



S | S
— —
4 | A

SAFE STREETS AND ROADS FOR ALL Local Assistance

Martha Horseman

KYLTAP Director

Technology Transfer Program at UK/KTC

Adam Kirk

Local Government Outreach Engineer,
Technology Transfer Program at UK/KTC



AGENDA

- Local Government Outreach / Technical Assistance Overview
- Safe Streets and Roads for All Overview
- KY ADD SS4A Approach
- FY 2024 Notice of Funding Opportunity

KY LOCAL TECHNICAL ASSISTANCE PROGRAM (LTAP)

The Local Technical Assistance Program (LTAP) assists local highway agencies in each State to meet the challenge of maintaining and rehabilitating roads and bridges and learn about best practices and innovative technology to meet local needs.



KY LOCAL TECHNICAL ASSISTANCE PROGRAM (LTAP)

Safety Circuit Rider Program

- Six counties selected a year
- Training followed by RSA
- HSIP funds to pay for safety improvements
- Free Technical Assistance

6 Counties per Year

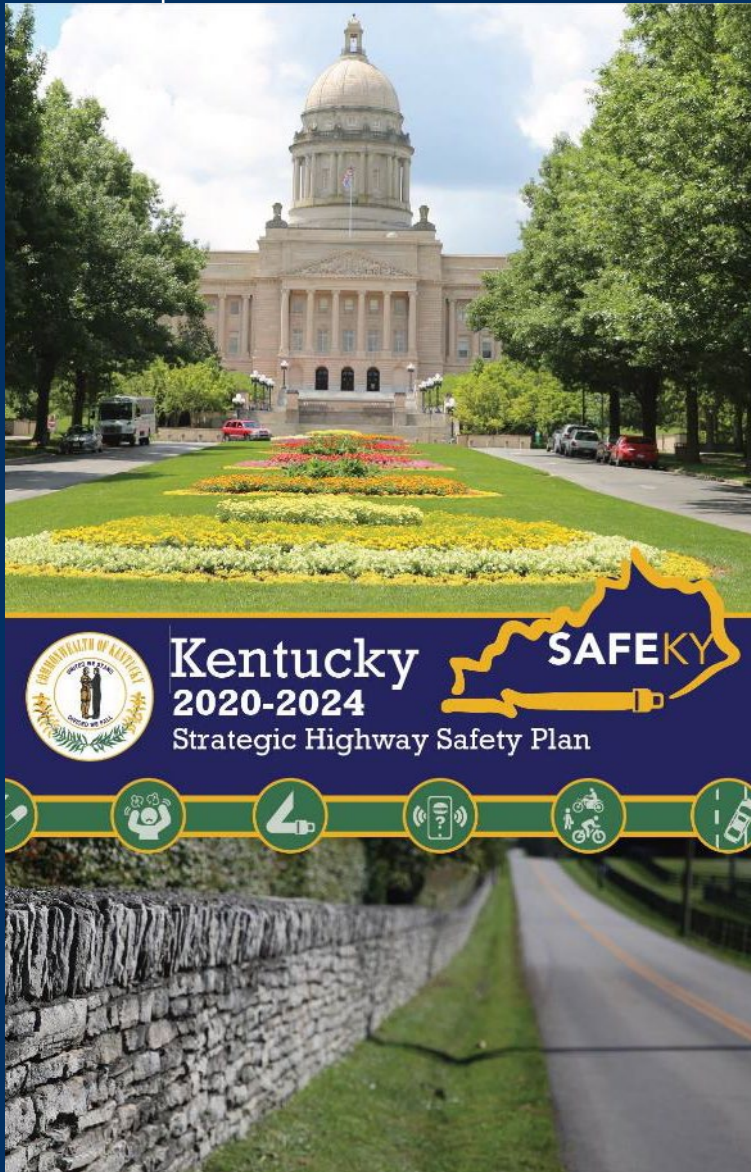
Fund 2 Roads per County



LOCAL ROAD SAFETY PLANS

- Data Driven Analysis
- High order local roadways
- High crash and high hazard locations
- Proven safety countermeasures
- Systemic approach to improvements
- Projects eligible for HSIP funding





Emphasis Areas



Aggressive Driving

Driving behavior characterized by speeding, disregarding traffic control, following too closely, weaving in traffic, failure to yield the right of way, or improper passing.



Distracted Driving

Driving behavior characterized by cell phone usage, distraction, or inattention.



Impaired Driving

Driving while under the influence of alcohol or drugs.



Occupant Protection

Failure to use seat belt or child restraint while driving or riding in a vehicle.



Roadway Departure

A crash type that results from a vehicle leaving its lane to the left or right.



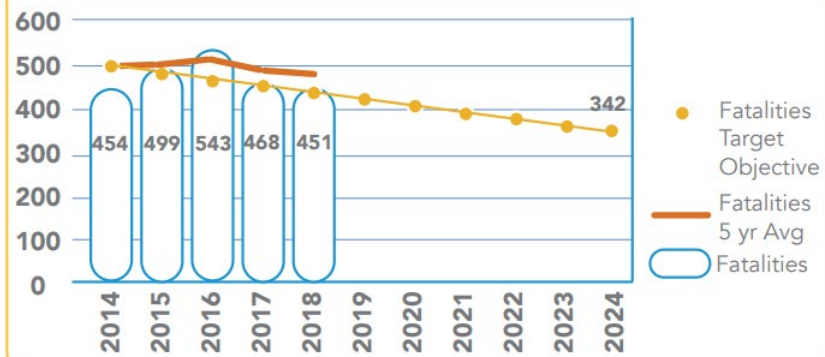
Vulnerable Road Users

Crashes involving pedestrians, bicycles, motorcycles, electric scooters, or other vehicles besides cars and trucks.

