

# Crash Data ~~Access~~ Analysis Tool

# What is CDAT?

- Integrates crash with road data
- Includes advanced crash flags
- Includes HSM-based analysis
- Compare to similar roads/regions
- More than KYOPS
- Updated once a year (matches rates report)
- Maps

http://crashtool.uky.edu

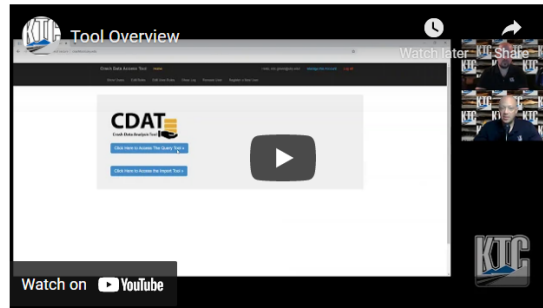


# CDAT

Crash Data Analysis Tool 

 [Click Here to Access The Query Tool »](#)

 [Click Here to Access the Import Tool »](#)



Want to know about CDAT? Watch this short video for more information!

# Access

- **Anonymous:** no access to CDAT
- **Basic:** A basic user has access to information currently available to the public.
- **Advanced:** An advanced user has a current and signed MOU on file with KYTC and has access to information as outlined in that agreement

# Functionality

- Query mode:
  - Country, route and milepoint range
- Import mode:
  - Upload your own file

# Crash Data Analysis Query Tool

Powered by Bill: a most excellent database!

[Home](#) [About](#) [Query Tool](#) [Import Tool](#) [KTSDS](#)

## Step 1 -

Please define a county, route and starting/ending milepoints.

### County

ADAIR

#### Limit to Prefix:

PV  CS  CR  PR  PS  LN  FD  KY

### Route

001-KY-0055 -000

Only Show Main Line  Only Show Ramps  Show All

*More information on main line, ramps, and other section IDs can be found [here](#). All non-cardinal crashes are counted on the cardinal segment.*

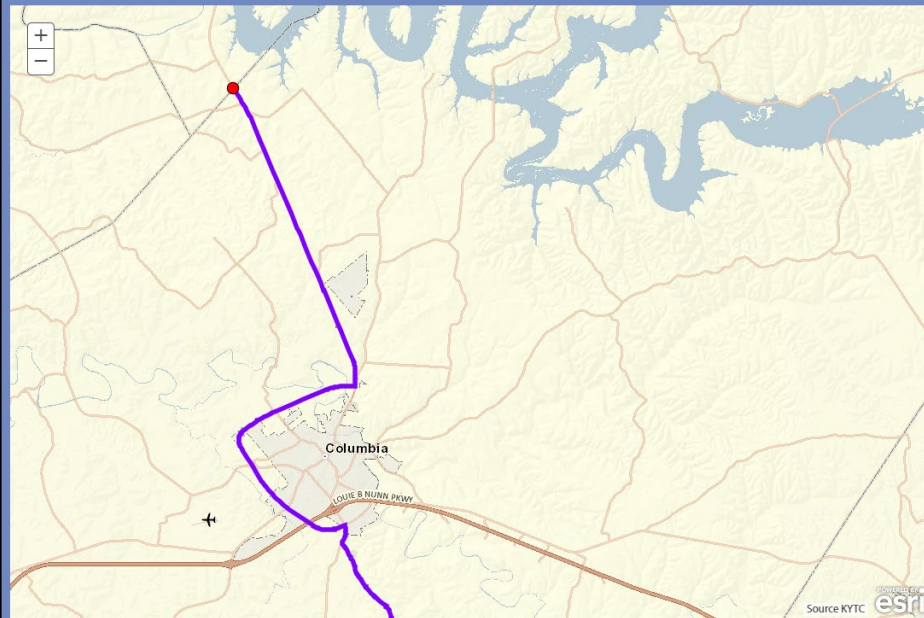
### Milepoints

NOTE: CDAT uses a route and milepoint that is post-processed to improve accuracy (KTC\_RT and KTC\_MP)

RT_UNIQUE	BEGIN_MP	END_MP	D_URBAREA	LANES	LANEWID	LASTCNT
001-KY-0055 -000	0	3.379	Rural	2	10	704
001-KY-0055 -000	3.379	6.184	Rural	2	10	1363
001-KY-0055 -000	6.184	9.335	Rural	2	10	2361
001-KY-0055 -000	9.335	9.68	Rural	2	10	5973
001-KY-0055 -000	9.68	9.68	Rural	2	12	5973
001-KY-0055 -000	9.68	9.68	Rural	2	10	1485
001-KY-0055 -000	9.68	10.941	Rural	2	12	1485
001-KY-0055 -000	9.68	9.68	Rural	2	12	5973
001-KY-0055 -000	9.68	9.68	Rural	2	10	1485
001-KY-0055 -000	9.68	9.68	Rural	2	12	1485
						12

 New version features  
interactive mapping!

