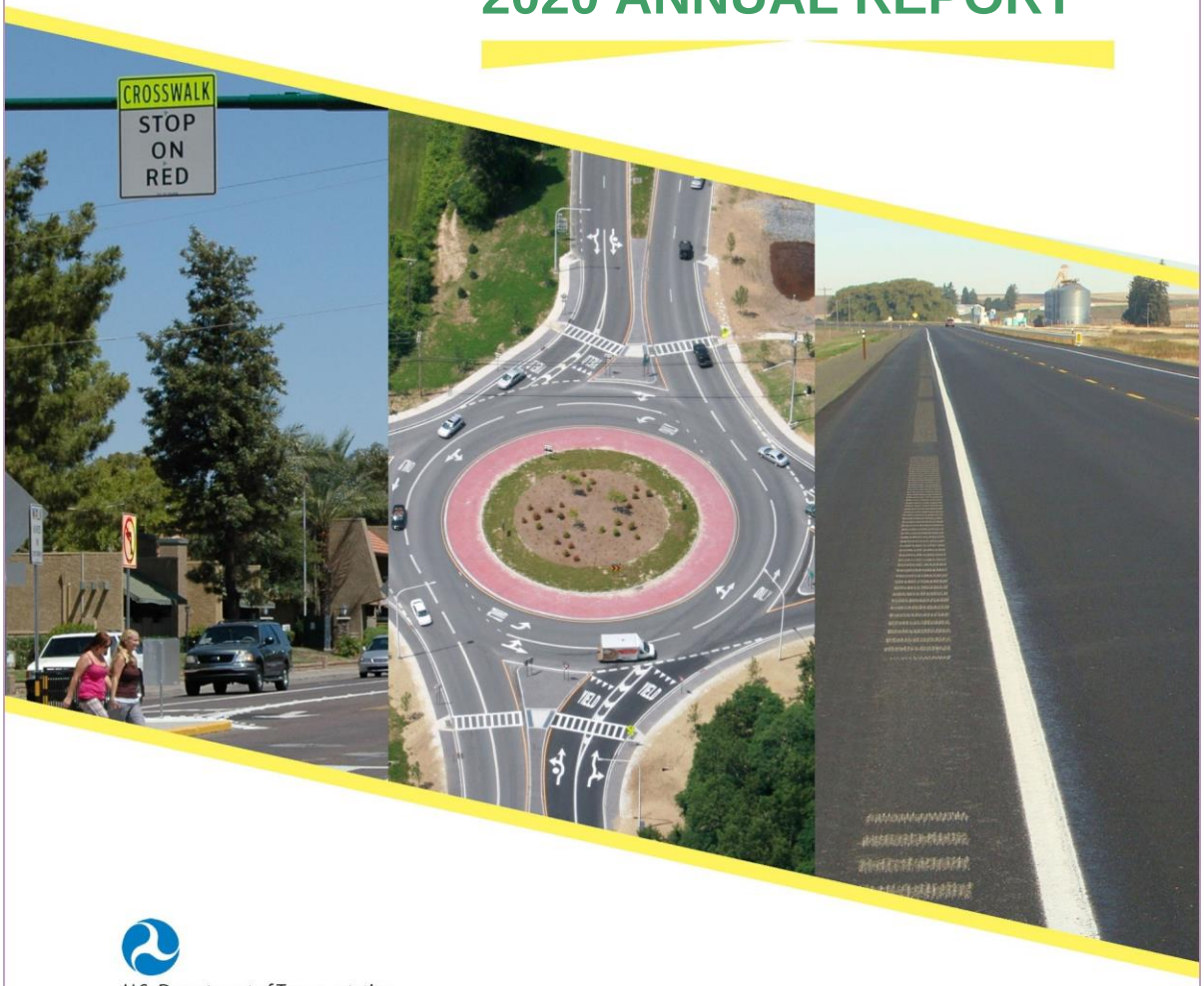
KENTUCKY

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2020 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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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. 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

Kentucky’s HSIP funds are administered by staff within the Division of Traffic Operations in KYTC’s Central Office. Each Highway District has an HSIP Coordinator that acts as a liaison between, and works closely with, Central Office HSIP staff and District staff to organize project team meetings, deliver required project documentation, and conduct a field investigation and/or Road Safety Audit (RSA) on potential improvement locations. The RSA teams are multi-disciplinary and represent the following highway functions: planning, highway design, traffic operations, maintenance, and construction. The Cabinet also encourages members from local Area Development Districts (ADDs) and local law enforcement agencies to participate in the process.

The HSIP supports Kentucky's Strategic Highway Safety Plan (SHSP) and its vision of Toward Zero Deaths. The mission of Kentucky’s SHSP is, "to enhance the lives of those who use Kentucky's transportation system by preventing crashes that result in deaths and serious injuries." In conformance with program guidelines, the HSIP seeks to adhere to the SHSP through a data-driven approach for funding safety improvements.

The methodology used by the Transportation Cabinet to prioritize and select projects during the time period of this report has been threefold: network screening using SPFs with EB adjustment, systemic analysis, and cost effectiveness analysis (e.g. benefit-cost).

The SPFs used for network screening by Kentucky’s HSIP are state-specific SPFs, updated annually, and developed using Kentucky’s roadway data, traffic volume data, and most recent 5 years of crash data. Further, for each facility type analyzed, multiple state-specific SPFs are developed; one SPF for each of the following crash severities: KA, B, C, and O. The result of this tailored network screening approach produces severity-specific Excess Expected Crash (EEC) values for KA, B, C, and O crashes, for each segment and/or each intersection in the analysis. The severity-specific EEC values for each segment and intersection are multiplied by average crash costs for KA, B, C, and O crashes and then summed to determine a value Kentucky calls the Cost of Excess Expected Crashes. This value represents the comprehensive economic impact of the excessive crashes occurring at each segment or intersection.

The systemic analysis method could be characterized as the reverse of the traditional approach in that low-cost, effective countermeasures are first identified and then the crash database is queried to prioritize highway sections that have targeted crashes at or above a crash threshold that would ensure cost-effective deployment of these countermeasures.

The cost effectiveness method is typically used to justify projects that may not have been identified via network screening or systemic analysis, but are locations that have been identified by District staff or local representatives as having safety improvement opportunities. If the projects are shown to be cost effective, then those projects are considered along with the projects identified via network screening and systemic analysis. Further, cost effectiveness analyses are used during project development to aid in decision-making when multiple improvements appear to be viable options for the identified safety challenges.

It is also noteworthy that Kentucky occasionally combines elements of the systemic approach into Kentucky’s network screening process. For example, through systemic analysis it has been found that roadway departure fatalities in Kentucky are most likely to occur on facilities classified as Rural, 2-Lane Undivided, with a speed limit of 50 mph or greater. As such, Kentucky’s HSIP has developed state specific SPFs that only incorporate and analyze roadway departure crashes occurring on facilities classified as Rural, 2-Lane Undivided, with a speed limit of 50 mph or greater. This allows Kentucky to focus on the portion of the network most at risk, but also prioritize sites using state of the art SPFs with EB adjustment.

Effectiveness evaluations were performed and benefit/costs were calculated, with results presented for the following 3 types of systemic improvements:

CABLE MEDIAN BARRIERS

Wilcoxon Signed-Rank Test for “before and after shift in proportions of cross-median or impacted object in median crashes” – significant reduction at 99% confidence level.

Empirical Bayes analysis of “before and after cross-median crashes” was not performed on cable median barrier crashes because the necessary safety performance function was not available.

Benefit/Cost analysis results using observed crashes; 5.60:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

HIGH-FRICTION SURFACE TREATMENTS

Wilcoxon Signed-Rank Test for “before and after shift in proportions of wet-weather lane departure crashes” – no significant change at 90% confidence level.

Empirical Bayes analysis of “before and after wet-weather lane departure crashes” results indicated the change in crashes (effect of the treatment) was not significant at the 90% confidence level.

Benefit/Cost analysis results using expected crashes from empirical Bayes analysis; 31.51:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

EDGELINE ONLY STRIPING

Wilcoxon Signed-Rank Test for “before and after shift in proportions of road departure crashes” – no statistically significant change.

Empirical Bayes analysis of “before and after cross-median crashes” results indicated the change in crashes (effect of the treatment) was significant at the 95% confidence level.

Benefit/Cost analysis results using observed crashes; 5.05:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

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.

Kentucky's HSIP funds are administered by the Division of Traffic Operations in KYTC's Central Office. Projects are prioritized and selected through network screening utilizing crash analysis performed by the Kentucky Transportation Center (KTC) at the University of Kentucky and/or risk assessment utilizing Road Safety Audits (RSAs) performed by District personnel. Each of the twelve Highway District has an HSIP Coordinator that works closely with Central Office and District Personnel. The HSIP Coordinator acts as a liaison between, and works closely with, Central Office HSIP staff and District staff to organize project team meetings, deliver required project documentation, and conduct a Road Safety Audit (RSA) on potential improvement locations. Project Development is achieved either in conjunction with in-house staff at the District level or by engineering consultants who have been selected for their knowledge, skills, and abilities in developing HSIP projects. HSIP projects are let through the Division of Construction Procurement; implementation and inspection of projects occurs through the District Construction staff. Evaluation is performed through a formal partnership with KTC.

Where is HSIP staff located within the State DOT?

Operations

Traffic Operations

How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data

The Governor's Office of Highway Safety is the lead agency for the development of the SHSP. Efforts have been made to use data-driven analysis to identify appropriate emphasis areas to affect highway safety. The Roadway Departure emphasis area and strategies, as well as the Intersections strategies, are the primary focus for HSIP infrastructure-related projects.

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

The Commonwealth of Kentucky does not have tribal roads. The Safety Circuit Rider program continues to function as the primary means of identifying and implementing projects on local roads through the HSIP. The focus of this program is to provide technical assistance to improve safety on local roads and streets. While the free technical advice offered by the Safety Circuit Rider is available to every community across the

Commonwealth, the program selects six counties with high crash rates on an annual cycle for focused training covering low-cost safety improvements. The 2020 selected counties are Adair, Bullitt, Campbell, Carter, Marshall, and Simpson. Typical improvements in these counties were clearing and correcting water runoff and drainage, repairing shoulder drop off and width, removing fixed objects such as trees and stumps, and clearing vegetation around signs and intersections. Additionally, each county is provided with funds for signing. Aside from these targeted counties, the Safety Circuit Rider Program provides a one day training course designed to provide communities with practical and effective ways to mainstream safety into their day-to-day activities and project development process. This course is offered for free at selected areas throughout Kentucky.

Please note that the Road Departure and High Friction Surface Treatment screenings include Minor Collectors and above for local roads. Furthermore, the Intersection database used for screening for the Intersection initiative includes all intersections in the state, including Local Road/Local Road intersections. If any local road screens high enough to be considered for a project the HSIP and LTAP work with local governments to implement projects.

In late 2018, the HSIP began a partnership with the Louisville Metro Government to create a Road Safety Plan. This effort has evolved into a Vision Zero Plan and is expected to be complete by the end of 2020.

Lastly, Kentucky is part of FHWA's Local Road Safety Plan (LRSP) Pilot 2 initiative. Three counties are currently in the pilot: Boone, Boyle, and Crittenden Counties. This effort is expected to be complete by the end of 2020. The pilot is being used to determine the framework for KYTC to move forward with development of LRSPs for additional counties in the upcoming years.

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

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

Describe coordination with internal partners.

Kentucky's HSIP funds are administered by the Division of Traffic Operations in KYTC's Central Office. The planning and project development processes involve collaboration with internal partners in the Divisions of Planning, Design, Traffic Operations, and Maintenance, as warranted by subject matter. The implementation process is performed in collaboration with the Divisions of Construction Procurement and Construction. Open communication is maintained with all internal partners to develop collaborative solutions on all HSIP endeavors. As an example of this open communication, HSIP staff coordinates closely with the Division of Maintenance to look for opportunities to bundle HSIP funded improvement projects with Maintenance funded resurfacing projects.

HSIP projects are selected and prioritized based on their correlation with Kentucky's SHSP. Kentucky published a new SHSP in early 2020. There are presently 6 emphasis areas within the SHSP and efforts are made to implement projects consistent with the goals and objectives of the SHSP.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-Kentucky Transportation Center

Describe coordination with external partners.

KTC is housed within the University of Kentucky and assists in the performance of data analytics for KYTC HSIP.

FHWA-KY Division Office representatives collaborates with the administration of Kentucky's HSIP.

Metropolitan Planning Organizations (MPOs) provide feedback during project identification and modify their Transportation Improvement Plans (TIPs) when applicable.

The University of Kentucky's Local Technical Assistance Program (LTAP) assists in administering the Safety Circuit Rider Program, as well as performing the safety analysis for prioritizing the six targeted counties subject to the Safety Circuit Rider Program and performing the subsequent RSAs. In addition, KTC & LTAP both provide training resources and programs for the Cabinet through the HSIP. Lastly, the LRSP initiative being led by LTAP is expected to be complete by the end of 2020and will produce safety plans for the three pilot counties of Boone, Boyle, and Crittenden. An important goal of the pilot is to develop the framework so additional LRSPs can be developed for many more counties in the upcoming years.

Program Methodology

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

Yes
Kentucky is currently in the process of updating the HSIP Investment Plan.

Select the programs that are administered under the HSIP.

- Intersection
- Low-Cost Spot Improvements
- Median Barrier
- Roadway Departure
- Shoulder Improvement
- Sign Replacement And Improvement
- Skid Hazard

Program: Intersection

Date of Program Methodology:3/27/2017

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

- All crashes
- Fatal and serious injury crashes only

Exposure

- Traffic
- Volume

Roadway

- Functional classification

What project identification methodology was used for this program?

- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment

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

How are projects under this program advanced for implementation?

- Other-Prioritized list

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

Rank of Priority Consideration

Available funding:2
Ranking based on net benefit:1

Program: Low-Cost Spot Improvements

Date of Program Methodology:3/27/2017

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-Potential

Exposure
- Other-Potential

Roadway
- Other-Potential

What project identification methodology was used for this program?

- Other-Potential

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:1

Program: Median Barrier

Date of Program Methodology:3/27/2017

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
- All crashes

Exposure
- Volume

Roadway
- Median width
- Functional classification

- Fatal and serious injury crashes only
- Roadside features

What project identification methodology was used for this program?

- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment

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
Ranking based on net benefit:1

Program: Roadway Departure

Date of Program Methodology:3/27/2017

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

- All crashes
- Fatal and serious injury crashes only

Exposure

- Volume

Roadway

- Functional classification

What project identification methodology was used for this program?

- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment

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-Prioritized list

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

Rank of Priority Consideration

Available funding:2
Ranking based on net benefit:1

Program: Shoulder Improvement

Date of Program Methodology:3/27/2017

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
		• Roadside features

What project identification methodology was used for this program?