KENTUCKY'S STRATEGIC HIGHWAY SAFETY PLAN



ROADWAY DEPARTURE Goal & Objective



ENGINEERING STRATEGIES

Roadway Departure Aggressive Driving Distracted Driving Impaired Driving

Continue the Safety Circuit Rider Program



Local road safety plans



Provide for safe recovery with clear zones, wider shoulders, and pavement



STEP: Rectangular rapid flashing beacons



ENGINEERING STRATEGIES

Roadway Departure Aggressive Driving Distracted Driving Impaired Driving Occupant Protection Vulnerable Road Users

Access management

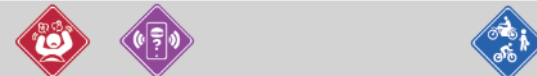
Improve skid resistance



Improve superelevation during resurfacing



Turn lane improvements, such as providing turn lanes, offset left- or right-turn lanes



Innovative intersections, such as roundabouts and RCUTs



Dynamic/variable speed limits – e.g., in work zones



Enhanced reflective signage; Enhanced striping and pavement



STEP: Improve visibility of intersection markings and devices



STEP: Road diets



Continued upgrades to, and installation of, roadside barrier systems, such as guardrails and median barriers



Continue the Safety Circuit Rider Program



Local road safety plans



Provide for safe recovery with clear zones, wider shoulders, and pavement



STEP: Rectangular rapid flashing beacons



SAFE STREETS FOR ALL (SS4A)

**\$1B Annually, FY22-26, to
regional and local initiatives**

Eligible Recipients

- Metropolitan Planning Organizations (MPOs)
- Political Subdivision of a State (County, City)
- Multijurisdictional Groups
- State DOTs not Eligible

Safe Streets for All

represents a significant opportunity for Local Agencies to raise the minimum standard of their roadway system, accelerate modern safety treatment integration, and improve transportation safety across all roads in Kentucky.

SS4A Overview Funding

Project Funding Opportunities

- Safety Action Plan (SAP) Development Grants
- Supplemental Action Plan Activities
- Implementation Grants for projects identified in SAP

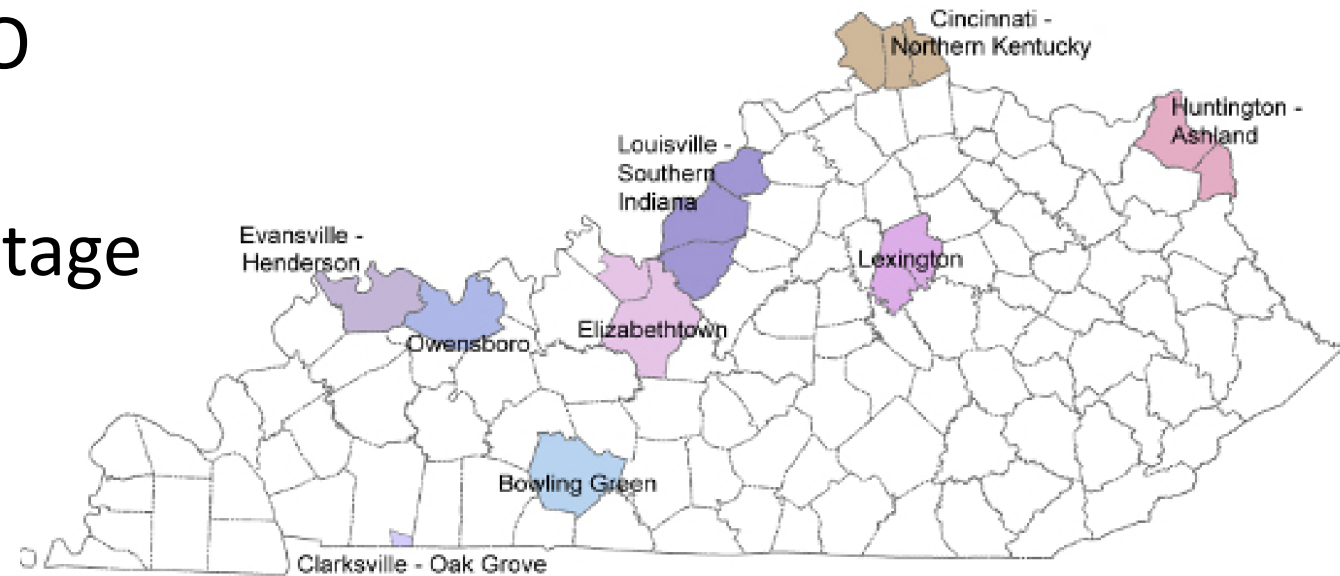
Funding Limits

- Action Plan Grants:
 - \$200K - \$1M
 - Up to \$5M for MPOs or Consortium
- Implementation Grants
 - \$5M - \$30M

*The Federal share of a SS4A grant may not exceed 80 percent of total eligible activity costs. All matching funds must be from non-Federal sources. In accordance with 2 CFR § 200.306, grant recipients may use **in-kind or cash contributions** toward local match requirements*

SS4A Challenges

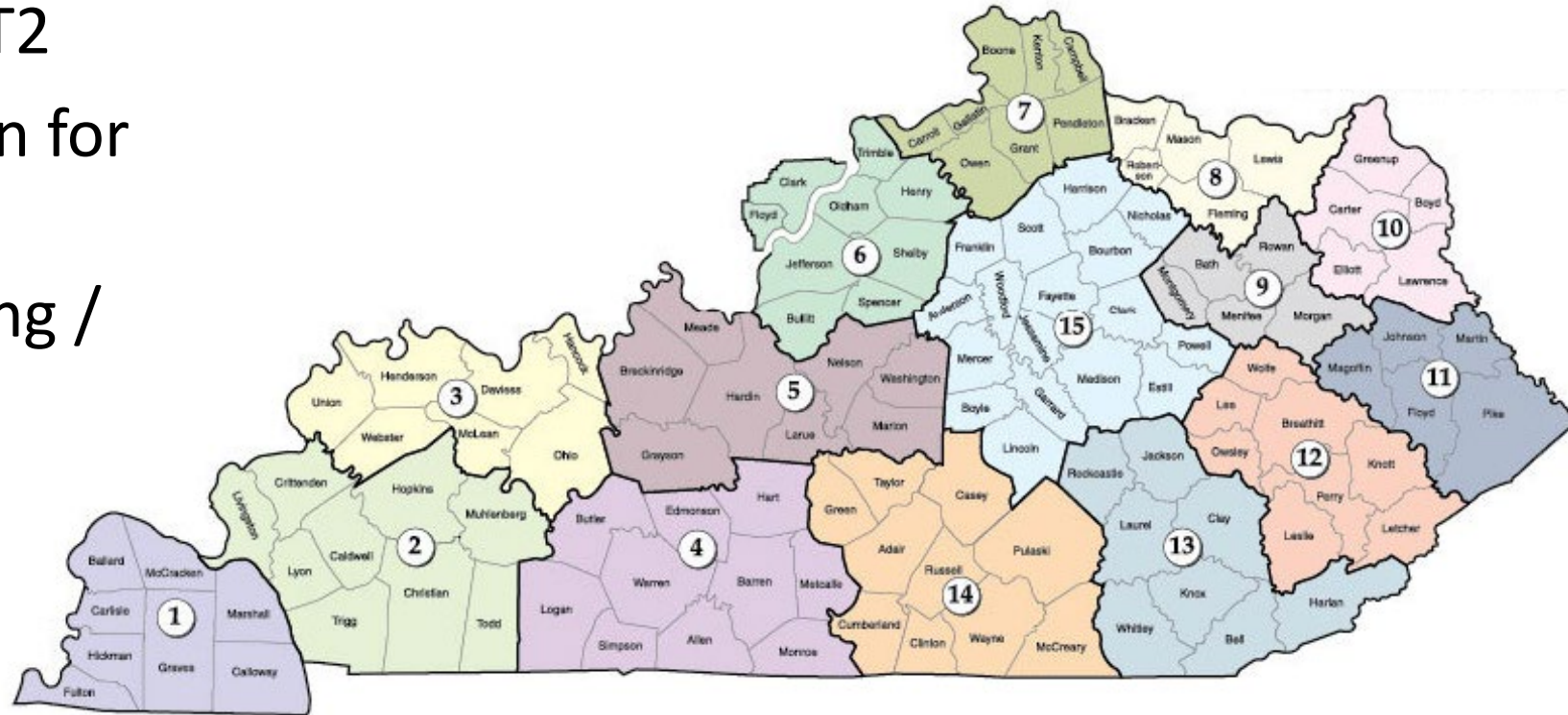
- 16 of 120 Counties covered by MPO
- 131 of 431 Cities covered by MPO
- Rural Cities/Counties at disadvantage
- Too big for one organization
- Minimum funding limits may not be met in single local agency



