



KANSAS

# HIGHWAY SAFETY IMPROVEMENT PROGRAM 2019 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**

In Kansas we continue to spend our HSIP dollars in a variety of independently managed sub-programs, including intersections, signing, pavement markings, lighting, rail, HRRR, and general safety improvements. The rail program is reported with the RHGCP report. This is the seventh year HRRR is reported with the HSIP report. We are working with our sub-program managers to develop program manuals specific to each sub-program in a manner consistent with the requirements of this report and related strategies in our Strategic Highway Safety Plan. Collectively, these programs cover all 140,000 centerline miles of public roads in Kansas while applying a multitude of proven countermeasures designed to reduce fatal and serious injury crashes statewide.

## **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.**

Our HSIP is managed via seven independent sub-programs, including intersections, signing, pavement markings, lighting, rail, HRRR, and general safety improvements. Each of these programs, with the exception of rail, is described in detail within this report.

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

Other-Planning and Design

Intersections, signing, pavement markings, lighting, and general safety improvements are managed in the Bureau of Transportation Safety and Technology within the Division of Planning and Development. HRRR is managed by the Bureau of Local Projects and rail by the Bureau of Road Design, both within the Division of Engineering and Design.

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

- Other-Headquarters

A committee made up of the HSIP Program Manager, FHWA Division Safety Engineer, sub-program managers, and management meet twice a year to measure program progress based on planned obligations and to estimate and distribute allocations for future years.

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

Our HSIP program is made up of seven sub-programs: lighting, pavement marking, signing, rail, intersections, HRRR, and general safety improvements. Lighting, pavement marking, signing, and general safety improvement projects are exclusive to the State Highway System, although projects may impact intersecting non-state roads. Intersections and rail projects may include local roads, that is, public roads not a part of the State Highway System. HRRR is exclusive to local roads. The rail program is addressed in the Rail-Highway Grade Crossing Program report.

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

- Design
- Districts/Regions
- Operations
- Planning

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- Local Aid Programs Office/Division
- Maintenance
- Traffic Engineering/Safety

### **Describe coordination with internal partners.**

Lighting sub-program: Projects are selected with input from the structural engineer in our State Bridge Office responsible for foundations for lighting, as well as field information from our Area Offices, and road safety audits performed by our Traffic Engineering Section.

Signing sub-program: This blanket replacement program was programmed to cover the entire state highway system in ten years. Our Area Offices complete a sign inventory for each project. Projects that are primarily on conventional roads the Area Offices typically install the new signs and posts. Projects that are on urban expressways and freeways are typically contractor let. Area Offices then administer the construction engineering duties.

Pavement Marking sub-program: Our pavement marking technician works closely with our district maintenance engineers to identify recommended routes. Works also with Traffic Engineering Section to identify locations in need of improved markings for safety.

Intersections sub-program: Projects are identified through solicitation to cities and their recommendations. Additionally, projects may be identified through studies such as Traffic Engineering Assistance Program reports (TEAP) and traffic studies. When the intersection is located on the State Highway System, our District and Area Offices are made part of the discussion as well. Once locations are identified a competitive process for funding begins using Part B of the Highway Safety Manual and engineering judgment.

HRRR sub-program: District Offices provide construction oversight. The Bureau of Local Projects manages the program.

General Safety Improvements sub-program: Projects are selected and scoped in partnership with District and Area Offices.

All sub-programs: The Traffic Safety Section in our Bureau of Transportation Safety & Technology manage and report on crash data as needed.

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

- FHWA
- Local Government Agency
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-Kansas Association of Counties
- Other-Local Roads Emphasis Area Team (SHSP)

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

Intersections sub-program: Projects are identified through solicitation to cities and their recommendations. Additionally, projects may be identified through studies such as Traffic Engineering Assistance Program reports (TEAP) and KDOT traffic studies.

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HRRR sub-program: Projects are identified through solicitation to counties and their recommendations. Additionally, projects may be identified through studies such as Traffic Engineering Assistance Program reports (TEAP), road safety audits, and Local Road Safety Plans.

### **Describe HSIP program administration practices that have changed since the last reporting period.**

As we move into FY20, we are transitioning from semi-annual sub-program manager meetings to monthly. We are also planning to meet quarterly with our FHWA Division Office.

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

**A total of \$25,691,533 in safety funds (HSIP and Rail) was apportioned for FFY 2019, distributed to each sub-program as follows:**

Lighting: \$3,100,000 HSIP

Pavement Marking: \$4,500,000 HSIP

Signing: \$2,400,000 HSIP

Highway-Railway Grade Crossing and Rail: \$6,428,758 (\$6,428,758 Rail & \$0 HSIP)

Intersection Safety: \$3,262,775 HSIP

High Risk Rural Roads: \$4,000,000 HSIP

General Safety Improvements: \$2,000,000 HSIP

### **The following dollars were obligated for SFY 2019 in each program:**

Lighting: \$225,643 HSIP

Pavement Marking: \$2,423,809 HSIP

Signing: \$0 HSIP

Highway-Railway Grade Crossing and Rail: \$6,243,866 (\$483,805 Rail, \$1,897,354 HSIP and \$3,862,707 ACHSIP)

Intersection Safety: \$11,349,953 HSIP

High Risk Rural Roads: \$3,850,499 (\$3,874,684 HSIP and -\$24,185 HRRR)

General Safety Improvements: \$100,309

Each of the programs discussed further in this report are consistent with our SHSP. It is our intent that strategies identified or developed as part of the SHSP process will contribute to the continued success of these programs. A portion of our HSIP funding is programmed as part of our RHGCP. See RHGCP report for more information.

### ***Program Methodology***

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

No

We are working with our FHWA Division Office on assessing our program and anticipate a final report at the beginning of FFY 2020. Outcomes will emphasize the importance of program evaluation at least at the sub-program level, overall distribution of funding, and an HSIP manual.

**Select the programs that are administered under the HSIP.**

- Intersection
- Local Safety
- Sign Replacement And Improvement
- Other-Pavement Marking
- Other-Lighting
- Other-General Safety Improvements

Our HRRR Program may also be referred to as Local Safety since it applies exclusively to locally-owned roads.

### **Program: Intersection**

***Date of Program Methodology:8/25/2016***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Other-Must satisfy a need based on the HSM, address crashes, and have a B/C>1.

***What data types were used in the program methodology?***

Crashes	Exposure	Roadway
<ul style="list-style-type: none"><li>• All crashes</li><li>• Other-Fatal and SI crashes</li></ul>	<ul style="list-style-type: none"><li>• Traffic</li><li>• Volume</li><li>• Population</li><li>• Lane miles</li></ul>	<ul style="list-style-type: none"><li>• Functional classification</li><li>• Other-Turn lanes</li></ul>

***What project identification methodology was used for this program?***

- Crash frequency
- Expected crash frequency with EB adjustment
- Other-B/C ratio
- Other-Observed crashes and patterns

***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?**

No

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

Process is same except local road projects include a periodic solicitation letter to all cities with population of 5000 or greater requesting project proposals.

**How are projects under this program advanced for implementation?**

- Competitive application process

**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**

Ranking based on B/C:2

Available funding:3

Other-Crash patterns:1

This program is increasingly focused on low-cost safety improvements as well as higher-cost that addresses observed crash patterns. Additionally, HSM tools such as Safety Analyst help us rank and quantify the countermeasures to address intersections with the greatest potential to improve safety.

