Analysis of Traffic Crash Data in Kentucky (2013-2017)

Kentucky Transportation Center Research Report KTC-18-17/KSP2-18-1F

https://doi.org/10.13023/ktc.rr.2018.17



Excellence in Motion http://ktc.uky.edu

KTC's Mission

We provide services to the transportation community through research, technology transfer, and education. We create and participate in partnerships to promote safe and effective transportation systems.



© 2018 University of Kentucky, Kentucky Transportation Center Information may not be used, reproduced, or republished without KTC's written consent.



Kentucky Transportation Center

176 Oliver H. Raymond Building Lexington, KY 40506-0281 (859) 257-4513 http://ktc.uky.edu

Research Report KTC-18-17/KSP2-18-1F

ANALYSIS OF TRAFFIC CRASH DATA IN KENTUCKY (2013-2017)

by

Eric R. Green Transportation Research Engineer

Kenneth R. Agent Transportation Research Engineer

Jerry G. Pigman Transportation Research Engineer

and

Paul A. Ross Research Analyst

Kentucky Transportation Center College of Engineering University of Kentucky Lexington, Kentucky

in cooperation with Kentucky Transportation Cabinet Commonwealth of Kentucky

The contents of this report reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the University of Kentucky or the Kentucky Transportation Cabinet. This report does not constitute a standard, specification, or regulation.

September 2018

Do you use this report? Fill out this survey to ensure it won't get changed: http://bit.ly/2cjZVS0

TABLE OF CONTENTS

	Pag	e
List of	Tablesii	i
List of	Figuresvii	i
Execut	tive Summaryit	X
1.0	Introduction	1
2.0	Procedure	1
3.0	Statewide Crash Rates	3
4.0	County Crash Statistics	6
5.0	City Crash Statistics	7
6.0	Alcohol- and Drug-Related Crashes	7
7.0	Occupant Protection1	1
8.0	Speed-Related Crashes	3
9.0	Teenage Drivers	4
10.0	General Crash Statistics	5
	10.1Crash Trend Analysis1110.2Pedestrian Crashes1010.3Bicycle Crashes1010.4Motorcycle Crashes1110.5School Bus Crashes1110.6Truck Crashes1110.7Train Crashes1110.8Vahiala Defeata11	5667777
		X.

TABLE OF CONTENTS (continued)

11.0	Sum	nary and Recommendations	19
	11 1	States in Court Dates	10
	11.1	Statewide Crash Rates	
	11.2	County and City Crash Statistics	20
	11.3	Alcohol-Related Crashes	20
	11.4	Drug-Related Crashes	21
	11.5	Occupant Protection	21
	11.6	Speed-Related Crashes	22
	11.7	Teenage Drivers	24
	11.8	General Crash Statistics	24
Table	s		26
Figur	es		
Appe	ndices		
	A.	Statewide Crash Rate as a Function of	
		Several Variables	
	B.	Crash Data for Three-Year Period (2015-2017)	
	C	Critical Number of Crashes Tables	108
	D.	Critical Crash Rate Tables for Highway	
	D.	Sections	112
	Б	Critical Creat Data Tables for "Spate"	112 1 2 0
	Е. Г	Tatal Crash Datas for Citics Installation 2010 Ca	120
	г.	I otal Crash Kates for Cities included in 2010 Census	124

Page

LIST OF TABLES

Table 1.	Comparison of 2013-2017 Crash Rates
Table 2.	Statewide Rural Crash Rates by Highway Type Classification (2013-2017)
Table 3.	Statewide Urban Crash Rates by Highway Type Classification (2013-2017)
Table 4.	Comparison of 2013-2017 Crash Rates by Rural and Urban Highway Type Classification
Table 5.	Statewide Crash Rates for "Spots" by Highway Type Classification (2013-2017)
Table 6.	Statewide Average and Critical Numbers of Crashes for "Spots" and One-Mile Sections by Highway Type Classification (2013-2017)
Table 7.	Crash Rates by County for State-Maintained System and All Roads (2013-2017)
Table 8.	County Populations (2010 Census) in Descending Order
Table 9.	Average and Critical Crash Rates by Population Category (2013-2017)
Table 10.	Crash Rates by County and Population Category (in Descending Order with Critical Rates Identified) (2013-2017) (All Roads)
Table 11.	Crash Rates by County and Population Category (in Descending Order with Critical Rates Identified) (2013-2017) (State-Maintained System)
Table 12.	Injury or Fatal Crash Rates by County and Population Category (in Descending Order with Critical Rates Identified) (2013-2017) (All Roads)
Table 13.	Fatal Crash Rates by County and Population Category (in Descending Order with Critical Rates Identified) (2013-2017) (All Roads)
Table 14.	Miscellaneous Crash Data for Each County
Table 15.	Crash Rates for Cities having Population over 2,500 (for State-Maintained System and All Roads for 2013-2017)
Table 16.	Miscellaneous Crash Data for Cities having Population over 2,500 (2013-2017 for All Roads)
Table 17.	Crash Rates on Identified Streets by City and Population Category (2013-2017)
Table 18.	Total Crash Rates by City and Population Category (in Descending Order) (2013-2017) (All Roads)
Table 19.	Fatal Crash Rates by City and Population Category (in Descending Order with Critical Rates Identified) (2013-2017) (All Roads)
Table 20.	Crashes Involving Alcohol by County and Population Category (in Order of Decreasing Percentages)

Table 21.	Crashes Involving Alcohol by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 22.	Summary of Alcohol Convictions by County (2013-2017)
Table 23.	Alcohol Conviction Rates in Decreasing Order (by County Population Categories) (2013-2017)
Table 24.	Percentage of Drivers Convicted of DUI Arrest (by County) (2013-2017)
Table 25.	DUI Arrest Conviction Rates by County and Population Category (in Descending Order) (2013-2017)
Table 26.	Summary of Reckless Driving Convictions by County (2013-2017)
Table 27.	Percentage of Crashes Involving Drugs by County and Population Category (in Order of Decreasing Percentages) (2013-2017) (All Roads)
Table 28.	Percentage of Crashes Involving Drugs by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 29.	Safety Belt Usage by County and Population Category (In Descending Order) (Observed Survey of All Front Seat Occupants in 2007)
Table 30.	Safety Belt Usage by Population Category (2007 Observational Data) (ADD)
Table 31.	Crash Severity versus Safety Belt Usage (All Drivers)
Table 32.	Usage and Effectiveness of Child Safety Seats (2013-2017) Crash Data for Children Age Three and Under)
Table 33.	Percentage of Crashes Involving Unsafe Speed by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 34.	Percentage of Crashes Involving Unsafe Speed by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 35.	Summary of Speeding Convictions by County (2013-2017)
Table 36.	Speeding Conviction Rates in Decreasing Order (by County Population Categories) (2013-2017)
Table 37.	Moving Speed Data for Various Highway Types (Cars)
Table 38.	Moving Speed Data for Various Highway Types (Trucks)
Table 39.	Crash Trend Analysis (2013-2017)
Table 40.	Number of Crashes and Rates by Crash Type for each County (2013-2017)

Table 41.	Pedestrian Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017) (All Roads)
Table 42.	Pedestrian Crash Rates by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 43.	Bicycle Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 44.	Bicycle Crash Rates by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 45.	Motorcycle Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 46.	Motorcycle Crash Rates by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 47.	School Bus Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 48.	School Bus Crash Rates by City and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 49.	Truck Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 50.	Motor Vehicle-Train Crash Rates by County and Population Category (in Order of Decreasing Percentages) (2013-2017)
Table 51.	Crashes Involving Vehicle Defect Before and After Repeal of Vehicle Inspection Law
Table A-1.	Statewide Crash Rates by Functional Classification (2013-2017)
Table A-2.	Statewide Crash Rates by Administrative Classification (2013-2017)
Table A-3.	Statewide Crash Rates by Median Type (Rural Roads with Four or More Lanes) (2013-2017)
Table A-4.	Statewide Crash Rates by Access Control (2013-2017)
Table A-5.	Statewide Crash Rates for Rural Highways by Federal-Aid System and Terrain (2013-2017)
Table A-6.	Statewide Crash Rates by Rural-Urban Designation (2013-2017)
Table A-7.	Relationship between Crash Rate and Traffic Volume (2013-2017)

- Table A-8.Percentage of Crashes occurring During Wet or Snow or Ice Pavement Conditions
or During Darkness by Rural and Urban Highway Type Classification (2013-
2017)
- Table B-1.
 Statewide Rural Crash Rates by Highway Type Classification (2015-2017)
- Table B-2.
 Statewide Urban Crash Rates by Highway Type Classification (2015-2017)
- Table B-3.Statewide Crash Rates for "Spots" by Highway Type Classification (2015-2017)
- Table B-4.Statewide Average and Critical Numbers of Crashes for "Spots" and One-Mile
Sections by Highway Type Classification (2015-2017)
- Table B-5.Statewide Crash Rates for 0.1 Mile "Spots" by Highway Type Classification
(2015-2017)
- Table B-6.Statewide Average and Critical Numbers of Crashes for 0.1-Mile "Spots" and
One-Mile Sections by Highway Type Classification (2015-2017)
- Table B-7.Critical Crash Rates for 0.1-Mile "Spots" on Rural One-Lane, Two-Lane and
Three-Lane Highways (Three-Year Period) (2015-2017)
- Table B-8.Critical Crash Rates for 0.1-Mile "Spots" on Rural Four-Lane Highways,
Interstates, and Parkways (Three-Year Period) (2015-2017)
- Table B-9.Critical Crash Rates for 0.1-Mile "Spots" on Urban Two-Lane and Three-Lane
Highways (Three-Year Period) (2015-2017)
- Table B-10.Critical Crash Rates for 0.1-Mile "Spots" on Urban Four-Lane Highways,
Interstates, and Parkways (Three-Year Period) (2015-2017)
- Table C-1.Critical Numbers of Crashes on Rural Highways by Highway Type and Section
Length (2013-2017)
- Table C-2.Critical Numbers of Crashes on Urban Highways by Highway Type and Section
Length (2013-2017)
- Table D-1.Critical Crash Rates for Rural One-Lane Sections (Five-Year Period) (2013-2017)
- Table D-2.Critical Crash Rates for Rural Two-Lane Sections (Five-Year Period) (2013-
2017)
- Table D-3.Critical Crash Rates for Rural Three-Lane Sections (Five-Year Period) (2013-
2017)
- Table D-4.Critical Crash Rates for Rural Four-Lane Divided Sections (Non-Interstate and
Parkway) (Five-Year Period) (2013-2017)