SS4A ADD Consortium Work Plan

Create Consortiums of Counties / Cities based on ADDs

- Championed by ADD
- Technical Analysis by UK/T2
- Create a Safety Action Plan for All Roadways in ADD
- UK/T2 Provide grant writing / administration support



SS4A ADD Consortium Work Plan

Partnered Approach Benefits

- Streamlined Approach to Grant Application and Safety Action Plan Development
- Information and resource sharing between consortiums
- Consistent and comprehensive approach within regions to address common issues
- Allows for project bundling in project implementation

USDOT Safe Streets and
Roads for All
Action Plan Grant Application

Attachments

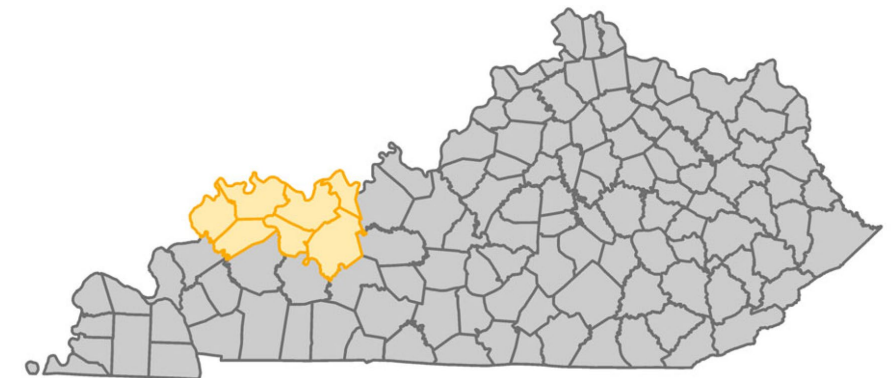


Green River ADD SAP Application Overview

Tom Lovett
MPO Director
Green River ADD

Green River Area Development District
300 Gradd Way
Owensboro, KY 42301

September 13, 2022

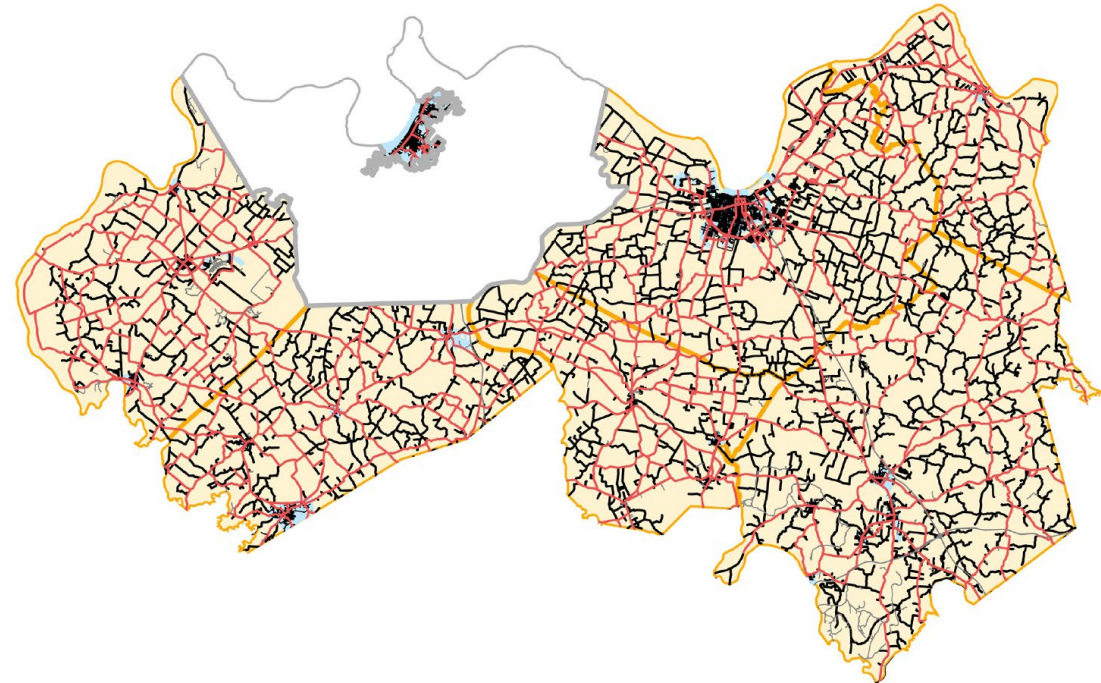


Key Information Table

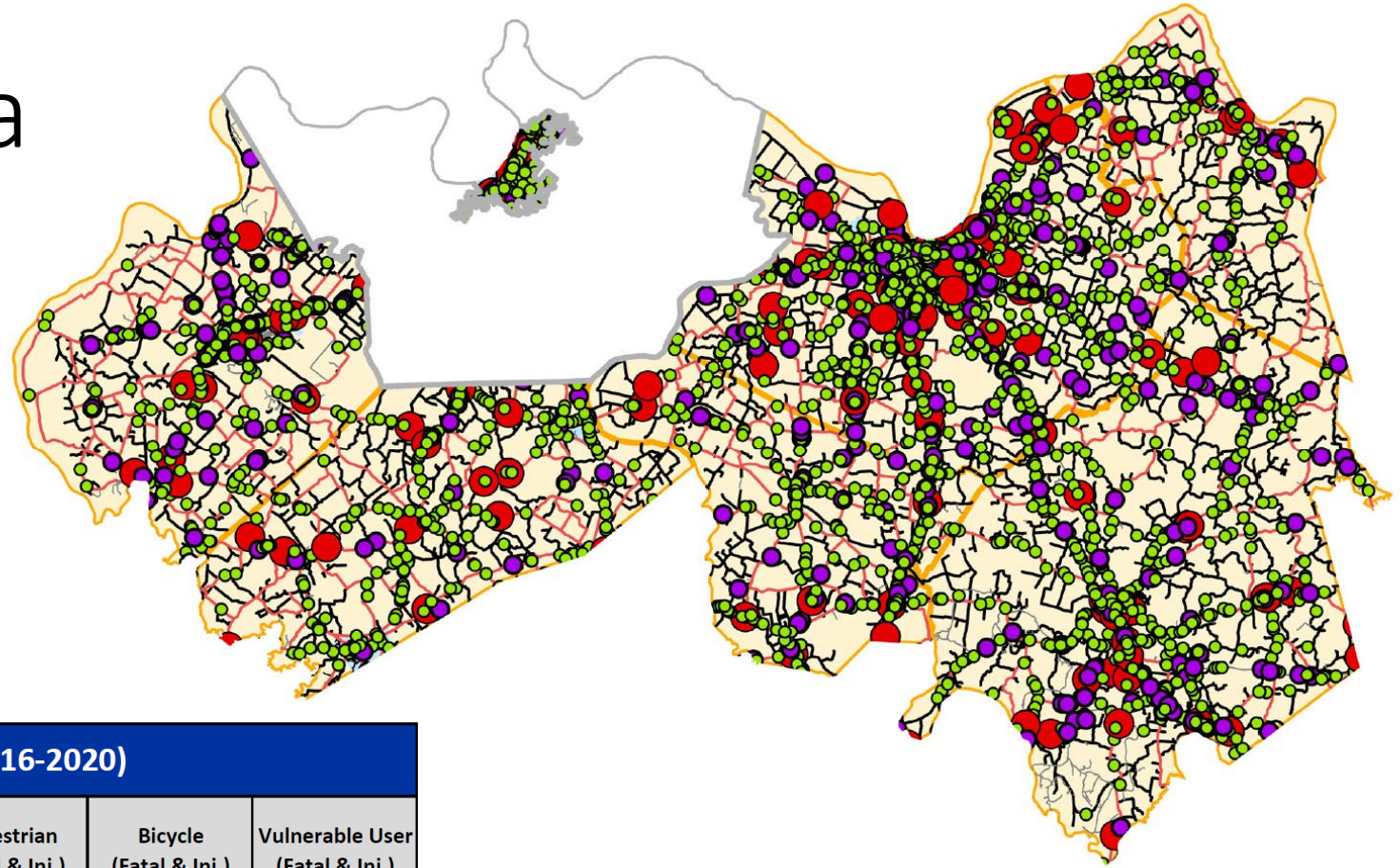
Lead Applicant	Green River Area Development District
Additional eligible entities jointly applying	Daviess County, KY
	Hancock County, KY
	McLean County, KY
	Ohio County, KY
	Union County, KY
	Webster County, KY
	City of Owensboro, Daviess County, KY
	City of Henderson, Henderson County, KY