- Other-Systematic Improvement

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:1

Program: Sign Replacement And Improvement

Date of Program Methodology:3/27/2017

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

- All crashes

Exposure

- Volume

Roadway

- Horizontal curvature
- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- 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.

Sign Replacement and Improvement on locally owned roads are handled through the Safety Circuit Rider Program

How are projects under this program advanced for implementation?

- Other-Prioritized list

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

Rank of Priority Consideration

Available funding:2
Ranking based on net benefit:1

Program: Skid Hazard

Date of Program Methodology:3/27/2017

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

- All crashes
- Fatal and serious injury crashes only

Exposure

- Volume

Roadway

- Horizontal curvature
- Functional classification

What project identification methodology was used for this program?

- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment

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-Prioritized list based on EB

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

Rank of Priority Consideration

Available funding:2
Ranking based on net benefit:1

What percentage of HSIP funds address systemic improvements?

50

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

- Cable Median Barriers
- Clear Zone Improvements
- Horizontal curve signs
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Upgrade Guard Rails

What process is used to identify potential countermeasures?

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

The HSIP does not utilize the SafetyAnalyst tool.

The HSIP is currently developing a Vision Zero Plan for the Louisville Metro area. The plan will include all roads, except for interstates, in Jefferson County. The process that the plan will utilize includes data-driven safety tools and other methods used for countermeasure identification at the State level.

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

The KYTC HSIP is exploring the potential benefits of connected vehicles and ITS technologies in regards to the goals of the SHSP. Although the HSIP has not dedicated funding directly to this area, the HSIP has representation on the internal workgroup on connected & autonomous vehicles (CAV) and has worked in conjunction with the State Highway Engineer's office to let projects to install DSRC units along targeted corridors.

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.

KYTC HSIP has worked with the Kentucky Transportation Center to improve the data analytics process utilizing the procedures and information found in the HSM. Specifically, KTC incorporates network screening techniques from Section B of the HSM and develops state-specific Safety Performance Functions (SPFs) to identify locations most likely to see a safety benefit. In addition, HSM Part C methods are used for evaluation and benefit-cost analysis of safety improvements.

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

Kentucky's HSIP has increased efforts towards identifying and developing Innovative Intersection projects, such as Mini-Roundabouts and Restricted Crossing U-Turn (RCUT) intersections. Four RCUTs have been constructed, eight are currently under construction, and four are currently in the project development process. One Mini-Roundabout is under construction and fourteen are in the project development process. Furthermore, HSIP is working in conjunction with KTC to develop a screening process for identifying potential locations for RCUTs and Mini-Roundabouts.

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)	$41,600,000	$51,388,887	123.53%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$5,608,677	$5,608,677	100%
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	$0	$0	0%
Totals	$47,208,677	$56,997,564	120.74%

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

$575,800

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

$575,800

Preliminary Mini-Roundabout Study in Elizabethtown - $150,000

Preliminary Study for Low Cost Improvements in Louisville - $13,000

Safety Circuit Rider Program - $412,800

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

$5,139,150

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

$5,139,150

Kentucky Commercial Motor Vehicle Crash Investigation - $163,350

Evaluation of Durable Pavement Striping Materials - $668,000

Statewide Pavement Friction Study - $3,000,000

Mobile LIDAR Data Collection & High Friction Surface Evaluation - $495,000

Safety Circuit Rider Program - $412,800

Implementation of the FY2021 Statewide Planning Program - $400,000

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.

In previous HSIP Annual Reports it was noted there was surplus of HSIP funds that had not been obligated. Through aggressive implementation of the HSIP Investment Plan the program has progressed toward full annual obligation of HSIP funds over the reporting period. Furthermore, the HSIP has developed a backlog of construction-ready projects for when additional funding becomes available.

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
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 62 FROM KY 1837 IN BALLARD COUNTY EXTENDING EASTWARD TO KY 998 IN MCCRACKEN COUNTY. (2018BOP),PERFORM LOW C	Roadway	Roadway - other	0.381	Miles	$100000	$100000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,582	55	State Highway Agency	Systemic	Roadway Departure	
LANE-DEPARTURE IMPROVEMENTS ALONG KY 2207.	Roadway	Roadway - other	1.277		$243000	$243000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	1,632	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 0.000 TO MP 10.049 IN BARREN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	10.049	Miles	$37500	$37500	HSIP (23 U.S.C. 148)	Urban	Major Collector	9,369	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 63 FROM CR 1186 (MP 6.344) TO LN 9008 UNDERPASS (MP13.171). (2016BOP)	Roadway	Roadway - other	6.827	Miles	$50000	$50000	HSIP (23 U.S.C. 148)	Urban	Major Collector	1,977	55	State Highway Agency	Systemic	Roadway Departure	
LANE-DEPARTURE IMPROVEMENTS ALONG KY 2207.	Roadway	Roadway - other	1.277		$27000	$27000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	1,632	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 0.000 TO MP 10.049 IN BARREN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	10.049	Miles	$337500	$337500	HSIP (23 U.S.C. 148)	Urban	Major Collector	9,369	55	State Highway Agency	Systemic	Roadway Departure	
SHOULDERING AND DRAINAGE STRUCTURES ON KY 36 FROM MP 8.00 TO MP 11.847 IN BATH COUNTY.	Shoulder treatments	Shoulder grading	3.847	Miles	$15000	$15000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,963	55	State Highway Agency	Systemic	Roadway Departure	

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
SHOULDERING AND DRAINAGE STRUCTURES ON KY 36 FROM MP 8.00 TO MP 11.847 IN BATH COUNTY.	Shoulder treatments	Shoulder grading	3.847	Miles	$315000	$315000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,963	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 60 FROM MP 17.402 IN BATH COUNTY TO MP 2.806 IN ROWAN COUNTY. (2018BOP)	Roadway	Roadway - other	2.709	Miles	$75000	$75000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,349	55	State Highway Agency	Systemic	Roadway Departure	
CABLE MEDIAN BARRIER ON I-64 FROM MP 181.339 TO MP 191.507 IN BOYD COUNTY, KY. (2018BOP)	Roadside	Barrier - cable	10.168	Miles	$50000	$50000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	24,228	70	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT ON-STREET PARKING BAY ALONG NB WINCHESTER AVE BETWEEN 9TH&10TH ST, MILL, RESURFACE & RESTRIPE WINCHESTER AVE TO INCLUDE A 2-WAY LEFT	Roadway delineation	Longitudinal pavement markings - remarking	0.0999999999999996	Miles	$21000	$21000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,852	35	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT ON-STREET PARKING BAY ALONG NB WINCHESTER AVE BETWEEN 9TH&10TH ST, MILL, RESURFACE & RESTRIPE WINCHESTER AVE TO INCLUDE A 2-WAY LEFT	Roadway delineation	Longitudinal pavement markings - remarking	0.245	Miles	$1835	$1835	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	9,837	55	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT ON-STREET PARKING BAY ALONG NB WINCHESTER AVE BETWEEN 9TH&10TH ST, MILL, RESURFACE & RESTRIPE WINCHESTER AVE TO INCLUDE A 2-WAY LEFT	Roadway delineation	Longitudinal pavement markings - remarking	0.225999999999999	Miles	$21000	$21000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	15,983	35	State Highway Agency	Systemic	Roadway Departure	

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
CONSTRUCT ON-STREET PARKING BAY ALONG NB WINCHESTER AVE BETWEEN 9TH&10TH ST, MILL, RESURFACE & RESTRIPE WINCHESTER AVE TO INCLUDE A 2-WAY LEFT	Roadway delineation	Longitudinal pavement markings - remarking	0.245	Miles	$500000	$500000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	9,837	55	State Highway Agency	Systemic	Roadway Departure	
CABLE MEDIAN BARRIER ON I-64 FROM MP 181.339 TO MP 191.507 IN BOYD COUNTY, KY. (2018BOP)	Roadside	Barrier - cable	10.168	Miles	$1734248	$1734248	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	24,228	70	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT ON-STREET PARKING BAY ALONG NB WINCHESTER AVE BETWEEN 9TH&10TH ST, MILL, RESURFACE & RESTRIPE WINCHESTER AVE TO INCLUDE A 2-WAY LEFT	Roadway delineation	Longitudinal pavement markings - remarking	0.12	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	9,837	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 52 FROM MP 0.000 TO MP 5.114 IN BOYLE COUNTY, AND MP 0.000 TO MP 4.231 IN GARRARD COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.114	Miles	$337500	$337500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	4,230	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 52 FROM MP 0.000 TO MP 5.114 IN BOYLE COUNTY, AND MP 0.000 TO MP 4.231 IN GARRARD COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.114	Miles	$37500	$37500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	4,230	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 8 FROM MP 4.218 TO MP	Roadway	Roadway - other	9.732	Miles	$37500	$37500	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,211	55	State Highway Agency	Systemic	Roadway Departure	

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
13.950 IN BRACKEN COUNTY, KY. (2018BOP)															
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 8 FROM MP 4.218 TO MP 13.950 IN BRACKEN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	9.732	Miles	$337500	$337500	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,211	55	State Highway Agency	Systemic	Roadway Departure	
INSTALL GUARDRAIL ALONG KY 15 FROM THE TROUBLESOME CREEK BRIDGE (MP 7.682), EXTENDING NORTH TO KY 3232 (MP 16.969).	Roadside	Barrier- metal	9.287	Miles	$50500	$50500	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	12,259	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 185 FROM MP 0.000 TO MP 7.232 IN BUTLER COUNTY AND FROM MP 0.000 TO MP 2.185 IN EDMONSON COUNTY. (2018BOP)	Roadway	Roadway - other	7.232	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,918	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 70 FROM MP. 11.031 TO MP 11.506 IN BUTLER COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.475	Miles	$99000	$99000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,952	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 70 FROM MP. 11.031 TO MP 11.506 IN BUTLER COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.475	Miles	$11000	$11000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,952	55	State Highway Agency	Systemic	Roadway Departure	
HORIZONTAL ALIGNMENT SIGNING ON VARIOUS ROUTES IN CAMPBELL, KENTON AND HARRISON COUNTIES.	Roadway signs and traffic control	Curve-related warning signs and flashers	0		$1000	$1000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT RIGHT TURN LANES ALONG KY 9, UPDATE THE SIGNING AND	Intersection geometry	Auxiliary lanes - add right-turn lane	0.5	Miles	$11409.5	$11409.5	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	32,623	55	State Highway Agency	Systemic	Intersections	

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
STRIPING, AND UPDATE THE TRAFFIC SIGNAL TO INCLUDE REFLECTIVE BACKPLATES, DOUBLE RED SIG															
CONSTRUCT RIGHT TURN LANES ALONG KY 9, UPDATE THE SIGNING AND STRIPING, AND UPDATE THE TRAFFIC SIGNAL TO INCLUDE REFLECTIVE BACKPLATES, DOUBLE RED SIG	Intersection geometry	Auxiliary lanes - add right-turn lane	0.5	Miles	$102685.5	$102685.5	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	32,623	55	State Highway Agency	Systemic	Intersections	
CABLE MEDIAN BARRIER ON I-71 FROM MP 52.298 TO MP 56.500 IN CARROLL AND GALLATIN COUNTIES. (2018BOP)	Roadside	Barrier - cable	1.135	Miles	$50000	$50000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	34,714	70	State Highway Agency	Systemic	Roadway Departure	
CABLE MEDIAN BARRIER ON I-71 FROM MP 52.298 TO MP 56.500 IN CARROLL AND GALLATIN COUNTIES. (2018BOP)	Roadside	Barrier - cable	1.135	Miles	$686198	$686198	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	34,714	70	State Highway Agency	Systemic	Roadway Departure	
CABLE MEDIAN BARRIER ON I-71 FROM MP 52.298 TO MP 56.500 IN CARROLL AND GALLATIN COUNTIES. (2018BOP)	Roadside	Barrier - cable	1.135	Miles	$229004	$229004	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	34,714	70	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 36 FROM MP 2.182 TO MP 8.132 IN CARROLL COUNTY. (2018BOP)	Roadway	Roadway - other	5.95	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,775	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 70 FROM MP 4.700 TO MP 12.868 IN CASEY COUNTY. (2018BOP)	Roadway	Roadway - other	8.168	Miles	$25000	$25000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,280	55	State Highway Agency	Systemic	Roadway Departure	

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
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 41 NB FROM MP 0.000 TO MP 31.574 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	31.574	Miles	$506500	$506500	HSIP (23 U.S.C. 148)	Urban	Major Collector	10,737	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 41 SB FROM MP 0.000 TO MP 31.574 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	31.574	Miles	$365500	$365500	HSIP (23 U.S.C. 148)	Urban	Major Collector	10,737	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 107 FROM MP 21.546 TO MP 27.016 IN CHRISTIAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.47	Miles	$15000	$15000	HSIP (23 U.S.C. 148)	Urban	Major Collector	2,856	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 107 FROM MP 21.546 TO MP 27.016 IN CHRISTIAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.47	Miles	$135000	$135000	HSIP (23 U.S.C. 148)	Urban	Major Collector	2,856	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 120 FROM 8.849 ON MP 9.124 IN CRITTENDEN COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.275	Miles	$44100	$44100	HSIP (23 U.S.C. 148)	Rural	Major Collector	685	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 120 FROM 8.849 ON MP 9.124 IN CRITTENDEN COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.275	Miles	$4900	$4900	HSIP (23 U.S.C. 148)	Rural	Major Collector	685	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN DAVIESS, HENDERSON, AND MCLEAN COUNTIES LOCATED IN DISTRICT 2.	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$126000	$126000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,266	45	State Highway Agency	Systemic	Intersections	

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
(2014BOP),INTERSECTION IMPROVEMENTS A															
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN DAVIESS, HENDERSON, AND MCLEAN COUNTIES LOCATED IN DISTRICT 2. (2014BOP),INTERSECTION IMPROVEMENTS A	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$54000	$54000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	23,864	35	State Highway Agency	Systemic	Intersections	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 431 FROM MP 0.000 TO MP 10.246 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	10.246	Miles	$343000	$343000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	10,628	55	State Highway Agency	Systemic	Roadway Departure	
HIGH FRICTION SURFACE TREATMENT ON CR 1215 FROM MP 0.10 TO MP 0.60 IN DAVIESS COUNTY.	Roadway	Pavement surface - high friction surface	0.5	Miles	$81000	$81000	HSIP (23 U.S.C. 148)	Urban	Major Collector	5,587	35	State Highway Agency	Systemic	Roadway Departure	
HIGH FRICTION SURFACE TREATMENT ON CR 1215 FROM MP 0.10 TO MP 0.60 IN DAVIESS COUNTY.	Roadway	Pavement surface - high friction surface	0.5	Miles	$1300	$1300	HSIP (23 U.S.C. 148)	Urban	Major Collector	5,587	35	State Highway Agency	Systemic	Roadway Departure	
HIGH FRICTION SURFACE TREATMENT ON CR 1215 FROM MP 0.10 TO MP 0.60 IN DAVIESS COUNTY.	Roadway	Pavement surface - high friction surface	0.5	Miles	$11700	$11700	HSIP (23 U.S.C. 148)	Urban	Major Collector	5,587	35	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN DAVIESS, HENDERSON, AND MCLEAN COUNTIES LOCATED IN DISTRICT 2. (2014BOP),INTERSECTION IMPROVEMENTS A	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$14000	$14000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,266	45	State Highway Agency	Systemic	Intersections	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$9000	$9000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	