- Table D-5.Critical Crash Rates for Rural Four-Lane Undivided Sections (Five-Year Period)
(2013-2017)
- Table D-6.
 Critical Crash Rates for Rural Interstate Sections (Five-Year Period) (2013-2017)
- Table D-7.
 Critical Crash Rates for Rural Parkway Sections (Five-Year Period) (2013-2017)
- Table D-8.Critical Crash Rates for Urban Two-Lane Sections (Five-Year Period) (2013-
2017)
- Table D-9.Critical Crash Rates for Urban Three-Lane Sections (Five-Year Period) (2013-
2017)
- Table D-10.Critical Crash Rates for Urban Four-Lane Divided Sections (Non-Interstate and
Parkway) (Five-Year Period) (2013-2017)
- Table D-11.Critical Crash Rates for Urban Four-Lane Undivided Sections (Five-Year Period)
(2013-2017)
- Table D-12.
 Critical Crash Rates for Urban Interstate Sections (Five-Year Period) (2013-2017)
- Table D-13.
 Critical Crash Rates for Urban Parkway Sections (Five-Year Period) (2013-2017)
- Table E-1.Critical Crash Rates for "Spots" on Rural One-Lane, Two-Lane, and Three-Lane
Highways (Five-Year Period) (2013-2017)
- Table E-2.Critical Crash Rates for "Spots" on Rural Four-Lane Highways, Interstates, and
Parkways (Five-Year Period) (2013-2017)
- Table E-3.Critical Crash Rates for "Spots" on Urban Two-Lane and Three-Lane Highways
(Five-Year Period) (2013-2017)
- Table E-4.Critical Crash Rates for "Spots" on Urban Four-Lane Highways, Interstates, Four-
Lane Highways, and Parkways (Five-Year Period) (2013-2017)
- Table F-1.Crashes and Crash Rates for All Cities Listed in the 2010 Census (2013-2017)

LIST OF FIGURES

- Figure 1. Trends in Crash Rates
- Figure 2. Trends in Rural Crash Rates
- Figure 3. Trends in Urban Crash Rates

EXECUTIVE SUMMARY

This report documents an analysis of traffic crash data in Kentucky for the years of 2013-2017. A primary objective of this study was to determine average crash statistics for Kentucky highways. Rates were calculated for various types of highways and for counties and cities. Difference criteria were used for exposure.

Average and critical numbers and rates of crashes were calculated for various types of highways in rural and urban areas. These rates used crashes identified on highways where traffic volumes were available. Improved methods of identifying crash locations have resulted in higher rates for the last couple of years. The crash rate data can be used in Kentucky's procedure to identify locations that have abnormal rates or numbers of crashes.

The other primary objective of this study was to provide data that can be used in the preparation of the problem identification portion of Kentucky's Annual Highway Safety Plan. County and city crash statistics were analyzed. A summary of results and recommendations in several problem identification areas is presented. These general areas include; alcohol involvement, occupant protection, speed, teenage drivers, pedestrians, bicycles, motorcycles, trucks, and vehicle defects. Other areas included in the analysis for which specific recommendations were not made include, school bus crashes and train crashes.

The crash data are stored in the Collision Report Analysis for Safer Highways (CRASH) database. This database is updated daily so the number of crashes in a given calendar year will continue to change for a substantial time after the end of that year.

1.0 INTRODUCTION

Annual reports have previously been prepared since 1978 dealing with the calculation of statewide traffic crash rates for Kentucky and preparation of the problem identification portion of Kentucky's Annual Highway Safety Plan. This is the 32nd report providing a combination of those two report areas. Traffic crash data for the five-year period of 2013-2017 were used in the preparation of this report.

Kentucky has a systematic procedure to identify locations that have had abnormal rates or numbers of traffic crashes. However, before that procedure may be utilized, average crash rates and numbers must be determined for appropriate highway categories and for rural and urban areas. A primary objective of this study was to determine average traffic crash statistics for Kentucky. Those statistics may then be used in the high-crash location identification program to identify locations that should be investigated to determine whether changes should be made.

A highway safety program is prepared each year for Kentucky in order to comply with Section 402, Title 23 of the United States Code. This program includes the identification, programming, budgeting, and evaluation of safety projects with the objective of reducing the number and severity of traffic crashes. The second major objective of this report is to provide data that may be included as the problem identification portion of Kentucky's Annual Highway Safety Plan. Results from this report are used to provide benchmark data for that process.

2.0 PROCEDURE

Crash and traffic (traffic volume and roadway geometrics) databases were used to obtain traffic crash statistics. Traffic crash data have been maintained in a computer file containing all police-reported crashes. The crash report was changed in 2000 with the data now contained in the Collision Report Analysis for Safer Highways (CRASH) database. The computer files and data base were obtained from the Kentucky State Police (KSP). All police agencies in the state are required to send traffic crash reports to the KSP.

Parking lot crashes were not included in the computer file from 1994 through 1999. Parking lot crashes are now contained in the CRASH data base but they were excluded from the analysis to maintain consistency with previous years. Crashes coded as occurring on private property were also excluded from the data for 2013-2017 so it would be consistent with other reports. All crashes included in the analysis occurred on a public highway. It should be noted that this data base is updated daily so the number of crashes in a given calendar year will continue to change for a substantial time after the end of that year. This would result in numbers in the tables in this report being less than those contained in the current CRASH database. Summaries were prepared from an analysis of the crash data from the CRASH database for 2013-2017.

Volume data, along with other data describing highway characteristics such as number of lanes, is obtained from a computer file containing roadway characteristics data for all statemaintained highways and some local roads. In the past this information is obtained from the Highway Performance Monitoring System (HPMS) file. Now the Highway Information File (HIS) file is been used. Data for a five-year period of 2013-2017 were obtained from these files. The HPMS and HIS files were used to obtain the roadway information needed to compute crash rates as a function of various roadway characteristics such as number of lanes.

A computer program using both crash data from the crash database and roadway characteristics information from the HPMS and HIS files was used to calculate rates for the state-maintained system. A separate computer program was used to obtain additional summaries of various crash variables with this program using all reported traffic crashes (excluding parking lots and private property).

The matching process was significantly changed staring with 2012 data due to the change to the HIS format. Crashes are now matched to any road with traffic volume data. Previously crashes were matched to HPMS using the route number. With the improvements in crash location data, crashes are able to be matched by three different route identifiers (RT_Unique, the GIS route identifier and roadway number). The resulting matching rate is much higher than previous years, particularly for urban streets. This has resulted in an increase in crashes and resulting rates.

Rates were calculated for: 1) all roads having known traffic volumes, route numbers and 2) all public streets and highways on and off the state-maintained system. A large majority of roads with traffic volumes are state-maintained. However, this document will refer to these roads as 'identified roads' since some of these routes were locally maintained. Rates were provided in terms of crashes per 100 million vehicle-miles (C/100 MVM) where traffic volumes could be determined. Population was used as the measure of exposure in instances where traffic volume data were not available to use as the exposure measure. Population data from the 2010 census were used.

In addition to average rates, critical rates and numbers of crashes are required for the high-crash location program. Both types of rates were calculated. The following formula (Equation 1) was used to calculate critical crash rates.

$$C_c = C_a + K \sqrt{\frac{C_a}{M}} + \frac{1}{2M}$$
(1)

where

 C_c = critical crash rate

- C_a = average crash rate
- $K = \text{constant related to level of statistical significance selected (a probability of 0.995 was used wherein K = 2.576)$
- M = exposure (for sections, M was in terms of 100 million vehicle-miles (100 MVM); for spots, M was in terms of million vehicles)

To determine the critical number of crashes, the following formula (Equation 2) was used.

$$N_c = N_a + K\sqrt{N_a + 0.5} \tag{2}$$

where

 N_c = critical number of crashes N_a = average number of crashes

There are highway safety problem areas (standards) identified by the National Highway Traffic Safety Administration. Problem areas that have been identified for emphasis include alcohol and occupant protection. To identify problems in these areas, as well as other "highway standard" areas, the analyses focused on the following.

- 1. Statewide Crash Rates
- 2. County Crash Statistics
- 3. City Crash Statistics
- 4. Alcohol- and Drug-Related Crashes
- 5. Occupant Protection
- 6. Speed-Related Crashes
- 7. Teenage Drivers
- 8. Pedestrian Crashes
- 9. Bicycle Crashes
- 10. Motorcycle Crashes
- 11. School Bus Crashes
- 12. Truck Crashes
- 13. Train Crashes
- 14. Vehicle Defects
- 15. General Trend Analysis

3.0 STATEWIDE CRASH RATES

All of the rates referred to in this section apply to roads having known traffic volumes, route numbers, and mileposts. Crash rates are given in terms of crashes per 100 million vehiclemiles (C/100 MVM). Using the HPMS and HIS files has identified about 28,000 miles being included in this category. This compares to over 80,000 miles of public roads in Kentucky. While only approximately 35 percent of the total miles are identified, these roads account for approximately 84 percent of the vehicle miles traveled. The crash file was matched with the HPMS and HIS files. The percentage of all crashes classified as being on an identified road is 70%. This was further enhanced with an integrated mapping system built into the crash reporting tool. This map has replaced the need for a handheld GPS device, instead having officers click on a point on the map which returns latitude and longitude and county, route and milepoint (even for local roads). A comparison of 2013-2017 crash statistics on streets and highways having known traffic volumes, route numbers, and mileposts is shown in Table 1. The overall crash rate in 2017 was 227 crashes per 100 million vehicle-miles (C/100 MVM). The crash rates for the previous four years varied from 236 to 281 C/100 MVM.

The fatal crash rate in 2017 was less than 2016. The fatal crash rate ranged from a low of 1.29 C/100MVM in 2013 to a high of 1.65 C/100 MVM in 2016. The injury crash rate in 2017 was 39 C/100MVM, which is a decrease of 14.8 percent from the previous four-year average. The injury crash rate of 50 C/100MVM in 2016 was the highest rate in the five-year period.

An analysis of statewide crash rates as a function of several variables, such as highway system classification, was conducted. Also included is information concerning the percentage of crashes occurring for various road conditions and during darkness. Results of this analysis are presented in APPENDIX A.

Crash rates required to implement the high-crash spot-improvement program in Kentucky are average rural and urban rates by highway type. The current classification uses the number of lanes with an additional separation of four-lane highways (non-interstate or parkway) into divided and undivided categories. Interstates and parkways are classified separately. Rates for rural highways for the five-year period (2013-2017) are listed in Table 2. The rates for urban highways are listed in Table 3. Highways were placed into either the rural or urban category based upon the rural-urban designation denoted on the HPMS and HIS files. For sections having a volume, route, and milepost, the rural or urban and highway type classifications were determined. The crash could not be used in this analysis if the county and route were given but the milepoint was not noted. The number of crashes for each section was then obtained from the crash file. The total crash rates (crashes per 100 million vehicle-miles) as well as injury and fatal crash rates were calculated.

On rural highways, excluding the small lengths of one-lane and three-lane highways, the highest rate for all crashes occurred on two-lane highways (Table 2). Two-lane highways have the highest injury crash rate (excluding one-lane roads). The fatal crash rate on two-lane highways is substantially higher than the other road types (excluding the small sample size of the three-lane). Interstates and parkways have the lowest total, injury, and fatal crash rates. The advantage of median-separated highways is shown when comparing the crash rates for four-lane divided (non-interstate or parkway) and four-lane undivided highways. The overall crash rate for a rural non-interstate or non-parkway divided highway (which would not typically have access control) is about 55 percent less than for an undivided highway, although the average daily traffic was fairly similar.

