAVED TERSECTION	NON LOC ROADS	AL PAVED - RAMPS	LOCAL PAY	/ED ROADS	UNPAVEI	D ROADS
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT										
Segment Identifier (12)	100	100					100	100	100	100
Route Number (8)	100	100								
Route/Street Name (9)	100	100								
Federal Aid/Route Type (21)	100	100								
Rural/Urban Designation (20)	100	100					100	100		
Surface Type (23)	100	100					100	100		
Begin Point Segment Descriptor (10)	100	100					100	100	100	100
End Point Segment Descriptor (11)	100	100					100	100	100	100
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	100
Median Type (54)	100	100								

2017 Illillois Highway	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
Access Control (22)	100	100								
One/Two Way Operations (91)	100	100								
Number of Through Lanes (31)	100	100					100	100		
Average Annual Daily Traffic (79)	100	100					100	100		
AADT Year (80)	100	100								
Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION										
Unique Junction Identifier (120)			100	100						
Location Identifier for Road 1 Crossing Point (122)			100	100						
Location Identifier for Road 2 Crossing Point (123)			100	100						
Intersection/Junction Geometry (126)			100	100						
Intersection/Junction Traffic Control (131)			100	100						
AADT for Each Intersecting Road (79)			100	100						
AADT Year (80)			100	100						
Unique Approach Identifier (139)			100	100						
INTERCHANGE/RAMP										
Unique Interchange Identifier (178)					100	100				
Location Identifier for Roadway at Beginning of Ramp Terminal (197)					100	100				
Location Identifier for Roadway at Ending Ramp Terminal (201)					100	100				
Ramp Length (187)					100	100				
Roadway Type at Beginning of Ramp Terminal (195)					100	100				

	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
Roadway Type at End Ramp Terminal (199)					100	100				
Interchange Type (182)					100	100				
Ramp AADT (191)					100	100				
Year of Ramp AADT (192)					100	100				
Functional Class (19)					100	100				
Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Enter additional comments here to clarify your response for this question or add supporting information.

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

We do all required MIRE FDEs, therefore do not need to develop a plan to meet the requirement by 2026.

Provide the suspected serious injury identifier, definition and attributes used by the State for both the crash report form and the crash database using the table below. Please also indicate whether or not these elements are compliant with the MMUCC 4th edition criteria for data element P5. Injury Status, suspected serious injury.

CRITERIA	SUSPECTED SERIOUS INJURY IDENTIFIER(NAME)	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY DEFINITION	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS)	MMUCC 4TH EDITION COMPLIANT *
Crash Report Form	A Incapacitating injury	No	N/A	No	N/A	No
Crash Report Form Instruction Manual	A Incapacitating injury	No	Any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities he/she was capable of performing before the injury occurred.	No	This includes severe lacerations, broken/distorted limbs, skull injuries, chest injuries, abdominal injuries.	No
Crash Database	A_Injuries	No	N/A	No	N/A	No
Crash Database Data Dictionary	Alnjuries	No	Total of incapacitating injuries in the crash	No	Any injury other than fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities he/she was capable of performing before the injury occurred. Includes severe lacerations, broken limbs, skull or chest injuries, and abdominal injuries.	No

Please describe the actions the State is taking to become compliant by April 15, 2019.

Illinois is working with the Secretary of State and traffic safety partners to update the SR 1050 (Illinois State Crash Report) to be compliant with the revised serious injury definition and add additional fields as necessary.

Enter additional comments here to clarify your response for this question or add supporting information.

2017	Illinois	Highway	Safety	Improvement	<b>Program</b>

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

Yes

Describe the purpose and outcomes of the State's HSIP program assessment.

The purpose of the review is to evaluate the procedures and process currently utilized to identify local public agency HSIP projects. The overall objective is to optimize the use of HSIP funding and streamline the application process to increase the number and quality of local public agency applications.

## **Optional Attachments**

Program Structure:
SAFETY 1.06 - Safety Engineering Policy Memorandum.pdf
Project Implementation:
Safety Performance:  Evaluation:
Compliance Assessment:

### Glossary

5 year rolling average	means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).
Emphasis area	means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.
Highway safety improvement project	means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.
HMVMT	means hundred million vehicle miles traveled.
Non-infrastructure projects	are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.
Older driver special rule	applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.
Performance measure	means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.
Programmed funds	mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.
Roadway Functional Classification	means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.
Strategic Highway Safety Plan (SHSP)	means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.
Systematic	refers to an approach where an agency deploys countermeasures at all locations across a system.
Systemic safety improvement	means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.
Transfer	means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.