



KENTUCKY

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2024 ANNUAL REPORT



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Disclaimer

Protection of Data from Discovery Admission into Evidence

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

23 U.S.C. 407 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 Highway Safety Improvement Program (HSIP) is administered by staff within the Central Office of the Kentucky Transportation Cabinet (KYTC), Division of Traffic Operations, Traffic Safety Branch. There are twelve KYTC Highway Districts across Kentucky and each KYTC Highway District has an HSIP Coordinator that acts as a liaison between, and works closely with, Central Office staff and District staff to organize project team meetings, deliver required project documentation, and conduct a field investigation and/or Road Safety Assessment (RSA) of 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), Metropolitan Planning Organizations (MPOs), and local law enforcement agencies to participate in the RSA and project development process.

Kentucky's HSIP supports Kentucky's Strategic Highway Safety Plan (SHSP) and its vision to improve highway safety in Kentucky such that those traveling on roads in the Commonwealth - every person, every trip - arrive at their destination unharmed. 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 to prioritize and select HSIP-funded projects during the time period of this report has been threefold: network screening using Safety Performance Functions (SPFs) with Empirical Bayes (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 starts by identifying a focus crash type and filtering the crash data to only include the focus crash type. Roadway data is then analyzed to identify which facility type has an overrepresentation of the focus crash type. Once the focus facility type is determined, additional analysis is conducted to identify the roadway attributes along the focus facility type that have a strong correlation with the focus crash type. The roadway attributes identified are known as risk factors. Once the focus crash type's risk factors are determined, roadway segments and intersections are prioritized where the locations with the highest number of risk factors have the highest priority. Potential projects are then reviewed to identify low-cost, effective countermeasures that are likely to mitigate and/or prevent the focus crash type.

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 and/or countermeasures 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

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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 for roadway departure fatalities, but also prioritizes sites using state of the art state-specific SPFs with EB adjustment.

Effectiveness evaluations were performed and benefit/costs were calculated for three of Kentucky's HSIP initiatives (shoulder widening, roadway departure corridors, and restricted crossing U-turns). The results are as follows:

SHOULDER WIDENING

Wilcoxon Signed-Rank Test for "before and after shift in proportions of road departure crashes" – no statistically significant change. Benefit/Cost analysis results using observed crashes; 3.57:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

ROADWAY DEPARTURE CORRIDORS

Wilcoxon Signed-Rank Test for "before and after shift in proportions of road departure crashes" –statistically significant decrease at the 99% confidence level. Benefit/Cost analysis results using observed crashes; 5.32:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

RESTRICTED CROSSING U-TURNS (RCUTs)

Wilcoxon Signed-Rank Test for "before and after shift in proportions of angle crashes" – no statistically significant change. Benefit/Cost analysis results using observed crashes; 4.12:1 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 Highway Safety Improvement Program (HSIP) is administered by staff within the Central Office of the Kentucky Transportation Cabinet (KYTC), Division of Traffic Operations, Traffic Safety Branch. Projects are prioritized and selected through a variety of methods. One such method is network screening using state-specific Safety Performance Functions (SPFs) with Empirical Bayes (EB) adjustment performed by the Kentucky Transportation Center (KTC) at the University of Kentucky. Another method is systemic analysis of different focus crash types (e.g. roadway departure, intersection, VRU, etc.) to identify focus facility types, risk factors, and ultimately projects that could address portions of the network most at risk for fatal and serious injury crashes. The last method involves identifying safety risks and potential improvements via Road Safety Assessments (RSAs) performed by the Safety Circuit Rider Program, LTAP staff, local agencies, consultant staff, and/or District personnel. Each of KYTC's twelve Highway Districts has an HSIP Coordinator that works closely with Central Office and District Personnel. District HSIP Coordinators act 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 a Road Safety Assessment (RSA) of 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 through a competitive process based their knowledge, skills, and abilities related to identifying safety challenges, brainstorming and evaluating the costs, benefits, and impacts of potential solutions, and the efficient development of project plans, specifications, and estimates. HSIP projects are let to construction through the Division of Construction Procurement; implementation, inspection, and administration of the construction phase of HSIP projects is performed by District Construction staff. Evaluation of HSIP projects is performed by the Traffic Safety Branch through a formal partnership with KTC.

Where is HSIP staff located within the State DOT?

Operations

How are HSIP funds allocated in a State?

- Central Office via Statewide Competitive Application Process
- Formula via Districts/Regions
- SHSP Emphasis Area Data

Kentucky's HSIP implements a variety of HSIP Initiatives based on and in support of the Emphasis Areas and strategies within Kentucky's Strategic Highway Safety Plan (SHSP). The process of allocating funding begins

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by first dividing the funding into 4 primary categories: Roadway Departure, Intersections, Vulnerable Road Users, and Funding to Support Implementation of the HSIP and SHSP. The process of dividing funds over these categories begins by carving out the funding needed for the category Funding to Support Implementation of the HSIP and SHSP. The amount is based on the historical costs for administration of Kentucky's HSIP, including Planning Studies and Preliminary Engineering. Once the Funding to Support Implementation of the HSIP and SHSP has been taken off the top, the funding for the categories of Roadway Departure, Intersections, and Vulnerable Road Users is based on the proportion of statewide fatalities and serious injuries within these categories. From there, a variety of HSIP Initiatives are brainstormed to further sub-divide the funding. The projects implemented through some HSIP Initiatives are prioritized and selected by network screening and/or systemic analysis. For other HSIP Initiatives, projects are prioritized and selected through a competitive application process.

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 HSIP-funded projects on local roads. The focus of this program is to improve safety on local roads and streets across Kentucky by providing technical assistance. While the free technical advice offered by the Safety Circuit Rider is available to every community across the Commonwealth, the program selects six focus counties on an annual cycle for focused training covering low-cost safety improvements. The current selected focus counties are Adair, Bullitt, Campbell, Carter, Marshall, and Simpson. Improvements discussed during the free training include: improving water runoff and drainage, repairing shoulder drop off and width, removing fixed objects such as trees and stumps, clearing vegetation around signs and intersections, and installation of horizontal alignment signs and other signs important for highway safety. Additionally, the Safety Circuit Rider assists local agency staff within each focus county with the execution of two Road Safety Assessments (RSAs). Funding is provided to cover the signing needs identified during the RSAs, with the potential for competitive funding for other improvements identified through the RSAs. 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 network screening process for several Road Departure initiatives includes all local roadways that have a functional classification of Minor Collector and above. Furthermore, the Statewide Intersection database used for the network screening process for Intersection initiatives includes all intersections within the state, including Local Road @ Local Road intersections, regardless of functional classification. If any local road segment or intersection screens high enough to be considered for a project, the HSIP, Safety Circuit Rider, LTAP, and/or District staff work with the appropriate local government staff to select and implement the identified projects.

In late 2018, Kentucky's HSIP began a partnership with the Louisville Metro Government to create a Road Safety Plan. This effort evolved into the Vision Zero Louisville Safety Report, which was published in April of 2021. Several projects identified in the Vision Zero Louisville Safety Report have been implemented or are currently under development and expected to be under construction soon. Additionally, Kentucky's HSIP recently wrapped up the development of a Safety Action Plan for the city of Lexington. This effort is very similar to the Vision Zero Louisville initiative and Kentucky's HSIP anticipates identifying, prioritizing, selecting, and implementing HSIP-funded projects with the city of Lexington in the very near future.

Kentucky's HSIP staff, with assistance from Kentucky's LTAP recently finished the development of three pilot Local Road Safety Plans (LRSPs), as well as an application process for other counties to request the development of an LRSP, plus an application process for counties to submit specific projects for HSIP funding consideration. The next steps are to review and select projects, and begin developing the plans, specifications, and estimates necessary to move selected projects into the construction phase. The LRSPs and the projects from the LRSPs are focused on rural, locally owned roadways, with an emphasis on systemic low-cost safety

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countermeasures. In August of 2022, the Kentucky LTAP hosted a LRSP Peer Exchange, that included agency representatives from nine counties and four cities. The two-day peer exchange included presentations by representatives from the FHWA and Kentucky Office of Highway Safety, testimonials by representatives from two of the three pilot LRSP counties, instructions on how to develop an LRSP, demonstrations on self-help resources provided by the Kentucky LTAP for developing an LRSP, and discussions on the resources available for providing funding for the project identified by LRSPs. The Kentucky LTAP will build on the success of these initial LRSP efforts and plans to host additional LRSP Peer Exchanges in the future. An important next step for local road safety in Kentucky will be the selection and implementation of projects identified in completed LRSPs. The goal of Kentucky's HSIP is to continue the growth of the local road safety program and begin dedicating a larger portion of Kentucky's HSIP apportionment until the funding dedicated towards Kentucky's local road safety program is proportional to the percentage of fatalities occurring on locally owned roadways.