Total jurisdiction population	191,511
Count of motor-vehicle-involved roadway fatalities from 2016 to 2020	154
Fatality rate per 100,000 persons	16.08
Action Plan Type	New Action Plan
Population in Underserved Communities	50%
States(s) in which projects and strategies are located	Kentucky
Costs by State (if project spans more than one State)	\$ 216,024

GRADD Key Statistics

- 7 Counties
- 2 Major Cities
- 60% Local Owned Roads
- 50% Underserved Pop.



GRADD Crash Data



Supplemental Information Table (Crash Data 2016-2020)

Jurisdiction	Fatalities	Injuries	Total Fatal & Injuries	Pedestrian (Fatal & Inj.)	Bicycle (Fatal & Inj.)	Vulnerable User (Fatal & Inj.)
Green River Area Development District	144	6,221	6,365	116	79	195
Daviess County, KY	58	3,808	3,866	96	75	171
Hancock County, KY	9	164	173	0	0	0
McLean County, KY	11	406	417	1	1	2
Ohio County, KY	32	982	1,014	12	1	13
Union County, KY	20	476	496	6	2	8
Webster County, KY	14	385	399	1	0	1

Safety Action Plan Requirements

What's in a Local Safety Plan?

Safety Plan Requirements		
Required	Crash Analysis	✓
	Strategic Safety Projects	✓
	Completed in < 5 Yrs	✓
Must Contain 4 of 6	Vision Zero	✓
	Task Force Driven	✓
	Engage Public	✓
	Considers Equity	✓
	Assessment of Policies	✓
	Performance Measures	✓

UK/T2 Resources

TAP IT!