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
IN DAVIESS, HENDERSON, AND MCLEAN COUNTIES LOCATED IN DISTRICT 2. (2014BOP),INTERSECTION IMPROVEMENTS A															
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 82 IN ESTILL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.029	Miles	$2500	$2500	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,651	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 82 IN ESTILL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.029	Miles	$22500	$22500	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,651	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON RAMP I-75 SB TO I-64 WB FROM MP .550 TO MP .820 IN FAYETTE COUNTY (2018BOP)	Roadway	Pavement surface - high friction surface	0.27	Miles	$7300	$7300	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	1,774		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON RAMP I-75 SB TO I-64 WB FROM MP .550 TO MP .820 IN FAYETTE COUNTY (2018BOP)	Roadway	Pavement surface - high friction surface	0.27	Miles	$65700	$65700	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	1,774		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON US 421 IN FAYETTE COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	8.166	Miles	$429000	$429000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	38,543	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 353 FROM MP 1.372 TO MP 10.153 IN FAYETTE COUNTY. (2018BOP)	Roadway	Roadway - other	8.781	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Urban	Major Collector	4,395	55	State Highway Agency	Systemic	Roadway Departure	
ROADSIDE IMPROVEMENTS ON KY 1968 IN FAYETTE COUNTY. (2016BOP)	Roadside	Roadside - other	4.942	Miles	$40500	$40500	HSIP (23 U.S.C. 148)	Urban	Minor Collector	8,040	55	State Highway Agency	Systemic	Roadway Departure	

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
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 57 FROM MP 1.292 TO MP 7.800 IN FAYETTE COUNTY. (2018BOP)	Roadway	Roadway - other	6.508	Miles	$200000	$200000	HSIP (23 U.S.C. 148)	Urban	Major Collector	6,312	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 122 FROM MP 8.520 TO MP 15.479 IN FLOYD COUNTY. (2018BOP)	Roadway	Roadway - other	6.957	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	7,810	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON KY 676 IN FRANKLIN COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	5.287	Miles	$293000	$293000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,685	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON US 421 IN FRANKLIN COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	3.072	Miles	$176000	$176000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	14,631	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 5.315 TO 11.132 IN FRANKLIN COUNTY. (2018BOP)	Roadway	Roadway - other	5.817	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,760	55	State Highway Agency	Systemic	Roadway Departure	
HIGH FRICTION SURFACE TREATMENT ON I-71 BETWEEN MP 63.5 AND MP 63.7 IN GALLATIN COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.200000000000003	Miles	$130000	$130000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	38,740	70	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 22 FROM MP 5.758 TO MP 10.522 IN GRANT COUNTY. (2018BOP)	Roadway	Roadway - other	4.764	Miles	$2258000	$2258000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,201	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 22 FROM MP 5.758 TO MP 10.522 IN GRANT COUNTY. (2018BOP)	Roadway	Roadway - other	4.764	Miles	$767051.1	$767051.1	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,201	55	State Highway Agency	Systemic	Roadway Departure	

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
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 467 FROM MP 3.800 TO MP 9.000 IN GRANT COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.2	Miles	$30000	$30000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,532	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 467 FROM MP 3.800 TO MP 9.000 IN GRANT COUNTY, KY. (2018BOP)	Roadway	Roadway - other	5.2	Miles	$270000	$270000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,532	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 129 FROM MP 8.734 TO MP 15.402 IN GRAVES COUNTY, KY.	Roadway	Roadway - other	6.668		$30000	$30000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	668	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 129 FROM MP 8.734 TO MP 15.402 IN GRAVES COUNTY, KY.	Roadway	Roadway - other	6.668		$270000	$270000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	668	55	State Highway Agency	Systemic	Roadway Departure	
REBUILD THE TRAFFIC SIGNAL AND UPDATE THE STRIPING AT THE INTERSECTION OF US 60 & ALLEN LN. (2018BOP),UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW	Intersection traffic control	Modify traffic signal - modernization/replacement	1	Intersections	$84450	$84450	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
REBUILD THE TRAFFIC SIGNAL AND UPDATE THE STRIPING AT THE INTERSECTION OF US 60 & ALLEN LN. (2018BOP),UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW	Intersection traffic control	Modify traffic signal - modernization/replacement	1	Intersections	$138000	$138000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
REBUILD THE TRAFFIC SIGNAL AND UPDATE THE STRIPING AT THE INTERSECTION OF US 60 & ALLEN LN. (2018BOP),UPDATE THE	Intersection traffic control	Modify traffic signal - modernization/replacement	1	Intersections	$50000	$50000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	

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
TRAFFIC SIGNAL TO INCLUDE YELLOW															
REBUILD THE TRAFFIC SIGNAL AND UPDATE THE STRIPING AT THE INTERSECTION OF US 60 & ALLEN LN. (2018BOP),UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW	Intersection traffic control	Modify traffic signal - modernization/replacement	1	Intersections	$92000	$92000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
REBUILD THE TRAFFIC SIGNAL AND UPDATE THE STRIPING AT THE INTERSECTION OF US 60 & ALLEN LN. (2018BOP),UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW	Intersection traffic control	Modify traffic signal - modernization/replacement	0.173	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ALONG KY 1214 BETWEEN MP 6.300 AND MP 14.028 IN GRAYSON COUNTY, KY.	Roadway	Roadway - other	7.728	Miles	$16000	$16000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	1,598	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 259 FROM MP 16.390 TO MP 21.459 IN GRAYSON COUNTY AND MP 0.000 TO MP 1.921 IN BRECKINRIDGE COUNTY.(2018BOP)	Roadway	Roadway - other	5.069	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,294	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 2 BEGINNING AT MP 13.203 AND ENDING AT MP 17.190 IN GREENUP COUNTY. (2016BOP)	Roadway	Roadway - other	3.987	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 2 BEGINNING AT MP 13.203 AND ENDING AT	Roadway	Roadway - other	3.987	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	

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
MP 17.190 IN GREENUP COUNTY. (2016BOP)															
ROADSIDE SAFETY IMPROVEMENTS ALONG US 60 FROM MP 4.75 TO MP 9.35. (2014BOP)	Roadside	Roadside - other	4.6	Miles	$1250	$1250	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	10,526	55	State Highway Agency	Systemic	Roadway Departure	
ROADSIDE SAFETY IMPROVEMENTS ALONG US 60 FROM MP 4.75 TO MP 9.35. (2014BOP)	Roadside	Roadside - other	4.6	Miles	$11250	$11250	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	10,526	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO ENHANCE SAFETY & CAPACITY ALONG US 31W FROM DIECKS DR TO GRAHAM AVE.	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	8.159	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	34,699	55	State Highway Agency	Systemic	Intersections	
OVERLAY AND RESTRIPE KY 251 TO CONVERT FROM A 4 LANE SECTION TO A 3 LANE SECTION BETWEEN W DIXIE AVE AND PEAR ORCHARD RD AND CONSTRUCT MINI ROUNDABOUT	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	1.458	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	10,367	45	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 62 FROM MP 7.844 TO MP 10.900 IN HARDIN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	3.056	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,293	55	State Highway Agency	Systemic	Roadway Departure	
PRELIMINARY DESIGN AND STUDY OF MINI-ROUNDABOUTS AT VARIOUS INTERSECTIONS WITHIN THE CITY OF ELIZABETHTOWN. (2018BOP)	Non-infrastructure	Transportation safety planning	1	Projects	$150000	$150000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US	Roadway	Roadway - other	3.056	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,293	55	State Highway Agency	Systemic	Roadway Departure	

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
62 FROM MP 7.844 TO MP 10.900 IN HARDIN COUNTY, KY. (2018BOP)															
OVERLAY AND RESTRIPE KY 251 TO CONVERT FROM A 4 LANE SECTION TO A 3 LANE SECTION BETWEEN W DIXIE AVE AND PEAR ORCHARD RD AND CONSTRUCT MINI ROUNDABOUT	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	1.458	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	10,367	45	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO ENHANCE SAFETY & CAPACITY ALONG US 31W FROM DIECKS DR TO GRAHAM AVE.	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	8.159	Miles	$5000	$5000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	34,699	55	State Highway Agency	Systemic	Intersections	
CONSTRUCTION OF A ROUNDABOUT AT THE INTERSECTION OF KY 1136 & US 31W BYPASS.	Intersection geometry	Intersection geometry - other	1	Intersections	$250000	$250000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	4,539	55	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 17.107 TO MP 21.061 IN HARLAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	3.954	Miles	$225000	$225000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	1,915	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 17.107 TO MP 21.061 IN HARLAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	3.954	Miles	$25000	$25000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	1,915	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 41A FROM MP 0.000 TO MP 17.436 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	17.436	Miles	$89010	$89010	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	22,948	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON	Roadside	Barrier end treatments (crash cushions, terminals)	17.436	Miles	$16000	$16000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	22,948	55	State Highway Agency	Systemic	Roadway Departure	

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
US 41A FROM MP 0.000 TO MP 17.436 (2018BOP).															
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 60 IN HENDERSON COUNTY. (2018BOP)	Roadside	Barrier end treatments (crash cushions, terminals)	25.111	Miles	$500720	$500720	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	25,205	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 112 BEGINNING AT MP 1.925 AND ENDING AT MP 9.372 IN HOPKINS COUNTY. (2016BOP)	Roadway	Roadway - other	7.447	Miles	$153000	$153000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	1,944	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 112 BEGINNING AT MP 1.925 AND ENDING AT MP 9.372 IN HOPKINS COUNTY. (2016BOP)	Roadway	Roadway - other	7.447	Miles	$17000	$17000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	1,944	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 3.600 TO MP 7.900 IN JACKSON COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4.3	Miles	$247500	$247500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,794	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 22.127 TO MP 29.574 IN JACKSON COUNTY. (2018BOP)	Roadway	Roadway - other	7.447	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,628	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 421 FROM MP 3.600 TO MP 7.900 IN JACKSON COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4.3	Miles	$27500	$27500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,794	55	State Highway Agency	Systemic	Roadway Departure	
ADDRESS PAVEMENT CONDITION OF PCC PAVEMENT	Roadway	Pavement surface - miscellaneous	0.450000000000001	Miles	$1058000	$1058000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	

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
WIDEN KY 864 TO CREATE A NORTHBOUND LEFT TURN LANE. (2018BOP)	Intersection geometry	Auxiliary lanes - add left-turn lane	1	Intersections	$2500	$2500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	12,339	35	State Highway Agency	Systemic	Intersections	
WIDEN KY 864 TO CREATE A NORTHBOUND LEFT TURN LANE. (2018BOP)	Intersection geometry	Auxiliary lanes - add left-turn lane	1	Intersections	$22500	$22500	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	12,339	35	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 155 FROM MP 4.490 TO MP 5.990 IN JEFFERSON COUNTY. (2018BOP)	Roadway	Roadway - other	1.5	Miles	$250000	$250000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	20,144	55	State Highway Agency	Systemic	Roadway Departure	
SAFETY IMPROVEMENTS AT THE INTERSECTION OF KY 155 (TAYLORSVILLE RD) AND KY 1747 (HURSTBOURNE PKWY) IN JEFFERSON COUNTY. (2014BOP)	Intersection geometry	Intersection geometry - other	1	Intersections	$43422	$43422	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	34,868	45	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 0.00 TO MP 4.807 IN JESSAMINE COUNTY. (2018BOP)	Roadway	Roadway - other	4.807	Miles	$175000	$175000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	11,015	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 160 FROM MP 12.363 TO MP 16.555 IN JESSAMINE COUNTY. (2018BOP)	Roadway	Roadway - other	4.192	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Urban	Major Collector	11,517	55	State Highway Agency	Systemic	Roadway Departure	
INSTALL GUARDRAIL ALONG KY 1107 FROM 0.192 MILE WEST OF HOLBROOK HOLLOW ROAD (MP 2.050) TO 0.098 MILE EAST OF HOLBROOK HOLLOW ROAD (MP 2.340). (2016BO	Roadside	Barrier- metal	0.29	Miles	$5000	$5000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,070	35	State Highway Agency	Systemic	Roadway Departure	

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
CORRECT DROP OFFS, IMPROVE DITCHING, REMOVE TREES IN CLEAR ZONE AND INSTALL HFS FROM MP 1.7 TO MP 2.25 ON KY 1829 IN KENTON COUNTY.	Roadside	Removal of roadside objects (trees, poles, etc.)	1.05	Miles	$10000	$10000	HSIP (23 U.S.C. 148)	Urban	Major Collector	5,206	45	State Highway Agency	Systemic	Roadway Departure	
CORRECT DROP OFFS, IMPROVE DITCHING, REMOVE TREES IN CLEAR ZONE AND INSTALL HFS FROM MP 1.7 TO MP 2.25 ON KY 1829 IN KENTON COUNTY.	Roadside	Removal of roadside objects (trees, poles, etc.)	1.05	Miles	$30000	$30000	HSIP (23 U.S.C. 148)	Urban	Major Collector	5,206	45	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 536 FROM MP 8.000 TO MP 8.300 IN KENTON COUNTY, KY.	Roadway	Pavement surface - high friction surface	0.300000000000001		$46575	$46575	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,097	45	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 536 FROM MP 8.000 TO MP 8.300 IN KENTON COUNTY, KY.	Roadway	Pavement surface - high friction surface	0.300000000000001		$5175	$5175	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,097	45	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 160 FROM KY 15 TO KY 899. (2014BOP)	Roadway	Roadway - other	8.155	Miles	$150000	$150000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,537	55	State Highway Agency	Systemic	Roadway Departure	
FLATTEN SLOPES, WIDEN CURVES, UPGRADE GUARDRAIL END TREATMENTS, AND EXTEND CULVERT.	Alignment	Vertical alignment or elevation change	1.62	Miles	$10000	$10000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	1,275	55	State Highway Agency	Systemic	Roadway Departure	
FLATTEN SLOPES, WIDEN CURVES, UPGRADE GUARDRAIL END TREATMENTS, AND EXTEND CULVERT.	Alignment	Vertical alignment or elevation change	1.62	Miles	$97000	$97000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	1,275	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS	Roadway	Roadway - other	5.252		$75000	$75000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	3,093	55	State Highway Agency	Systemic	Roadway Departure	