Excluding the small number of three lane roadways, on urban highways, the highest overall crash rates are on four-lane undivided and two-lane highways (Table 3). The fatal crash rate for four-lane (non-interstate or parkway) undivided highways was 1.3 C/100MVM, higher than the overall fatal rate of 1.0 C/100MVM. The lowest overall crash rate, along with injury and fatal crash rates, are on interstates and parkways. Parkways have the lowest fatal crash rate.

Data in Tables 2 and 3 show that the overall total crash rate on urban highways was about 118 percent higher than that for rural highways. Also, the injury rate on urban highways

was 71 percent higher than that for rural highways. However, the fatal crash rate on urban highways is 41 percent less than of that for rural highways. The lower fatal crash rate is due to the slower travel speeds and the higher traffic volumes in urban areas.

Variations in crash rates by rural and urban highway-type classifications over the fiveyear period are listed in Table 4. The 2017 rate in urban areas was lower than the average for the previous four years with a 12.1 percent decrease in urban areas. Only a small percentage (12 percent) of identified roads mileage is classified as urban. The rates generally fluctuated more for the highway types that had only a small number of miles.

Trends in overall crash rates representative of rural and urban areas are shown graphically in Figure 1 for the five-year period of 2013-2017. In addition, trends in crash rates for types of highways are shown for rural highways (Figure 2) and urban highways (Figure 3). These rates apply to roads having information which could be matched to crash data. The increase in matching in 2013-2017 is shown. Not all highway types are shown on Figures 2 and 3 due to low mileages for some highway types.

Average rates listed in Tables 2 and 3 may be used to determine critical crash rates for sections of highway of various lengths. In addition to highway sections, Kentucky's high-crash location procedure uses highway "spots", defined as having a length of 0.3 or 0.1 mile. The highway "spot" represents a specific identifiable point on a highway. Statewide crash rates for "spots", by highway-type classification, are listed in Table 5 using 2013-2017 data.

The first step in Kentucky's procedure for identifying high-crash locations involves identifying "spots" and sections that have more than the critical numbers of crashes. The crash rates for those locations are then compared to critical crash rates. Statewide averages and critical numbers of crashes for 0.3-mile "spots" and one-mile sections by highway-type classification are presented in Table 6 for 2013-2017. Critical numbers of crashes, such as those listed in Table 6, are used to establish the "number of crashes" criterion for determining the initial list of potential high-crash locations. For example, six crashes in this time period would be the critical number of crashes for a 0.3 mile "spot" on a rural, two-lane highway.

The numbers and rates presented in Tables 2, 3, 5, and 6 could be calculated for various numbers of years. A three-year period is used in some analyses. The data shown in those tables were calculated for a three-year period (2015-2017) with the results shown in APPENDIX B. Data for 0.1 mile "spots" are also given in that appendix.

Critical numbers of crashes for various section lengths were determined for each highway type using Equation 2 on page 2 of this report. Results are presented in the tables found in APPENDIX C. Section lengths up to 20 miles for rural roads and up to 10 miles for urban roads are included. The critical numbers of crashes given in this appendix are for the five-year period of 2013-2017.

After the initial list of locations meeting the critical number criterion is compiled, comparisons between crash rates for those locations and critical crash rates are made. Critical rate tables for highway sections for the five-year period of 2013-2017 are presented in

APPENDIX D. Critical crash rates for the various rural and urban highways were determined as a function of section length and traffic volume (AADT). The rates are listed in units of crashes per 100 MVM and were calculated using Equation 1 on page 2 of this report.

Critical rate tables for 0.3 mile "spots" are contained in APPENDIX E. Those rates are presented in units of crashes per million vehicles and also were determined using Equation 1. These rates are for the five-year period of 2013-2017.

4.0 COUNTY CRASH STATISTICS

Crash rates were calculated for each county considering 1) roads that could be identified with crash and volume data related (the state-maintained system plus a few other roads with adequate data) and 2) all roads within the county. The crash rates are presented in terms of C/100 MVM (crashes per 100 million vehicle miles). Total crash rates were calculated for both categories. Also, using all roads in the county, crash rates were calculated considering fatal crashes only and fatal-or-injury crashes only. Those rates are presented in Table 7. The numbers given represent the crashes reported by the various police agencies in each county. If any agency does not report all of the crashes they investigate, the number of crashes listed in that county will be lower than the actual number that occurred. Total miles traveled in each county were determined by combining miles traveled on roads having known traffic volumes with those having no recorded volumes. The HPMS and HIS files were used to tabulate vehicle-miles traveled by county on roads having traffic volume counts. The difference between the statewide total of vehicle-miles traveled on roads having known traffic volumes (provided by the Kentucky Transportation Cabinet) compared to the total estimated miles driven in the state was then distributed to each county. The distribution was based upon the percentage of registered vehicles in each county. The total miles driven in each county was then obtained by adding the known miles driven on the state-maintained highway system and the estimated miles driven on the remaining streets and highways.

To assist in the analysis of county crash statistics, county populations were tabulated (in descending order) and presented in Table 8. The population data used are from the 2010 census. The counties were then grouped into five categories based upon population. Using crashes on all roads in the county, average and critical crash rates were calculated (Table 9). The total crash rate and injury-or-fatal crash rates generally increased as population increased while the fatal crash rate decreased with increased population. The critical crash rate was calculated using Equation 1. Critical rates (in terms of crashes per 100 million vehicle-miles) were calculated for total crashes, fatal crashes, and injury-or-fatal crashes. The numbers of counties having rates above critical in each population category were determined. The total number was 35 for total crashes (all roads), 21 for injury-or-fatal crashes, and 1 for fatal crashes. There has been consistency in recent years regarding counties which have a critical rate. For example, of the counties determined to have a critical crash rate when total crashes were considered, 33 were also identified in the last year's report.

Table 10 contains the number of crashes and total crash rates for all counties grouped by population category (considering all roads in the county). Counties within each population category are listed in order of descending crash rate, with the critical rates identified with an asterisk.

Crash rates for each county were also calculated considering only the identified (statemaintained and a few roads with sufficient information) system. Those rates, grouped by population category, are presented in Table 11. The rankings of counties in Tables 10 and 11 are similar. In two of the five population categories, the same county had the highest rate considering all roads or identified roads. These counties are Pendleton County (in the 10,000 to 14,999 population category) and Harrison County (in the 15,000 to 24,999 populating category). In the under 10,000 population category, Nicholas County had the highest rate for all roads while Crittenden County had the highest rate for the identified system. In the over 50,000 population category, Jefferson County had the highest rate for all roads while Fayette County had the highest rate for the identified system. When all roads are considered, Jefferson and Fayette Counties have the highest rate in the state. Leslie and Bath Counties, which are in the second lowest population category, had the lowest rates in the state when considering both all roads and identified roads.

Using crashes on all roads in each county, injury or fatal crash rates are listed in Table 12 in descending order by population category. Counties having critical rates are identified with an asterisk. Counties having the highest rates for their respective population categories are Crittenden, Breathitt, Clay, Perry, and Jefferson. Crittenden County and Jefferson County had the highest rate in the state while Gallatin County had the lowest rate.

Similar rates for fatal crashes are listed in Table 13. Counties having the highest fatal crash rates for their population categories are Owsley, Green, Casey, Mead, and Pike. The highest rates are generally for the smallest counties where there would be more driving on twolane rural roads where fatal crash rates have been found to be the highest (Table 2). Pike County is the only county identified as having a critical fatal crash rate.

A summary of other miscellaneous crash data used in the problem identification process is presented by county in Table 14. This table includes the number of crashes by year for the last five years; percent change in the crash total from the previous four-year average; percentages of crashes involving alcohol, drugs, and speeding; percentage of fatal crashes; percentage of injury-or-fatal crashes; and percentage of drivers using safety belts.

5.0 CITY CRASH STATISTICS

Crash statistics were analyzed for cities by using the 2013-2017 crash data (Table 15). The primary group of cities included in the analysis was those having a population over 2,500 that had a city code in the computer file allowing crash data to be summarized. Incorporated cities in Jefferson County, such as St. Matthews, Jeffersontown, and Shively, were included separately from Louisville. Therefore, for Louisville, only the population of the city area was included instead of a metropolitan area population.

Table 15 is a summary of crash rates for cities included in the 2010 census having populations of more than 2,500 where crash data could be related to the city for all five years. Crashes recorded as occurring in the city are included. However, crashes using the city as a reference but recorded as occurring any distance from the city were not included. Rates in terms of C/100 MVM are listed for the identified system while rates in terms of crashes per 1,000 population are listed using all streets in the city. The table notes the 12 cities where no data was available for the identified system.

Additional statistics are listed in Table 16 for the cities that had five years of crash data available for analysis. Rates for fatal crashes, pedestrian-motor vehicle crashes, bicycle-motor vehicle crashes, and motorcycle crashes are provided. Those rates are in terms of crashes per 10,000 population. Percentages of crashes involving speeding or alcohol are also listed.

Total crash rates for all cities listed in the 2010 census are summarized in APPENDIX F (Table F-1). A total of 410 cities were listed with a population in the census. Information included for the cities were population, number of crashes, and crash rate (crashes per 1,000 population). However, a city code was not available for several small cities. This resulted in data being available for 335 cities in Appendix F.

Crashes on the state-maintained system of highways within a city typically only accounted for a portion of all the crashes occurring within any city. Therefore, total crash rates, rather than on the identified system, were used to determine critical crash rates for cities. Crash rates on the identified system, by city and by population category, are shown in Table 17. The cities are listed in descending order by crash rate for each population category. The cities for which a match could not be obtained using a city code listed in the HPMS and HIS files would not be listed in Table 17. Lexington, Owensboro, Newport, Bellevue, Walton and Cave City have the highest crash rate on identified streets in their population category. Cities in the 1,000 to 2,499 population category are also included in this table. Therefore, this table provides data for more cities compared to Table 16. The average crash rate for all cities in a category is also listed. The overall rates are highest for cities in the 10,000 to 19,999 population category. The lowest overall rate is for the 1,000 to 2,499 population category. The large range in rates and number of crashes is related in part to the detail of reporting.

Total crash rates for cities by population category are listed in Table 18. They are tabulated in order of descending crash rates by population category and critical rates are identified with an asterisk. The order of rates for cities is very different in Table 18 compared to Table 17. There were 19 cities identified as having total crash rates above critical. Lexington, Florence, Somerset, Fort Wright, and Crestview Hills have the highest total crash rates in their respective population ranges. Fatal crash rates, by city and population category, are listed in Table 19. They also are tabulated in order of descending fatal crash rates by population category. Louisville, Paducah, Shively, London, and Prestonsburg have the highest fatal crash rates in their respective population ranges. Due to the small numbers of fatal crashs no city was identified as having a critical fatal crash rate. Prestonsburg had the highest fatal crash rate (by a substantial amount).