KY Technical Assistance Program

Horizontal Alignment (Curve) Signing



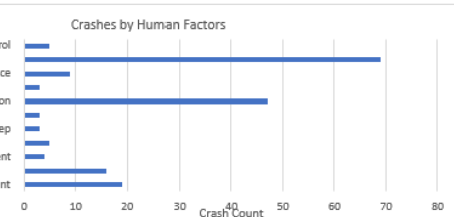
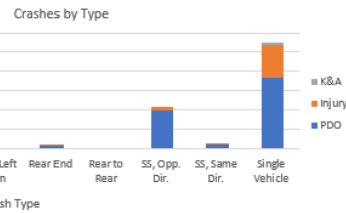
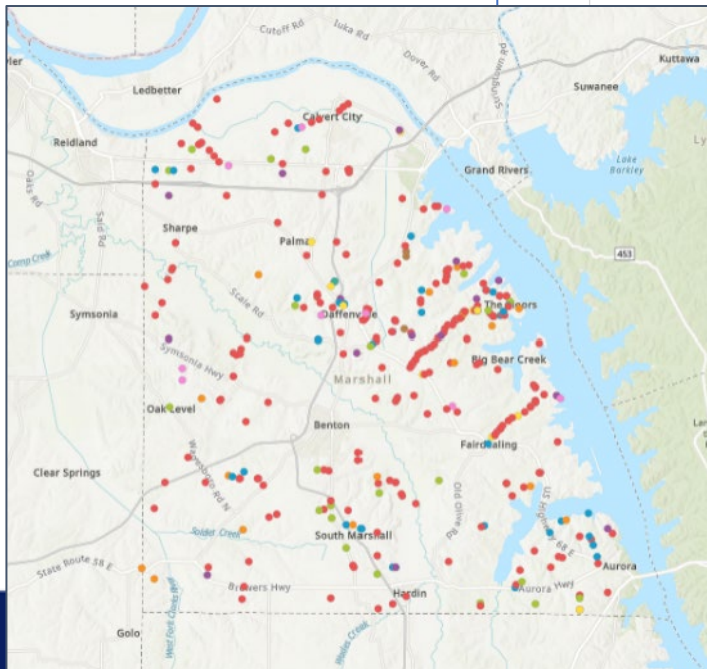
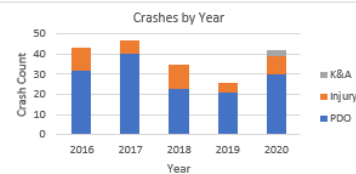
TECHNOLOGY
TRANSFER
PROGRAM

Barren County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in BARREN County. For more information visit crashinformation.ky.gov or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@uky.edu or (859) 421-2567. This information is provided by the University of Kentucky Technology Transfer Program, which is supported by the Kentucky Transportation Cabinet and Federal Highway Administration to support local road safety.

Crash Severity (2016-2020)

Crash Severity	Crash Count
Fatal & Incapacitating	20
Injury	88
Property Damage Only	475



ADAM KIRK, PE
KY SAFETY CIRCUIT RIDER
adam.kirk@uky.edu

Horizontal Alignment (Curve) Signing

The MUTCD provides guidance for the use of horizontal alignment warning signs on roadways based on the speed differential between prevailing speed on the roadway and the horizontal curve's advisory speed. These warning signs are required on arterial and collector roadways with more than 1,000 AADT but may be used

on other roadways based on engineering judgment. While curve signing is not required on many local roads, signing can be implemented to improve safety for all users.

Specifically, the increased and consistent use of horizontal alignment signing are proven safety countermeasures capable of reducing crashes by 30-40 percent.



Horizontal Curve (Waterwork Road, Boyle County, KY)

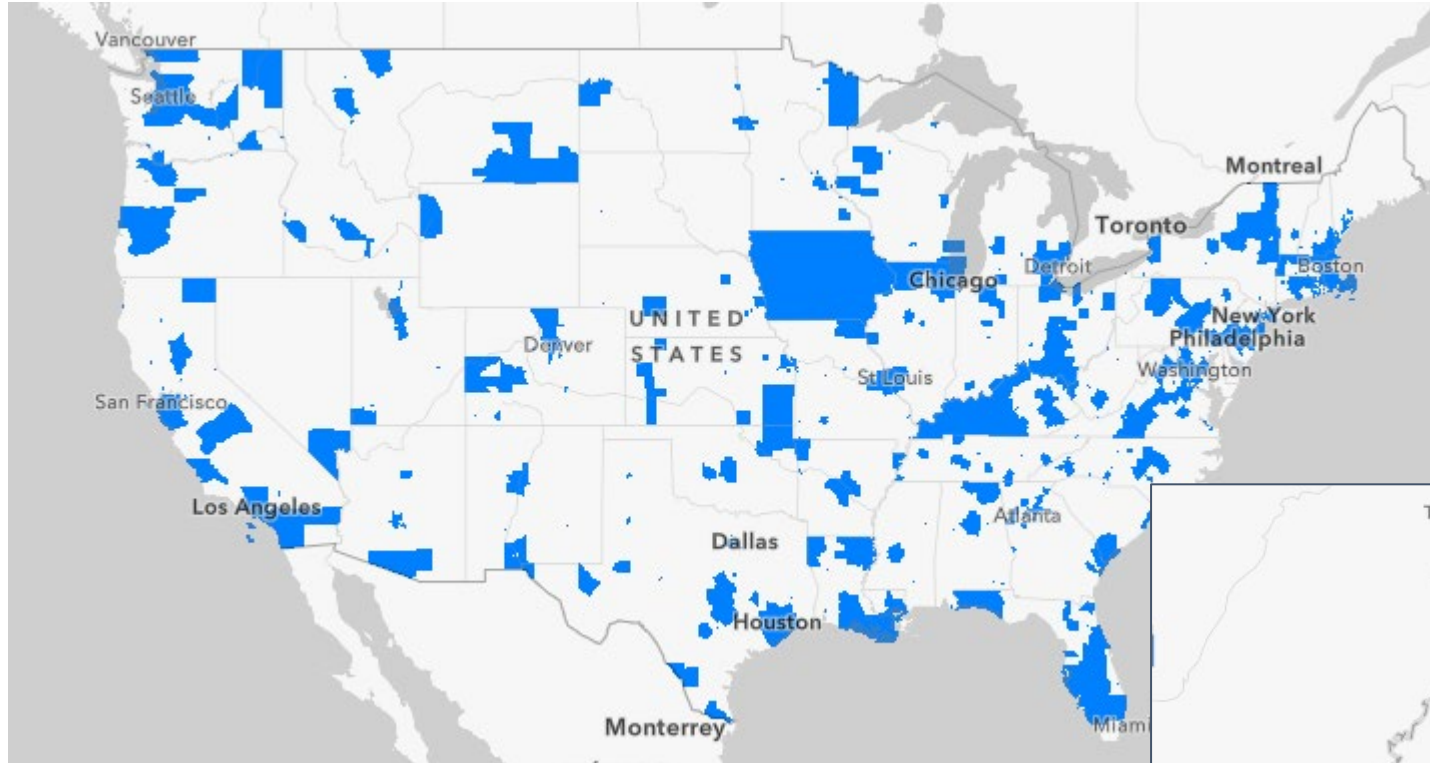
It is recommended that all county collector roadways be evaluated to determine appropriate advisory speeds and signed appropriately. The MUTCD provides for three placements of signing to address horizontal alignment issues. These include 1) in advance of the horizontal curve, 2) at the beginning of the horizontal curve and 3) guidance throughout the horizontal curve.