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
ALONG KY 490 BETWEEN MP 2.950 AND MP 8.202 IN LAUREL COUNTY, KY.															
WIDEN KY 192 AND EXTEND THE EXISTING 3-LANE SECTION FURTHER SOUTH, INSTALL MEDIAN ACCESS CONTROL, AND UPDATE THE STRIPING AND SIGNING AT THE INTERSECT	Roadway	Roadway widening - travel lanes	0.300000000000001		$438385	$438385	HSIP (23 U.S.C. 148)	Urban	Major Collector	9,192	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 363 FROM MP 0.000 TO MP 2.214 IN LAUREL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	2.214	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,584	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ALONG KY 490 BETWEEN MP 2.950 AND MP 8.202 IN LAUREL COUNTY, KY.	Roadway	Roadway - other	5.252		$55000	$55000	HSIP (23 U.S.C. 148)	Urban	Minor Collector	3,093	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 363 FROM MP 0.000 TO MP 2.214 IN LAUREL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	2.214	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,584	55	State Highway Agency	Systemic	Roadway Departure	
REALIGNMENT OF KY 2565 BETWEEN MP 3.2 AND MP 3.35 (DEAD MAN CURVE) IN LAWRENCE COUNTY. (2016BOP)	Alignment	Horizontal curve realignment	0.15	Miles	$1142877	$1142877	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,012	45	State Highway Agency	Systemic	Roadway Departure	
INSTALL GUARDRAIL ALONG KY 931 FROM LARRY'S ROAD (MP 0.679) TO PACK DRIVE (MP 5.505). (2018BOP)	Roadside	Barrier- metal	4.826	Miles	$478354	$478354	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,135	55	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT A RIGHT TURN SLIP LANE AND RECONSTRUCT THE	Intersection geometry	Auxiliary lanes - add right-turn lane	0.299999999999999	Miles	$430000	$430000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	4,817	55	State Highway Agency	Systemic	Intersections	

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
FLASHING BEACON AT THE INTERSECTION OF KY 9 & KY 10 EAST OF VANCEBURG. (2018BOP)															
SIGNAL ENCHANCEMENTS AND INSTALL MEDIAN ACCESS CONTROL AT THE INTERSECTION OF US 27 & BOAT DOCK RD. (2018BOP),SIGNAL ENHANCEMENTS AT THE INTERSECT	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	1	Intersections	$76000	$76000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,078	55	State Highway Agency	Systemic	Intersections	
SIGNAL ENCHANCEMENTS AND INSTALL MEDIAN ACCESS CONTROL AT THE INTERSECTION OF US 27 & BOAT DOCK RD. (2018BOP),SIGNAL ENHANCEMENTS AT THE INTERSECT	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	1	Intersections	$331000	$331000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	13,515	55	State Highway Agency	Systemic	Intersections	
SIGNAL ENCHANCEMENTS AND INSTALL MEDIAN ACCESS CONTROL AT THE INTERSECTION OF US 27 & BOAT DOCK RD. (2018BOP),SIGNAL ENHANCEMENTS AT THE INTERSECT	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	1	Intersections	$110000	$110000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,078	55	State Highway Agency	Systemic	Intersections	
SIGNAL ENCHANCEMENTS AND INSTALL MEDIAN ACCESS CONTROL AT THE INTERSECTION OF US 27 & BOAT DOCK RD. (2018BOP),SIGNAL ENHANCEMENTS AT THE INTERSECT	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	1	Intersections	$57500	$57500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,206	55	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY	Roadway	Roadway - other	9.259	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,605	55	State Highway Agency	Systemic	Roadway Departure	

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
78 FROM MP 2.909 TO MP 12.168 IN LINCOLN COUNTY. (2018BOP)															
CONSTRUCTION OF A J-TURN AT THE INTERSECTION OF US 68 AND KY 73.	Intersection geometry	Intersection geometry - other	1	Intersections	$1150000	$1150000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	13,278	65	State Highway Agency	Systemic	Intersections	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 52 FROM MP 3.970 TO MP 4.477 IN MADISON COUNTY, KY (2018BOP)	Roadway	Pavement surface - high friction surface	0.507	Miles	$12200	$12200	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,869	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 52 FROM MP 3.970 TO MP 4.477 IN MADISON COUNTY, KY (2018BOP)	Roadway	Pavement surface - high friction surface	0.507	Miles	$109800	$109800	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,869	55	State Highway Agency	Systemic	Roadway Departure	
MINOR WIDENING, SIGNING, STRIPING, AND SUPERELEVATION IMPROVEMENTS AT THE INTERSECTION OF KY 7 & KY 867. (2018BOP)	Intersection geometry	Intersection geometry - other	1	Intersections	$18000	$18000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,492	55	State Highway Agency	Systemic	Intersections	
MINOR WIDENING, SIGNING, STRIPING, AND SUPERELEVATION IMPROVEMENTS AT THE INTERSECTION OF KY 7 & KY 867. (2018BOP)	Intersection geometry	Intersection geometry - other	1	Intersections	$2000	$2000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,492	55	State Highway Agency	Systemic	Intersections	
MINOR WIDENING, SIGNING, STRIPING, AND SUPERELEVATION IMPROVEMENTS AT THE INTERSECTION OF KY 7 & KY 867. (2018BOP)	Intersection geometry	Intersection geometry - other	1	Intersections	$45000	$45000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,492	55	State Highway Agency	Systemic	Intersections	
MINOR WIDENING, SIGNING, STRIPING, AND SUPERELEVATION IMPROVEMENTS AT THE INTERSECTION OF	Intersection geometry	Intersection geometry - other	1	Intersections	$5000	$5000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,492	55	State Highway Agency	Systemic	Intersections	

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
KY 7 & KY 867. (2018BOP)															
CADIZ-AURORA; BRIDGE OVER KENTUCKY LAKE (079B00023N)(10CCR)	Roadway	Roadway - other	0.345000000000002	Miles	$1750000	$1750000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	2,953	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 1.550 TO MP 2.677 IN MCCRACKEN COUNTY AND FROM MP 0.000 TO MP 14.000 IN MARSHALL COUNTY. (2018BO	Roadway	Roadway - other	1.127	Miles	$550000	$550000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,083	55	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCTION OF AN RCUT AT THE INTERSECTION OF US 641 AND KY 402 (2018BOP)	Intersection geometry	Intersection geometry - other	1	Intersections	$175000	$175000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,434	65	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 14.00 TO MP 22.25 IN MARSHALL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	8.25	Miles	$135000	$135000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	5,355	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 68 FROM MP 14.00 TO MP 22.25 IN MARSHALL COUNTY, KY. (2018BOP)	Roadway	Roadway - other	8.25	Miles	$15000	$15000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	5,355	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 1286 FROM MP 4.134 TO MP 4.301 IN MCCRACKEN COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.167	Miles	$4300	$4300	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	11,369	45	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1954 FROM KY 348 TO 0.085 MI SOUTH OF KY 3075. (2014BOP)	Roadway	Roadway - other	3.04	Miles	$2950	$2950	HSIP (23 U.S.C. 148)	Rural	Major Collector	5,516	55	State Highway Agency	Systemic	Roadway Departure	

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
CONSTRUCTION OF AN RCUT AT THE INTERSECTION OF US 45 AND KY 1288 IN MCCRACKEN COUNTY, KY.	Intersection geometry	Intersection geometry - other	1	Intersections	$175000	$175000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	13,220	65	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1954 FROM KY 348 TO 0.085 MI SOUTH OF KY 3075. (2014BOP)	Roadway	Roadway - other	3.04	Miles	$26550	$26550	HSIP (23 U.S.C. 148)	Rural	Major Collector	5,516	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE TREATMENT ON KY 1286 FROM MP 4.134 TO MP 4.301 IN MCCRACKEN COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.167	Miles	$38700	$38700	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	11,369	45	State Highway Agency	Systemic	Roadway Departure	
CONSTRUCT AN ACCELERATION LANE ALONG I-24 FOR THE EASTBOUND ON RAMP AT EXIT 4. (2018BOP)	Interchange design	Acceleration / deceleration / merge lane	1	Ramps	$45000	$45000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	42,252	70	State Highway Agency	Systemic	Intersections	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO REDUCE CONFLICT POINTS AND ENHANCE SAFETY ALONG US 60 FROM MP 3.10-4.20. (2018BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	10,839	55	State Highway Agency	Systemic	Intersections	
UPDATE STRIPING, CROSSWALKS, AND PAVEMENT MARKINGS, RECONSTRUCT SIDEWALK RAMPS, AND RECONSTRUCT CURB LINES TO REDUCE PAVEMENT WIDTH ALONG APPROACHES A	Pedestrians and bicyclists	Install new crosswalk	1	Intersections	$1400	$1400	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	4,566	25	State Highway Agency	Systemic	Pedestrians	
CONSTRUCT AN ACCELERATION LANE ALONG I-24 FOR THE EASTBOUND ON RAMP AT EXIT 4. (2018BOP)	Interchange design	Acceleration / deceleration / merge lane	1	Ramps	$5000	$5000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	42,252	70	State Highway Agency	Systemic	Intersections	

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
UPDATE STRIPING, CROSSWALKS, AND PAVEMENT MARKINGS, RECONSTRUCT SIDEWALK RAMPS, AND RECONSTRUCT CURB LINES TO REDUCE PAVEMENT WIDTH ALONG APPROACHES A	Pedestrians and bicyclists	Install new crosswalk	1	Intersections	$12600	$12600	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	4,566	25	State Highway Agency	Systemic	Pedestrians	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$500	$500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	9,146	35	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$2200	$2200	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,491	45	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$550	$550	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	14,442	55	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$4000	$4000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,491	45	State Highway Agency	Systemic	Intersections	

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
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$19800	$19800	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,491	45	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$4950	$4950	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	14,442	55	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$800	$800	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,812	55	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$4500	$4500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	9,146	35	State Highway Agency	Systemic	Intersections	
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$7200	$7200	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	9,812	55	State Highway Agency	Systemic	Intersections	

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
AND CLOSURE OF AN ENTRANC															
UPDATE THE TRAFFIC SIGNAL TO INCLUDE YELLOW ARROW, REFLECTIVE BACKPLATES, DOUBLE RED SIGNAL HEADS, AND GREEN EXTENSION LOOPS AND CLOSURE OF AN ENTRANC	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$36000	$36000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	19,491	45	State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$650	$650	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,880	55	State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$4950	$4950	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$5850	$5850	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 431 FROM MP 0.000 TO MP 9.262 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	9.262	Miles	$376500	$376500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,309	55	State Highway Agency	Systemic	Roadway Departure	
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$5850	$5850	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,880	55	State Highway Agency	Systemic	Intersections	

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
TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST															
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$550	$550	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION OF US 41A & WASHINGTON ST	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$650	$650	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 81 FROM MP 17.839 TO MP 18.087 IN MCLEAN COUNTY AND FROM MP 0.000 TO MP 8.673 IN DAVIESS COUNTY. (2018BOP)	Roadway	Roadway - other	0.248000000000001	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,802	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 213 FROM MP 0.675 TO MP 5.322 IN MONTGOMERY COUNTY. (2018BOP)	Roadway	Roadway - other	4.647	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,946	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 460 FROM MP 6.260 TO MP 10.260 IN MORGAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4	Miles	$25000	$25000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,414	55	State Highway Agency	Systemic	Roadway Departure	

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
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 460 FROM MP 6.260 TO MP 10.260 IN MORGAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4	Miles	$225000	$225000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,414	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 431 FROM MP 0.000 TO MP 28.390 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	28.313	Miles	$755810	$755810	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	7,978	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE ON KY 55 FROM MP 5.3 TO MP 5.6 IN NELSON COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.3	Miles	$6205	$6205	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,082	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF HIGH FRICTION SURFACE ON KY 55 FROM MP 5.3 TO MP 5.6 IN NELSON COUNTY, KY. (2018BOP)	Roadway	Pavement surface - high friction surface	0.3	Miles	$55845	$55845	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,082	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 36 FROM MP 4.5 TO MP 12.807 IN NICHOLAS COUNTY AND MP 0.000 TO MP 0.890 IN BATH COUNTY. (2018BOP)	Roadway	Roadway - other	8.307	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,742	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 69 FROM MP 16.835 TO MP 24.031 IN OHIO COUNTY, KY. (2018BOP)	Roadway	Roadway - other	7.196	Miles	$15000	$15000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,002	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 69 FROM MP 16.835 TO MP 24.031 IN OHIO COUNTY, KY. (2018BOP)	Roadway	Roadway - other	7.196	Miles	$135000	$135000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,002	55	State Highway Agency	Systemic	Roadway Departure	
STUDY, DESIGN, AND CONSTRUCT SAFETY IMPROVEMENTS	Roadway	Roadway - other	13.5	Miles	$225000	$225000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	66,828	70	State Highway Agency	Systemic	Roadway Departure	

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
ALONG I-71 IN OLDHAM COUNTY. (2018BOP)															
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 80 FROM MP 0.000 TO MP 7.054 IN PERRY COUNTY. (2018BOP)	Roadway	Roadway - other	7.054	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Urban	Major Collector	6,140	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN PIKE AND LAWRENCE COUNTIES LOCATED IN DISTRICT 12.	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$58500	$58500	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 197 FROM MP 6.729 TO MP 15.237 IN PIKE COUNTY. (2018BOP)	Roadway	Roadway - other	8.508	Miles	$125000	$125000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,336	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 80 FROM MP 0.000 TO MP 1.650 IN PIKE COUNTY, KY. (2018BOP)	Roadway	Roadway - other	1.65	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,921	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 632 FROM KY 194 (MP 0.00) TO 0.037 MI EAST OF BLACKBERRY FRK (CR-1576) AT (MP 7.00) IN PIKE COUNTY. (2016BO	Roadway	Roadway - other	7	Miles	$1882106.1	$1882106.1	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,383	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 80 FROM MP 0.000 TO MP 1.650 IN PIKE COUNTY, KY. (2018BOP)	Roadway	Roadway - other	1.65	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,921	55	State Highway Agency	Systemic	Roadway Departure	
PEFORM LOW COST SAFETY IMPROVEMENTS ON US 460 FROM MP 22.461 TO	Roadway	Roadway - other	2.864	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,050	55	State Highway Agency	Systemic	Roadway Departure	