Click on a row above to set the query to that segment



Click on the map to identify a route:

County

Route

BMP

EMP

XMP\*

\*The closest milepoint to the point clicked on

## Step 2 -

Please define additional parameters.

### Severity

Please define the crash severity:

- K (Killed)
- A (Suspected Serious Injury )
- B (Suspected Minor Injury )
- C (Possible Injury)
- O (Property Damage Only)
- U (unknown)
- H (hit and run where injury is not known)

*\*New categories used starting in 2017*

### Filters

Check any boxes below to limit the results to only include the crash types selected (checking more than one will limit results to be of both crash types):

- Motorcycle
- Commercial Vehicle
- Lane Departure
- Run Off the Road
- Young Driver
- Mature Driver
- Pedestrian Involved
- Bicyclist Involved
- Distracted Driving
- Aggressive Driving
- Impaired Driving
- Unrestrained
- Hit and Run

[Click here to access Crash type definitions and Intersection descriptions](#)

### Road Type

Select One:

- Private property and Public       Private property only       Public only

Select One:

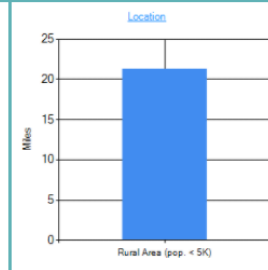
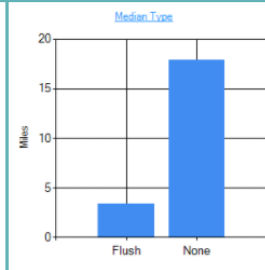
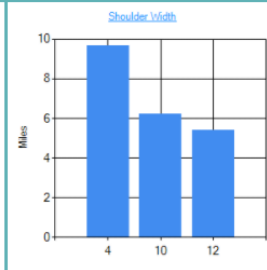
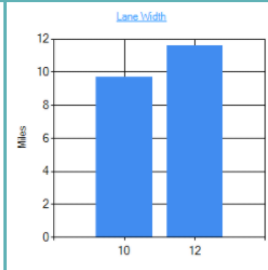
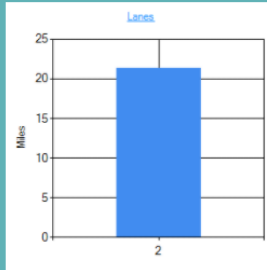
- Parking Lot and Non-Parking Lot       Parking lot only       Non-Parking lot only

### Timeframe

- 2015  2016  2017  2018  2019

[View Data](#)



[Show Table](#)[Download Data](#)

Note: You can click a graph title for more information.

Click on chart title to:

- Display table version of the chart
- Toggle between pie and bar chart
- Both

(this setting applies to all charts on this page)

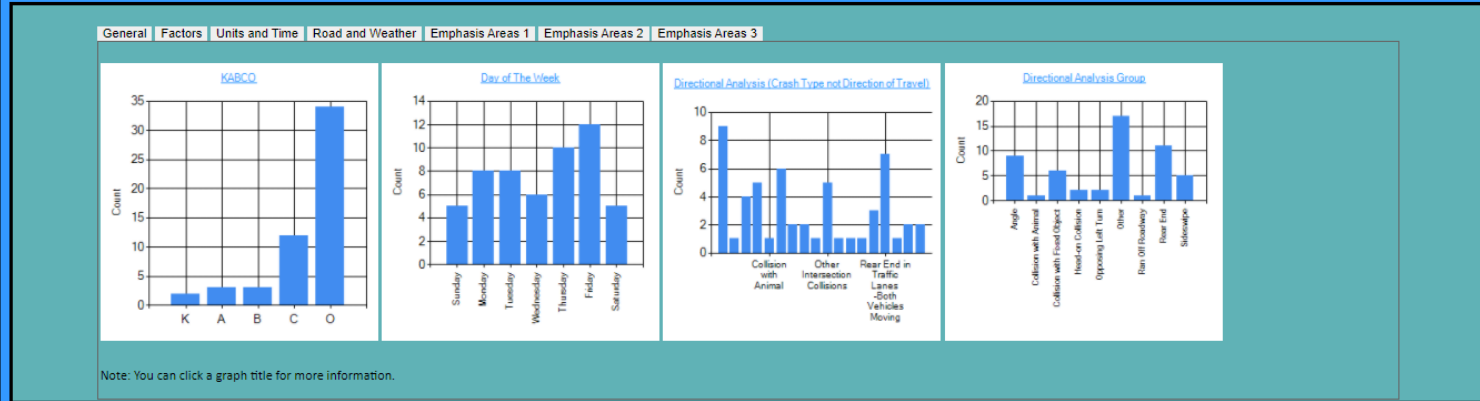
[Click here](#) For more information on curve class.