Advanced sign placement includes the Turn, Curve, Reverse Turn, Reverse Curve and Winding Road Signs, shown in Figure 14 below. Advisory speed plaques are recommended by the MUTCD in conjunction with these signs when the advisory speed is 5 mph or less than the prevailing speed on the roadway.

Horizontal Alignment Signs



2022 AWARDS



14 Safety Action Plan Awards

11 ADDs

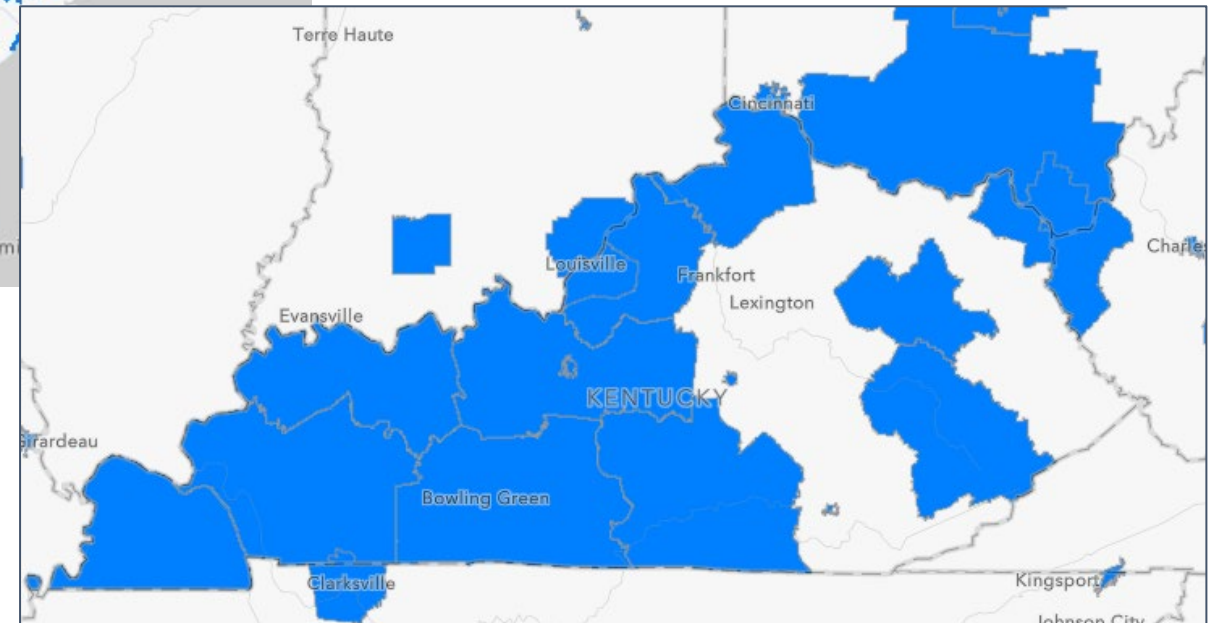
85 Counties

4 City Recipients

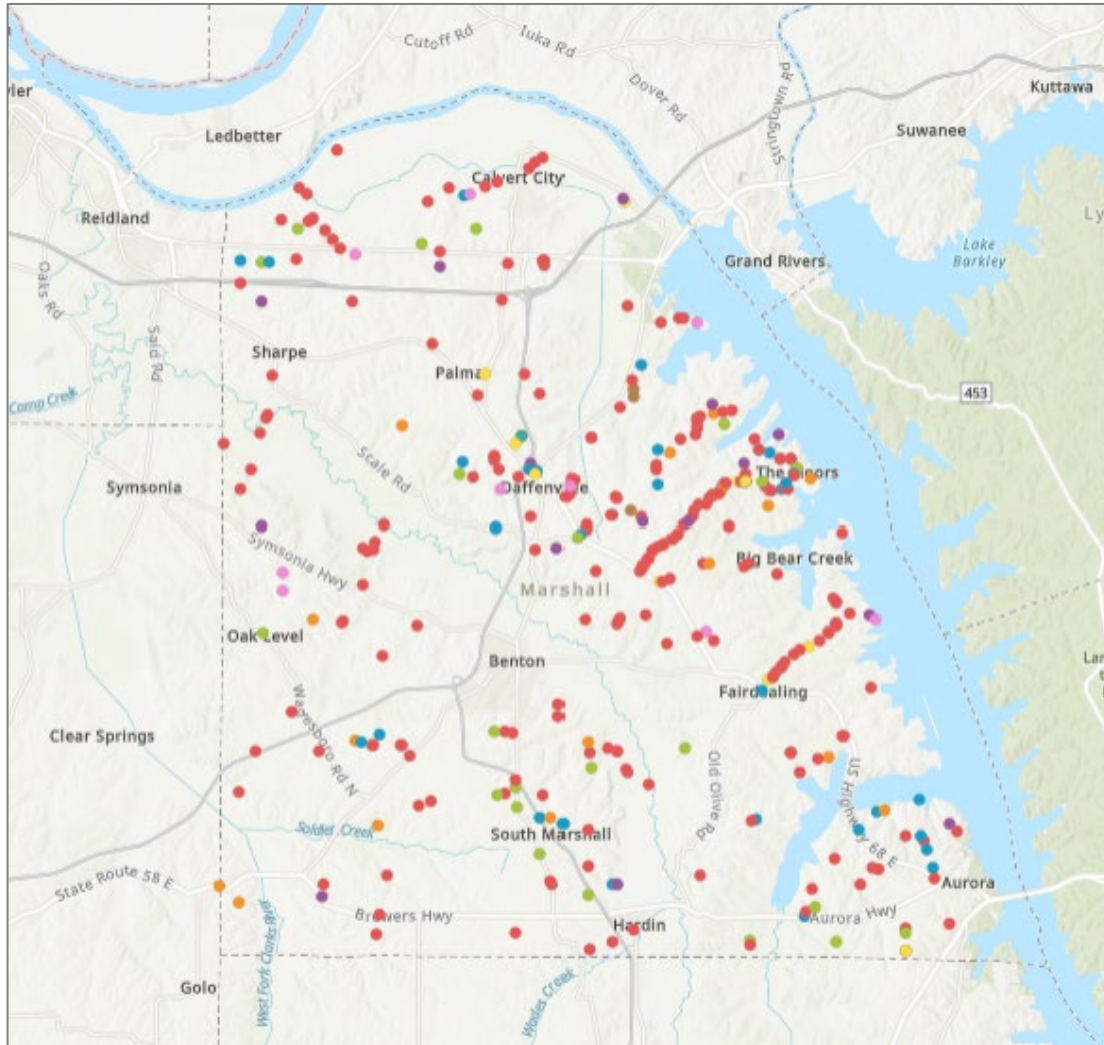
(\$3.4M)