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
MP 25.325 IN PIKE COUNTY, KY. (2018BOP)															
PEFORM LOW COST SAFETY IMPROVEMENTS ON US 460 FROM MP 22.461 TO MP 25.325 IN PIKE COUNTY, KY. (2018BOP)	Roadway	Roadway - other	2.864	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	3,050	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1057 BEGINNING AT MP 0.824 AND ENDING AT MP 4.976 IN POWELL COUNTY.	Roadway	Roadway - other	4.152		$1703000	$1703000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,013	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1057 BEGINNING AT MP 0.824 AND ENDING AT MP 4.976 IN POWELL COUNTY.	Roadway	Roadway - other	4.152		$557851.5	$557851.5	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,013	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1057 BEGINNING AT MP 0.824 AND ENDING AT MP 4.976 IN POWELL COUNTY.	Roadway	Roadway - other	4.152		$61983.5	$61983.5	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,013	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1057 BEGINNING AT MP 0.824 AND ENDING AT MP 4.976 IN POWELL COUNTY. (2016BOP)	Roadway	Roadway - other	4.152	Miles	$150000	$150000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,013	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN PULASKI COUNTY LOCATED IN DISTRICT 8. 8-9004.40-CONSTRUCT A J-TURN AND UPDATE SIGNING AND STRIPING	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$40000	$40000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	

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
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN PULASKI COUNTY LOCATED IN DISTRICT 8. 8-9004.40- CONSTRUCT A J-TURN AND UPDATE SIGNING AND STRIPING	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$54000	$54000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN PULASKI COUNTY LOCATED IN DISTRICT 8. 8-9004.40- CONSTRUCT A J-TURN AND UPDATE SIGNING AND STRIPING	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$27000	$27000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 790 FROM WAYNE-PULASKI COUNTY LINE (MP 0.000) TO KY 90 (MP 5.551) IN PULASKI COUNTY, KY. (2014BOP)	Roadway	Roadway - other	5.551	Miles	$64115.2	$64115.2	HSIP (23 U.S.C. 148)	Urban	Minor Collector	2,687	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 790 FROM WAYNE-PULASKI COUNTY LINE (MP 0.000) TO KY 90 (MP 5.551) IN PULASKI COUNTY, KY. (2014BOP)	Roadway	Roadway - other	5.551	Miles	$577036.8	$577036.8	HSIP (23 U.S.C. 148)	Urban	Minor Collector	2,687	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ALONG KY 70 BETWEEN MP 3.535 AND MP 11.960 IN PULASKI COUNTY, KY. (2016BOP)	Roadway	Roadway - other	8.425	Miles	$35000	$35000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,189	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 192 FROM KY 692 (MP 1.076) TO JAMES MEECE RD (CR-1233) AT (MP 7.435) IN	Roadway	Roadway - other	6.359	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,570	55	State Highway Agency	Systemic	Roadway Departure	

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
PULASKI COUNTY. (2016BOP)															
CABLE MEDIAN BARRIER ON I-64 FROM MP 128.955 TO MP 137.268 IN ROWAN COUNTY, KY. (2018BOP)	Roadside	Barrier - cable	8.31299999999999	Miles	$50000	$50000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	21,221	70	State Highway Agency	Systemic	Roadway Departure	
CABLE MEDIAN BARRIER ON I-64 FROM MP 128.955 TO MP 137.268 IN ROWAN COUNTY, KY. (2018BOP)	Roadside	Barrier - cable	8.31299999999999	Miles	$1644640	$1644640	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	21,221	70	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 377 FROM MP 8.049 TO MP 15.339 IN ROWAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	7.29	Miles	$292500	$292500	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,663	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 377 FROM MP 8.049 TO MP 15.339 IN ROWAN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	7.29	Miles	$32500	$32500	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,663	55	State Highway Agency	Systemic	Roadway Departure	
IMPROVE ALIGNMENT AT THE INTERSECTION OF KY80, KY379, & KY 3017. (2018BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$3316.01	$3316.01	HSIP (23 U.S.C. 148)	Rural	Major Collector	9,105	45	State Highway Agency	Systemic	Intersections	
IMPROVE ALIGNMENT AT THE INTERSECTION OF KY80, KY379, & KY 3017. (2018BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$29844.08	$29844.08	HSIP (23 U.S.C. 148)	Rural	Major Collector	9,105	45	State Highway Agency	Systemic	Intersections	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO REDUCE CONFLICT POINTS AND ENHANCE SAFETY & OPERATIONS ALONG THE GEORGETOWN BYPASS BETWEEN MP 5.943 TO 7	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1.75	Miles	$111600	$111600	HSIP (23 U.S.C. 148)	Urban	Major Collector	20,584	55	State Highway Agency	Systemic	Intersections	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1.75	Miles	$100000	$100000	HSIP (23 U.S.C. 148)	Urban	Major Collector	20,584	55	State Highway Agency	Systemic	Intersections	

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
REDUCE CONFLICT POINTS AND ENHANCE SAFETY & OPERATIONS ALONG THE GEORGETOWN BYPASS BETWEEN MP 5.943 TO 7															
INSTALLATION OF STRIPING ON US 421 IN SCOTT COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0.754	Miles	$50000	$50000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	10,246	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON US 62 IN SCOTT COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0.825	Miles	$55000	$55000	HSIP (23 U.S.C. 148)	Rural	Major Collector	9,289	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION AND CORRIDOR IMPROVEMENTS TO REDUCE CONFLICT POINTS AND ENHANCE SAFETY & OPERATIONS ALONG THE GEORGETOWN BYPASS BETWEEN MP 5.943 TO 7	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1.75	Miles	$1004400	$1004400	HSIP (23 U.S.C. 148)	Urban	Major Collector	20,584	55	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 227 FROM MP 0.000 TO MP 5.874 IN SCOTT COUNTY. (2018BOP)	Roadway	Roadway - other	5.874	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,026	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1848 FROM MP 6.418 TO MP 10.591 IN SHELBY COUNTY. (2018BOP)	Roadway	Roadway - other	4.173	Miles	$350000	$350000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,679	55	State Highway Agency	Systemic	Roadway Departure	
(MP 2.000) FROM 0.371 MILES EAST OF HAROLD JERNIGAN ROAD EXTENDING EAST TO KY 1008 (MP 8.786)	Roadway	Roadway - other	8.375	Miles	$88000	$88000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	3,467	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY	Roadway	Roadway - other	2.296		$5000	$5000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	12,046	55	State Highway Agency	Systemic	Roadway Departure	

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
55 FROM KY 155 IN SPENCER COUNTY TO KY 148 IN SHELBY COUNTY.															
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 55 FROM KY 155 IN SPENCER COUNTY TO KY 148 IN SHELBY COUNTY.	Roadway	Roadway - other	2.296		$31500	$31500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	12,046	55	State Highway Agency	Systemic	Roadway Departure	
INSTALL GUARDRAIL ALONG KY 1319 FROM MP 1.939 TO MP 2.050. (2018BOP)	Roadside	Barrier- metal	0.111	Miles	$47500	$47500	HSIP (23 U.S.C. 148)	Rural	Minor Collector	1,768	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 44 FROM THE BULLIT/SPENCER COUNTY LINE (MP 0.00) TO OAK TREE WAY (MP 7.542). (2016BOP)	Roadway	Roadway - other	7.542	Miles	$423000	$423000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,191	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 55 FROM KY 155 IN SPENCER COUNTY TO KY 148 IN SHELBY COUNTY.	Roadway	Roadway - other	2.296		$45000	$45000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	12,046	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 55 FROM KY 155 IN SPENCER COUNTY TO KY 148 IN SHELBY COUNTY.	Roadway	Roadway - other	2.296		$3500	$3500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	12,046	55	State Highway Agency	Systemic	Roadway Departure	
ADDING NEW TURN LANES, IMPROVING EXISTING TURN LANES, AND SIGNAL IMPROVEMENTS ALONG US 68 FROM MP 3.5 TO 4.9. (2018BOP)	Intersection geometry	Auxiliary lanes - add left-turn lane	1.4	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	18,467	55	State Highway Agency	Systemic	Intersections	

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
ADDING NEW TURN LANES, IMPROVING EXISTING TURN LANES, AND SIGNAL IMPROVEMENTS ALONG US 68 FROM MP 3.5 TO 4.9. (2018BOP)	Intersection geometry	Auxiliary lanes - add left-turn lane	1.4	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	18,467	55	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 42 FROM MP 8.268 TO MP 14.520 IN TRIMBLE COUNTY, KY. (2018BOP)	Roadway	Roadway - other	6.252	Miles	$270000	$270000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,584	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON US 42 FROM MP 8.268 TO MP 14.520 IN TRIMBLE COUNTY, KY. (2018BOP)	Roadway	Roadway - other	6.252	Miles	$30000	$30000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,584	55	State Highway Agency	Systemic	Roadway Departure	
INSTALL SUPPLEMENTAL SIGNAL HEADS, REFLECTIVE BACKPLATES, AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION O	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$950	$950	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,062	45	State Highway Agency	Systemic	Intersections	
INSTALL SUPPLEMENTAL SIGNAL HEADS, REFLECTIVE BACKPLATES, AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION O	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$8550	$8550	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,062	45	State Highway Agency	Systemic	Intersections	
INSTALL SUPPLEMENTAL SIGNAL HEADS, REFLECTIVE BACKPLATES, AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$1650	$1650	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,062	45	State Highway Agency	Systemic	Intersections	

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
YELLOW ARROW AT THE INTERSECTION O															
INSTALL SUPPLEMENTAL SIGNAL HEADS, REFLECTIVE BACKPLATES, AND UPDATE THE LEFT TURN SIGNAL HEADS TO INCLUDE FLASHING YELLOW ARROW AT THE INTERSECTION O	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$14850	$14850	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,062	45	State Highway Agency	Systemic	Intersections	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 60 FROM MP 0.000 TO MP 26.069 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	26.069	Miles	$82700	$82700	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	9,681	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 60B FROM MP 0.000 TO 2.915 IN UNION COUNTY, KY. (2018BOP)	Roadside	Barrier end treatments (crash cushions, terminals)	2.915	Miles	$193200	$193200	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,266	55	State Highway Agency	Systemic	Roadway Departure	
COMMERCIAL MOTOR VEHICLE (CMV) CRASH INVESTIGATION IN KENTUCKY	Non-infrastructure	Data/traffic records	1	Projects	$163350	$163350	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
INSTALLATION OF STRIPING ON VARIOUS ROUTES IN DISTRICT 9.	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$1243671	$1243671	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
EVALUATION OF DURABLE PAVEMENT STRIPING MATERIALS.	Non-infrastructure	Non-infrastructure - other	1	Projects	$668000	$668000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PAVEMENT FRICTION STUDY AND DATA COLLECTION ON ALL INTERSTATES, PARKWAYS, STATE PRIMARY, AND STATE SECONDARY ROUTES.,	Non-infrastructure	Data/traffic records	1	Projects	$2700000	$2700000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
HIGHWAY SAFETY IMPROVEMENT PROGRAM – MOBILE LIDAR DATA	Non-infrastructure	Data/traffic records	1	Projects	$495000	$495000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	

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
COLLECTION AND HIGH FRICTION SURFACE EVALUATION															
PAVEMENT FRICTION STUDY AND DATA COLLECTION ON ALL INTERSTATES, PARKWAYS, STATE PRIMARY, AND STATE SECONDARY ROUTES.,	Non-infrastructure	Data/traffic records	1	Projects	$300000	$300000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
IMPLEMENTATION OF THE FY2021 STATEWIDE PLANNING PROGRAM.	Non-infrastructure	Transportation safety planning	1	Projects	$400000	$400000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
OVERLAY AND RESTRIPE US 231X BETWEEN WILKINSON TRACE AND COVINGTON ST TO CONVERT FROM A 4 LANE SECTION TO A 5 LANE SECTION. (2018BOP)	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.72	Miles	$114353.3	$114353.3	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	11,973	65	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$4000	$4000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	28,304	45	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 53 BEGINNING AT MP 10.040 AND EXTENDING TO MP 2.65 IN OLDHAM COUNTY.	Roadway	Roadway - other	6.395		$70000	$70000	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,141	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$3000	$3000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
REMOVE RAISED MEDIAN AND CONSTRUCT A LEFT	Intersection geometry	Auxiliary lanes - add left-turn lane	1	Intersections	$80000	$80000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	25,237	45	State Highway Agency	Systemic	Intersections	

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
TURN LANE AT OLD TRAM RD. (2018BOP)															
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$55000	$55000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 185 FROM MP 8.250 TO MP 10.050 IN WARREN COUNTY, KY. (2018BOP)	Roadway	Roadway - other	1.8	Miles	$180000	$180000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,717	55	State Highway Agency	Systemic	Roadway Departure	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$60000	$60000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$143000	$143000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND SUPPLEMENTAL SIGNAL HEADS, CONSTRUCT MEDIAN ACCESS CONTROL ALONG US 31W AND CAMPBELL LANE, AND UPDATE THE STRIPING N	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$33500	$33500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$1000	$1000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 185 FROM MP 8.250 TO	Roadway	Roadway - other	1.8	Miles	$20000	$20000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,717	55	State Highway Agency	Systemic	Roadway Departure	

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
MP 10.050 IN WARREN COUNTY, KY. (2018BOP)															
INTERSECTION IMPROVEMENTS AT VARIOUS LOCATIONS IN WARREN COUNTY LOCATED IN DISTRICT 3. (2014BOP)	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	1	Intersections	$5000	$5000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	23,832	45	State Highway Agency	Systemic	Intersections	
INSTALL REFLECTIVE BACKPLATES AND SUPPLEMENTAL SIGNAL HEADS, CONSTRUCT MEDIAN ACCESS CONTROL ALONG US 31W AND CAMPBELL LANE, AND UPDATE THE STRIPING N	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders	1	Intersections	$31500	$31500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	29,863	45	State Highway Agency	Systemic	Intersections	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 55 FROM MP 5.585 TO MP 9.862 IN WASHINGTON COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4.277	Miles	$25000	$25000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,464	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 55 FROM MP 5.585 TO MP 9.862 IN WASHINGTON COUNTY, KY. (2018BOP)	Roadway	Roadway - other	4.277	Miles	$225000	$225000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,464	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 41A FROM MP 0.000 TO MP 19.657 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	19.657	Miles	$167900	$167900	HSIP (23 U.S.C. 148)	Rural	Major Collector	7,507	55	State Highway Agency	Systemic	Roadway Departure	
REPLACEMENT OF TARGETED GUARDRAIL END TREATMENTS ON US 41 FROM MP 0.000 TO MP 6.035 (2018BOP).	Roadside	Barrier end treatments (crash cushions, terminals)	6.035	Miles	$469000	$469000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,934	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY	Roadway	Roadway - other	0.694	Miles	$247500	$247500	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,252	55	State Highway Agency	Systemic	Roadway Departure	