6.0 ALCOHOL- AND DRUG-RELATED CRASHES

Alcohol- and drug-related crashes continue to be one of the highest priority problem identification areas (in Kentucky and across the nation) and considerable emphasis is being placed on programs to impact those problems. In Kentucky, the number of traffic crashes in which alcohol was listed as a contributing factor on the crash report has averaged about 4,545 per year for the past five years. Alcohol-related fatalities have averaged 164 per year during the past five years (using Fatal Analysis Reporting System data). Using the number of fatalities (reported by FARS), injuries & property damage in alcohol-related crashes (as reported on the scene). the estimated cost of alcohol-related crashes Kentucky in varied in 2017 from about \$338 million using economic cost data up to about \$2.4 billion using comprehensive cost data from the National Safety Council.

The number of alcohol-related crashes has generally decreased over the past several years. In the early 1980's, the annual number of alcohol crashes was over 10,000. This number decreased to the relatively constant level of approximately 7,700 to 8,100 from 1985 through 1990 with a gradual reduction to a low of 5,995 in 1994. The first yearly increase since 1990 occurred in 1995 (to 6,163). The number of alcohol-related crashes then decreased yearly through 1998 to 5,222. There was a slight increase in 1999 and then a larger increase in 2000. In 2001, the downward trend in alcohol-related crashes started again. In 2017 the total dropped to 3901 which represents a 9.2 percent decrease compared to the previous four-year average. Alcohol-related crashes represented about 3 percent of all crashes during the latest five-year period. The number of alcohol-related fatalities in 2017 (154) was about 7 percent lower than the previous four-year average (166).

To identify alcohol-related crash problem areas, percentages of crashes involving alcohol were summarized for counties and cities as shown in Tables 20 and 21, respectively. In Table 20, the number and percentage of crashes involving alcohol were determined by considering all drivers and those less than 21 years of age. This allowed a separate analysis for young drivers. The counties are listed by county population group in order of descending percentages of alcohol crashes for all drivers. Counties in each population category having the highest percentage of crashes involving alcohol, considering all drivers, are Elliott, Butler, Mason, Meade, and Pike.

The information provided in Table 20 also may be used to determine the counties that have the highest percentages of crashes involving alcohol for young drivers by county population category. The counties identified as having the highest percentages of alcohol-related crashes, considering only young drivers, were similar to those identified when all drivers were considered. For 16 through 20 years of age drivers, the county in each population category having the highest percentage of crashes involving alcohol are Elliott, Breathitt, Harrison, Harlan, and Pike.

Table 21 is a summary of number and percentage of crashes involving alcohol for cities. For each population category, the cities having the highest percentages of crashes involving alcohol in 2017 are Lexington, Covington, Fort Thomas, Dayton, and Ludlow.

Additional analyses were performed to show the number and rate of alcohol convictions by county (Table 22). Rates are in terms of convictions per 1,000 licensed drivers and convictions per alcohol-related crash. Five years of conviction data (2013-2017) were used in the analysis. The data were obtained from records maintained by the Administrative Office of the Courts (AOC). Those same rates are presented in Table 23 with counties grouped by population ranges and rates are listed in order of descending percentages. Counties in each population group having the lowest rates of alcohol convictions per 1,000 licensed drivers are Robertson, Green, Breckenridge, Meade and Jefferson. Counties having the lowest rates of alcohol convictions per alcohol-related crash are Mason, Robertson, Madison, Bracken, and Jefferson. Counties having low rates for either convictions per 1,000 licensed drivers or convictions per alcohol-related crash may be candidates for increased enforcement or other special programs (especially if they have a high percentage of alcohol-related crashes). Data in Table 22 shows that, statewide, there has been a decrease each year for the last five years in the number of alcohol convictions during the five-year period from a high of 18,030 in 2013 a low of 12,797 in 2017. The number of alcohol convictions in 2017 decreased ~15 percent from the average of the previous four years.

A comparison was also made between the total alcohol filings, convictions, and nonconvictions, by county, for the five years of 2013-2017 (Table 24). The data for "driving under the influence" filings and the results of the filings were obtained from the AOC. The statewide percentage of alcohol convictions per filing over these five years was 83.2 percent. The percentages varied from a low of 55.7 percent in Leslie County to a high of 92.9 percent in Oldham County. In previous years, the percentages would be affected by the overlapping effects of filings being made and convictions being prosecuted in different calendar years. However, the current procedure calculates conviction rate using those filings that are resolved with either a conviction or non-conviction in the same calendar year as the filing. There were 8 counties with a conviction rate at or over 90 percent. Only one county, Leslie, had a conviction rate less than 60 percent.

The counties are grouped by population category and are placed in decreasing order of conviction percentage by population category in Table 25. The average conviction percentage did not vary substantially by population category with a range of from 80.1 to 83.2 percent. Counties having the highest conviction percentages in the various population categories are Lee, Clinton, Woodford, Clark and Oldham. Counties having the lowest conviction percentages for the various population categories are Gallatin, Leslie, Clay, Bell and Pike.

A drunk-driving offense may be reduced to a charge of reckless driving. This could occur when a person is arrested for drunk driving because of erratic driving behavior, and then field sobriety or BAC tests fail to confirm the drunk-driving charge. In addition, the severity of the penalty for drunk driving could result in a reduction of the drunk-driving charge to reckless driving. For those reasons, it was determined that a summary of reckless driving convictions would be beneficial. Numbers of reckless driving convictions and the rate of convictions per 1,000 licensed drivers for each county are presented in Table 26. In the 5-year period of 2013-2017, the highest number of convictions at 2,472 was in 2013. The number in 2017 was a 0.9 percent decrease from the average number in the previous four years. The highest rates

(convictions per 1,000 licensed drivers) occurred in Lyon, Fulton and Trigg Counties. The lowest rates are in Estill, Oldham, and Letcher Counties.

Drugs continue to be listed as a contributing factor in a relatively small percentage of all crashes. However, drugs have been found to be involved in a large number of fatal crashes (when blood tests are conducted). The number of drug-related crashes (as noted as a contributing factor on the police report) was 1,844 in 2017. In the previous four years the lowest number was 1,540 in 2013. When compared to the previous four-year average, drug-related crashes increased by 10 percent in 2017. The number of drug-related fatal crashes also saw an increase 2017 (20.4 percent) compared to the previous four-year average. In 2017 there were 239 fatal drug-related crashes. The number of drug-related injury crashes also increased (by 6.2 percent) in 2017 compared to the previous four-year average.

Percentages of crashes involving drugs (as noted by the investigating officer) by county and population category for all roads are presented in Table 27. Counties having the highest percentages of drug-related crashes by population category are: Elliott, Magoffin, Clay, Floyd, and Pike. The data in Table 27 show most of the counties with the highest percentages are in southeastern Kentucky. Counties with the highest percentages of this type of crash are Pike, Floyd, Harlan, Clay, and Magoffin County. The large difference in the percentage in Pike County compared with the other counties in its population category should be noted.

Another summary was prepared to show percentages of crashes involving drugs by city population categories (Table 28). Within each population category, cities having the highest percentages of drug-related crashes were Louisville, Nicholasville, Fort Thomas, Dayton, and Barbourville. Barbourville had the highest rate in the state at 4.2 percent.

7.0 OCCUPANT PROTECTION

The percentages of drivers of passenger cars involved in traffic crashes that were reported as wearing safety belts (listed by county) have been used to compare usage rates. However, it was known that these reported rates were much higher than found in observation surveys. Observation surveys were first taken in each county in 2004 by the Area Development Districts. These surveys were repeated for 2005 and 2006 but data has not been collected since 2006. These safety belt rates (for 2006) for each county were reported in Table 14. Those same percentages are listed in descending order by county population category in Table 29. The rates varied from a high of 82.0 percent in Lyon County to a low of 40.1 percent in Monroe County. The data shows that 26 counties had a usage rate over 70 percent while 18 counties had a rate under 50 percent. The 2017 statewide survey found a usage rate of 87 percent. The statewide methodology does not collect data in every county but uses a representative sample of counties.

It should be noted that the first statewide safety belt law (with secondary enforcement) was passed with an effective date in July 1994. The law was changed to allow primary enforcement with an effective date of July 2007. Prior to the statewide laws, local ordinances had been enacted by several cities and counties. The first such ordinances were enacted in Fayette County effective July 1, 1990 and in the city of Louisville effective July 1, 1991. Similar

ordinances were adopted in Jefferson County, Murray, Kenton County, Bowling Green, Corbin, Bardstown, and Midway. Observational surveys conducted since the enactment of the local ordinances and statewide law has demonstrated their effectiveness in increasing usage rates.

Even though a statewide safety belt law has been passed, there is a need for continued promotion and enforcement of the law. Counties having the potential for intensive promotional campaigns are identified by an asterisk in Table 29. Those fifteen counties were selected on the basis of their safety belt usage rate (as determined by the surveys taken by the Area Development Districts (ADD)), crash rates, and location in the state. Counties having low usage rates were identified with the criterion of selecting one county from within each of the 16 Kentucky State Police Posts' areas of jurisdiction. When possible, an attempt was made to select counties having high crash rates (either total crash rate or injury or fatal crash rate). Also, an attempt was made to select counties that had not been identified in the past couple of years.

The safety belt usage rates in 2007 (from the ADD survey) are presented in Table 30 as a function of county population. This table shows the higher usage percentages for counties having a population over 50,000. Counties in the over 50,000 population category had a usage rate about 12 percent higher than for counties in the under 10,000 population category.

Safety belts are recognized as an effective method of reducing the severity of injuries in traffic crashes. This is confirmed by the crash data presented in Table 31. This table shows that, when a driver of a motor vehicle is wearing a safety belt at the time of a crash, the chance of being fatally injured is reduced by about 98 percent compared to not wearing a safety belt. Also, the chance of receiving an incapacitating injury is reduced by 93 percent and the chance of receiving a non-incapacitating injury is reduced by 81 percent. Safety belts will greatly decrease the possibility of injury in crashes involving large deceleration forces, but some injury or complaint of soreness or discomfort may persist. In many instances, use of seat belts will reduce a severe injury to a less severe injury. The category of "possible injury", which involves a complaint of pain without visible signs of injury, decreased only 67 percent (from 17.20 percent for drivers not wearing safety belts to 5.66 percent for drivers wearing safety belts). These percentages are high when compared to national statistics concerning the effectiveness of safety belts in reducing fatal or serious injuries. The reason is probably related to the over reporting of seat belt usage in traffic crashes. This would occur more often for drivers who were not injured where there was no physical evidence of whether they were wearing a seat belt.

A summary of usage and effectiveness of child safety seats for children under the age of four who were involved in traffic crashes is presented in Table 32. Data are for 2013-2017. Age categories in the crash file governed the age category that was used. Most children three years of age or younger would be placed in a child safety seat rather than a seat belt or harness. However, many were coded as wearing a safety belt, so the categories of restraint used were 1) none, 2) safety belt or harness, 3) child safety seat, and 4) any restraint.