[Click here to look at Intersection types.](#)

54 crashes found (major route only. See below for all approaches).

Show Table

Download Data



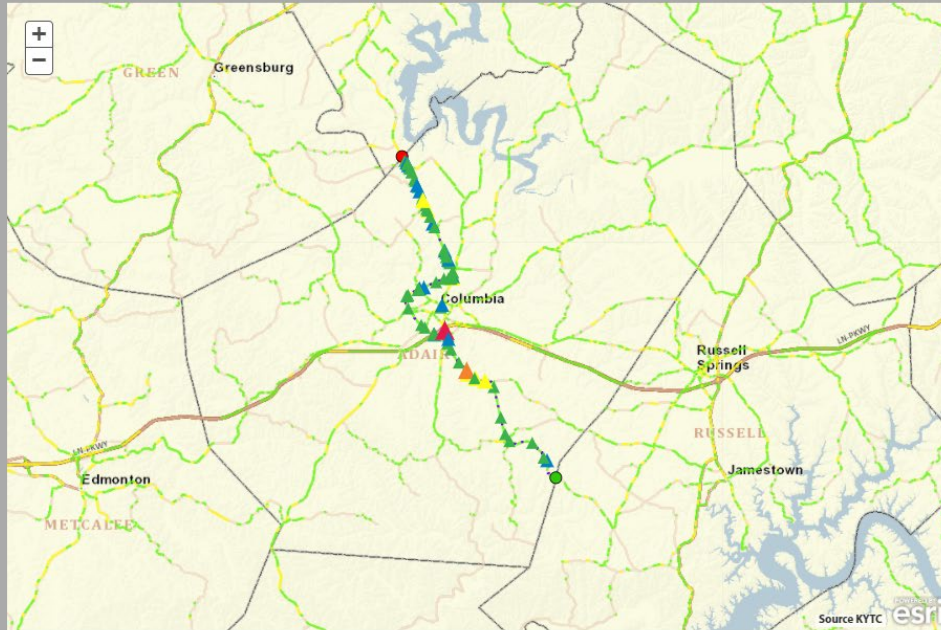
Intersection Table:

IntersectionID	MainRt	MainMP	MinRt	MinMP	Approaches	ClassType	MajorAADT	MinorAADT	K	A	B	C	O	All_EEC
34491	001-KY-0055-000	0.419	001-CR-1193-000	0	3	U3rP	704	89	0	0	0	0	0	-0.030
35768	001-KY-0055-000	1.008	001-CR-1881-000	0	3	U3rP	704	89	0	0	0	1	1	0.293
36938	001-KY-0055-000	1.881	001-CR-1199-000	0	3	U3rP	704	89	0	1	0	0	0	0.131
37098	001-KY-0055-000	2.888	001-CR-1238-000	0	3	U3rP	704	89	0	0	0	0	0	-0.030
37276	001-KY-0055-000	2.224	001-CR-1200-000	0	3	U3rP	704	89	0	0	0	1	1	0.293
37628	001-KY-0055-000	3.55	001-KY-0768-000	27.423	3	U3rP	1364	163	0	0	0	0	0	-0.168
37999	001-KY-0055-000	3.887	001-CR-1205-000	0	3	U3rP	1364	89	0	0	0	0	0	-0.079
39818	001-KY-0055-000	5.262	001-CR-1871-000	0	3	U3rP	1364	89	0	0	0	0	0	-0.079
41162	001-KY-0055-000	6.184	001-KY-0092-000	0	3	U3rP	1862	195	0	0	0	0	2	0.548
41250	001-KY-0055-000	6.305	001-CR-1888-000	0	3	U3rP	2360	89	0	0	0	0	0	-0.171