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 staff within the Central Office of the Kentucky Transportation Cabinet (KYTC), Division of Traffic Operations, Traffic Safety Branch. 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, Traffic Safety Branch staff coordinates closely and frequently with the Division of Maintenance to look for opportunities to bundle HSIP-funded improvement projects with Maintenance funded resurfacing projects. Additionally, Traffic Safety Branch staff have begun partnering with the Divisions of Maintenance, Materials, and Highway Design concerning the collection, analysis, and utilization of continuous pavement friction data, one of the new FHWA Proven Safety Countermeasures.

HSIP projects are selected and prioritized based on their correlation with Kentucky's 2020-2024 SHSP. Kentucky is currently in the process of updating the SHSP, which will be effective for the period of 2025-2029. The 2020-2024 SHSP contains 6 emphasis areas and efforts are made to implement HSIP-funded projects consistent with the goals, objectives, and a wide variety of strategies within the SHSP. The Kentucky Transportation Cabinet has established taskforce teams for each emphasis area and Traffic Safety Branch staff are active participants on each SHSP taskforce team.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Law Enforcement Agency
- Local Government Agency

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- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Other-Kentucky Transportation Center

Describe coordination with external partners.

The Kentucky Transportation Center (KTC) is housed within the University of Kentucky and provides a variety of technical assistance, such as network screening and the evaluation of Kentucky's HSIP Initiatives. Kentucky's HSIP has also partnered with researchers at the University of Louisville and Western Kentucky University to investigate a variety of safety-related items, such as distracted driving-related crashes, motorcycle crashes, incorporating virtual reality technology during project development of complex/innovative projects, and evaluating roundabouts and Restricted Crossing U-Turn (RCUT) intersections that have been implemented across Kentucky.

FHWA-KY Division Office representatives routinely and frequently collaborate 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.

Kentucky's Local Technical Assistance Program (LTAP) is housed at the University of Kentucky. The LTAP assists with the administration and implementation of the Safety Circuit Rider Program, as well as performing the safety analysis for identifying and selecting the focus counties for the Safety Circuit Rider Program and performing the subsequent RSAs. In addition, KTC & LTAP both provide training resources and programs for KYTC through the HSIP. Lastly, the local road safety initiative being led by LTAP has produced Local Road Safety Plans (LRSPs) for the three pilot counties of Boone, Boyle, and Crittenden. Additional LRSPs are under development, with the goal of producing LRSPs 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's HSIP completed an update to the HSIP Investment Plan in 2022.

Select the programs that are administered under the HSIP.

- Intersection
- Local Safety
- Median Barrier
- Roadway Departure
- Sign Replacement And Improvement
- Skid Hazard
- Vulnerable Road Users
- Other-Roadway Reconfigurations

Program: Intersection

Date of Program Methodology:6/30/2022

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
- Other-Intersection type

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?

- Competitive application process
- 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

Cost Effectiveness:1

Other-Potential to bundle with another project:2

Program: Local Safety

Date of Program Methodology:6/30/2022

What is the justification for this program?

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- 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
<ul style="list-style-type: none">• All crashes• Fatal crashes only• Fatal and serious injury crashes only	<ul style="list-style-type: none">• Traffic• Volume	<ul style="list-style-type: none">• Median width• Horizontal curvature• Functional classification• Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess proportions of specific crash types
- Level of service of safety (LOSS)
- Other-Road Safety Assessments (RSAs)
- 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.

For Kentucky's two largest cities, Louisville and Lexington, road safety plans have been developed that covers the entire county these cities are within and include analysis of all roadways, except interstate routes, regardless of roadway ownership. For Kentucky's rural counties, a few Local Road Safety Plans have been developed (with many more LRSPs under development) that focus on the safety challenges and safety improvement opportunities along county-owned routes.

How are projects under this program advanced for implementation?

- Competitive application process
- 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

Cost Effectiveness:1

Other-Potential to bundle with another project:2

Program: Median Barrier

Date of Program Methodology:6/30/2022

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

- Median width
- Functional classification
- 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?

- Other-Prioritized list
- selection committee

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

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

Rank of Priority Consideration

Available funding:2

Cost Effectiveness:1

Program: Roadway Departure

Date of Program Methodology:6/30/2022

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

- Horizontal curvature
- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess proportions of specific crash types
- Level of service of safety (LOSS)
- Probability of specific crash types

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Other-Prioritized list
- selection committee

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

Rank of Priority Consideration

Available funding:2

Cost Effectiveness:1

Other-Potential to bundle with another project:2

Program: Sign Replacement And Improvement

Date of Program Methodology:6/30/2022

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

- Traffic
- Volume

Roadway

- Horizontal curvature
- Functional classification

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- 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.

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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
- selection committee

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

Rank of Priority Consideration

Available funding:2

Cost Effectiveness:1

Other-Potential to bundle with another project:2

Program: Skid Hazard

Date of Program Methodology:6/30/2022

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

- Horizontal curvature
- Functional classification
- Other-Continuous pavement friction and texture data

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 expected crash reduction after friction treatment
- 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:3

Ranking based on net benefit:1

Cost Effectiveness:2

Program: Vulnerable Road Users

Date of Program Methodology:6/30/2022

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

- Median width
- Functional classification
- Roadside features
- Other-Crossing distance

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess expected crash frequency using SPFs
- Excess expected crash frequency with the EB adjustment
- Excess proportions of specific crash types
- Level of service of safety (LOSS)
- Probability of specific crash types

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Other-Prioritized list
- selection committee

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

Rank of Priority Consideration

Available funding:2

Cost Effectiveness:1

Other-Potential to bundle with another project:2

Program: Other - Roadway Reconfigurations

Date of Program Methodology:6/30/2022

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?

- Crash frequency
- Crash rate
- Equivalent property damage only (EPDO Crash frequency)
- Excess proportions of specific crash types

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- Probability of specific crash types

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

Yes

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

Yes

How are projects under this program advanced for implementation?

- Other-Prioritized list
- 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:3

Cost Effectiveness:2

Other-Potential to bundle with another project:1

What percentage of HSIP funds address systemic improvements?

54

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers
- Clear Zone Improvements
- Horizontal curve signs
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Upgrade Guard Rails
- Wrong way driving treatments

What process is used to identify potential countermeasures?

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

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Kentucky's HSIP does not utilize the SafetyAnalyst tool.

Kentucky's HSIP recently developed the Vision Zero Louisville Safety Report and a Safety Action Plan for the city of Lexington. These two plans include all roads, except for interstates, for the counties of Jefferson (Louisville) and Fayette (Lexington). Both of these plans utilize data-driven safety tools and other methods to identify safety challenges and potential countermeasures.

Kentucky's HSIP recently developed Load Road Safety Plans (LRSPs) for several counties. Additional LRSPs are under development for several more counties, with plans for many more counties in the future. Local agencies can submit potential projects through an application process. The LRSP application process is new and still evolving with assistance from Kentucky's LTAP.

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

Kentucky's HSIP continues to explore the potential benefits of connected vehicles and ITS technologies in regards to the goals and priorities of Kentucky's SHSP. Although Kentucky's HSIP has not dedicated funding directly to a CAV and ITS initiative, Kentucky's HSIP, in partnership with the city of Louisville, is currently exploring the uses and benefits of various ITS solutions to assist with data collection, problem identification, and countermeasure evaluation.

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.

Kentucky's HSIP has worked with the Kentucky Transportation Center (KTC) to improve the data analytics process utilizing the procedures and information found in the Highway Safety Manual (HSM). Specifically, KTC incorporates network screening techniques from Section B of the HSM and develops state-specific Safety Performance Functions (SPFs) adjusted with the Empirical Bayes (EB) method to identify the segments and intersections with the highest values of Excess Expected Crashes and are therefore the locations most likely to see a safety benefit after implementation of an appropriate safety improvement project. In addition, HSM Part C methods are used for evaluation and benefit-cost analysis of safety improvements and initiatives.

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

Kentucky's HSIP continues to identify and develop Innovative Intersection projects, such as Mini-Roundabouts and Restricted Crossing U-Turn (RCUT) intersections. Twenty-eight RCUTs have been constructed and fourteen are currently in the project development process. Fifteen Mini-Roundabouts have been constructed and six are under construction. Furthermore, Kentucky's HSIP is working in conjunction with Western Kentucky University to evaluate all roundabouts (not just Mini-Roundabouts) and RCUTs across Kentucky and develop a list of potential intersections that would be good candidates for conversion to an RCUT or roundabout.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

Kentucky's state fiscal year reporting period for this report is July 1, 2023 to June 30, 2024.

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$54,550,914	\$65,443,152	119.97%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$0	\$0	0%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	\$0	\$0	0%
Penalty Funds (23 U.S.C. 154)	\$0	\$0	0%
Penalty Funds (23 U.S.C. 164)	\$0	\$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$0	\$0	0%
State and Local Funds	\$0	\$0	0%
Totals	\$54,550,914	\$65,443,152	119.97%

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

\$811,115

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

\$811,115

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

\$13,593,482

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

\$13,593,482

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.

There are no current impediments to obligating Kentucky's HSIP funds.