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
1966 FROM MP 0.000 TO MP 0.694 IN WOODFORD COUNTY, AND MP 0.000 TO MP 3.865 IN FAYETTE COUNTY, KY. (2018BOP															
INSTALLATION OF STRIPING AND CENTERLINE RUMBLE STRIPS ON US 421 IN WOODFORD COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	4.931	Miles	$265000	$265000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	6,665	55	State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON US 62 IN WOODFORD COUNTY. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	2.059	Miles	$102000	$102000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	9,740	55	State Highway Agency	Systemic	Roadway Departure	
PERFORM LOW COST SAFETY IMPROVEMENTS ON KY 1966 FROM MP 0.000 TO MP 0.694 IN WOODFORD COUNTY, AND MP 0.000 TO MP 3.865 IN FAYETTE COUNTY, KY. (2018BOP	Roadway	Roadway - other	0.694	Miles	$27500	$27500	HSIP (23 U.S.C. 148)	Rural	Minor Collector	2,252	55	State Highway Agency	Systemic	Roadway Departure	
PURCHASE 16 LEICA ROBOTIC TOTAL STATION COLLISION RECONSTRUCTION SYSTEMS.	Non-infrastructure	Non-infrastructure - other	1	Projects	$9000	$9000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PURCHASE 16 LEICA ROBOTIC TOTAL STATION COLLISION RECONSTRUCTION SYSTEMS.	Non-infrastructure	Non-infrastructure - other	1	Projects	$13500	$13500	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PURCHASE 16 LEICA ROBOTIC TOTAL STATION COLLISION RECONSTRUCTION SYSTEMS.	Non-infrastructure	Non-infrastructure - other	1	Projects	$13500	$13500	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PURCHASE 16 LEICA ROBOTIC TOTAL STATION COLLISION RECONSTRUCTION SYSTEMS.	Non-infrastructure	Non-infrastructure - other	1	Projects	$9000	$9000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	

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
SAFETY CIRCUIT RIDER PROGRAM ADMINISTERED BY THE UNIVERSITY OF KENTUCKY TO ASSESS SAFETY ISSUES AND RECOMMEND LOW COST IMPROVEMENTS WITH AN EMPHASIS	Non-infrastructure	Road safety audits	1	Projects	$412800	$412800	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
PRELIMINARY DESIGN AND STUDY TO DETERMINE LOW COST IMPROVEMENTS AT VARIOUS INTERSECTIONS WITHIN DISTRICT 5. (2016BOP)	Non-infrastructure	Transportation safety planning	1	Projects	$13000	$13000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Data	
INSTALLATION OF STRIPING ON VARIOUS ROUTES IN DISTRICT 12. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$1380350	$1380350	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 6. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$465000	$465000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 8. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$120000	$120000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 5. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$1071587	$1071587	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 9. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$110000	$110000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 1. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$45000	$45000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	

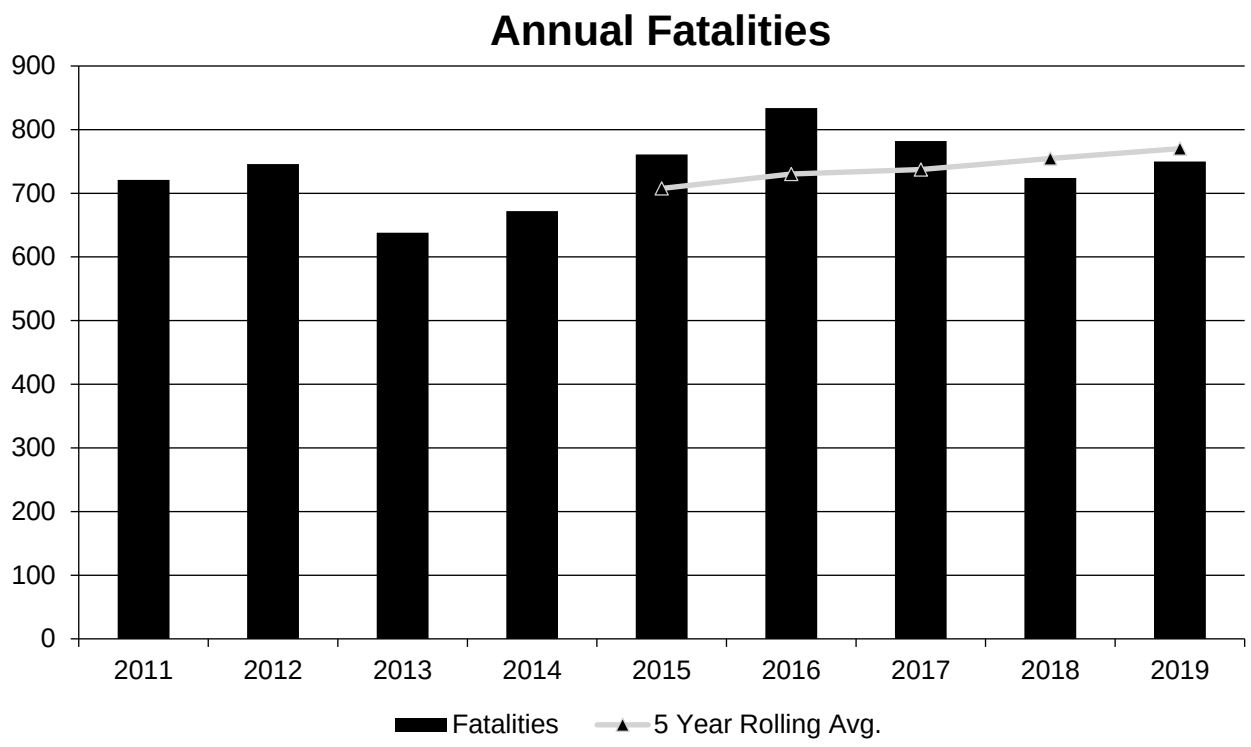
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 3. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$414000	$414000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 2. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$68000	$68000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF STRIPING ON VARIOUS ROUTES IN DISTRICT 10. (2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$1092500	$1092500	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 4. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$55000	$55000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 7. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$290000	$290000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 12. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$205000	$205000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 11. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$90000	$90000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	
INSTALLATION OF PAVEMENT MARKERS ON VARIOUS ROUTES IN DISTRICT 10. (HSIP)(2018BOP)	Roadway delineation	Longitudinal pavement markings - remarking	0	Miles	$130000	$130000	HSIP (23 U.S.C. 148)	N/A	N/A	0		State Highway Agency	Systemic	Roadway Departure	

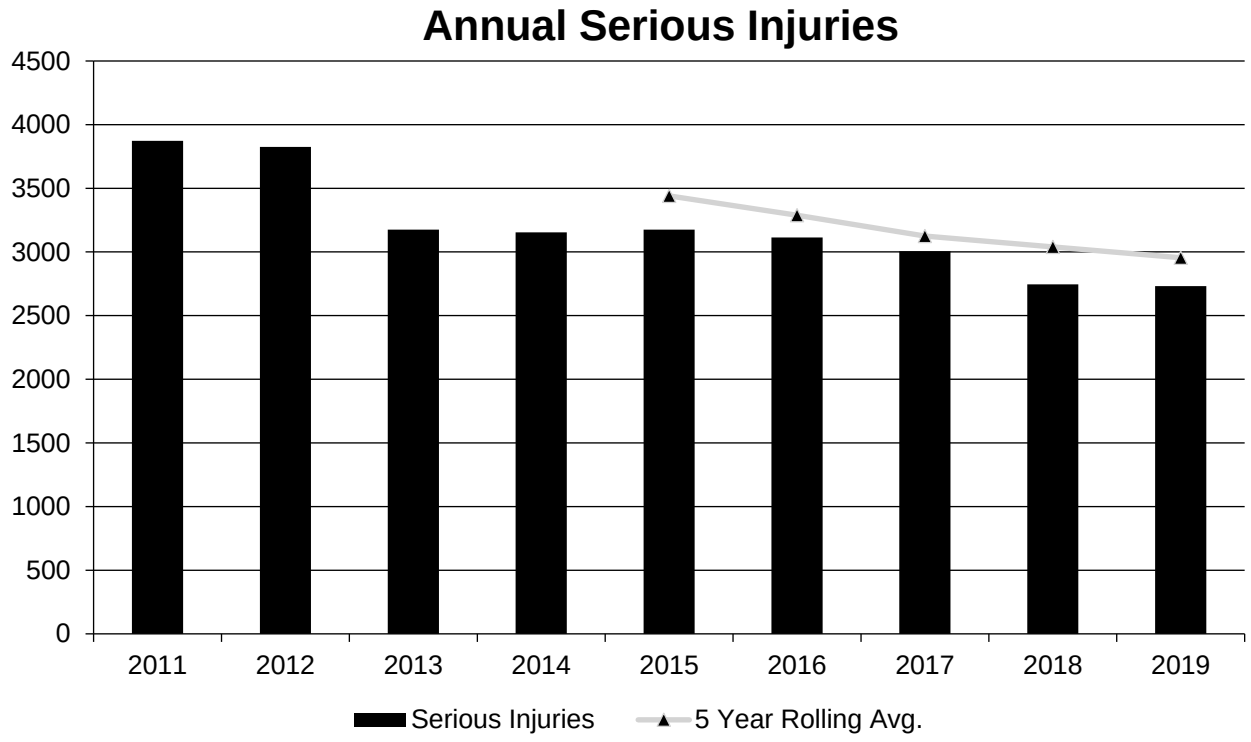
Safety Performance

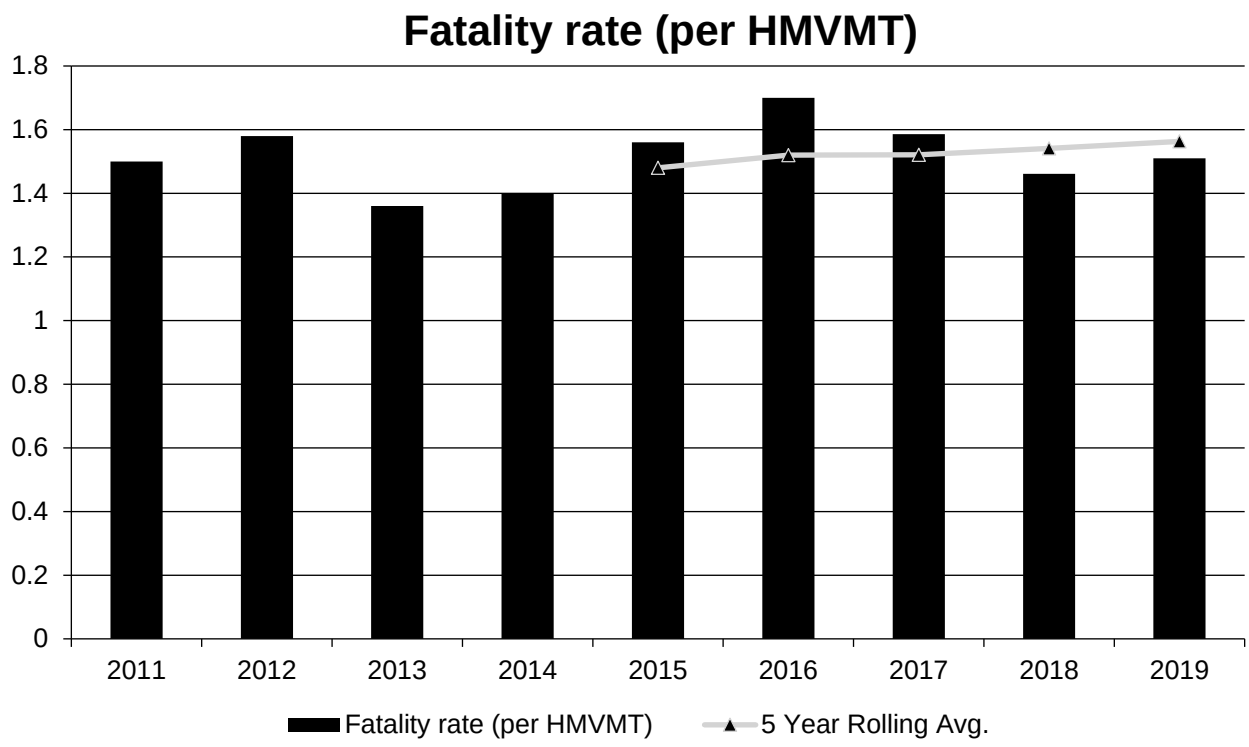
General Highway Safety Trends

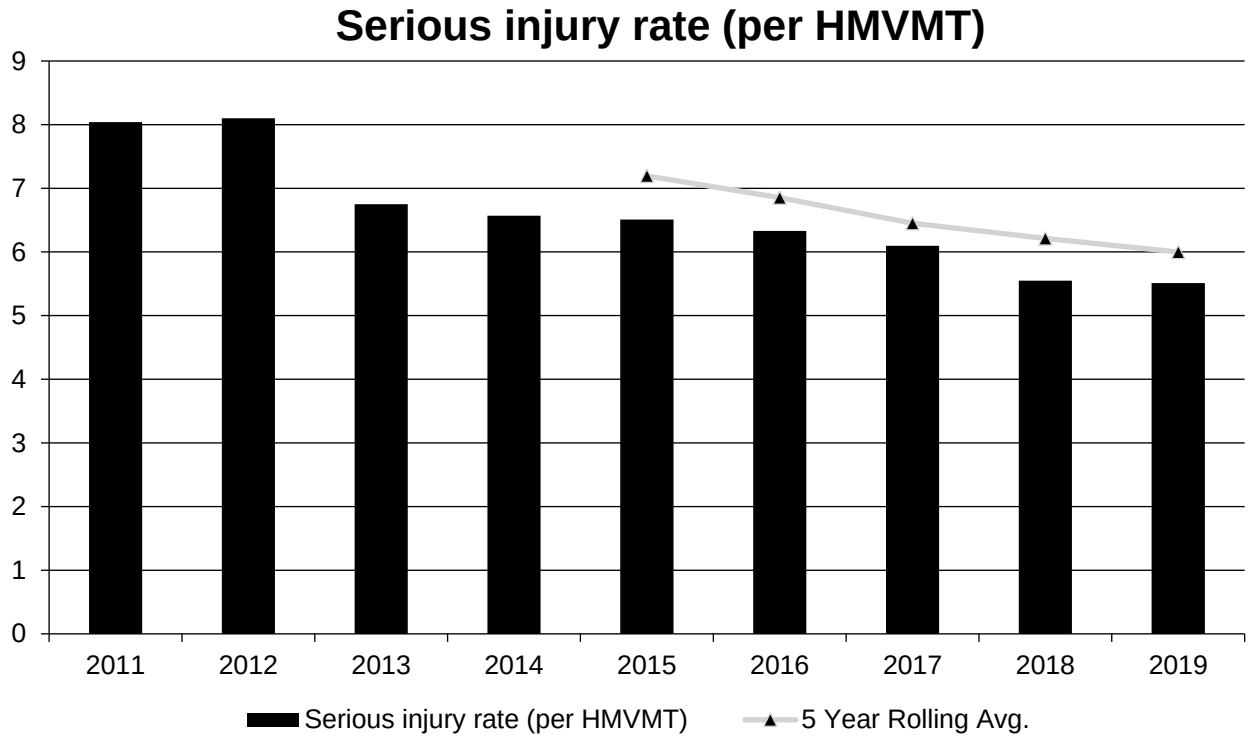
Present data showing the general highway safety trends in the State for the past five years.