**Program: Local Safety**

**Date of Program Methodology:2/11/2011**

**What is the justification for this program?**

- Addresses SHSP priority or emphasis area

**What is the funding approach for this program?**

Competes with all projects

**What data types were used in the program methodology?**

**Crashes**

- All crashes

**Exposure**

- Traffic
- Volume
- Population
- Lane miles

**Roadway**

- Horizontal curvature
- Functional classification
- Roadside features
- Other-Shoulder width, sign sheeting type, percent in district, past projects, cost, road safety audit, county priority

**What project identification methodology was used for this program?**

- Crash frequency
- Crash rate
- Excess proportions of specific crash types
- 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?**

No

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

This program applies only to local roads (non-state owned and operated.)

**How are projects under this program advanced for implementation?**

- Competitive application process
- Other-Scoring rubric
- 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

Available funding:2

Other-Scoring rubric:1

Other-Geographical distribution:3

**Program: Sign Replacement And Improvement**

**Date of Program Methodology:7/1/2006**

**What is the justification for this program?**

- Addresses SHSP priority or emphasis area

**What is the funding approach for this program?**

Funding set-aside

**What data types were used in the program methodology?**

Crashes

Exposure

Roadway

- Other-Sign inventory

***What project identification methodology was used for this program?***

- Other-Pre-programmed blanket replacement program

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

No

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

***How are projects under this program advanced for implementation?***

- Other-Projects were pre-programmed based on a blanket replacement program.

***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-Per established cyclical program:1

This program was established in 1996 to address necessary sign replacements on the State Highway System due to pending (now final) federal requirements for minimum retro-reflectivity of highway signs. This program schedules sign replacements based upon highway route-mileage statewide and the total mileage of all the routes in each District Sub-Area with multiple Sub-Areas in each District being addressed each year. This program excludes signs on any other state project that include sign replacement for that highway route in the same year. This program also excludes any signs that were replaced within seven years of the scheduled date of the replacement project. This is the 13th year KDOT has used HSIP funds to improve permanent signing. The projects in the program are administered using two separate methods. Sub-Areas comprised primarily of routes classified as freeways and expressways with interchanges are let to contract via normal letting procedures. Sub-Areas with routes that are classified as expressways and conventional roads are administered by releasing contracts to purchase the signs and posts with installation performed by KDOT maintenance crews. However, due to KDOT maintenance work force reductions, the program will rely on contractors to install the signs regardless of route classification within some Sub-Areas.

**Program: Other-Pavement Marking**

***Date of Program Methodology:7/1/2006***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

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Funding set-aside

### ***What data types were used in the program methodology?***

#### **Crashes**

- All crashes

#### **Exposure**

- Volume
- Population
- Other-If we considered only traffic volumes, only high volume districts (1 and 5) would get funded, thus population is taken into account. At the district level, we then consider higher volume routes first and take into account retro-readings.

#### **Roadway**

- Other-Retro-reflectivity.

### ***What project identification methodology was used for this program?***

- Crash frequency
- Other-Mobile retro-reflectivity data

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

No

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

### ***How are projects under this program advanced for implementation?***

- Other-Pavement Marking Specialist works closely with district maintenance engineers to select projects.

***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**

Available funding:1

This set-aside program was established in FY 1996 to address pavement marking necessary due to pending new federal requirements for minimum retro-reflectivity of pavement markings. Improvements in this category utilize high-performance, long-life pavement marking materials. Efforts are also made to identify those marking materials with wet-weather retro-reflectivity. This program is limited to projects that do not have high-performance markings included under any other KDOT program. Projects are selected by the BTS&T based upon a roadway's traffic volumes, past performance of marking material, geometry, surface condition, surface type, crash history, and, in the case of new marking materials, the research benefit. We are also expanding our

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use of mobile retro-reflectivity data to identify potential projects. This is the 14th year KDOT has used HSIP funds to improve pavement markings.

### **Program: Other-Lighting**

***Date of Program Methodology: 7/1/2006***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Funding set-aside

***What data types were used in the program methodology?***

#### **Crashes**

- Other-Night-time unlit crashes

#### **Exposure**

- Volume

#### **Roadway**

- Other-Road type: Interchanges

***What project identification methodology was used for this program?***

- Other-Locations are identified by District Engineers and public

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

No

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

***How are projects under this program advanced for implementation?***

- Other-Lighting Unit

***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**

Available funding: 1

Because lighting is beneficial to the safety and operation of the highway system, this set-aside program was established in FY 2000. Projects are selected by the Bureau of Transportation Safety & Technology (BTS&T) based on the roadway's volume and the potential for night-time crash history. This program is limited to projects which are not included under any other KDOT program. Projects are scheduled until the available lighting funds are exhausted. This is the 14th year KDOT has used HSIP funds to improve lighting.

**Program: Other-General Safety Improvements**

***Date of Program Methodology:2/10/2012***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Funding set-aside

***What data types were used in the program methodology?***

<b>Crashes</b>	<b>Exposure</b>	<b>Roadway</b>
<ul style="list-style-type: none"><li>• Fatal and serious injury crashes only</li></ul>	<ul style="list-style-type: none"><li>• Volume</li><li>• Population</li><li>• Lane miles</li></ul>	<ul style="list-style-type: none"><li>• Median width</li><li>• Horizontal curvature</li><li>• Functional classification</li><li>• Roadside features</li></ul>

***What project identification methodology was used for this program?***

- Crash frequency
- Crash rate

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

No

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

***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).***

**Rank of Priority Consideration**

Available funding:2

Cost Effectiveness:1

**What percentage of HSIP funds address systemic improvements?**

56

**HSIP funds are used to address which of the following systemic improvements?**

- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing

Percent was calculated by summing amounts apportioned for Lighting, Pavement Marking, and 80% of HRRR, and then dividing by the total apportioned.

**What process is used to identify potential countermeasures?**

- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Other-Highway Safety Manual and CMF Clearinghouse
- Other-Crash data analysis to identify systematic countermeasures

**Does the State HSIP consider connected vehicles and ITS technologies?**

Yes

**Describe how the State HSIP considers connected vehicles and ITS technologies.**

Dollars have been obligated under the GSIP to support truck parking projects in Kansas.

The State of Kansas has formed an autonomous vehicle (AV) task force to consider the impacts of this emerging technology on everything from state statutes to infrastructure safety expenditures.

**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.**

Our intersections sub-program is working to integrate Part B (Roadway Safety Management Process) and Part D (Crash Modification Factors) into the program methodology.

## Project Implementation

### Funds Programmed

#### Reporting period for HSIP funding.

State Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$19,262,775	\$19,871,752	103.16%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	0%
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))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$0	\$0	0%
State and Local Funds	\$7,556,805	\$6,836,484	90.47%
<b>Totals</b>	<b>\$26,819,580</b>	<b>\$26,708,236</b>	<b>99.58%</b>

HSIP values were provided by our Management Systems Analyst; State and Local values were provided by our WinCPMS Administrator. Both persons in our Bureau of Program and Project Management. State and Local values are based on original estimates and obligations that occurred between 07/01/2018 and 06/30/2019.