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

In previous HSIP Annual Reports it was noted Kentucky's HSIP had a surplus of funds that had not been obligated. Through aggressive implementation of Kentucky's HSIP Investment Plan the program has progressed toward full annual obligation of HSIP funds. Furthermore, Kentucky's HSIP has developed a backlog of construction-ready projects for when additional HSIP 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 OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
0051034	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	11.761	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,141	55	State Highway Agency	Systemic	Roadway Departure	
0051035	Roadside	Drainage improvements	6.99	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,006	55	State Highway Agency	Systemic	Roadway Departure	
0251048	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	\$1248390	\$1248390	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	15,846	55	State Highway Agency	Spot		Intersection Improvements
0271096	Intersection traffic control	Modify traffic signal – add backplates with retroreflective borders	0.0999999999999996	Miles	\$26000	\$26000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	20,019	45	State Highway Agency	Spot		Intersection Improvements
0271100	Intersection geometry	Add/modify auxiliary lanes	0.42	Miles	\$396085	\$396085	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	10,211	55	State Highway Agency	Spot		Intersection Improvements
0272119	Pedestrians and bicyclists	Install sidewalk	0.1499999999999999	Miles	\$215226	\$215226	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	43,815	45	State Highway Agency	Spot		Intersection Improvements
0321032	Intersection geometry	Add/modify auxiliary lanes	0.4099999999999998	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	7,358	55	State Highway Agency	Spot		Intersection Improvements
0521014	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	9.345	Miles	\$680000	\$680000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,022	55	State Highway Agency	Systemic	Roadway Departure	
0711128	Roadway	Pavement surface – high friction surface	0.241	Miles	\$1390	\$1390	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	15,574	65	State Highway Agency	Spot	Roadway Departure	
1271125	Intersection geometry	Add/modify auxiliary lanes	1	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	11,183	45	State Highway Agency	Spot		Intersection Improvements
1501129	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	1	Intersections	\$1477001	\$1477001	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	12,947	55	State Highway Agency	Spot		Intersection Improvements

2024 Kentucky Highway Safety Improvement Program

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
2641184	Roadway delineation	Roadway delineation - other	10.826	Miles	\$975750	\$975750	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	166,875	55	State Highway Agency	Systemic	Roadway Departure	
2681034	Roadside	Drainage improvements	4.807	Miles	\$75000	\$75000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,927	55	State Highway Agency	Systemic	Roadway Departure	
4181033	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)	3	Intersections	\$500000	\$500000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	0	N/A	State Highway Agency	Spot		Intersection Improvements
4201087	Roadside	Roadside - other	5.817	Miles	\$1000000	\$1000000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,128	55	State Highway Agency	Systemic	Roadway Departure	
4211051	Roadside	Roadside - other	8.129	Miles	\$766583	\$766583	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,326	55	State Highway Agency	Systemic	Roadway Departure	
4212054	Roadside	Roadside - other	4.3	Miles	\$1276904	\$1276904	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,754	55	State Highway Agency	Systemic	Roadway Departure	
4602099	Shoulder treatments	Widen shoulder – paved or other (includes add shoulder)	4	Miles	\$63000	\$63000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	1,305	55	State Highway Agency	Systemic	Roadway Departure	
5007008	Roadside	Drainage improvements	6.21	Miles	\$90000	\$90000	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,178	55	State Highway Agency	Spot	Roadway Departure	
5009024	Roadside	Roadside - other	9.19	Miles	\$24206	\$24206	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,743	55	State Highway Agency	Systemic	Roadway Departure	
5038125	Roadway	Roadway - other	3.056	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,858	55	State Highway Agency	Systemic	Roadway Departure	
5059002	Roadway	Roadway - other	5.47	Miles	\$850000	\$850000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,947	55	State Highway Agency	Systemic	Roadway Departure	
5071019	Roadside	Roadside - other	8.83	Miles	\$435651	\$435651	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,292	55	State Highway Agency	Systemic	Roadway Departure	
5079003	Roadside	Drainage improvements	8.511	Miles	\$2892388	\$2892388	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,229	55	State Highway Agency	Systemic	Roadway Departure	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
5124010	Roadside	Drainage improvements	4.316	Miles	\$1293513	\$1293513	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,312	55	State Highway Agency	Systemic	Roadway Departure	
5152004	Roadway	Superelevation / cross slope	9.361	Miles	\$5383174	\$5383174	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,341	55	State Highway Agency	Systemic	Roadway Departure	
5152005	Intersection geometry	Add/modify auxiliary lanes	3	Miles	\$524845	\$524845	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,299	55	State Highway Agency	Spot		Intersection Improvements
5152006	Intersection traffic control	Modify control – Compact/Mini-roundabout	0.352999999999998	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Major Collector	6,299	55	State Highway Agency	Spot		Intersection Improvements
5158017	Roadside	Roadside - other	12.22	Miles	\$103500	\$103500	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,890	55	State Highway Agency	Systemic	Roadway Departure	
5166021	Roadside	Drainage improvements	0.949999999999999	Miles	\$129600	\$129600	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,448	45	State Highway Agency	Spot	Roadway Departure	
5169010	Roadside	Roadside - other	5.2	Miles	\$99000	\$99000	HSIP (23 U.S.C. 148)	Rural	Minor Collector	1,764	55	State Highway Agency	Systemic	Roadway Departure	
5180029	Roadway	Roadway - other	10.118	Miles	\$1327450	\$1327450	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,360	55	State Highway Agency	Systemic	Roadway Departure	
5217017	Intersection geometry	Intersection realignment	3.8	Miles	\$108000	\$108000	HSIP (23 U.S.C. 148)	Rural	Major Collector	4,029	55	State Highway Agency	Spot		Intersection Improvements
5220003	Advanced technology and ITS	Intersection Conflict Warning System (ICWS)	0.25	Miles	\$147004	\$147004	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,375	55	State Highway Agency	Spot		Intersection Improvements
5237004	Roadside	Roadside - other	7.29	Miles	\$4422062	\$4422062	HSIP (23 U.S.C. 148)	Rural	Major Collector	707	55	State Highway Agency	Systemic	Roadway Departure	
5255027	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.5	Miles	\$440910	\$440910	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	8,226	25	State Highway Agency	Spot		Intersection Improvements
5261001	Alignment	Horizontal and vertical alignment	5.029	Miles	\$2000000	\$2000000	HSIP (23 U.S.C. 148)	Rural	Major Collector	3,316	55	State Highway Agency	Spot	Roadway Departure	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
5271046	Roadside	Roadside - other	7.054	Miles	\$1000000	\$1000000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,875	55	State Highway Agency	Systemic	Roadway Departure	
5274010	Intersection traffic control	Modify control – Compact/Mini-roundabout	1	Intersections	\$1104507	\$1104507	HSIP (23 U.S.C. 148)	Urban	Major Collector	6,252	35	State Highway Agency	Spot		Intersection Improvements
5284008	Intersection traffic control	Modify control – Compact/Mini-roundabout	1	Intersections	\$400000	\$400000	HSIP (23 U.S.C. 148)	Urban	Major Collector	7,813	35	State Highway Agency	Spot		Intersection Improvements
5344009	Roadside	Drainage improvements	11.027	Miles	\$2725785	\$2725785	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,015	55	State Highway Agency	Systemic	Roadway Departure	
5357023	Roadside	Roadside - other	4.455	Miles	\$862222	\$862222	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,055	55	State Highway Agency	Systemic	Roadway Departure	
5357024	Roadside	Drainage improvements	25.654	Miles	\$90000	\$90000	HSIP (23 U.S.C. 148)	Rural	Major Collector	1,647	55	State Highway Agency	Systemic	Roadway Departure	
5361009	Roadside	Drainage improvements	7.21	Miles	\$500000	\$500000	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,207	55	State Highway Agency	Systemic	Roadway Departure	
7861001	Intersection traffic control	Modify control – Modern Roundabout	1	Intersections	\$1247385	\$1247385	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	3,929	55	State Highway Agency	Spot		Intersection Improvements
7872009	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	1.458	Miles	\$1300000	\$1300000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	7,475	35	State Highway Agency	Spot	Vulnerable Road Users	
7873001	Intersection traffic control	Modify control – Compact/Mini-roundabout	1	Intersections	\$186000	\$186000	HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0	N/A	City or Municipal Highway Agency	Spot		Intersection Improvements
7873002	Intersection traffic control	Modify control – Compact/Mini-roundabout	1	Intersections	\$185000	\$185000	HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0	N/A	City or Municipal Highway Agency	Spot		Intersection Improvements
8202005	Roadside	Roadside - other	1.05	Miles	\$631061	\$631061	HSIP (23 U.S.C. 148)	Urban	Major Collector	6,629	45	State Highway Agency	Spot	Roadway Departure	
8547014	Intersection geometry	Add/modify auxiliary lanes	0.100000000000001	Miles	\$261339	\$261339	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	37,680	35	State Highway Agency	Spot		Intersection Improvements