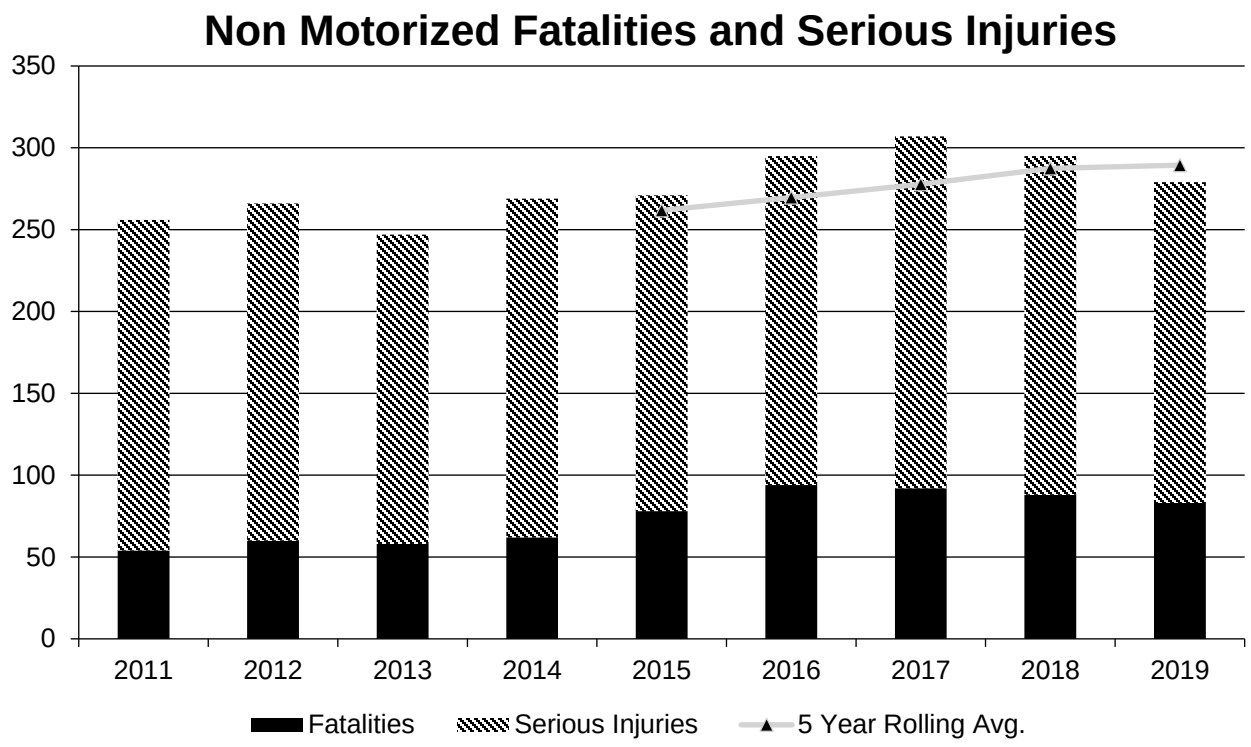
PERFORMANCE MEASURES	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	721	746	638	672	761	834	782	724	750
Serious Injuries	3,873	3,825	3,175	3,154	3,175	3,114	3,006	2,746	2,731
Fatality rate (per HMVMT)	1.500	1.580	1.360	1.400	1.560	1.700	1.586	1.461	1.510
Serious injury rate (per HMVMT)	8.040	8.100	6.750	6.570	6.510	6.330	6.097	5.548	5.510
Number non-motorized fatalities	54	60	58	62	78	94	92	88	83
Number of non-motorized serious injuries	202	206	189	207	193	201	215	207	196
Number of non-motorized fatalities & serious injuries	256	266	247	269	271	295	307	295	279

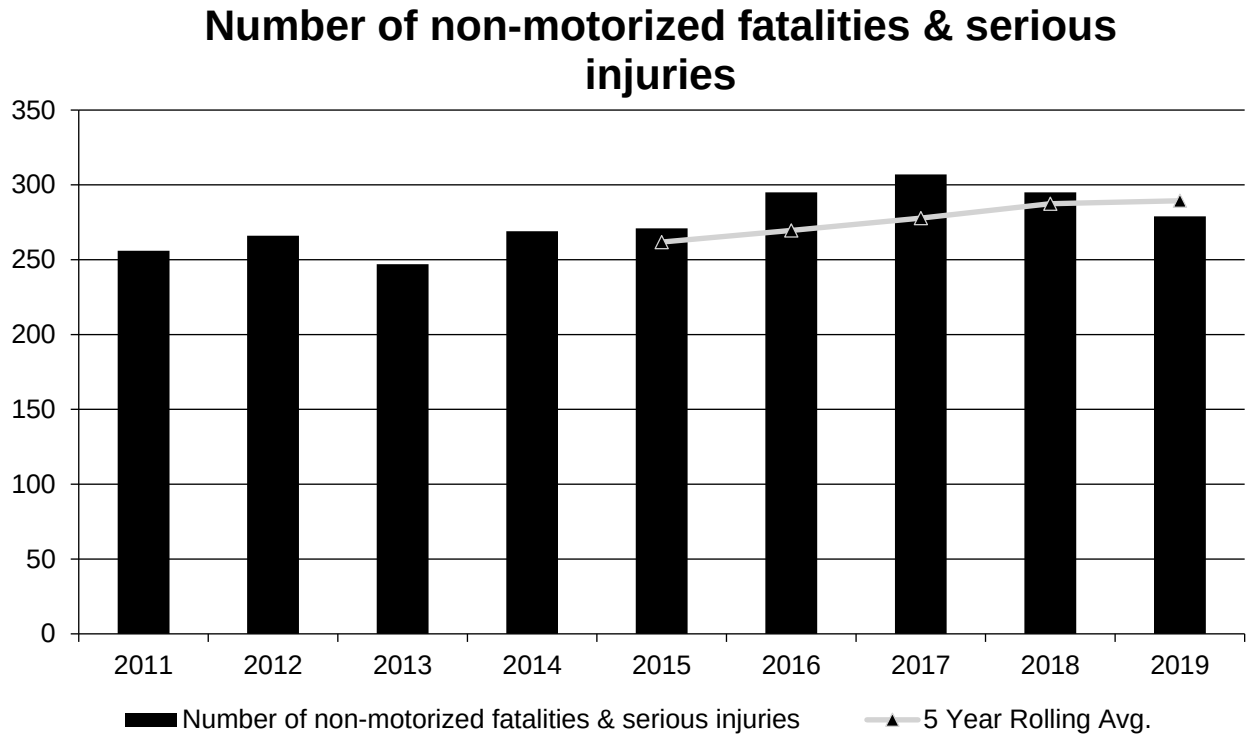

Annual Fatalities
900
800
700
600
500
400
300
200
100
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
9
8
7
6
5
4
3
2
1
0
2011
2012
2013
2014
2015
2016
2017
2018
2019
Serious injury rate (per HMVMT)
5 Year Rolling Avg.





Describe fatality data source.

FARS

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

Year 2019

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	45.2	110.4	0.56	1.36
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	81	172	1.74	3.7
Rural Minor Arterial	78.4	235.8	2.23	6.71
Rural Minor Collector	71	242.4	3.31	11.29
Rural Major Collector	133.6	371	3.4	9.44
Rural Local Road or Street	17.4	63.6	2.52	9.29
Urban Principal Arterial (UPA) - Interstate	33.2	143.6	0.65	2.77
Urban Principal Arterial (UPA) - Other Freeways and Expressways	5.8	14	0.69	1.66
Urban Principal Arterial (UPA) - Other	67.6	294.6	1.49	6.5
Urban Minor Arterial	73	364	1.42	7.06
Urban Minor Collector				
Urban Major Collector	21.4	111.4	1.13	5.82
Urban Local Road or Street	2.2	9.8	1.95	8.3

Year 2019

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)
State Highway Agency	671.8	2,293.4	1.36	4.66
County Highway Agency	51.2	217.6		
Town or Township Highway Agency				
City or Municipal Highway Agency	37.4	296.2		
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency				
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)	4.6	17.6		
Indian Tribe Nation				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2021 Targets *

Number of Fatalities:720.0

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

The Kentucky Transportation Cabinet has set the target goal of 720 fatalities (5-year moving average) for fiscal year 2021. Similar to the national trend, the number of fatalities on Kentucky's public roads has been

increasing the past five years, after a historically low number of fatalities in 2013. This is possibly due to factors such as increased VMT and economic growth. Despite these upward trends, KYTC remains committed to the reduction of fatalities throughout the Commonwealth. This target represents a reduction in total fatalities in calendar years 2019 and 2020 as compared to calendar years 2017 and 2018. This goal is shared with the SHSP and reiterates KYTC's commitment to the shared vision of Toward Zero Deaths.

Number of Serious Injuries:2590.0

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

The Kentucky Transportation Cabinet has set the target goal of 2590 serious injuries (5-year moving average) for fiscal year 2021. KYTC remains committed to the continued reduction of serious injuries throughout the Commonwealth. This target represents a reduction in total serious injuries in calendar years 2019 and 2020 as compared to calendar years 2017 and 2018. This goal is shared with the SHSP and reiterates KYTC's commitment to the shared vision of Toward Zero Deaths.

Fatality Rate:1.500

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

The Kentucky Transportation Cabinet has set the target goal of a 1.5 fatality rate (5-year moving average) for fiscal year 2021. KYTC remains committed to the reduction of the fatality rate throughout the Commonwealth. This target represents a reduction in the fatality rate in calendar years 2019 and 2020 as compared to calendar years 2017 and 2018. This goal is shared with the SHSP and reiterates KYTC's commitment to the shared vision of Toward Zero Deaths.

Serious Injury Rate:5.400

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

The Kentucky Transportation Cabinet has set the target goal of a 5.4 serious injury rate for fiscal year 2021. KYTC remains committed to the reduction of the serious injury rate throughout the Commonwealth. This target represents a reduction in the serious injury rate in calendar years 2019 and 2020 as compared to calendar years 2017 and 2018. This goal reiterates KYTC's commitment to the shared vision of Toward Zero Deaths.

Total Number of Non-Motorized Fatalities and Serious Injuries:285.0

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

The Kentucky Transportation Cabinet has set the target goal of 285 non-motorized fatalities and serious injuries for fiscal year 2021. KYTC remains committed to the reduction of non-motorized serious injuries and fatalities throughout the Commonwealth. This target represents a reduction in total Non-Motorized fatalities and serious injuries in calendar years 2019 and 2020 as compared to calendar years 2017 and 2018. This goal reiterates KYTC's commitment to the shared vision of Toward Zero Deaths.

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

HSIP and KOHS partner with Planning and MPOs to coordinate performance targets.

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	737.0	770.2
Number of Serious Injuries	2991.0	2954.4
Fatality Rate	1.500	1.563
Serious Injury Rate	6.070	5.999
Non-Motorized Fatalities and Serious Injuries	276.0	289.4

For the 2019 reporting period, KYTC met the target for two (2) safety performance measures, the Number of Serious Injuries and the Serious Injury Rate measures. In addition, KYTC showed significant progress towards one (1) safety performance measure, namely the Number of Non-Motorized Fatalities & Serious Injuries measure. However, KYTC did not meet or show significant progress for the remaining two safety performance measures, specifically the Number of Fatalities and Rate of Fatalities measures. Based on this information, KYTC has met or made significant progress in three (3) of the five (5) safety performance measures, and the overall finding is that KYTC has not met or made significant progress toward meeting its safety performance targets.

The primary reason for the differences in the actual outcomes and targets for these three safety performance measures is that KYTC was extremely aggressive in establishing the 2019 targets involving fatalities and serious injuries. When it comes to the two performance measures involving fatal collisions, KYTC understood that the baseline five (5) year average included a historically low year for highway fatalities and that this historically low year would not be included in the 2019 evaluation. Nevertheless, KYTC established the fatality-based targets at or near the 2017 baseline measures in support of the goal of showing improvement, even though it was understood that the required reductions in fatalities would be extremely difficult to achieve.

Applicability of Special Rules

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

Yes

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	144	152	130	140	196	198	189
Number of Older Driver and Pedestrian Serious Injuries	551	528	513	583	563	500	429

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Other-Initiative Basis

Due to the extent of utilization of the HSM by KYTC's HSIP, procedures for program-wide effectiveness assessment do not currently exist. Effectiveness is determined at the initiative level, utilizing such methodology as benefit/cost ratios.

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

As previously stated, effectiveness is not currently determined at the program-wide level. Effectiveness at the initiative level is determined through benefit/cost ratios were applicable as seen below in the entry entitled Countermeasure Effectiveness Evaluations and in the Executive Summary. Current and previous benefit/cost analysis has shown positive return on investment for the initiatives analyzed.

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

- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- Policy change

New policy changes include the installation of 6” durable striping on all State Primary Routes as well as the systemic application of 6” striping on all rural, two-lane routes with a travel lane width of 20’ or greater and ADT of 1,000 or more. Kentucky has also published a Data Driven Safety Analysis (DDSA) implementation plan, which describes the various ways to increase DDSA methods throughout the state.

Describe significant program changes that have occurred since the last reporting period.