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

38%

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

\$6,972,038

Programmed is the total apportionment to those programs that include non-state owned roads in the methodology and may include dollars that get obligated to projects on state-owned roads: \$0 (rail) + \$3,262,775 (intersections) + \$4,000,000 (HRRR) / \$19,262,775 (total) = 38%

Obligated is the total obligated to those programs that include non-state owned roads in the methodology excluding projects in the intersections program on state-owned roads. \$1,897,354 (rail) + \$1,200,000 (intersection projects on locally-owned roads listed in the project listing) + \$3,874,684 (HRRR) = \$6,972,038.

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

0%

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

\$1,850,000

No funding is programmed directly to non-infrastructure safety projects. However, each sub-program may have non-infrastructure projects and those obligated in SFY 2019 are included in the total: \$750,000 to KA-5259-01 for mobile analysis of pavement markings, \$200,000 for C-4855-19 for TEAP, and \$900,000 to C-4790-02 for LRSP.

**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%

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

Nothing to report at this time.

**General Listing of Projects**

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

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
C-4790-02	Non-infrastructure	Transportation safety planning	4440	Miles	\$900000	\$1008786	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Local Road Safety Plan	
C-4869-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	71	Miles	\$221487	\$269411	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4855-19	Non-infrastructure	Transportation safety planning			\$200000	\$220000	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0		Other Local Agency	As requested	Traffic Engineering Assistance	
C-4888-01	Roadway signs and traffic control	Roadway signs and traffic control - other	88	Miles	\$229828	\$227851	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing and passing zones	
C-4889-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	15	Miles	\$83655	\$83153	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4890-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	102	Miles	\$349000	\$320064	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4892-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	154	Miles	\$137768	\$136705	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4893-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	23	Miles	\$101810	\$101141	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4894-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	112	Miles	\$202470	\$165341	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4895-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	14	Miles	\$131692	\$130674	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4897-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	131	Miles	\$299068	\$295610	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4899-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	102	Miles	\$126192	\$124975	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
C-4900-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	115	Miles	\$264548	\$261655	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4901-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	64	Miles	\$116230	\$115546	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4902-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	87	Miles	\$107481	\$146119	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4903-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	51	Miles	\$127085	\$104011	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4904-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	86	Miles	\$194537	\$193302	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4905-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	46	Miles	\$111485	\$91144	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4929-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	224	Miles	\$49838	\$302644	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4930-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	165	Miles	\$52310	\$475471	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4931-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	61	Miles	\$41105	\$269986	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4932-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	42	Miles	\$43477	\$209296	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4933-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	120	Miles	\$49293	\$296035	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4934-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	100	Miles	\$44000	\$425938	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
C-4937-01	Roadway signs and traffic control	Roadway signs and traffic control - other	0.3	Miles	\$6868	\$71613	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Spot	Upgrade signing and pavement markings	

2019 Kansas Highway Safety Improvement Program

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
C-4964-01	Roadway signs and traffic control	Roadway signs (including post) - new or updated	50	Miles	\$31103	\$175686	HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Upgrade signing	
U-0225-01	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.4	Miles	\$100000	\$100041.45	HSIP (23 U.S.C. 148)	Urban	Major Collector	13,140	30	Other Local Agency	Spot	Intersections	
U-2317-01	Intersection geometry	Auxiliary lanes - add left-turn lane	3	Intersections	\$700000	\$1446116.06	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	3,560	40	Other Local Agency	Spot	Intersections	
U-2316-01	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.1	Miles	\$400000	\$488511.01	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	19,475	40	Other Local Agency	Spot	Intersections	
KA-4514-01	Intersection geometry	Intersection geometry - other	1	Intersections	\$6079741.99	\$626132.03	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,620	65	State Highway Agency	Spot	Intersections	Roundabout
KA-5142-01	Roadway delineation	Improve retroreflectivity	14.094	Miles	\$162607.3	\$162607.3	HSIP (23 U.S.C. 148)			3,390	65	State Highway Agency		Roadway Departure	Pavement Markings
KA-5143-01	Roadway delineation	Improve retroreflectivity	26.533	Miles	\$708622.49	\$708622.49	HSIP (23 U.S.C. 148)			29,300	75	State Highway Agency		Roadway Departure	Pavement Markings
KA-5144-01	Roadway delineation	Improve retroreflectivity	5.48	Miles	\$275989.94	\$275989.94	HSIP (23 U.S.C. 148)			8,660	60	State Highway Agency		Roadway Departure	Pavement Markings
KA-5259-01	Non-infrastructure	Data/traffic records			\$750000	\$750000	HSIP (23 U.S.C. 148)			0		State Highway Agency		Data	Pavement Markings
KA-5282-01	Roadway delineation	Improve retroreflectivity	9.5	Miles	\$709500	\$709500	HSIP (23 U.S.C. 148)			21,000	75	State Highway Agency		Roadway Departure	Pavement Markings
KA-0725-02	Lighting	Intersection lighting	0.4	Miles	\$155908.18		HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	12,000	75	State Highway Agency	Spot		