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
8725013	Intersection geometry	Intersection geometry - other	1	Ramps	\$297442	\$297442	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	8,386	65	State Highway Agency	Spot		Intersection Improvements
8774010	Intersection geometry	Intersection geometry - other	1	Ramps	\$481671	\$481671	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	4,802	55	State Highway Agency	Spot		Intersection Improvements
9010032	Miscellaneous	Transportation safety planning	1	Data	\$1005300	\$1005300	HSIP (23 U.S.C. 148)	N/A	N/A	0	N/A	N/A	Data collection, analysis, and/or safety research		Supports Implementation of HSIP and SHSP
9010033	Roadway signs and traffic control	Sign sheeting - upgrade or replacement	0	Signs	\$500000	\$500000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic	Roadway Departure	Intersection Improvements
9010302	Miscellaneous	Data collection	1	Data	\$180000	\$180000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic		Supports Implementation of HSIP and SHSP
9010348	Intersection geometry	Add/modify auxiliary lanes	1	Miles	\$546088	\$546088	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	21,787	45	State Highway Agency	Spot		Intersection Improvements
9010425	Miscellaneous	Data collection	15100	Miles	\$4173182	\$4173182	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Data collection, analysis, and/or safety research		Supports Implementation of HSIP and SHSP
9010432	Roadway	Roadway widening - travel lanes	6.668	Miles	\$2216803	\$2216803	HSIP (23 U.S.C. 148)	Rural	Minor Collector	546	55	State Highway Agency	Systemic	Roadway Departure	
9010442	Intersection traffic control	Modify control – Compact/Mini-roundabout	1	Intersections	\$440115	\$440115	HSIP (23 U.S.C. 148)	Urban	Major Collector	4,840	35	City or Municipal Highway Agency	Spot		Intersection Improvements
9010447	Miscellaneous	Transportation safety planning	1	Data	\$6750000	\$6750000	HSIP (23 U.S.C. 148)	N/A	N/A	0	N/A	N/A	Supports administration of the HSIP		Supports Implementation of HSIP and SHSP
9010450	Miscellaneous	Transportation safety planning	1	Data	\$900000	\$900000	HSIP (23 U.S.C. 148)	N/A	N/A	0	N/A	N/A	Supports administration of the HSIP		Supports Implementation of HSIP and SHSP

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
9010454	Roadside	Barrier- metal	0	Guardrail	\$277250	\$277250	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic	Roadway Departure	
9010456	Roadway delineation	Raised pavement markers	0	Pavement Markers	\$625663	\$625663	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic	Roadway Departure	
9010461	Roadway delineation	Raised pavement markers	0	Pavement Markers	\$1128120	\$1128120	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic	Roadway Departure	
9010474	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0	Signs	\$740082	\$740082	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic		Intersection Improvements
9010478	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0	Signs	\$1378570	\$1378570	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic		Intersection Improvements
9010481	Roadway signs and traffic control	Roadway signs (including post) - new or updated	0	Signs	\$667345	\$667345	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	N/A	State Highway Agency	Systemic		Intersection Improvements
9010493	Roadway	Pavement surface – high friction surface	0.3500000000000001	Miles	\$150034	\$150034	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	9,870	55	State Highway Agency	Spot		Intersection Improvements
9010518	Roadway	Pavement surface – high friction surface	0.6000000000000001	Miles	\$7223	\$7223	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,399	55	State Highway Agency	Spot	Roadway Departure	
9010519	Roadway	Pavement surface – high friction surface	0.4	Miles	\$213471	\$213471	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	12,316	45	State Highway Agency	Spot	Roadway Departure	
9010523	Miscellaneous	Data collection	1	Data	\$585000	\$585000	HSIP (23 U.S.C. 148)	N/A	N/A	0	N/A	N/A	Specified project to support KY's Quick Clearance Program		Supports Implementation of HSIP and SHSP
9010525	Roadway	Pavement surface – high friction surface	0.2000000000000003	Miles	\$84375	\$84375	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	2,105	55	State Highway Agency	Spot	Roadway Departure	
9010526	Roadway	Pavement surface - other	0.7000000000000017	Miles	\$462635	\$462635	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other Freeways & Expressways	30,355	70	State Highway Agency	Spot	Roadway Departure	
9010544	Intersection geometry	Add/modify auxiliary lanes	0.224	Miles	\$45000	\$45000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	5,305	55	State Highway Agency	Spot		Intersection Improvements

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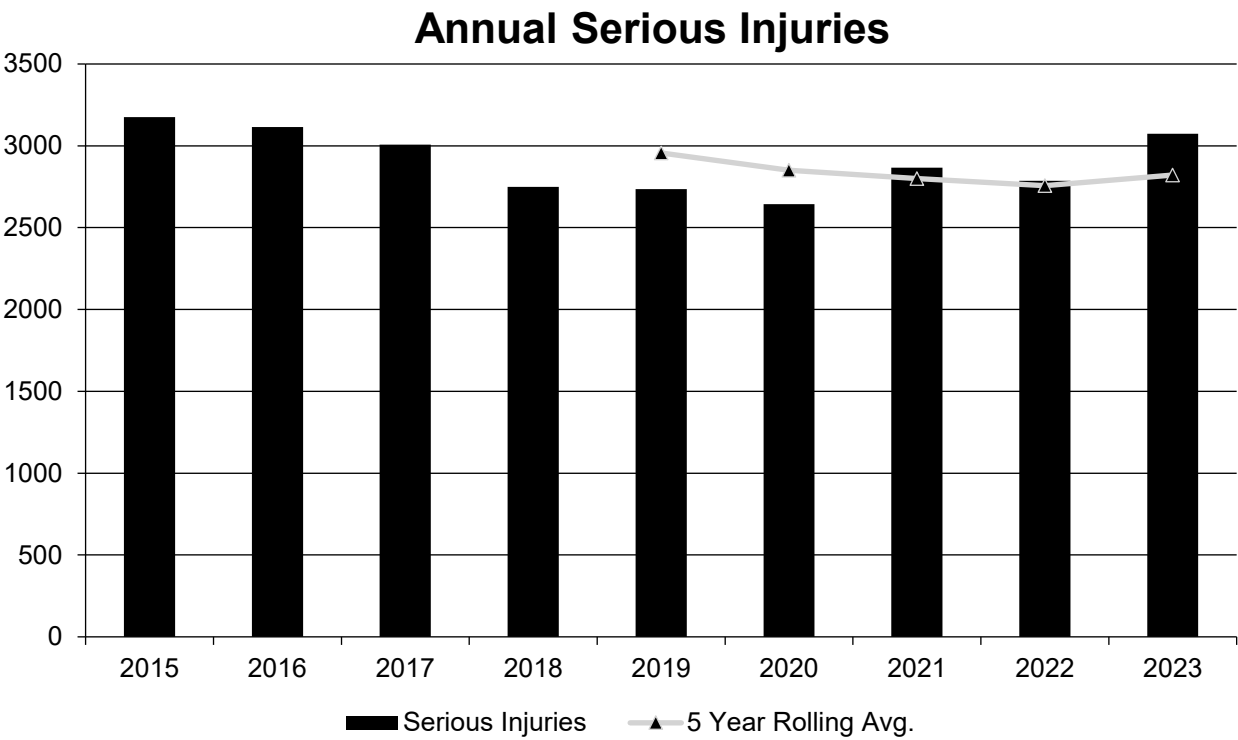
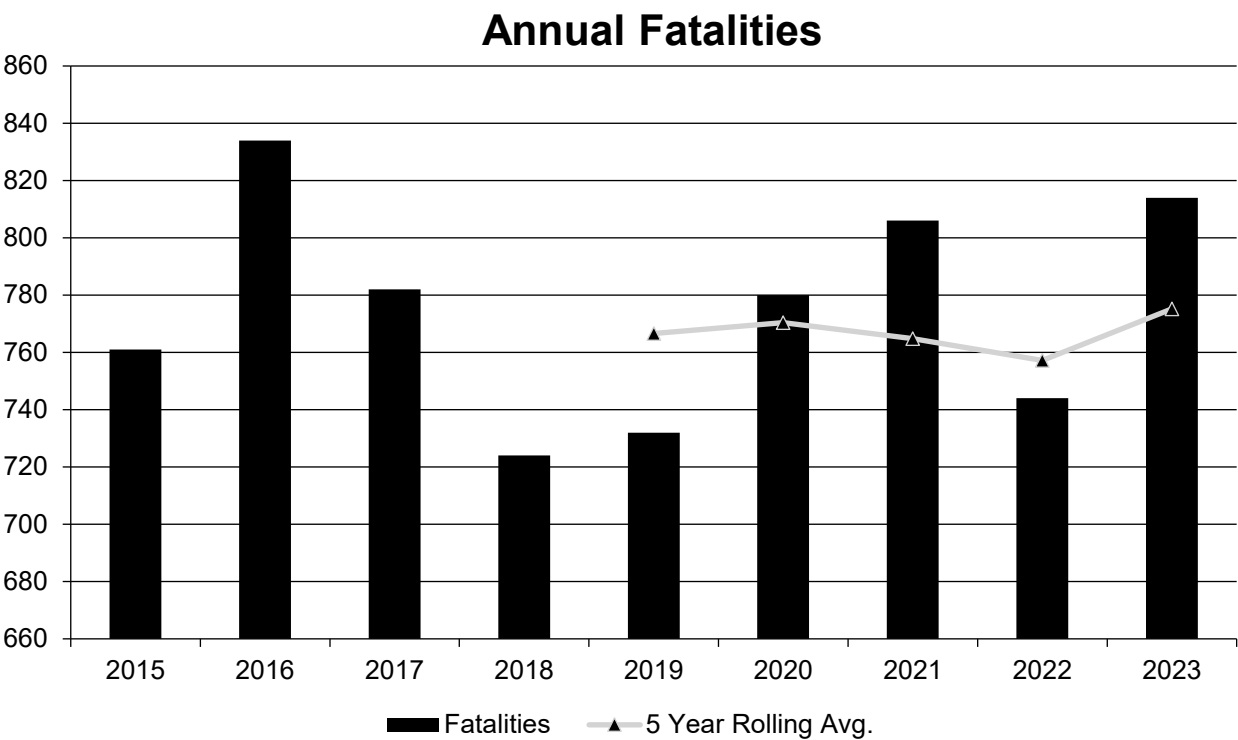
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
9010577	Roadway	Pavement surface – high friction surface	0.15	Miles	\$86625	\$86625	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	4,359	55	State Highway Agency	Spot		Intersection Improvements
9010578	Roadway	Pavement surface – high friction surface	0.28	Miles	\$86625	\$86625	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	8,924	65	State Highway Agency	Spot	Roadway Departure	
9010580	Roadway	Pavement surface – high friction surface	0.300000000000001	Miles	\$139320	\$139320	HSIP (23 U.S.C. 148)	Rural	Principal Arterial- Other	11,168	55	State Highway Agency	Spot		Intersection Improvements
9010586	Roadway	Pavement surface – high friction surface	0.16	Miles	\$64800	\$64800	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Interstate	2,981	65	State Highway Agency	Spot	Roadway Departure	
9010589	Roadway	Pavement surface – high friction surface	0.13	Miles	\$54000	\$54000	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	8,399	45	State Highway Agency	Spot		Intersection Improvements
9010590	Roadway	Pavement surface – high friction surface	0.147	Miles	\$59625	\$59625	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	8,399	45	State Highway Agency	Spot		Intersection Improvements
9010592	Roadway	Pavement surface – high friction surface	0.154	Miles	\$73238	\$73238	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	14,268	35	State Highway Agency	Spot	Roadway Departure	
9010597	Roadway	Pavement surface – high friction surface	0.2	Miles	\$103500	\$103500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	32,785	50	State Highway Agency	Spot		Intersection Improvements
9010598	Roadway	Pavement surface – high friction surface	0.2	Miles	\$103500	\$103500	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	32,785	50	State Highway Agency	Spot		Intersection Improvements
9010600	Roadway	Pavement surface – high friction surface	0.0790000000000006	Miles	\$75550	\$75550	HSIP (23 U.S.C. 148)	Urban	Principal Arterial- Other	46,773	40	State Highway Agency	Spot		Intersection Improvements
9010601	Roadway	Pavement surface – high friction surface	0.17	Miles	\$92115	\$92115	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	16,480	35	State Highway Agency	Spot		Intersection Improvements
9010602	Roadway	Pavement surface – high friction surface	0.2	Miles	\$68310	\$68310	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	15,246	45	State Highway Agency	Spot		Intersection Improvements
9010603	Roadway	Pavement surface – high friction surface	0.21	Miles	\$72450	\$72450	HSIP (23 U.S.C. 148)	Rural	Major Collector	5,243	55	State Highway Agency	Spot		Intersection Improvements