1 Implementation Award

(Louisville, Jefferson Co. \$21.4M)



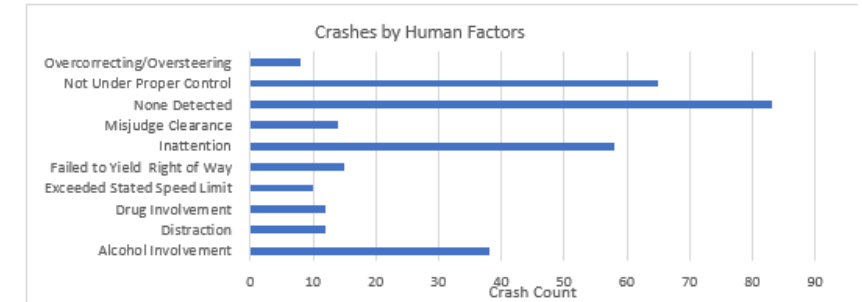
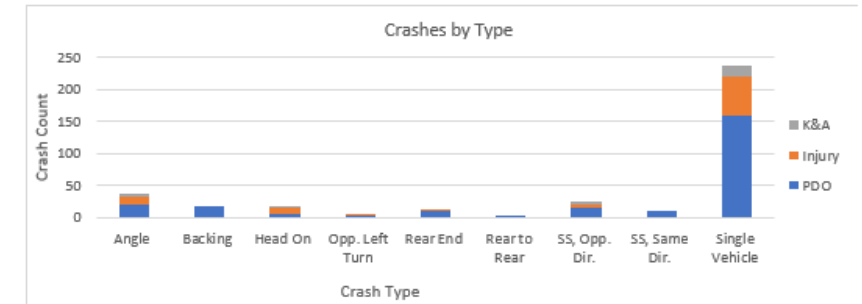
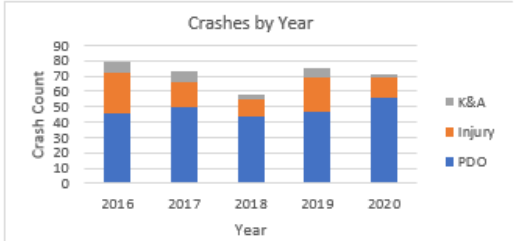
UK/T2 Resources



This crash summary is compiled from *Kentucky Collision Analysis for the Public* data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in MARSHALL County. For more information visit crashinformationky.gov or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@uky.edu or (859) 421-2567. This information is provided by the University of Kentucky Technology Transfer Program, which is supported by the Kentucky Transportation Cabinet and Federal Highway Administration to support local road safety.

Crash Severity (2016-2020)

Crash Severity	Crash Count
Fatal & Incapacitating	25
Injury	88
Property Damage Only	243



UK/T2 Resources

SAPs AND LRSPs

- Local Road Safety Plan process aligns well with SS4A Safety Action Plan Requirements
- Projects identified in a SAP are eligible for SS4A funds and KYTC-HSIP funds

SAP Requirements		LRSP
Required	Crash Analysis	✓
	Strategic Safety Projects	✓
	Plan <5yrs Old (2017-2022)	✓
Must Contain 4 of 6	Vision Zero	
	Task Force Driven	✓
	Engage Public	
	Considers Equity	
	Assessment of Policies	✓
	Performance Measures	✓

SAFETY ACTION PLAN

2022



DEVELOP FLEXIBLE SAPs

TAP IT!

KY Technical Assistance Program

URBAN STREETS

TAP IT!

KY Technical Assistance Program

RURAL ROADS

Horizontal Alignment (Curve) Signing

The MUTCD provides guidance for the use of horizontal alignment warning signs on roadways based on the speed differential between prevailing speed on the roadway and the horizontal curve's advisory speed. These warning signs are required on arterial and collector roadways with more than 1,000 AADT but may be used on other roadways based on engineering judgment. While curve signing is not required on many local roads, signing can be implemented to improve safety for all users. Specifically, the increased and consistent use of horizontal alignment signing are proven safety countermeasures capable of reducing crashes by 30-40 percent.

It is recommended that all county collector roadways be evaluated to determine appropriate advisory speeds and signed appropriately. The MUTCD provides for three placements of signing to address horizontal alignment issues. These include 1) in advance of the horizontal curve, 2) at the beginning of the horizontal curve and 3) guidance throughout the horizontal curve. Advanced sign placement includes the Turn, Curve, Reverse Turn, Reverse Curve and Winding Road Signs, shown in Figure 14 below. Advisory speed plaques are recommended by the MUTCD in conjunction with these signs when the advisory speed is 5 mph or less than the prevailing speed on the roadway.

Horizontal Curve (Waterwork Road, Boyle County, KY)

Horizontal Alignment Signs

Boone County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Boone County. For more information visit kysafety.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov.

Crash Severity	Crash Count
Fatal & Injury	10
Property	388

Kenton County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Kenton County. For more information visit kysafety.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov.

Crash Severity	Crash Count
Fatal & Injury	10
Property	388

Campbell County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Campbell County. For more information visit kysafety.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov.