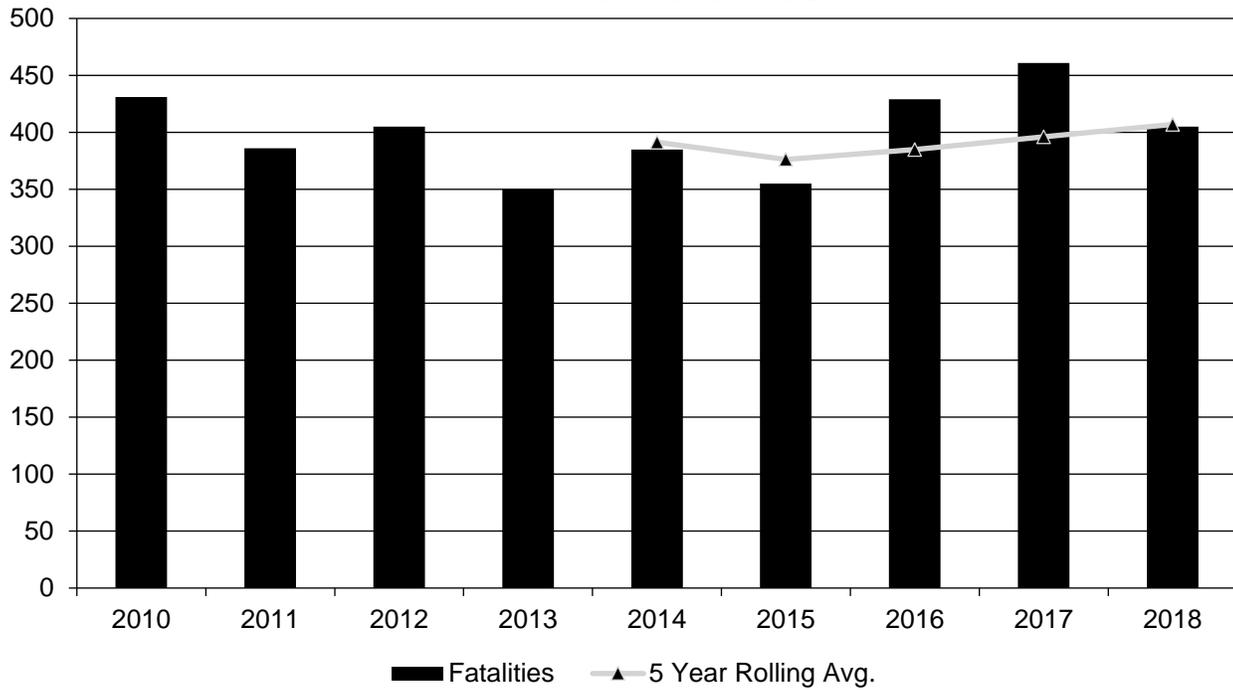
## Safety Performance

### *General Highway Safety Trends*

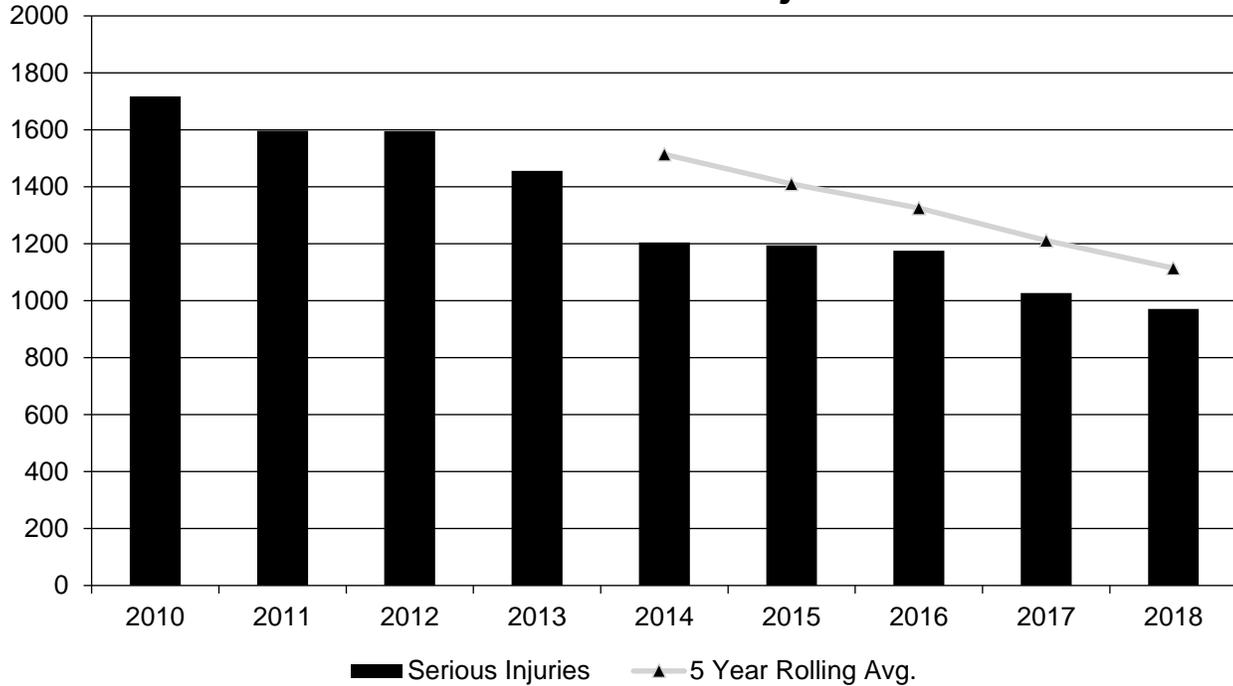
Present data showing the general highway safety trends in the State for the past five years.

<b>PERFORMANCE MEASURES</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Fatalities	431	386	405	350	385	355	429	461	405
Serious Injuries	1,717	1,597	1,596	1,456	1,204	1,195	1,175	1,027	971
Fatality rate (per HMVMT)	1.440	1.290	1.325	1.159	1.250	1.130	1.340	1.430	1.250
Serious injury rate (per HMVMT)	5.742	5.320	5.220	4.820	3.921	3.808	3.670	3.188	2.999
Number non-motorized fatalities	16	16	33	31	30	27	46	39	33
Number of non-motorized serious injuries	95	97	106	108	84	101	102	86	85