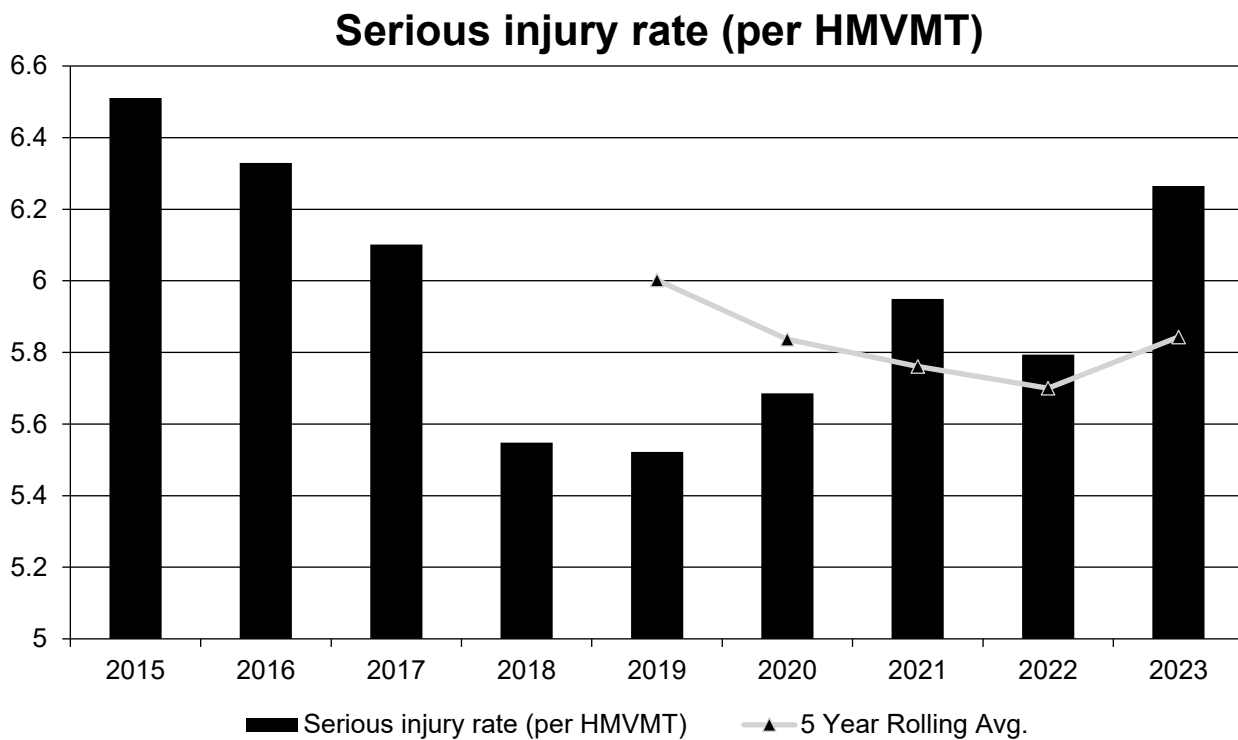
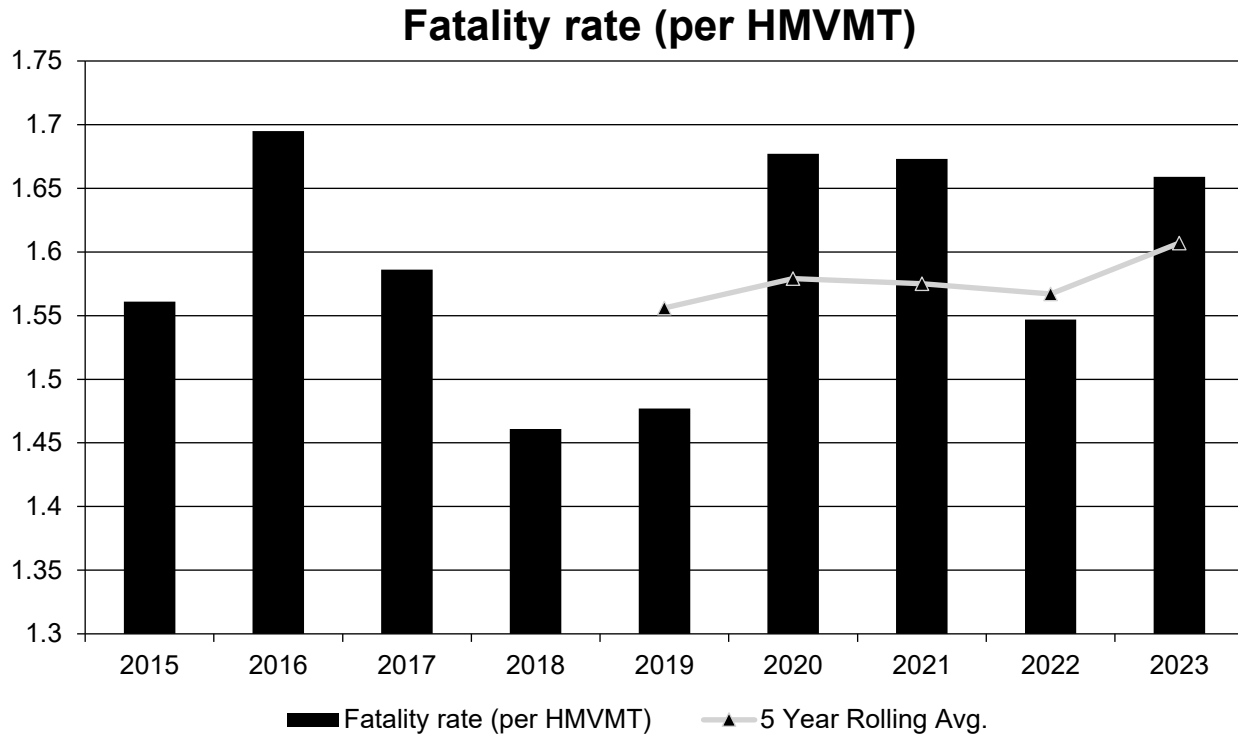
Safety Performance