Of the 21 fatalities (children age three and under) occurring during the study period (2013-2017), 18 involved use of a restraint. The use of a restraint in most of the fatalities would be related to the very high usage rate and possibly to improper usage. Also, of the 59 incapacitating injuries, 55 involved use of a restraint. A better measure of effectiveness would

be the percentage sustaining a specific injury. This analysis revealed the percentages of fatalities and incapacitating and non-incapacitating injuries were much lower for children who were in a child safety seat or safety belt compared to those using no restraint. Comparison of the "any restraint" and "none" categories revealed there was a 96 percent reduction in fatalities for children in restraints, a 90 percent reduction in incapacitating injuries, an 88 percent reduction in non-incapacitating injuries, and a 73 percent reduction in possible injuries.

An analysis of the percentage of children in restraints revealed the percentage was higher in the rear seat than in the front seat. A comparison of percent usage by year shows the constant very high usage rate. The usage rate using the crash data was 99 percent. This usage rate was calculated by dividing the "any restraint" total by the sum of the "any restraint" and "none" categories from Table 32. This compares to the usage rate of 98 percent found in the 2012 observational survey (this data is no longer collected after 2012.)

8.0 SPEED-RELATED CRASHES

Speed is one of the most common contributing factors in total crashes and fatal crashes. Speed-related crashes had remained fairly constant during the previous years. In 2007, the number of speed-related crashes was the lowest it has been since the inception of this report. In 2017 the number of speed-related crashes decreased by 8.3 percent when compared to the previous four-year average. For the five-year period (2013-2017), speed-related crashes represented 5.1 percent of all crashes, 8 percent of injury crashes, and 21.2 percent of fatal crashes. In 2017 the number of speed-related fatal crashes saw an increase of 8 percent when compared to the previous four-year average. The number of speed-related fatal crashes ranged from a low of 99 in 2013 to a high of 131 in 2015. The number of speed-related injury crashes decreased by 9.1 percent in 2017 compared to the previous four years. The number of speed-related injury crashes ranged from a low of 1,846 in 2014 to a high of 1,979 in 2016.

As a means of analyzing speed-related crashes, crashes having "unsafe speed" coded as a contributing factor were summarized by county and population category in Table 33. The police report has two codes indicating speed was a contributing factor. These codes are "exceeded stated speed limit" and "too fast for conditions." When arranged in order of decreasing percentages of speed-related crashes by population category, those counties having the highest percentages in each category are Carlisle, Butler, Grant, Carter, and Madison. A similar summary of crashes involving unsafe speeds for cities was prepared and is presented in Table 34. Those cities having the highest percentages in each population category are Lexington, Independence, Erlanger, Taylor Mill, and Williamstown.

In addition to crash analysis, the other major area of analysis for unsafe speed was speed convictions. Areas having large percentages of crashes involving speeding and low conviction rates are candidates for increased enforcement. Table 35 presents a summary of speeding convictions by county. Numbers of speed convictions, speed convictions per 1,000 licensed drivers, and speeding convictions per speed-related crash are included. For the five-year period examined, the number of speeding convictions for the entire state ranged from a low of 47,605 in 2015 to a high of 55,061 in 2013.

To assist in identifying areas having the potential for increased enforcement, Table 36 was prepared with speeding conviction rates listed in descending order by county population Within each population category, those counties having the lowest speeding categories. conviction rates per 1,000 licensed drivers are Elliott, Leslie, Letcher, Greenup and Pike. Most of those counties were identified as also having the lowest rates of speeding convictions per speed-related crash. There was a predominance of counties having high percentages of speedrelated crashes and low rates of convictions in the southeastern region of Kentucky.

Speeds on various types of roads were obtained in 2007 and 2008 prior to and after the implementation of an increase of speed limits on rural interstates and parkways from 65 to 70 mph. In addition to interstates and parkways, data were taken on rural four-lane roads and twolane with full width shoulders. Summary of that data for cars and trucks (single unit and combination tractor trailer) are given in Tables 37 and 38, respectively. The 85th percentile speeds are given which is the speed which should be used to establish the speed limit. The data show that the increase in speed limits on rural interstates and four-lane parkways from 65 to 70 mph resulted in only a small increase in speed. The large difference in the 85th percentile speed and posted speed limit on a few other road types justify an increase in speed limit on a limited number of high-design type roads. Speeds for trucks are less than that for cars. The speed data show that the operating speed is above the posted speed limit on all road types.

9.0 TEENAGE DRIVERS

A separate analysis (2017 Traffic Collision Facts report) was conducted to determine the frequency of crashes involving teenage drivers (16 to 19 years of age). A review of driver records shows that teenage drivers account for approximately 8 percent of licensed drivers (including learner permits) in Kentucky. Using 2017 data, it was found that teenage drivers were involved in about 15 percent of all crashes, 15 percent of injury crashes, and 10 percent of fatal crashes. Teenage drivers (including drivers with a learner permit) are overrepresented in all crash types.

The involvement rate of teenage drivers compared to all drivers in total and fatal crashes was analyzed (using 2017 data). Considering all crashes on public highways, the rate was 71 crashes per 1,000 drivers for all drivers compared to 88 crashes per 1,000 drivers for teenage drivers. Considering fatal crashes, the rate was 22 fatal crashes per 100,000 drivers for all drivers compared to 31 fatal crashes per 100,000 teenage drivers. These rates again show the over representation of teenage drivers in both total and fatal crashes.

10.0 GENERAL CRASH STATISTICS

Several types of general statistics were developed for use in analyses of specific problem areas. Included were crash trends over a five-year period and several types of statistics for crashes involving pedestrians, bicycles, motorcycles, school buses, trucks, and trains.

10.1 CRASH TREND ANALYSIS

An analysis of crash trends over the five-year period is summarized in Table 39. The crashes in 2017 were compared to an average of the preceding four years (2013-2016). There was a 3.9 percent increase in total crashes. It should be noted that crashes in parking lots were not included in the analysis.

The highest number of crashes in this five-year span on public roads was in 2016 (140,547). The lowest number (123,258) occurred in 2013. The numbers of fatal crashes increased by 8.4 percent in 2017 compared to the previous four years while the number of fatalities increased by 7.7 percent. The number of fatalities in the five-year period ranged from a low of 638 in 2013 to a high of 834 in 2016. The number of injury crashes increased 1.3 percent and injuries increased 1.9 percent. The number of injuries varied from 34,180 in 2013 to 37,347 in 2016.

Vehicle-miles traveled dropped slightly over the five-year period which ranges from 47.054 billion miles in 2013 to 49.196 billion miles in 2016. The vehicle miles traveled in 2017 saw a decrease of 0.3 percent over the previous four-year average. There was an increase in total crash rate in 2017 of 4.3 percent when compared to the previous four-year average. The total crash rate varied from a low of 262 C/100 MVM in 2013 to 286 C/100 MVM in 2016. The total crash rate has remained fairly constant in recent years.

There were increases in 2017 in the fatal crash rate (8.7 percent) and fatality rate (8.4 percent) compared to the average of the previous four years. The fatal crash rate in 2013 (1.25) was the lowest rate in this five-year period with the highest in 2016 (1.55).

There were a total of 664,448 crashes in the five-year period, of which 3,380 (0.5 percent) were fatal crashes and 118,594 (17.8 percent) were injury crashes. Those crashes resulted in 3,687 fatalities and 177,289 injuries.

There is a large range used when estimating crash costs. Considering economic costs, an estimate for 2017 is \$11.3 billion for the cost of Kentucky traffic crashes (on public roads) or an average cost of about \$22,515 per crash using National Safety Council estimates of motor vehicle crash cost. Similarly, the comprehensive costs result in an estimate of \$74.3 billion for the cost of Kentucky traffic crashes or an average cost of about \$148,318 per crash.

Note: These figures are higher than previous publications as "No Injury Observed" was used rather than "Property Damage Only" as published by the National Safety Council in their 2016 Guide To Calculating Costs which can be found here as of the publication of this book:

https://injuryfacts.nsc.org/all-injuries/costs/guide-to-calculating-costs/data-details/

Trends in the number of specific types of crashes also are presented in Table 39. Those trends are discussed in the appropriate section dealing with that crash category. Additional general statistics compiled by county for crashes involving pedestrians, bicycles, motorcycles, school buses, and trucks are included in Table 40. Numbers of crashes and average annual crashes per 10,000 population are included.

10.2 PEDESTRIAN CRASHES

The number of pedestrian crashes increased 2.0 percent in 2017 compared to the previous four-year period. There had been a steady decrease in pedestrian crashes from 2000 to 2007 before an increase starting in 2008. Pedestrian collisions are a severe type of crash. In 2017, pedestrian crashes accounted for only 0.8 percent of all crashes but 3.4 percent of injury crashes and 11.8 percent of fatal crashes. The number of pedestrian injury crashes decreased by 3.3 percent in 2017 compared to the previous four-year average while the number of fatal crashes in 2017 increased by 28.8 percent compared to the previous four-year average. Pedestrian injury crashes ranged from 818 in 2016 to 857 in 2015 while fatal crashes ranged from 53 in 2013 to 85 in 2017.

A summary of pedestrian crash statistics by county and population category is presented in Table 41. Numbers of crashes and annual crash rates per 10,000 population are included. From the listing of crash rates in descending order, the following counties have the highest rates in each population category: Cumberland, Breathitt, Mason, Scott, and Jefferson. A similar analysis was performed for pedestrian crashes by city and population category. Results are summarized in Table 42 and the following cities have the highest rates in their respective population categories: Louisville, Covington, Shively, Bellevue, and Prestonsburg. Shively had the highest rate of any city.

10.3 BICYCLE CRASHES

Numbers and rates of motor-vehicle crashes involving bicycles by county are listed in Table 43. Counties were grouped by population category. The counties having the highest crash rate in each category are Carlisle, Caldwell, Rowan, Henderson, and Fayette. A similar summary was prepared for cities and the results are presented in Table 44. Cities having the highest rate of bicycle-related crashes in each population category are Lexington, Covington, Newport, Alexandrea, and Paintsville.

The number of bicycle crashes decreased by 7.4 percent in 2017 compared to the previous four year average. The number of bicycle crashes ranged from 410 in 2016and 2017 to 495 in 2013. This is a severe type of crash. For the five years, while bicycle crashes accounted for 0.3 percent of all crashes, they accounted for 1.1 percent of injury crashes and 0.97 percent of fatal crashes. The number of injury crashes decreased by 9.4 percent in 2017 and the number of fatal crashes increased by 16.7 percent (7 fatal crashes compared to an average of 6) compared to the 2013-2016 average. The range in injury crashes was from 255 in 2016 to 348 in 2013 while the number of fatal crashes ranged from 3 in 2013 and 2014 to 9 in 2016.