## Advanced Map

Use the map below view and identify crash and roadway data

### Map



### Layers

- ImageServices/Ky NAIP 2020 2FT
- AADT
- Speed Limit
- Median
- Number of Lanes
- Lane Width
- Functional Class
- Shoulder Width
- EEC Layers

### Legend



## Segment Crash Data

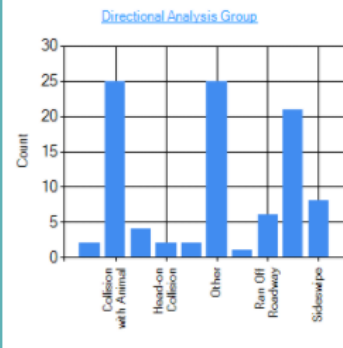
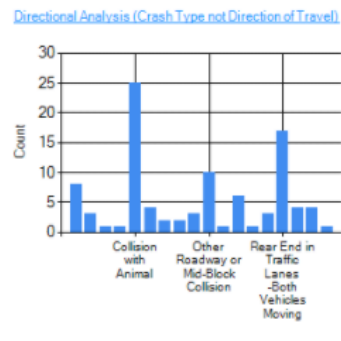
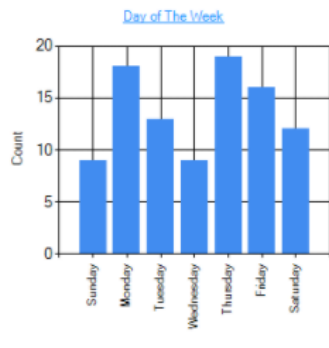
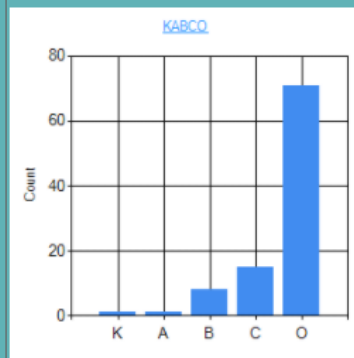
96 crashes found

Show Table

Download Data

Show query code (advanced)

General Factors Units and Time Road and Weather Emphasis Areas 1 Emphasis Areas 2 Emphasis Areas 3



Note: You can click a graph title for more information.

### Step 3 -

## Safety Performance Functions.

Please select an SPF for the segment

- No Recommended SPF
- Rural Two-Lane
- Urban Two-Lane
- Rural Multi-Lane Divided
- Rural Multi-Lane Undivided
- Urban Multi-Lane Divided
- Urban Multi-Lane Undivided
- Rural Interstate and Parkway
- Urban Interstate and Parkway

Choose a severity type for the SPF (this should match your severity filter from Step 2)

- KABCO
- KAB
- CO

### SPF Information

Number of Crashes:

Theta:

Theta defaults to 100 if no model is selected

Model form:  $SPF = e^{a \cdot AADT^b} \cdot \text{Length}$

Length:

AADT:

a:

b:

AADT is 100 if there is no count for a segment

Any values that are changed will be shown in orange. Values will be shown in red if non-numeric values are entered.

### Adjustment Factors (optionally add notes)

<input type="text" value="1"/>	<input type="text"/>
<input type="text" value="1"/>	<input type="text"/>
<input type="text" value="1"/>	<input type="text"/>
<input type="text" value="1"/>	<input type="text"/>
<input type="text" value="1"/>	<input type="text"/>

[Click here for more information about Adjustment Factors](#)

[Perform Advanced Analysis](#)

## Perform Advanced Analysis

### Safety Score

**Disclaimer! Advanced analysis is based on using statewide SPFs generally based on all crashes. If you apply any crash filters then you must use adjustment factors to obtain accurate results. Moreover, statewide SPFs are based on predominate base conditions. You must also apply adjustment factors if the segment or intersection you are analyzing has geometrics different from these base conditions. As always, use engineering judgement.**

Crash prediction at site	<input type="text" value="239.1"/>	crashes per time period
EB Estimate	<input type="text" value="113.2"/>	crashes per time period
Excess Expected Crashes (EEC)	<input type="text" value="-125.9"/>	crashes per time period
Standard Deviation (+/-)	<input type="text" value="10"/>	crashes per time period
Level of Service of Safety (LOSS)	<input type="text" value="2"/>	crashes per time period