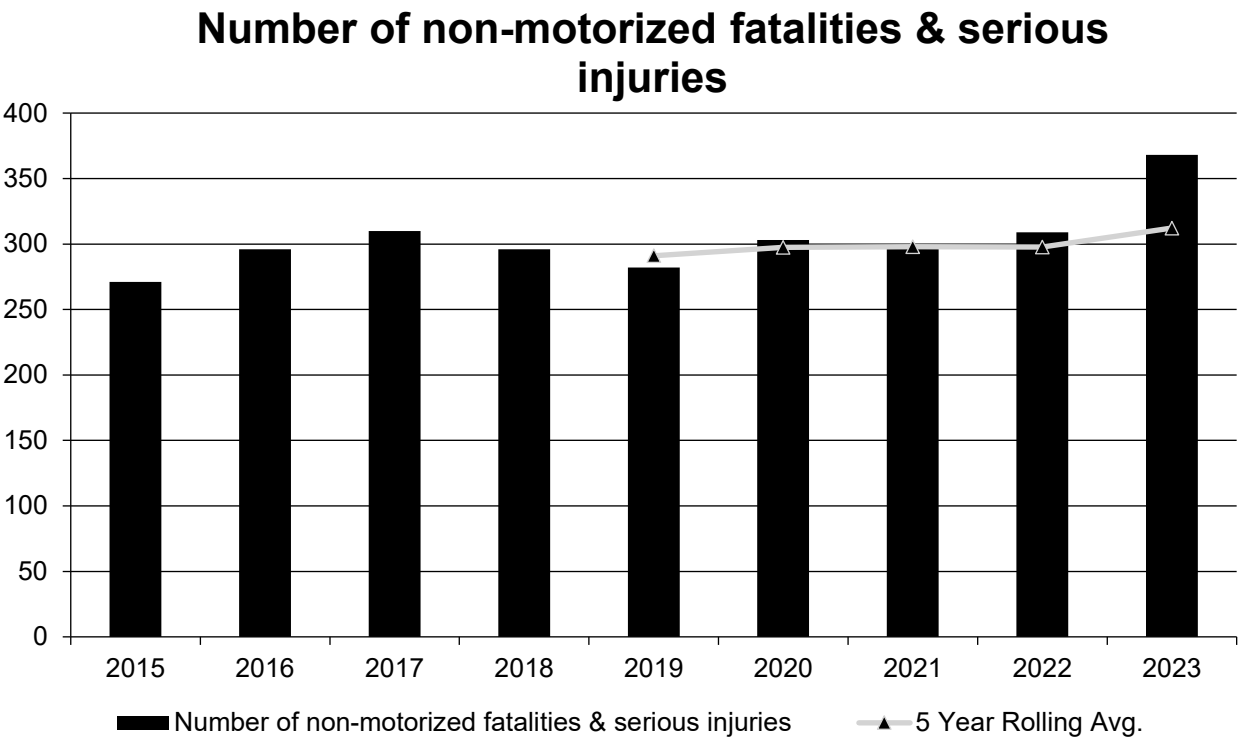
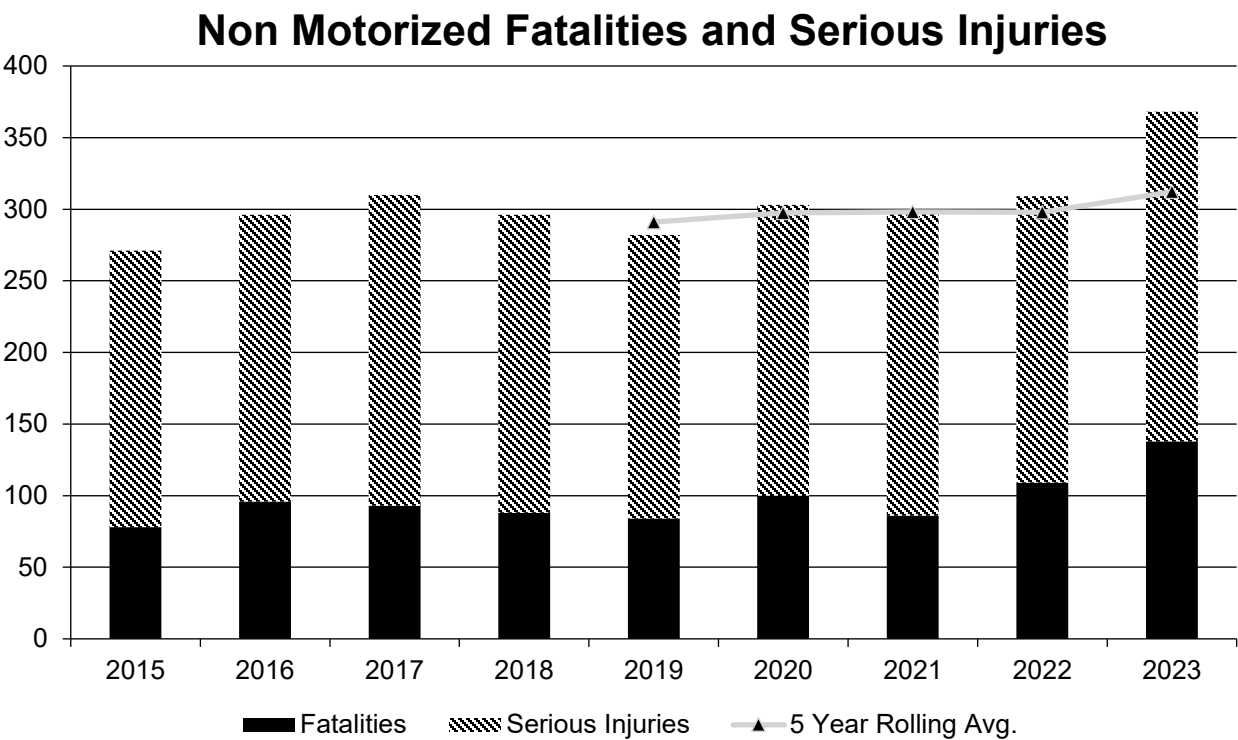
General Highway Safety Trends

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

PERFORMANCE MEASURES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fatalities	761	834	782	724	732	780	806	744	814
Serious Injuries	3,175	3,114	3,008	2,749	2,736	2,644	2,867	2,787	3,074
Fatality rate (per HMVMT)	1.561	1.695	1.586	1.461	1.477	1.677	1.673	1.547	1.659
Serious injury rate (per HMVMT)	6.511	6.329	6.101	5.548	5.522	5.686	5.949	5.794	6.265
Number non-motorized fatalities	78	96	93	88	84	100	86	109	138
Number of non-motorized serious injuries	193	200	217	208	198	203	213	200	230
Number of non-motorized fatalities & serious injuries	271	296	310	296	282	303	299	309	368







Describe fatality data source.
FARS

2024 Kentucky Highway Safety Improvement Program

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

Year 2023

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	119.2	0.53	1.22
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	82.8	201.6	1.66	2.89
Rural Minor Arterial	87.6	282.8	2.43	5.48
Rural Minor Collector	71.4	278.6	3.4	9.17
Rural Major Collector	122	402.6	3.1	7.09
Rural Local Road or Street	46.8	175.4	1.56	3.28
Urban Principal Arterial (UPA) - Interstate	41	120.6	0.62	1.41
Urban Principal Arterial (UPA) - Other Freeways and Expressways	7.8	16.2	0.91	1.77
Urban Principal Arterial (UPA) - Other	90.4	327	2.02	5.06
Urban Minor Arterial	97.4	450	1.85	5.54
Urban Minor Collector				
Urban Major Collector	32	190.2	1.26	5.09
Urban Local Road or Street	16.6	85	0.73	1.84

2024 Kentucky Highway Safety Improvement Program

Year 2023

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	675	2,319.8	1.4	4.8
County Highway Agency	59.6	240.4		
Town or Township Highway Agency				
City or Municipal Highway Agency	39.8	245.4		
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)	3.4	13.2		
Indian Tribe Nation				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2025 Targets *

Number of Fatalities:745.0

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

The Kentucky Transportation Cabinet (KYTC) has set the target goal of 745 fatalities (5-year moving average) for calendar year 2025. Similar to the national trend, the 5-year moving average for the number of fatalities on Kentucky's public roads has mostly been increasing the last several years, after a historically low number of fatalities in calendar year 2013. This is possibly due to factors such as increased VMT and economic growth. Regardless of current or past trends, KYTC remains committed to the reduction of fatalities throughout the Commonwealth of Kentucky. A target of 745 represents a reduction in total fatalities in calendar years 2024 and 2025 as compared to calendar years 2021, 2022, and 2023. This goal is shared with the HSP and reiterates KYTC's commitment to highway safety and the shared vision of Toward Zero Deaths.