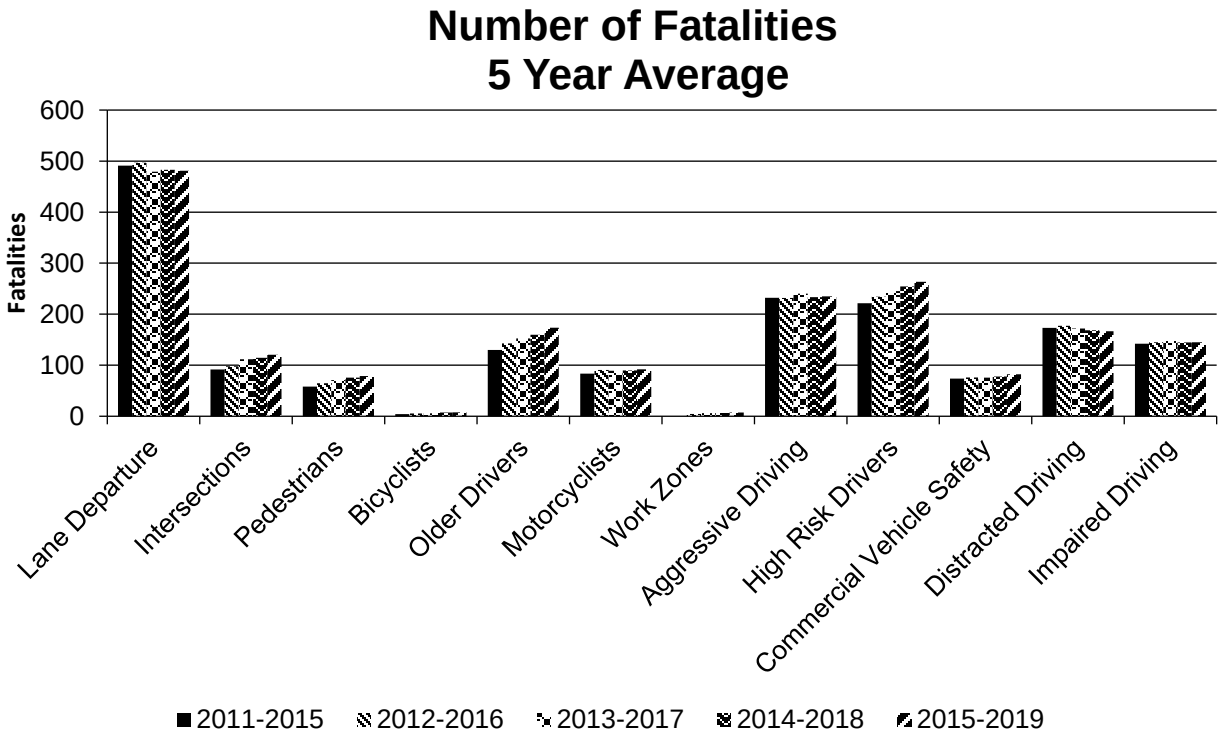
In early 2020 the HSIP began the process of contracting with a vendor to collect continuous pavement friction data on approximately 15,000 lane miles of Kentucky roadway. The HSIP believes that this data will supplement the network screening process and it will assist in countermeasure identification.

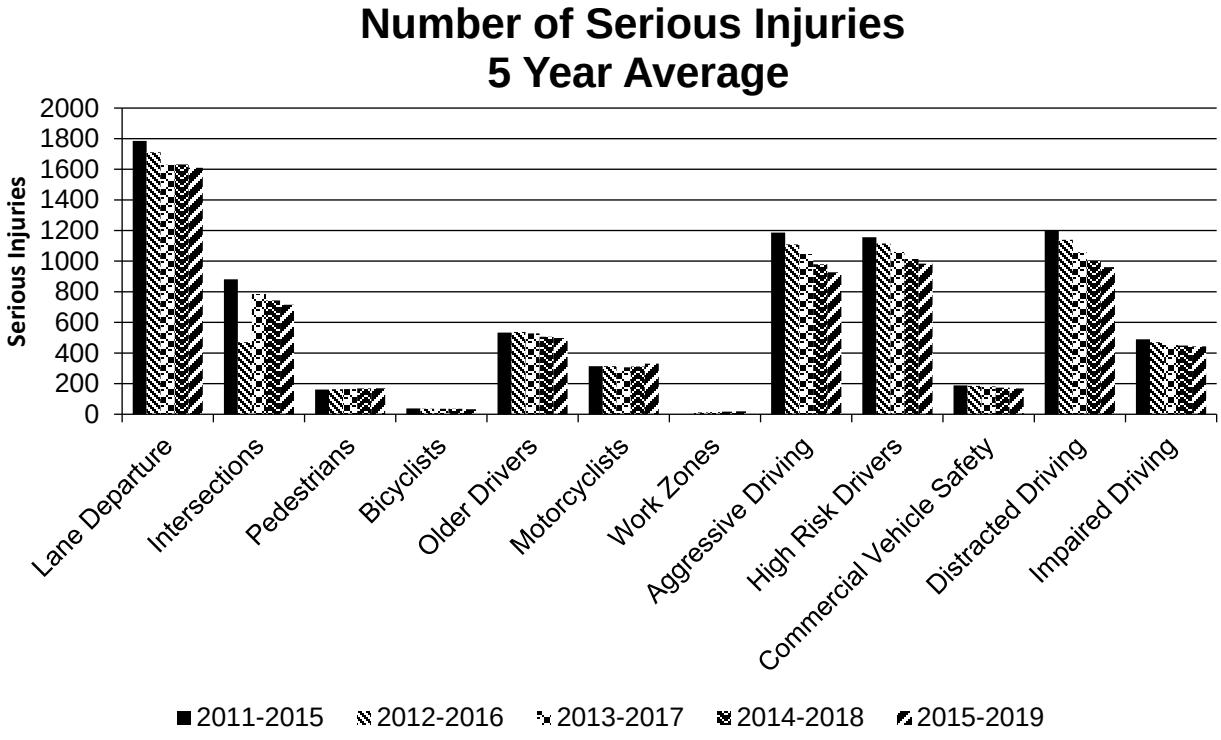
Effectiveness of Groupings or Similar Types of Improvements

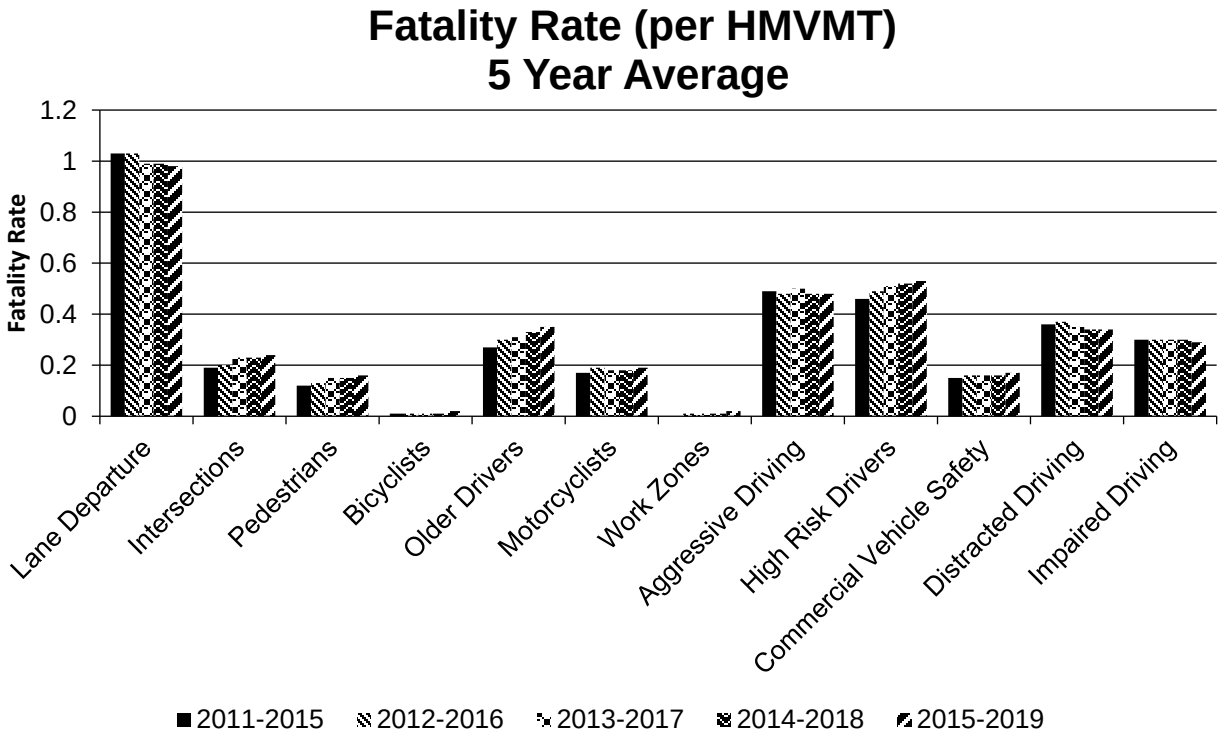
Present and describe trends in SHSP emphasis area performance measures.

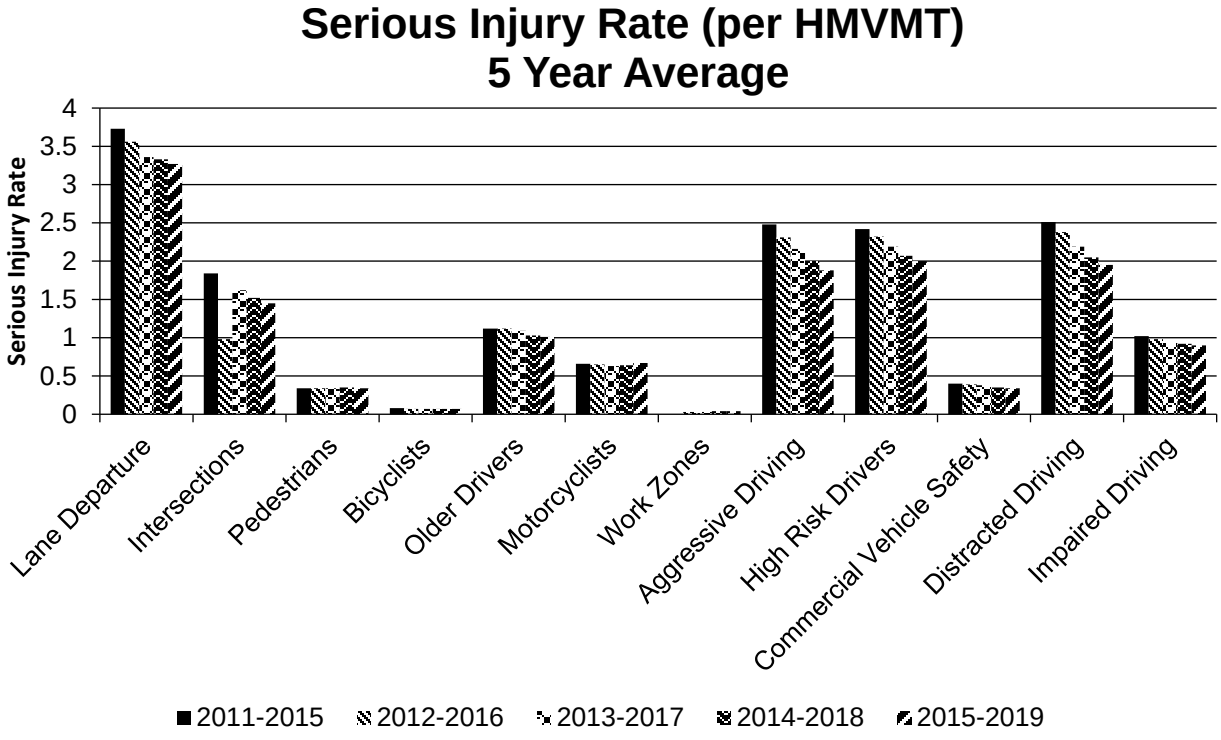
Year 2019

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)
Lane Departure	Lane Departure	481	1,610.2	0.98	3.27
Intersections	Intersections	120.6	715	0.24	1.45
Pedestrians	Vehicle/pedestrian	78.8	169.4	0.16	0.34
Bicyclists	Vehicle/bicycle	7.6	32.8	0.02	0.07
Older Drivers	Older Driver Involved	173.4	498	0.35	1.01
Motorcyclists	Motorcycle Involved	92	330.2	0.19	0.67
Work Zones	Work Zone Involve	7.4	19.6	0.02	0.04
Aggressive Driving	Aggressive Human Factors	234.8	927.2	0.48	1.88
High Risk Drivers	Younger & Older Driver	263.4	983.4	0.53	2
Commercial Vehicle Safety	Truck-related	82.2	168.4	0.17	0.34
Distracted Driving	Distraction Related	166.6	960.4	0.34	1.95
Impaired Driving	Alcohol or Drug Related	145	444	0.29	0.9


Number of Fatalities
5 Year Average
Fatalities
600
500
400
300
200
100
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Aggressive Driving
High Risk Drivers
Commercial Vehicle Safety
Distracted Driving
Impaired Driving
2011-2015
2012-2016
2013-2017
2014-2018
2015-2019


Number of Serious Injuries
5 Year Average
Serious Injuries
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Aggressive Driving
High Risk Drivers
Commercial Vehicle Safety
Distracted Driving
Impaired Driving
2011-2015
2012-2016
2013-2017
2014-2018
2015-2019





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

No

CABLE MEDIAN BARRIERS

Wilcoxon Signed-Rank Test for “before and after shift in proportions of cross-median or impacted object in median crashes” – significant reduction at 99% confidence level.

Empirical Bayes analysis of “before and after cross-median crashes” was not performed on cable median barrier crashes because the necessary safety performance function was not available.

Benefit/Cost analysis results using observed crashes; 5.60:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

HIGH-FRICTION SURFACE TREATMENTS

Wilcoxon Signed-Rank Test for “before and after shift in proportions of wet-weather lane departure crashes” – no significant change at 90% confidence level.

Empirical Bayes analysis of “before and after wet-weather lane departure crashes” results indicated the change in crashes (effect of the treatment) was not significant at the 90% confidence level.

Benefit/Cost analysis results using expected crashes from empirical Bayes analysis; 31.51:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

EDGELINE ONLY STRIPING

Wilcoxon Signed-Rank Test for “before and after shift in proportions of road departure crashes” – no statistically significant change.

Empirical Bayes analysis of “before and after cross-median crashes” results indicated the change in crashes (effect of the treatment) was significant at the 95% confidence level.

Benefit/Cost analysis results using observed crashes; 5.05:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

Project Effectiveness

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

Compliance Assessment

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

03/26/2020

What are the years being covered by the current SHSP?

From: 2020 To: 2024

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

2024

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]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	100	100					100	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	100	100

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
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	2.25		
	Average Annual Daily Traffic (79) [81]	100	100					100	3.67		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]			100	100						
	Intersection/Junction Traffic Control (131) [131]			100	100						
	AADT for Each Intersecting Road (79) [81]			81	81						
	AADT Year (80) [82]			13	8						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at					100	100				

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
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					100	100				
	Roadway Type at End Ramp Terminal (199) [189]					100	100				
	Interchange Type (182) [172]					100	100				
	Ramp AADT (191) [181]					85	100				
	Year of Ramp AADT (192) [182]					85	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**100.00**	**100.00**	**86.75**	**86.13**	**97.27**	**100.00**	**100.00**	**78.44**	**100.00**	**100.00**

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

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.

The State will continue to collect the MIRE fundamental data elements on all public roads and is on-target to meet the deadline.

Optional Attachments

Program Structure:

HSIP FAST Act Investment Plan with Memo to FHWA.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.