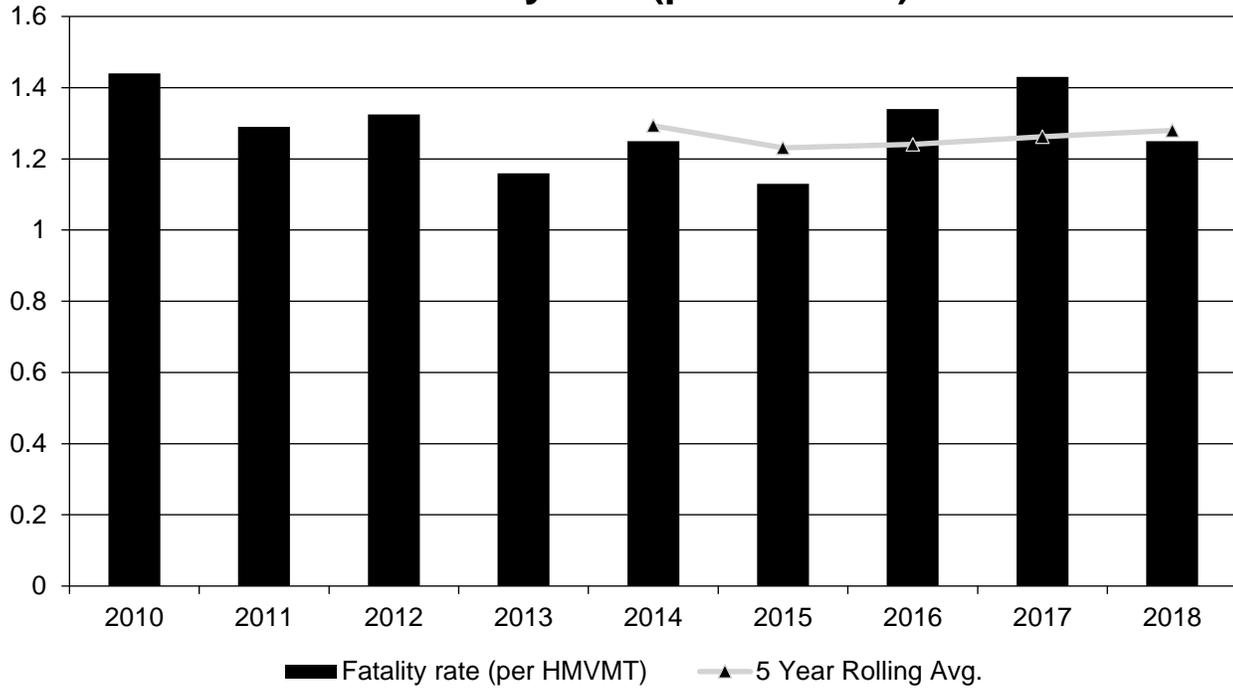
### Annual Fatalities



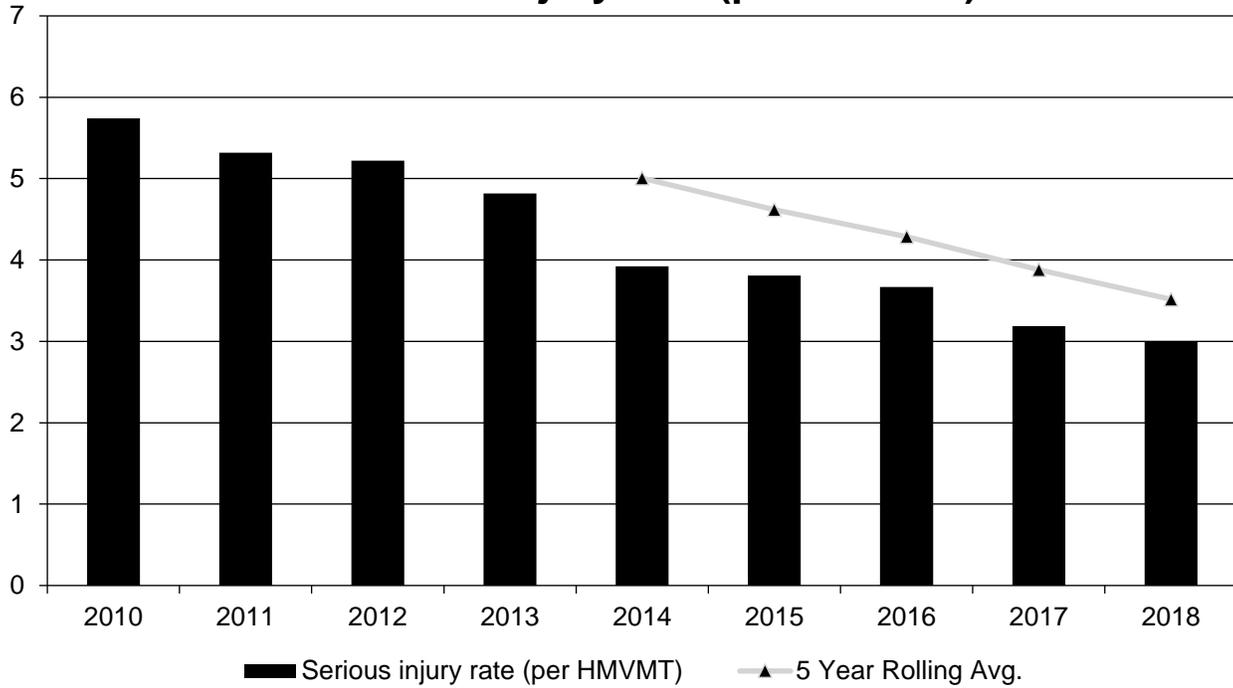
### Annual Serious Injuries



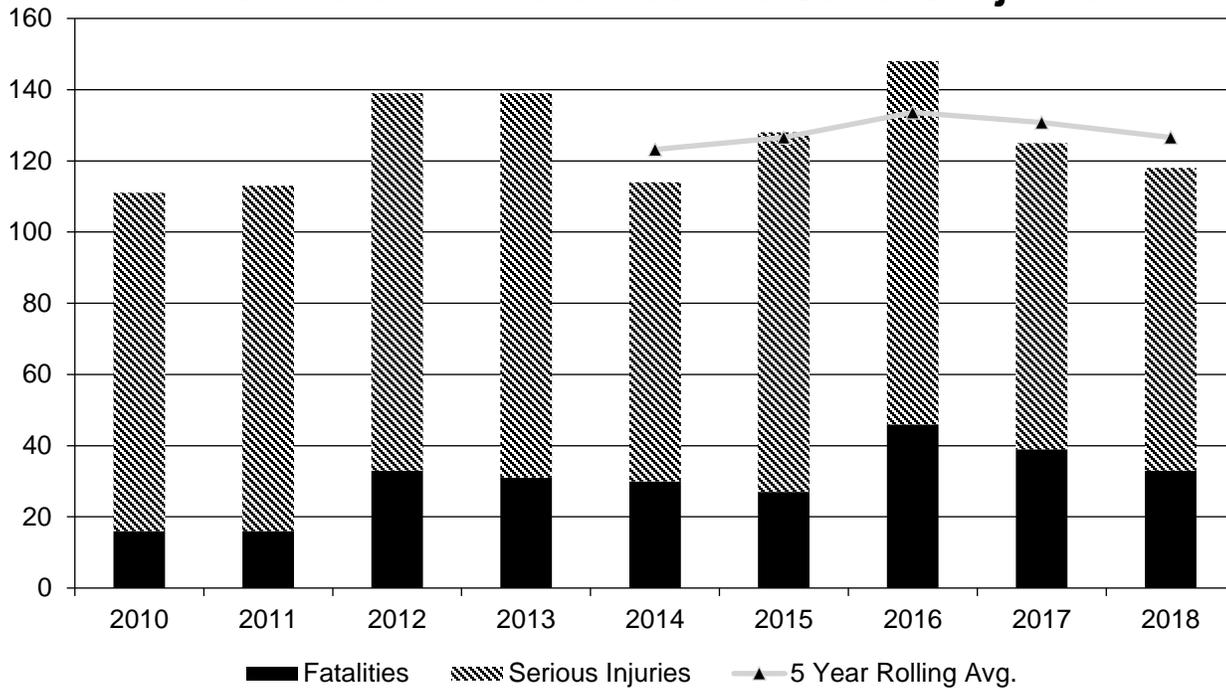
### Fatality rate (per HMVMT)



### Serious injury rate (per HMVMT)



### Non Motorized Fatalities and Serious Injuries



The above data is consistent with the data used to develop our safety performance targets for 2020.

**Describe fatality data source.**

State Motor Vehicle Crash Database

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

**Year 2016**

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 (RPA) - Interstate	24	78	0.67	2.12
Rural Principal Arterial (RPA) - Other Freeways and Expressways	10	25	0.8	1.89
Rural Principal Arterial (RPA) - Other	67	137	2.1	4.3
Rural Minor Arterial	48	111	2.07	4.81
Rural Minor Collector	6	20	1.94	6.05
Rural Major Collector	48	141	1.84	5.36

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<b>Functional Classification</b>	<b>Number of Fatalities (5-yr avg)</b>	<b>Number of Serious Injuries (5-yr avg)</b>	<b>Fatality Rate (per HMVMT) (5-yr avg)</b>	<b>Serious Injury Rate (per HMVMT) (5-yr avg)</b>
Rural Local Road or Street	54	144	3.07	8.2
Urban Principal Arterial (UPA) - Interstate	22	115	0.54	2.76
Urban Principal Arterial (UPA) - Other Freeways and Expressways	14	51	0.7	2.62
Urban Principal Arterial (UPA) - Other	29	187	2.19	14.1
Urban Minor Arterial	29	138	0.64	3.06
Urban Minor Collector	0	0	0	0.18
Urban Major Collector	10	43	0.44	1.95
Urban Local Road or Street	21	114	0.84	4.66

2019 Kansas Highway Safety Improvement Program

**Year 2015**

<b>Roadways</b>	<b>Number of Fatalities (5-yr avg)</b>	<b>Number of Serious Injuries (5-yr avg)</b>	<b>Fatality Rate (per HMVMT) (5-yr avg)</b>	<b>Serious Injury Rate (per HMVMT) (5-yr avg)</b>
State Highway Agency	202	647	1.12	3.59
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency	175	750	1.31	5.61
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

We are continuing to resolve issues associated with crash locating and do not have confidence in our 2017-2018 data enough to confidently report these numbers. We anticipate this issue to be resolved by next reporting cycle and will update and add all five-year averages going back to 2014.