Number of Serious Injuries:2542.0

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

The Kentucky Transportation Cabinet (KYTC) has set the target goal of 2542 serious injuries (5-year moving average) for calendar year 2025. KYTC remains committed to the reduction of serious injuries throughout the Commonwealth of Kentucky. This target represents a reduction in total serious injuries in calendar years 2024 and 2025 as compared to calendar years 2021, 2022, and 2023. This goal is shared with the HSP and reiterates KYTC's commitment to highway safety.

Fatality Rate:1.540

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

The Kentucky Transportation Cabinet (KYTC) has set the target goal of a 1.540 fatality rate (5-year moving average) for calendar year 2025. KYTC remains committed to the reduction of the fatality rate throughout the Commonwealth of Kentucky. This target represents a reduction in fatality rate in calendar years 2024 and 2025 as compared to calendar years 2021, 2022, and 2023. This goal is shared with the HSP and reiterates KYTC's commitment to highway safety and the shared vision of Toward Zero Deaths.

Serious Injury Rate:5.840

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

The Kentucky Transportation Cabinet (KYTC) has set the target goal of a 5.840 serious injury rate (5-year moving average) for calendar year 2025. KYTC remains committed to the reduction of the serious injury rate throughout the Commonwealth of Kentucky. This target represents a reduction in serious injury rate in calendar years 2024 and 2025 as compared to calendar years 2021, 2022, and 2023. This goal reiterates KYTC's commitment to highway safety.

Total Number of Non-Motorized Fatalities and Serious Injuries:311.0

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

The Kentucky Transportation Cabinet (KYTC) has set the target goal of 311 non-motorized fatalities and serious injuries for calendar year 2025. KYTC remains committed to the reduction of non-motorized fatalities and serious injuries throughout the Commonwealth of Kentucky. This target represents a reduction in total non-motorized fatalities and serious injuries in calendar years 2024 and 2025 as compared to calendar years 2021, 2022, and 2023. This goal reiterates KYTC's commitment to highway safety and the shared vision of Toward Zero Deaths.

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

Staff within KYTC's Traffic Safety Branch and the Kentucky Office of Highway Safety partner with KYTC's Division of Planning and MPOs to coordinate safety performance targets.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2023 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	764.0	775.2
Number of Serious Injuries	2658.0	2821.6
Fatality Rate	1.575	1.607
Serious Injury Rate	5.519	5.843
Non-Motorized Fatalities and Serious Injuries	289.0	312.2

Regarding the 2023 safety performance targets, Kentucky did not meet any of the safety performance targets. Furthermore, Kentucky did not show significant progress towards any of the safety performance measures, since the 2023 actual outcomes were higher than the 5-year average values for the 2019-2021 baseline comparison period. Based on this information, Kentucky did not meet nor make significant progress toward the five safety performance measures.

The primary reason for Kentucky not meeting nor making significant progress towards the five safety performance measures is because Kentucky sets extremely aggressive safety performance targets. Similar to national trends over recent years, Kentucky's actual values for all of the safety performance measures have went up and down, with some years' actual values being slightly higher than the actual values prior to the recent years. In short, it is becoming increasingly challenging to see multi-year downward trends for all of the safety performance measures. Nevertheless, Kentucky established the 2023 safety targets at or below the 2021 baseline values to show a strong commitment towards safety performance improvement, even though it was understood these targets would be very difficult to achieve.

Applicability of Special Rules

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

No

Does the VRU Safety Special Rule apply to the State for this reporting period?

No

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	2017	2018	2019	2020	2021	2022	2023
Number of Older Driver and Pedestrian Fatalities	198	189	218	166	196	223	215
Number of Older Driver and Pedestrian Serious Injuries	500	429	472	437	498	572	609

NOTE: a typo for the number of older driver and pedestrian serious injuries during 2018 was corrected (changed the value from 500,429 to 429).

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Other-Initiative Basis

Kentucky's HSIP has not yet developed procedures for evaluating the effectiveness of the overall program. However, the effectiveness of several HSIP initiatives are evaluated using various methods, with the actual benefit-cost ratio achieved being the primary method Kentucky's HSIP relies on to decide whether to continue or discontinue an HSIP initiative.

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 for the overall program. Effectiveness at the initiative level is determined through benefit-cost ratios, where applicable, as seen below in the entry entitled Countermeasure Effectiveness Evaluations and in the Executive Summary. Current and previous benefit-cost analyses have shown positive return on investment for many of 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
- More systemic programs
- Policy change

The most recent policy change is that KYTC has implemented Intersection Control Evaluation (ICE) guidance, as well as guidance on when ICE should be implemented on projects in development. KYTC is also in the process of updating the Data Driven Safety Analysis (DDSA) Implementation Plan that was published in 2020.

Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

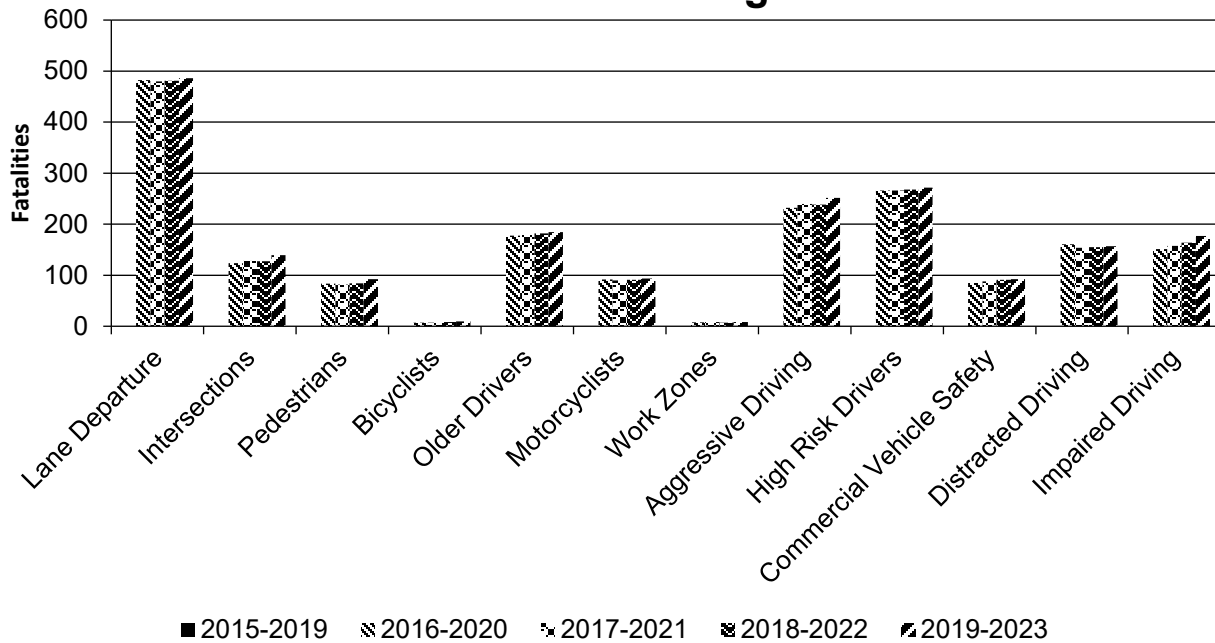
Year 2023

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	Other (define)	486	1,577.6	1.01	3.27
Intersections	Intersections	139.2	713.6	0.29	1.48
Pedestrians	Vehicle/pedestrian	92.6	175.4	0.19	0.36
Bicyclists	Vehicle/bicycle	9.6	33.4	0.02	0.07

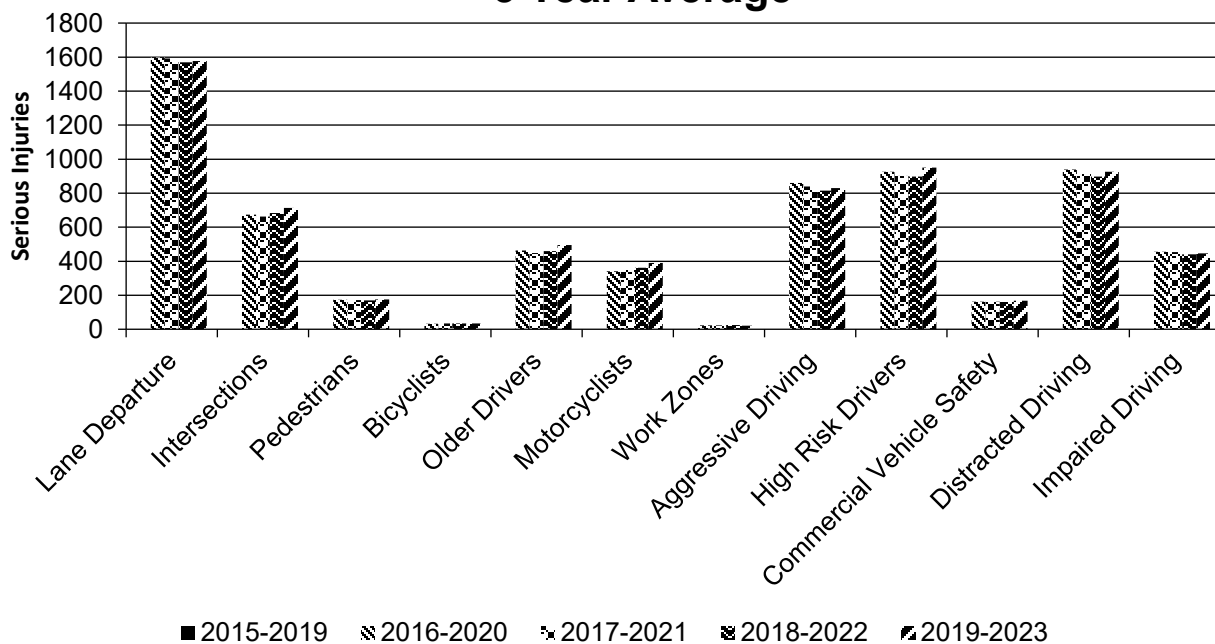
2024 Kentucky Highway Safety Improvement Program