10.4 MOTORCYCLE CRASHES

County and city statistics for crashes involving motorcycles are presented in Tables 45 and 46, respectively. For each population category, counties having the highest rates for motorcycle crashes per 10,000 population are Lyon, Trigg, Rowan, Whitley, and McCracken (Table 45). The highest rate is in Trimble County with the largest number in Jefferson County. From Table 46, those cities having the highest rates in each population category are Louisville, Paducah, Shively, Pikeville, and Hazard. The rates in Hazard, Shively and Pikeville were substantially higher than other cities.

There was a decrease in motorcycle crashes in 2017 (5.3 percent) compared to the 2013-2016 average. The numbers over the five-year period ranged from a high of 1,785 in 2016 to a low of 1,624 in 2017. This is a severe type of crash. Data in 2017 show that motorcycle crashes accounted for 1.2 percent of all crashes but 4.8 percent of injury crashes and 11.9 percent of fatal crashes. The numbers of injury crashes decreased by 11.3 percent while the number of fatal crashes decreased by 1.1 percent in 2017 compared to the 2013-2016 average. In the five-year period the number of injury crashes ranged from 1,146 in 2017 to 1,377 in 2016 while the number of fatal crashes ranged from 74 in 2014 to 105 in 2016.

10.5 SCHOOL BUS CRASHES

School bus crash statistics were summarized for counties and cities and results are presented in Tables 47 and 48, respectively. Table 47 lists numbers and rates of school bus crashes by county and population category. Counties having the highest rates in each population category are Lee, Owen, Clay, Clark, and Boone. A similar summary was prepared for cities by population categories, as shown in Table 48. Those cities having the highest rates in each population category are Louisville, Florence, Shively, Versailles, and Prestonsburg. The highest rates were in Shively and Prestonsburg.

The trend analysis presented in Table 39 indicates there was a decrease in this type of crash in 2017 (23.5 percent) compared to the 2013-2016 average. The annual number of this type of crash ranged from a low of 564 in 2014 to a high of 852 in 2015. There was a decrease in injury crashes of 38.8 percent in 2017 compared to 2013-2016. The number of injury crashes ranged from 85 in 2016 to 107 in 2014. There were no fatal crashes involving a school bus in 2017 and a total of 10 for the five-year period.

10.6 TRUCK CRASHES

Truck crashes included both single unit and combination trucks. A truck is defined as a vehicle with a registered weight of 10,000 pounds or more. A summary of those crashes by county is given in Table 49. Counties having the highest rates in each population category are Gallatin, Carroll, Hart, Scott, and Boone. All these counties contain at least one interstate highway. Other counties having a high rate either contained an interstate highway or had a large amount of coal truck traffic. The trend analysis showed there was an increase in the number of truck crashes in 2017 (4 percent) compared to the previous four-year average. The number of truck crashes ranged from a low of 7,442 in 2012 to a high of 9,380 in 2016. The number of injury crashes increased by 0.6 percent and the number of fatal crashes decreased by 7.4 percent in 2017 compared to the previous four-year average. The number of injury crashes ranged from 1,250 in 2013 to 1,396 in 2015 while the number of fatal crashes ranged from 67 in 2014 to 93 in 2016. In 2017, truck crashes represented 6.7 percent of all crashes, 5.5 percent of injury crashes, and 10.4 percent of fatal crashes.

10.7 TRAIN CRASHES

A summary of motor vehicle-train crashes by county is presented in Table 50. Counties having the highest rates in each population category are Carlisle, Webster, Mercer, Hopkins, and Oldham. The highest rate is in Mercer County with the highest number in Oldham County. There were no train crashes in 68 of the 120 counties in the five-year period of 2013-2017.

The trend analysis for motor vehicle-train crashes is given in Table 39. There was a range in train crashes from 39 in 2013 to 55 in 2014 with a decrease of 10.9 percent in 2017 compared to the previous four-year average. The number of injury crashes increased 7.7 percent from an average of 13 per year in the previous 4-year period to 14 in 2017. Injury crashes ranged from a low of 11 in 2016 to a high of 17 in 2015. The number of fatal crashes for the five-year period ranged from 2 in 2016 to 5 in 2013 with a 25 percent decrease in 2017 compared to the previous four-year average.

10.8 VEHICLE DEFECTS

The requirement for an annual vehicle inspection was repealed in 1978. A summary of the involvement of vehicle defects in crashes before and after repeal of that law is presented in Table 51. The percent of crashes involving a vehicle defect was 5.86 percent before repeal of the vehicle inspection law. The percent increased to 7.09 in the first 19 months after repeal of the law and 7.43 percent in 1980 through 1984 but has decreased since that time. Starting in 1995, the percentage of crashes involving a vehicle defect was lower than that noted prior to repeal of the vehicle inspection requirement. The percent of crashes in which a vehicle defect was noted on the report was 5.1 percent in 2017.

Numbers in this year's publication may differ from previous versions slightly. The CRASH database is being used from an annual extract rather than from a live (and changing) data set and will not be dynamic as in previous years to make it more consistent with all other data in this publication.

11.0 SUMMARY AND RECOMMENDATIONS

11.1 STATEWIDE CRASH RATES

For the high-crash-location safety improvement program in Kentucky to be successful, procedures for identifying high-crash locations and scheduling improvements must be used. A computer program has been developed to identify high-crash locations. Inputs into this program are average and critical crash numbers and rates for rural and urban highway classifications. Various crash rates are presented throughout the report text, tables, and appendices, which can be used to implement a safety improvement program.

Each crash must be identified accurately to perform a complete crash analysis. In past years, many crashes that occurred on a state-maintained road did not have the necessary route and milepoint information to be included in the detailed analysis. Efforts have been made as part of the implementation of the newest report form to increase the number of crash reports having the necessary location information. Part of this effort should be to inform the investigating agencies of the importance of placing the proper route and milepoint for all crashes occurring on state-maintained roads. The roadway reference log has been updated to provide a more comprehensive list of milepoints that should be used.

The crash report form which was implemented starting in 2000 contains fields to use the Global Positioning System (GPS) to report the latitude and longitude for each crash. The accuracy of this data has been evaluated with recommendations made to improve location accuracy. Software has been developed by the Kentucky Transportation Center to assist in obtaining crash locations. This program, called MapClick, can be used to obtain county, route and milepoint as well as GPS coordinates by simply clicking on the crash location on a map. This program is available free to any law enforcement agency. More information can be obtained at <u>http://www.ktc.uky.edu/MapClick</u>. A similar software package has been included in the eCrash system starting in October of 2007. The system, MapIt, has greatly improved the accuracy of crash location data.

The fatal crash rate on rural, two-lane roadways is much higher than any road type. The factors contributing to this high rate have been investigated with countermeasures recommended. An effort should be made to review and implement as many of these countermeasures as practical.

A detailed study of all fatal crashes in 2004 was conducted (KTC-05-36). The recommended countermeasures given in that analysis should be considered. Examples of the recommendations include: require driver retesting (specifically, vision testing), improve curve delineation, increase use of milled shoulder and centerline rumble strips, include safety improvements as part of the resurfacing program, and increase awareness of the medical review board process concerning driver licenses. Some of these countermeasures (such as improvements to curve signing and edge line and centerline rumble strips) are currently being implemented by the Transportation Cabinet.

11.2 COUNTY AND CITY CRASH STATISTICS

The various types of crash rates calculated and included in this report were used in the analysis of various problem identification areas.

Counties and cities with various types of critical crash rates are given in Tables 10 through 13, 18, and 19. Coordinated efforts involving engineering, enforcement, education, and emergency medical services should be implemented in counties and cities having critical rates to address those problem areas.

In the past, a program was available to provide funds for the purchase of appropriate traffic signs to bring signing on city and county streets and roadways into compliance with the standards and guidelines included in the Manual on Uniform Traffic Control Devices (MUTCD). A large number of cities took advantage of this program, which was expanded to include counties. Funding for this program has not been provided for several years. However, training concerning proper signs and markings is offered to county and cities through workshops presented by the Technology Transfer Program at the Kentucky Transportation Center at the University of Kentucky. This training should continue with publicity provided to inform counties and cities that all of their traffic control devices must conform to the standards and guidelines in the MUTCD.

Technical assistance and training is also provided to counties and cities through the Safety Circuit Rider program through the Kentucky Transportation Center at the University of Kentucky. This program should be continued. A limited amount of funding is included for improved signs on a couple of roads in selected counties.

11.3 ALCOHOL-RELATED CRASHES

The number of alcohol-related crashes decreased (9.2%) in 2017 compared to the previous four-year average and has decreased from the level prior to 1996. In general, there has been a decreasing trend in the number of alcohol-related fatal crashes and fatalities. This may be related to increased enforcement and public information campaigns in the past several years that have increased public awareness.

Percentages of alcohol-related crashes were tabulated for counties and cities. In addition, alcohol conviction rates were tabulated by county. Those counties having relatively high percentages of alcohol-related crashes (Table 20) and low average numbers of alcohol convictions per alcohol crash (Table 23) were identified as potential locations where increased enforcement may be beneficial. Counties that have 100 or more alcohol-related crashes during the five-year analysis period were to be considered as potential counties for the increased alcohol-related enforcement program. Following is a list of those counties by State Police Post (reference was made to the counties recommended in the past few years).

Post Number	County
1	Calloway
2	Christian
3	Allen
4	Jefferson
5	Oldham
6	Boone
7	Jessamine
8	Mason
9	Floyd
10	None
11	Laurel
12	Anderson
13	Perry
14	Greenup
15	Marion
16	None

An analysis was performed for cities similar to that for counties. However, alcohol conviction rates were not available for cities so consideration was given to conviction rates for counties within which a city was located. Cities were chosen if they had at least 100 crashes and a percentage of alcohol-related crashes of approximately five percent (Table 21). No cities met this criteria this year.

11.4 DRUG-RELATED CRASHES

Blood tests taken after fatal crashes show more involvement with drugs than alcohol in these crashes. The problem with drugs in traffic crashes is concentrated in southeastern Kentucky. The data show that additional drug education and enforcement is warranted in this region of the state. The difference in the percentage of drug-related fatal crashes identified on the crash report compared to FARS data show that there is a need to supplement the crash report data after the blood tests are obtained.

11.5 OCCUPANT PROTECTION

Even though a statewide "primary enforcement" safety belt law has been passed, efforts to increase safety belt usage must continue. The safety belt programs that have been conducted in several locations across the state in the past should continue. These programs have the objectives of increasing awareness of risks of traffic crashes, increasing understanding of benefits of safety belt usage, and providing assistance to organizations willing to promote safety belt usage.

Enforcement of the statewide law should be another objective of these programs. The success of the "Buckle Up Kentucky: It's the Law and It's Enforced" and "Click It or Ticket"

campaigns show that these types of programs can provide benefits when implemented on a statewide level.

Usage rates and crash rates were considered when choosing candidates for more intensive promotion and enforcement campaigns. Consideration was given to past campaign recommendations and the location in the state. Since safety belt usage is lower in rural areas, counties in the more rural areas of the posts were identified when possible. These counties were identified in Table 29. A list of those counties, by State Police Post, follows.