***Safety Performance Targets***

**Safety Performance Targets**

**Calendar Year 2020 Targets \***

***Number of Fatalities:411.0***

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

The 2020 five-year moving average projection based upon the trend line indicates 411 fatalities. A flat projection would derive our goal of 411 fatalities in 2020. Based upon recent history, the trend line of the target, the flat projection is realistic and attainable.

***Number of Serious Injuries:907.0***

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

The 2020 five-year moving average projection based upon the trend line indicates 916 serious injuries. A one percent reduction in this projection would derive our goal of 907 serious injuries in 2020. Based upon recent history, the trend line of the target, the one percent reduction goal is realistic and attainable.

***Fatality Rate:1.250***

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

The 2020 five-year moving average projection based upon the trend line indicates a fatality rate of 1.26. A one percent reduction in this projection would derive our goal of 1.25 fatality rate in 2020. Based upon recent history, the trend line of the target, the one percent reduction goal is realistic and attainable.

***Serious Injury Rate:2.750***

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

The 2020 five-year moving average projection based upon the trend line indicates 2.77 serious injury rate per 100 million VMT. A one percent reduction in this projection would lead to our goal of 2.75 serious injury rate per 100 million VMT in 2020. Based upon recent history, the trend line of the target, the one percent reduction goal is realistic and attainable.

***Total Number of Non-Motorized Fatalities and Serious Injuries:131.0***

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

The 2020 five year moving average projection based upon the trend line indicates 133fatalities and serious injuries. A one percent reduction in this projection would deriveour goal of 131 fatalities and serious injuries in 2020. Based upon recent history, thetrend line of the target, the one percent reduction goal is realistic and attainable.

The state of Kansas is fortunate in that both the SHSP and HSP administrators are in the KDOT Bureau of Transportation Safety and Technology. Calculations of the four common performance targets used the five-year moving average data to plan programs, establish goals and track progress. Both plans rely heavily on the same data sources to establish strategies and goals. These data sources include, but are not limited to: FARS, the statewide crash database, and observational surveys. The four identified performance measures – fatalities, fatality rate, serious injuries and serious injury rate – have the same definition and goals.

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

On February 22, 2017 we hosted a Kansas Safety Target Setting Coordination Training Workshop presented by the FHWA. Most MPOs in the state were represented at this training. On April 17, 2017 we hosted a conference call with all the MPOs to present state targets and discuss next steps. We have been and will continue to provide each MPO with the data necessary to calculate their 2019 targets. At present, we are not certain whether individual MPOs will adopt the state targets or their own. Our SHSO and SHSP/HSIP coordinator are housed in the same section within the Kansas DOT, making coordination simple. Our state

## 2019 Kansas Highway Safety Improvement Program

targets were discussed and established at a meeting dated May 23, 2019. On May 24, 2018, our methodology was presented to the Executive Safety Council, a multi-agency committee that oversees development and implementation of our SHSP.

### Does the State want to report additional optional targets?

No

**Describe progress toward meeting the State's 2019 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.**

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	364.0	407.0
Number of Serious Injuries	1190.0	1114.4
Fatality Rate	1.160	1.280
Serious Injury Rate	3.774	3.517
Non-Motorized Fatalities and Serious Injuries	138.0	126.6

We met three of the five targets for CY 2018: serious-injuries, serious-injury rate, and non-motorized. We did NOT meet the target for both fatalities and fatality rate. We look forward to the FHWA's determination if we have made "significant process" toward these targets. Our fatality numbers have been very inconsistent the past few years, making target-setting that much more difficult. We are encouraged by our significant decline in serious injuries. We are not certain what to attribute this to. Safer vehicles? Safer roads? We adopted the new serious-injury definition on January 1, 2019. We are anxious to see how this change impacts our numbers and also how the FHWA plans to address this issue in relation to meeting targets. Finally, we are close to rolling out our revised SHSP and may be making significant changes to our HSIP process.

### *Applicability of Special Rules*

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

No

The HRRR special rule has never applied to Kansas. However, we continue to spend HSIP funding on locally-owned roads thru the HRRR sub-program as described in this report. Perhaps the two are related!

#### Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Fatalities	68	70	63	50	78	74	64
Number of Older Driver and Pedestrian Serious Injuries	107	117	84	89	102	102	91

## 2019 Kansas Highway Safety Improvement Program

The numbers above reflect our interpretation of the older driver rule. Specifically, these are only older drivers and pedestrians who have died or been seriously injured. These numbers do NOT include older passengers, or, for example, fatal crashes where an older driver was involved but did not have serious injuries.

Please note: serious injuries increased from 99 to 102 in 2016 and from 96 to 102 in 2017.

## Evaluation

### *Program Effectiveness*

#### How does the State measure effectiveness of the HSIP?

- Other-Obligation of HSIP dollars.

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

In FFY 2017 we were apportioned \$18,375,593. In SFY 2017 we obligated \$19,233,724, providing some indication we are spending our HSIP funding. However, in FFY 2018 we were apportioned \$18,827,840. In SFY 2018 we obligated only \$14,599,213.74. While scheduling and timing often dictate the values of these calendar totals, we successfully worked towards a higher obligation rate in FY 2019: We were apportioned \$19,262,775 and obligated \$19,871,752.