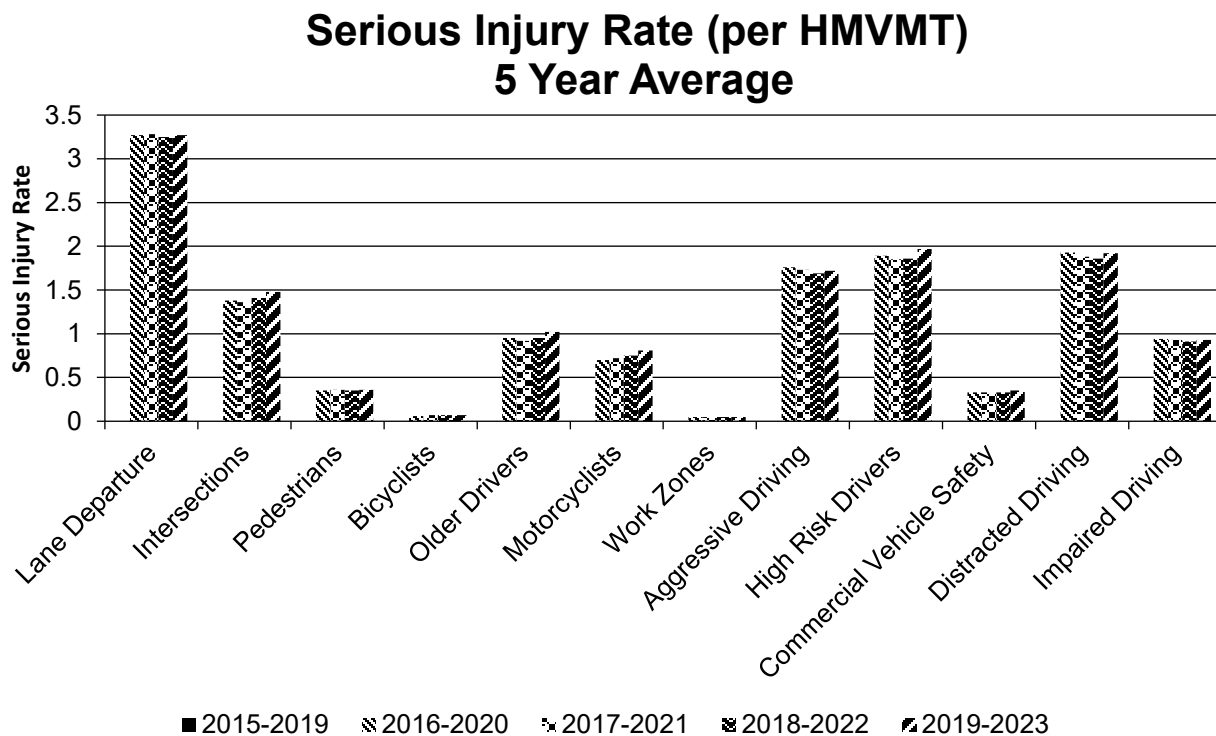
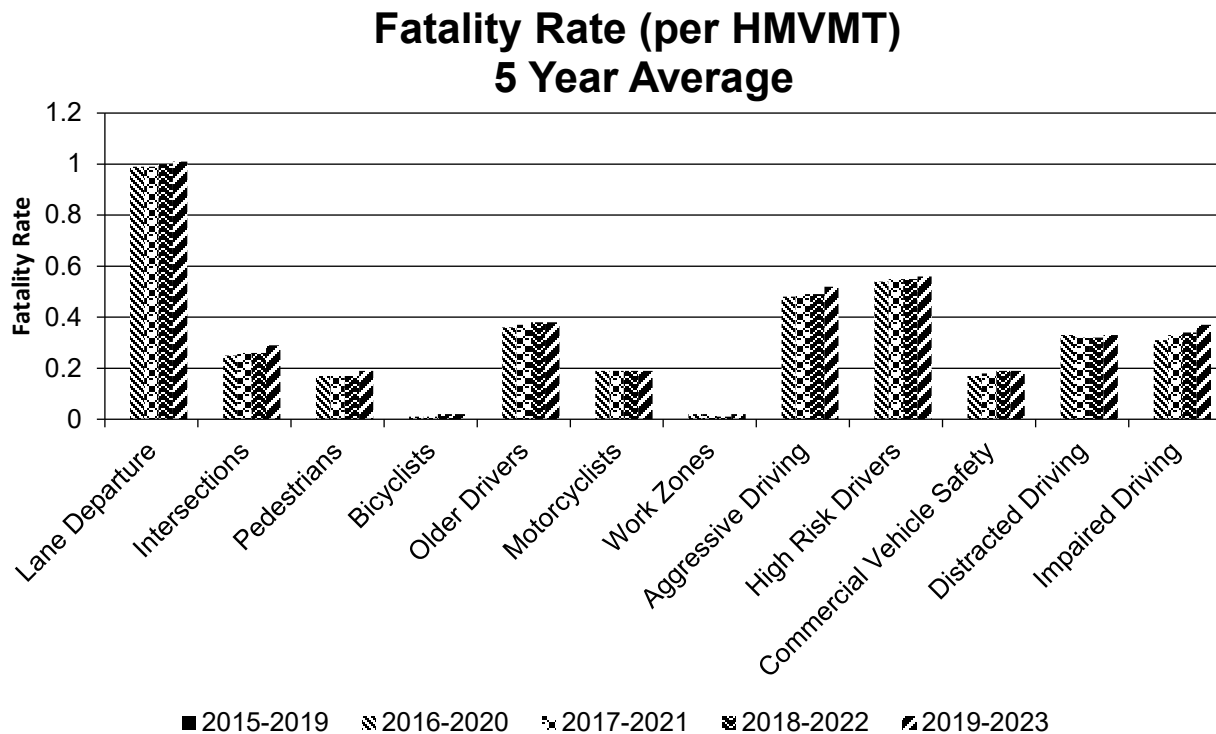
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Older Drivers	Other (define)	184.6	494.6	0.38	1.02
Motorcyclists	Other (define)	93.6	390	0.19	0.81
Work Zones	Other (define)	8.4	21.8	0.02	0.05
Aggressive Driving	Other (define)	251.6	830.2	0.52	1.72
High Risk Drivers	Other (define)	271.4	951.2	0.56	1.97
Commercial Vehicle Safety	Truck-related	92.6	167	0.19	0.35
Distracted Driving	Other (define)	157	926	0.33	1.92
Impaired Driving	Other (define)	177.2	446.8	0.37	0.93

Number of Fatalities 5 Year Average



Number of Serious Injuries 5 Year Average





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

No

2024 Kentucky Highway Safety Improvement Program

Effectiveness evaluations were performed and benefit/costs were calculated, with results presented below, for three of Kentucky's HSIP initiatives (shoulder widening, roadway departure corridors, and restricted crossing U-turns). HSM methods were used to evaluate and calculate the benefits and costs.

SHOULDER WIDENING

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

Benefit/Cost analysis results using observed crashes; 3.57:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

ROADWAY DEPARTURE CORRIDORS

Wilcoxon Signed-Rank Test for "before and after shift in proportions of road departure crashes" –statistically significant decrease at the 99% confidence level.

Benefit/Cost analysis results using observed crashes; 5.32:1 based on Comprehensive Cost of motor vehicle collisions (National Safety Council).

RESTRICTED CROSSING U-TURNS (RCUTs)

Wilcoxon Signed-Rank Test for "before and after shift in proportions of angle crashes" – no statistically significant change.

Benefit/Cost analysis results using observed crashes; 4.12:1 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 its next SHSP update?

2024

Kentucky has begun the process of updating the SHSP and expects to have the next SHSP in place by the beginning of 2025. The next SHSP will cover the period from 2025 to 2029.

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								

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Functional Class (19) [19]	100	100					100	100	100	100
	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	45		
	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				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					100	100				
	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	83.19	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 Investment Plan.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.