<u>County</u>
Carlisle
Christian
Barren
Meade
Carroll
Bracken
Lee
Morgan
Floyd
Harlan
Rockcastle
Woodford
Leslie
Lawrence
Adair
Ohio

To maintain up-to-date usage statistics and to monitor the effect of the statewide safety belt law, annual statewide observational surveys should continue to be conducted. The survey can identify the statewide rate as well as the difference in rates in various regions of the state. The survey results can be used to identify locations where increased education and enforcement would be most beneficial.

11.6 SPEED-RELATED CRASHES

Unsafe speed has been shown to be a primary contributing factor in fatal crashes and a common contributing factor in all crashes. Those counties having high percentages of speed-related crashes (Table 33) and low average number of speeding convictions per speed-related crash (Table 36) were identified as possible locations for increased enforcement.

Locations meeting the criteria for crashes and convictions also were required to have at least 150 speed-related crashes during the five-year study period and speed-related crashes were at least six percent of total crashes. The following is a list of counties (tabulated by State Police Post) recommended for programs of increased speed enforcement (reference was made to the counties recommended in the past few years).

<u>County</u>
McCracken
Hopkins
Barren
Bullitt
Oldham
Grant
Boyle
Mason
Pike
Knox
Pulaski
Scott
None
Boyd
None
Daviess

By analyzing speed-related crash rates for cities and applying the criterion of at least 150 crashes during the five-year period and speed related crashes of six percent or more of total crashes (Table 34), the following cities were recommended for additional programs of speed enforcement:

- Lexington
- Independence
- Richmond
- Erlanger

Increased speed enforcement should be implemented on roads that have been identified as having the highest percentage of speed-related crashes. Consideration should be given to the types of roadways that have the highest crash rates. This would indicate more enforcement on rural two-lane and four-lane (non-interstate and parkway) roadways as opposed to interstate and parkways that have much lower crash rates.

Legislation in Kentucky increased the speed limit from 65 mph to 70 mph on rural interstates and parkways. An evaluation (KTC-08-10) found this increase in speed limit resulted in only a small increase in travel speeds. Data show current speeds do not reflect speed limits on several other types of highways. There is a need to review current speed limits and establish speed limits based on the 85th percentile speed. Recommendations for speed limits on various types of roads in Kentucky have been developed which note that the large difference in 85th percentile speed limit on a limited number of high-design type roads (in addition to rural interstates and parkways) justify an increase in speed limit. This has been implemented on a few rural multi-lane roadways.
11.7 TEENAGE DRIVERS

Graduated licensing legislation was amended in the 2007 Kentucky legislature to require an intermediate phase to be added to the process between the permit and fully-licensed stages. This change should be evaluated to determine how it has affected crashes for teenage drivers with recommendations made for improvements in the current legislation.

11.8 GENERAL CRASH STATISTICS

Pedestrians

The crash rate analyses identified Louisville, Covington, Shively, Bellevue, and Prestonsburg, as cities having the highest pedestrian crash rates (Table 42). A study to determine factors contributing to this problem in those cities and recommendations for improved traffic control measures, increased police enforcement, or driver and pedestrian education programs is warranted.

Bicycles

Lexington and Louisville also had a high number of this type of crash (Table 44) (as with pedestrian crashes). A study of this type of crash could be included with the previously mentioned study of pedestrian crashes. It should also be noted that Covington and Newport had high rates.

Motorcycles

Before 2008 the number of total and fatal motorcycle crashes had been increasing the past several years. A study to determine the causes and countermeasures related to motorcycle crashes has been completed (KTC-11-04). The length of time a permit could be maintained without a motorcycle endorsement was changed as a result of this study. The vehicle, roadway, and driver countermeasures provided in this report should be considered. The law requiring motorcyclists to wear a helmet was repealed in the 1998 legislature. Observations have shown the helmet usage rate has dramatically decreased. Also, the number of injury and fatal motorcycle crashes has increased dramatically. An investigation should be made to determine the increased cost associated with nonuse of motorcycle helmets. The combination of the decrease in usage rate and the increase in injury and fatal crashes supports the need to reenact the requirement for the use of motorcycle helmets.

Lyon, Trigg, Rowan, Whitley and McCracken counties had the highest motorcycle crash rate in their population categories (Table 45) and Paducah, Shively, Pikeville, and Hazard (Table 46) had the highest motorcycle-crash rate in their population categories. An evaluation of this type of crash in these counties and cities could be warranted.

Truck Crashes

Counties with a large number of truck crashes either contained an interstate highway or had a large amount of coal truck traffic. Volume counts show that interstate highways have a high percentage of truck traffic. Coal trucks are hauling on an extended weight system that allows heavy loads. A 1999 research report conducted by the University of Kentucky investigated heavy truck involvement in traffic crashes on all types of highways while a 2002 research report investigated the impact of large trucks on

interstate highway safety. Both of these reports recommended countermeasures related to the vehicle, driver, or roadway. Implementation of these countermeasures should be considered.

Vehicle Defects

The percentage of crashes involving vehicle defects increased immediately after repeal of the vehicle inspection law (Table 51). It could be concluded that the repeal of that law resulted in additional crashes involving vehicle defects. However, the percentage of crashes involving a vehicle defect has decreased in recent years to less than that before repeal of the inspection law. A study could be conducted to determine whether the defects that have contributed to crashes since repeal of the vehicle inspection law were of the type that might have been detected under the previous inspection program. That study could also reveal types of inspections necessary to detect defects contributing to crashes for various types of vehicles.

Roadway Contributing Factors

A recent research study evaluated the coding of police reports relating to roadway contributing factors (KTC-14-08). The recommendations included in this report relating to coding of the police report and related police training should be implemented. The codes included in the analysis were for environmental contributing factors, traffic control devices, road surface condition, weather condition, and vehicular relate factors. The report also describes the type of coordination between police and government agencies which should occur to deal with potential roadway-related issues.

TABLE 1. COMPARISON OF 2013 - 2017 CRASH RATES*

STATISTIC	2013	2014	2015	2016	2013-2016 Average	2017	Percent Change***	
Crashes	102,943	106,122	96,902	116,160	105,532	94,461	-10.5	
Fatal Crashes	517	538	537	682	569	544	-4.3	
Injury Crashes	18,655	18,687	16,457	20,529	18,582	16,387	-11.8	
Mileage	28,430	28,178	28,247	28,123	28,245	28,265	0.1	
Crashes Per Mile	3.62	3.77	3.43	4.13	3.74	3.34	-10.6	
Vehicle Miles (Billion)	40.17	40.14	41.08	41.33	40.68	41.66	2.4	
AADT	3,871	3,903	3,985	4,026	3,946	4,038	2.3	
Crash Rate**	256	264	236	281	259	227	-12.4	
Fatal Crash Rate**	1.29	1.34	1.31	1.65	1.40	1.31	-6.3	
Injury Crash Rate**	46	47	40	50	46	39	-14.8	

* Data apply to streets and highways having known traffic volumes, route numbers, and mileposts.

** Crash rates are given in terms of crashes per 100 million vehicle-miles (C/100 MVM).

*** Percent change in 2017 compared to 2013 through 2016 average.

TABLE 2. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2013-2017)

	τοται		(CR	CRASH RATE ASHES PER 10	S 0 MVM)
HIGHWAY TYPE	MILEAGE*	AADT	ALL	INJURY	FATAL
One-Lane	31	510	582	70	0.0
Two-Lane	22,939	1,330	267	56	2.8
Three-Lane	27	6,540	286	45	1.2
Four-Lane Divided (Non-Interstate or Par	634 kway)	9,660	123	24	1.0
Four-Lane Undivided	19	13,580	136	31	1.5
Interstate	612	34,030	57	10	0.5
Parkway	524	10,060	67	13	0.8
All	24,786	2,550	167	34	1.7

* Average for the five years.

	τοται		(CR	CRASH RATE ASHES PER 10	S 0 MVM)
HIGHWAY TYPE	MILEAGE*	AADT	ALL	INJURY	FATAL
Two-Lane	2,178	5,750	507	79	1.3
Three-Lane	44	10,200	684	96	0.7
Four-Lane Divided (Non-Interstate or Pa	789 rkway)	18,420	419	71	1.3
Four-Lane Undivided	143	21,230	578	91	1.1
Interstate	211	75,840	123	19	0.4
Parkway	35	14,900	110	19	1.1
All **	3,461	14,100	364	58	1.0

TABLE 3. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2013-2017)

* Average for the five years.

** Includes small number of one-, five-, and six-lane highways.

TABLE 4. COMPARISON OF 2013 - 2017 CRASH RATES BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION

LOCATION	HIGHWAY TYPE	2013	2014	2015	2016	2013-2016 Average	2017	Percent Change*
Rural	One-Lane	596	305	574	729	551	892	61.8
	Two-Lane	269	278	264	290	275	236	-14.1
	Three-Lane	325	270	278	296	292	269	-8.0
	Four-Lane Divided	141	141	93	141	129	95	-26.7
	(Non-Interstate or Pa	arkway)						
	Four-Lane Undivided	í 174	130	85	174	141	116	-17.3
	Interstate	54	57	57	58	56	57	1.8
	Parkway	70	63	68	70	68	63	-6.2
	All	174	174	161	178	172	148	-14.0
Urban	Two-Lane	528	530	478	565	525	437	-16.7
	Three-Lane	800	669	558	795	706	626	-11.3
	Four-Lane Divided	446	436	354	491	432	373	-13.7
	Four-Lane Undivided	563	609	531	663	592	527	-10.9
	Interstate	108	116	128	134	122	127	4.6
	Parkway	110	97	118	116	110	117	6.0
	All	374	377	330	412	374	328	-12.1

* Percent change from 2013 through 2016 to 2017.

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane Two-Lane Three-Lane Four-Lane Divided (Non-Interstate or Parkway) Four-Lane Undivided Interstate Parkway All Rural	166 148,750 921 13,729 656 21,526 6,422 192,170	102 76,463 90 2,114 65 2,040 1,747 82,620	0.19 0.49 2.39 3.53 4.96 12.42 3.67 0.93	1.75 0.80 0.86 0.37 0.41 0.17 0.20 0.50
Urban	Two-Lane Three-Lane Four-Lane Divided Four-Lane Undivided Interstate Parkway All Urban**	115,919 5,546 111,208 32,060 36,015 1,053 324,303	7,259 145 2,630 477 704 117 11,535	2.10 3.72 6.72 7.75 27.68 5.44 5.15	1.52 2.05 1.26 1.74 0.37 0.33 1.09

TABLE 5. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2013-2017)

* Average for the five years. The length of a spot is defined to be 0.3 mile. ** Includes small number of miles of one-, five-, and six-lane highways.