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

- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs

### *Effectiveness of Groupings or Similar Types of Improvements*

#### Present and describe trends in SHSP emphasis area performance measures.

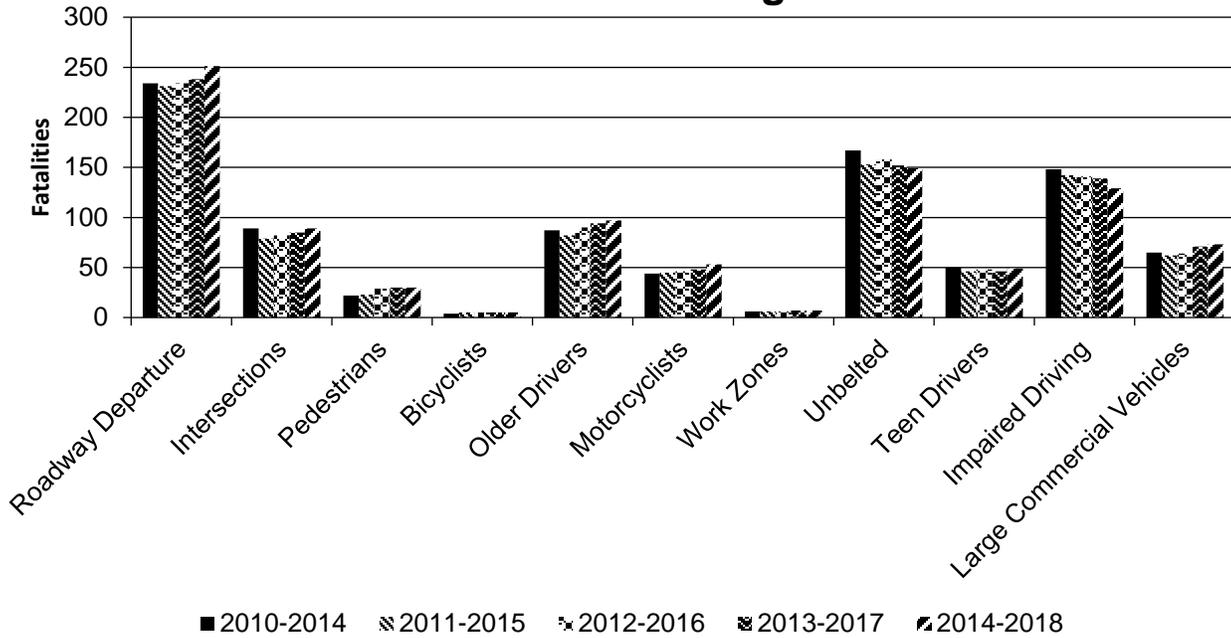
##### Year 2018

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)
Roadway Departure		251	530	0.79	1.67
Intersections		89	342	0.28	1.08
Pedestrians		30	68	0.1	0.22
Bicyclists		5	29	0.02	0.09
Older Drivers		97	204	0.31	0.64
Motorcyclists		53	170	0.17	0.53
Work Zones		7	22	0.02	0.07
Unbelted		149	235	0.47	0.74
Teen Drivers		49	189	0.15	0.6

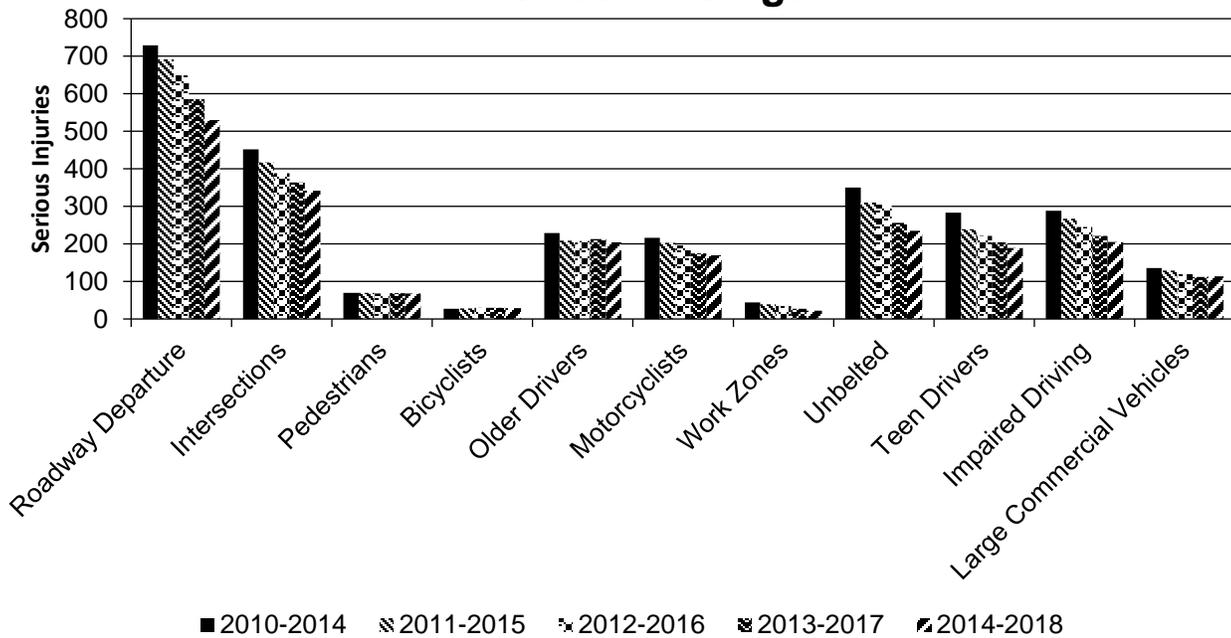
2019 Kansas Highway Safety Improvement Program

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)
Impaired Driving		129	205	0.41	0.65
Large Commercial Vehicles		73	114	0.23	0.36