Crash Severity	Crash Count
Fatal & Injury	10
Property	388



BOONE COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor

KENTON COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor

CAMPBELL COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor
008 CR-1016	CAYTON RD	Asphalt		0.58		Upgrade signing on Corridor
008 CR-1144	STEPHENSON MILL RD	Asphalt		4.37		Upgrade signing on Corridor
008 CR-1328	WOOLPER RD	Asphalt		5.51		Upgrade signing on Corridor
008 CR-1333	BOTTLE LN	Asphalt		1.67		Upgrade signing on Corridor
008 CR-1032	POINT PLEASANT RD	Asphalt		1.54		Upgrade signing on Corridor
008 CR-1121	OLD LEXINGTON PIKE	Asphalt		2.32		Upgrade signing on Corridor
008 CR-1201	BIG BONE CHURCH RD	Asphalt		0.93		Upgrade signing on Corridor
008 CR-1312	WILLIAMS RD	Asphalt		1.78		Upgrade signing on Corridor
008 CR-1296	BOAT DOCK RD	Asphalt		1.78		Upgrade signing on Corridor
008 CR-1011	OAKBROOK RD	Asphalt		2.36		Upgrade signing on Corridor
008 CR-1121	OLD LEXINGTON PIKE	Asphalt		2.22		Upgrade signing on Corridor
008 CR-1201	BIG BONE CHURCH RD	Asphalt		2.76		Upgrade signing on Corridor
008 CR-1312	WILLIAMS RD	Asphalt		1.81		Upgrade signing on Corridor
008 CR-1296	BOAT DOCK RD	Asphalt		1.33		Upgrade signing on Corridor
008 CR-1011	OAKBROOK RD	Asphalt				Upgrade signing and striping on Corridor

SAFETY ACTION PLAN

2022



DEVELOP FLEXIBLE SAPs

TAP IT! URBAN STREETS

TAP IT! RURAL ROADS

PEDESTRIANS... The MUTCD... speed... but may be... increased... capable of... it is recent... speeds are... The MUTCD... include 1) through... Advanced... Signs, show... conjunction... roadway.

Horizontal Alignment (Curve) Signing

The MUTCD provides guidance for the use of horizontal alignment warning signs on roadways based on the speed differential between prevailing speed on the roadway and the horizontal curve's advisory speed. These warning signs are required on arterial and collector roadways with more than 1,000 AADT but may be used on other roadways based on engineering judgment. While curve signing is not required on many local roads, signing can be implemented to improve safety for all users. Specifically, the increased and consistent use of horizontal alignment signing are proven safety countermeasures capable of reducing crashes by 30-40 percent. It is recommended that all county collector roadways be evaluated to determine appropriate advisory speeds and signed appropriately. The MUTCD provides for three placements of signing to address horizontal alignment issues. These include 1) in advance of the horizontal curve, 2) at the beginning of the horizontal curve and 3) guidance throughout the horizontal curve. Advanced sign placement includes the Turn, Curve, Reverse Turn, Reverse Curve and Warning Road Signs, shown in Figure 14 below. Advisory speed plaques are recommended by the MUTCD in conjunction with these signs when the advisory speed is 5 mph or less than the prevailing speed on the roadway.

Horizontal Alignment Signs

LOCAL ROAD SAFETY PLAN 2022

Boone County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Boone County. For more information visit pubtransparency.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov

Kenton County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Kenton County. For more information visit pubtransparency.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov

Campbell County Crash Summary

This crash summary is compiled from Kentucky Collision Analysis for the Public data maintained by the Kentucky State Police. This summary represents reported crashes between January 1, 2016 and December 31, 2020 on county maintained roadways in Campbell County. For more information visit pubtransparency.org or contact Adam Kirk, the KY Safety Circuit Rider, at adam.kirk@ky.gov



BOONE COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor

KENTON COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor

CAMPBELL COUNTY IMPROVEMENTS

LRS_ID	Road Name	Surface Type	Width	Length	Improvements	Signing
008 CR-1058	ROGERS LN	Asphalt		1.75		Upgrade signing on Corridor
008 CR-1016	CAYTON RD	Asphalt		0.58		Upgrade signing on Corridor
008 CR-1144	STEPHENSON MILL RD	Asphalt		4.37		Upgrade signing on Corridor
008 CR-1328	WOOLPER RD	Asphalt		5.51		Upgrade signing on Corridor
008 CR-1333	BOTTLS LN	Asphalt		1.67		Upgrade signing on Corridor
008 CR-1032	POINT PLEASANT RD	Asphalt		1.54		Upgrade signing on Corridor
008 CR-1121	OLD LEXINGTON PIKE	Asphalt		2.32		Upgrade signing on Corridor
008 CR-1201	BIG BONE CHURCH RD	Asphalt		0.93		Upgrade signing on Corridor
008 CR-1312	WILLIAMS RD	Asphalt		1.78		Upgrade signing on Corridor
008 CR-1296	BOAT DOCK RD	Asphalt		1.78		Upgrade signing on Corridor
008 CR-1011	OAKBROOK RD	Asphalt		1.33		Upgrade signing on Corridor
008 CR-1222	LOWER RIVER RD	Asphalt		2.36		Upgrade signing on Corridor
008 CR-1121	OLD LEXINGTON PIKE	Asphalt		2.22		Upgrade signing on Corridor
008 CR-1201	BIG BONE CHURCH RD	Asphalt		2.76		Upgrade signing on Corridor
008 CR-1312	WILLIAMS RD	Asphalt		1.81		Upgrade signing on Corridor
008 CR-1296	BOAT DOCK RD	Asphalt		1.33		Upgrade signing on Corridor
008 CR-1011	OAKBROOK RD	Asphalt		1.33		Upgrade signing on Corridor
EADS RD		Asphalt				Upgrade signing on Corridor
PEBBLE CREEK		Asphalt				Upgrade signing and striping on Corridor

WHAT CAN I DO WITH A PLAN?

- Eligible for SS4A (and other Federal Grant) Implementation Funding
- Eligible for KYTC HSIP Funds
- Identify better projects for SHIFT prioritization
- Prioritize and plan regular maintenance activities

KEY DATES

- Local Road Safety Plan
 - Anytime
- KYTC/HSIP Local Road Safety Plan Assistance
 - Contact Us Now – May
- USDOT
 - NOFO due April 15

KYTC SUPPORT



- KYTC is committed to improving safety for all users/modes of travel on ALL roadways in Kentucky and regards SS4A as a significant opportunity for local agencies to improve the Commonwealth's transportation system
- KYTC provided funding for application support to ADDs and locals through the Technology Transfer Program
- KYTC committed to providing the required matching funds for SS4A Action Plan Grants in 2022 to Rural Counties
- Provide technical resources through District Highway Safety Improvement Program (HSIP) Coordinators and central office staff
- KYTC is committed to partnering and collaborating with local agencies. Provide guidance and assistance on grant administration and federal requirements



CONTACT INFORMATION

Martha Horseman

martha.horseman@uky.edu

859.257.4531

Adam Kirk

adam.kirk@uky.edu

859.421.2567