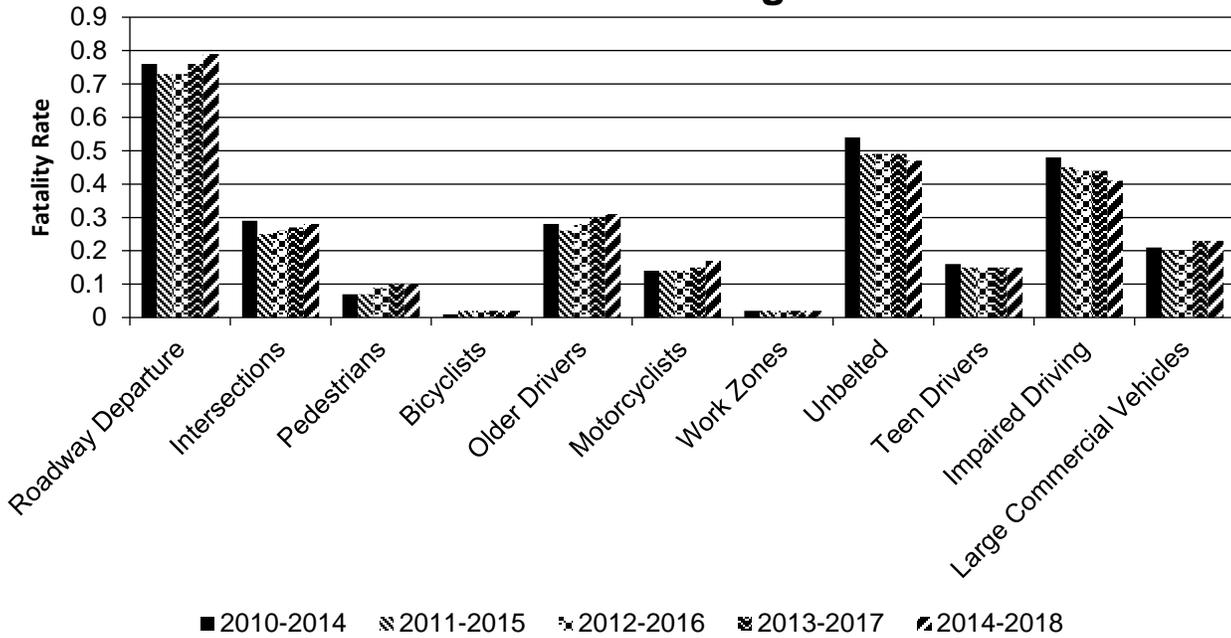
### Number of Fatalities 5 Year Average



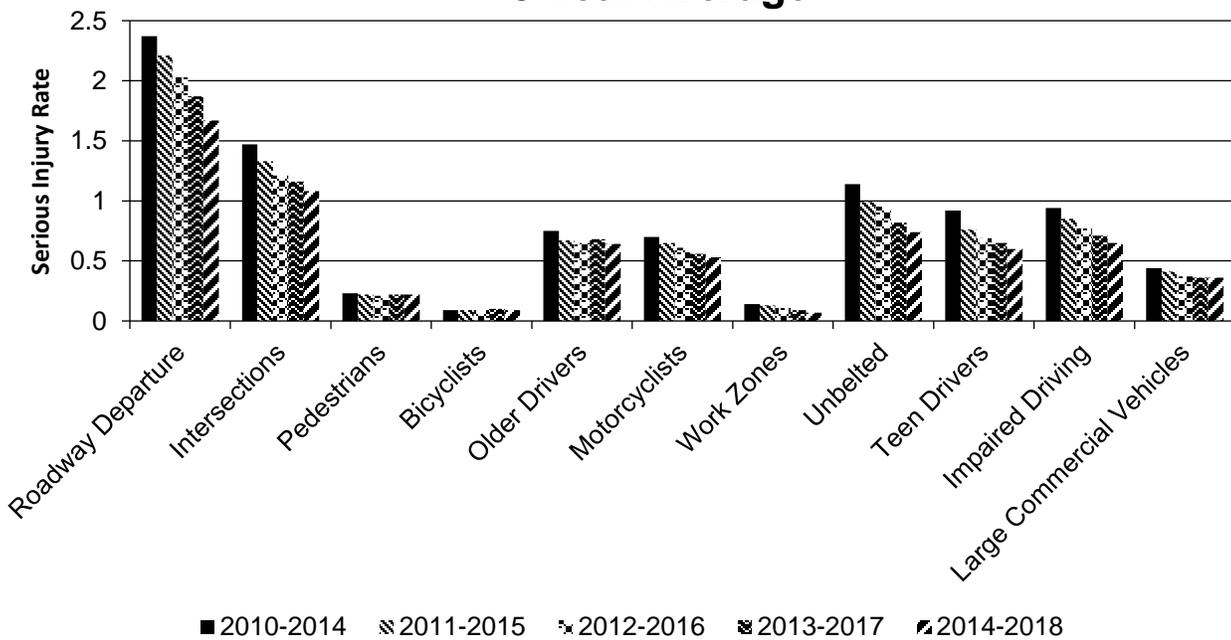
### Number of Serious Injuries 5 Year Average



### Fatality Rate (per HMVMT) 5 Year Average



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



**Project Effectiveness**

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
Nothing to report														

**Describe any other aspects of HSIP effectiveness on which the State would like to elaborate.**

It remains our intent to develop performance measures for each of these HSIP sub-programs. This will be in concert with a current HSIP Assessment and completion of a program manual for each eligible sub-program, and be driven by our SHSP which includes reallocation of HSIP funding as a key strategy for the emphasis areas intersections and roadway departure. As an example, three of these programs (lighting, pavement marking, and signing) can be measured by wet-weather and/or nighttime crashes.

## Compliance Assessment

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

07/26/2017

**What are the years being covered by the current SHSP?**

From: 2015 To: 2019

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

2019

The 2019 Kansas SHSP was scheduled to be published by July 1, 2019. However, we were asked to delay publication until peer exchanges with a few model states to determine if changes should be made to our plan. The 2019 Kansas SHSP is intended to be a five-year, strategic plan, that focuses on data-driven emphasis areas with three to seven key strategies each.

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

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	99	99					99	99	99	99
	Route Number (8) [8]	99	99								
	Route/Street Name (9) [9]	99	99								
	Federal Aid/Route Type (21) [21]	99	99								
	Rural/Urban Designation (20) [20]	99	99					99	99		
	Surface Type (23) [24]	99	99					99	99		
	Begin Point Segment Descriptor (10) [10]	99	99					99	99	99	99
	End Point Segment Descriptor (11) [11]	99	99					99	99	99	99
	Segment Length (13) [13]	99	99								
Direction of Inventory (18) [18]	99	99									

2019 Kansas Highway Safety Improvement Program

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Functional Class (19) [19]	99	99					99	99	99	99
	Median Type (54) [55]	99	99								
	Access Control (22) [23]	99	99								
	One/Two Way Operations (91) [93]	99	99								
	Number of Through Lanes (31) [32]	99	99					99	99		
	Average Annual Daily Traffic (79) [81]	99	99					99	99		
	AA DT Year (80) [82]	99	99								
	Type of Governmental Ownership (4) [4]	99	99					99	99	99	99
<b>INTERSECTION</b>	Unique Junction Identifier (120) [110]			75							
	Location Identifier for Road 1 Crossing Point (122) [112]			75							
	Location Identifier for Road 2 Crossing Point (123) [113]			75							
	Intersection/Junction Geometry (126) [116]			75							
	Intersection/Junction Traffic Control (131) [131]			75							
	AA DT for Each Intersecting Road (79) [81]			75							
	AA DT Year (80) [82]			75							
	Unique Approach Identifier (139) [129]			75							
<b>INTERCHANGE/RAMP</b>	Unique Interchange Identifier (178) [168]					99					

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ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]										
	Ramp Length (187) [177]					99					
	Roadway Type at Beginning of Ramp Terminal (195) [185]					99					
	Roadway Type at End Ramp Terminal (199) [189]					99					
	Interchange Type (182) [172]					50					
	Ramp AADT (191) [181]					99					
	Year of Ramp AADT (192) [182]					99					
	Functional Class (19) [19]					99					
	Type of Governmental Ownership (4) [4]					99					
<b>Totals (Average Percent Complete):</b>		<b>99.00</b>	<b>99.00</b>	<b>75.00</b>	<b>0.00</b>	<b>76.55</b>	<b>0.00</b>	<b>99.00</b>	<b>99.00</b>	<b>99.00</b>	<b>99.00</b>

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]  
 These numbers have not been updated for this year's report. It can be assumed actual values are at or above those recorded above.

**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.**

Complete access to MIRE FDE on all public roads in Kansas should be accomplished by two projects: K-Hub and work associated with Next Generation 911.

K-Hub:

K-Hub is a new Linear Referencing and Transportation Database System, which will replace our existing CANSYS II database system. K-Hub is an opportunity for KDOT to develop a combined statewide geospatially enabled roadway and transportation data management system that allows KDOT to efficiently meet current and future business requirements. Successful deployment of K-Hub will position KDOT to maintain data on all 140,000 miles of Kansas public roads with the current level of staffing. Bottom line, this is a colossal IT project that will influence almost every KDOT system.

Primary objectives of the K-Hub project include:

- Deploy an innovative solution that balances upfront project cost, system lifecycle cost and total cost of ownership to achieve the best value and level of service for KDOT.

## 2019 Kansas Highway Safety Improvement Program

- Utilize commercial-off-the-shelf (COTS) software components licensed to KDOT and additional components, as needed, to meet K-Hub System Requirements.
- Innovative approaches to accomplish system functions and data exchanges to support current and future KDOT business processes while minimizing the need for custom components.
- Project planning and execution to ensure successful and timely transition to K-Hub from the existing system.
- Integration of hardware and software components to provide system response performance that consistently meets system benchmarks.
- Flexibility that allows for modification and enhancement by KDOT, the bidder team or third parties.
- User friendly and easily accessible design for enterprise-wide usage.
- Configurable system parameters.
- Position KDOT to maximize its ability to support the system post implementation.

### Next Generation 911:

Next Generation 9-1-1 (abbreviated NG9-1-1) refers to an initiative aimed at updating the 9-1-1 service infrastructure in the United States and Canada to improve public emergency communications services in a growingly wireless mobile society.

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

We are currently working on our assessment. It will be completed this fall.

## **Optional Attachments**

Program Structure:

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.