TABLE 6. STATEWIDE AVERAGE AND CRITICAL NUMBERS OF CRASHES FOR "SPOTS" AND ONE-MILE SECTIONS BY HIGHWAY TYPE CLASSIFICATION (2013-2017)

				CRASH	ES PER
RURAL		CRASHES I	PER SPOT*	ONE-MILE	E SECTION
OR			CRITICAL		CRITICAL
URBAN	HIGHWAY TYPE	AVERAGE	NUMBER	AVERAGE	NUMBER
Rural	One-Lane	1.63	5	5.42	12
	Two-Lane	1.95	6	6.48	14
	Three-Lane	10.23	19	34.11	50
	Four-Lane Divided (Non-Interstate or Parkway)	6.49	14	21.65	34
	Four-Lane Undivided	10.14	19	33.81	49
	Interstate	10.55	19	35.17	51
	Parkway	3.68	9	12.25	22
	All Rural	2.33	7	7.75	15
Urban	Two-Lane	15.97	27	53.23	73
	Three-Lane	38.17	55	127.23	157
	Four-Lane Divided	42.28	60	140.93	172
	Four-Lane Undivided	67.24	89	224.14	263
	Interstate	51.17	70	170.57	205
	Parkway	8.97	17	29.89	44
	All Urban**	28.11	42	93.71	119

* The length of a spot is defined to be 0.3 mile.
 ** Includes small number of miles of one-, five-, and six-lane highways.

TABLE 7. CRASH RATES BY COUNTY FOR IDENTIFIED SYSTEM AND ALL ROADS (2013-2017)

					ALL F	ROADS		
	IDEN	ITIFIED	TOTAL CRASHES	5	FATAL CRASHE	S	FATAL C CR	R INJURY
COUNTY	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
COUNTY Knox Larue Laurel Lawrence Lee Leslie Letcher Lewis Lincoln Livingston Logan Lyon McCracken McCreary McLean Madison Marshall Marion Marshall Martin Mason Meade Menifee Mercer Metcalfe Monroe Montgomery Morgan Muhlenberg Nelson Nicholas Ohio Oldham Owsley Pendleton Perry Pike Powell Pulaski Robertson Rockcastle Rowan Russell Scott Shelby Simpson Spencer Taylor Todd Trigg Trimble Union Warren Washington Wayne Webster Whitley	$\begin{array}{c} \text{RASHES} \\ 2,766 \\ 1,277 \\ 6,809 \\ 992 \\ 320 \\ 265 \\ 1,337 \\ 574 \\ 1,846 \\ 829 \\ 2,451 \\ 1,180 \\ 8,812 \\ 1,041 \\ 990 \\ 10,501 \\ 945 \\ 2,370 \\ 3,462 \\ 506 \\ 2,097 \\ 1,920 \\ 261 \\ 1,768 \\ 1,124 \\ 465 \\ 3,884 \\ 790 \\ 4,019 \\ 4,652 \\ 592 \\ 2,820 \\ 5,093 \\ 1,453 \\ 7,889 \\ 1,452 \\ 5,92 \\ 2,820 \\ 5,093 \\ 901 \\ 232 \\ 1,354 \\ 2,579 \\ 6,058 \\ 1,583 \\ 7,889 \\ 1,453 \\ 5,465 \\ 6,192 \\ 3,041 \\ 1,166 \\ 3,204 \\ 930 \\ 1,450 \\ 747 \\ 1,240 \\ 15,898 \\ 1,183 \\ 1,142 \\ 4,927 \\ 745 \\ \end{array}$	RATE* 215 152 168 126 147 55 154 105 192 130 204 91 257 186 231 178 353 125 241 194 205 234 125 241 194 205 234 125 241 194 205 234 125 241 194 209 286 239 125 241 194 209 209 286 239 125 162 197 162 153 162 153 162 153	NUMBER 3,088 1,495 8,573 1,117 376 299 1,494 702 2,131 920 2,884 1,305 11,419 1,058 13,278 880 2,310 3,994 486 2,260 3,41 2,374 1,217 474 4,105 803 4,227 5,550 752 3,059 5,761 976 259 1,649 3,655 6,983 1,543 8,594 165 2,972 1,315 1,286 1,470 22,952 1,315 1,286 5,276	RATE* 193 155 189 122 137 53 139 106 183 126 199 95 282 159 206 242 139 278 159 98 297 181 131 225 219 101 265 130 240 218 271 174 204 214 153 288 230 204 178 253 203 103 258 193 205 191 158 179 312 175 156 196 209 312 171 177 149 173 147	NUMBER 30 14 58 17 8 11 17 19 25 11 20 14 50 21 56 21 24 49 46 38 9 20 16 322 6 27 45 11 22 14 8 8 17 25 02 14 50 21 56 21 24 49 46 38 9 20 16 322 6 27 45 02 11 22 11 24 49 46 38 9 20 16 322 6 27 45 02 11 22 11 24 49 40 11 22 11 24 49 40 21 55 02 11 24 49 40 11 22 11 24 49 40 10 21 55 02 11 24 49 40 10 21 55 02 21 12 49 40 10 21 55 02 21 12 21 12 21 13 22 6 7 45 02 11 22 11 22 14 8 8 41 76 21 55 02 24 11 22 11 23 11 22 14 8 8 41 76 15 0 22 24 11 25 0 22 24 14 8 8 41 76 15 0 22 24 19 43 34 20 10 18 17 12 13 83 16 18 17 12 13 83 16 18 17 12 13 83 16 18 14 55 0 22 24 19 43 34 20 10 18 17 12 13 83 16 18 15 50 22 24 19 43 17 12 13 83 16 18 14 55 0 22 24 19 43 17 12 13 83 16 18 15 15 0 22 24 19 43 17 12 13 83 16 18 15 15 15 15 15 15 15 15 15 15	RATE* 1.9 1.5 1.3 1.9 2.9 1.6 2.9 2.2 1.5 1.4 1.0 1.2 3.0 1.0 3.3 2.9 1.8 1.0 1.2 3.0 1.0 3.3 2.9 1.5 1.4 1.0 3.0 1.0 3.3 2.9 1.5 1.4 1.0 3.0 1.0 3.3 2.9 1.5 1.4 1.0 3.0 1.0 3.3 2.9 1.5 1.4 1.0 3.0 1.0 3.0 1.5 1.4 1.0 1.2 3.0 1.0 3.3 2.9 1.5 1.4 1.0 1.2 3.0 1.5 1.4 1.0 1.2 3.0 1.5 1.4 1.0 1.2 3.0 1.5 1.4 1.0 3.3 2.9 1.5 1.4 1.0 1.0 3.19 2.2 1.5 1.4 1.0 1.0 3.19 2.9 1.5 1.4 1.0 1.0 3.19 2.9 1.5 1.4 1.0 1.0 3.19 2.9 1.5 1.4 1.0 1.0 3.19 2.9 1.5 1.4 1.0 1.0 3.19 2.9 1.4 1.0 1.5 1.4 1.0 1.5 1.0 1.1 1.0 1.1 1.0 1.2 2.4 1.0 1.5 1.0 1.5 1.0 1.5 1.1 1.0 1.3 2.9 1.1 1.0 1.2 2.1 1.0 1.3 2.9 1.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.1 3.1 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.0 1.2 2.1 1.1 2.1 1.5 2.1 1.1 2.1 1.5 2.1 1.1 2.1 1.5 2.1 1.1 2.1 1.5 2.1 1.1 2.1 2.1 2.1 2.1 2.1 2.1	NUMBER 852 308 1,867 321 81 112 575 171 529 214 634 283 2,723 342 310 1,979 280 436 992 124 483 682 111 457 265 116 774 229 854 1,033 139 736 945 253 76 301 1,018 1,995 374 1,556 301 1,018 1,995 374 1,556 301 1,018 1,995 374 1,556 301 1,018 1,995 374 1,556 301 1,280 663 340 537 243 340 537 5325 1,328 1,777	RATE* 53 32 41 35 30 20 53 26 46 29 44 21 67 50 60 36 44 29 44 21 67 50 60 36 44 29 9 25 47 53 30 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 53 26 46 29 44 20 55 47 55 33 26 46 29 44 20 55 47 55 33 26 47 55 33 26 46 29 44 20 55 47 55 33 26 46 29 44 20 55 47 55 33 26 47 55 33 55 55 55 33 54 55 33 54 55 55 53 54 55 55 54 53 37 55 55 55 55 55 55 54 55 55 55 55 55 55
STATEWIDE	3,305 516,588	253	4,387	224	3,380	1.0	121,971	
			· · · · · · ·				•	

	TABLE 7. CRASH RATES BY	COUNTY FOR IDENTIFIED	SYSTEM AND ALL R	(OADS (2013-2017)	continued)
--	-------------------------	-----------------------	------------------	-------------------	------------

* Crashes per 100 million vehicle-miles (C/100 MVM)

Table 8. COUNTY POPULATIONS (2010 CENSUS) IN DESCENDING ORDER

COUNTY	POPULATION	COUNTY	POPULATION	COUNTY	POPULATION
Jefferson	741,096	Logan	26,835	Breathitt	13,878
Fayette	295,803	Montgomery	26,499	Lewis	13,870
Kenton	159,720	Grayson	25,746	Webster	13,621
Boone	118,811	Woodford	24,939	Jackson	13,494
Warren	113,792	Lincoln	24,742	Magoffin	13,333
Hardin	105,543	Grant	24,662	Caldwell	12,984
Daviess	96,656	Letcher	24,519	Martin	12,929
Campbell	90,336	Taylor	24,512	Butler	12,690
Madison	82,916	Ohio	23,842	Powell	12,613
Bullitt	74,319	Johnson	23,356	Todd	12,460
Christian	73,955	Rowan	23,333	Edmonson	12,161
McCracken	65,565	Clay	21,730	Washington	11,717
Pike	65,024	Anderson	21,421	Bath	11,591
Pulaski	63,063	Mercer	21,331	Leslie	11,310
Oldham	60,316	Wayne	20,813	Green	11,258
Laurel	58,849	Breckinridge	20,059	Monroe	10,963
Boyd	49,542	Bourbon	19,985	Owen	10,841
Franklin	49,285	Allen	19,956	Carroll	10,811
Jessamine	48,586	Marion	19,820	Clinton	10,272
Scott	47,173	Harrison	18,846	Metcalfe	10,099
Hopkins	46,920	Adair	18,656	McLean	9,531
Henderson	46,250	McCreary	18,306	Livingston	9,519
Nelson	43,437	Hart	18,199	Crittenden	9,315
Barren	42,173	Russell	17,565	Trimble	8,809
Shelby	42,074	Mason	17,490	Gallatin	8,589
Floyd	39,451	Simpson	17,327	Hancock	8,565
Calloway	37,191	Spencer	17,061	Bracken	8,488
Graves	37,121	Rockcastle	17,056	Lyon	8,314
Greenup	36,910	Garrard	16,912	Ballard	8,249
Whitley	35,637	Knott	16,346	Lee	7,887
Clark	35,613	Casey	15,955	Elliott	7,852
Knox	31,883	Lawrence	15,860	Wolfe	7,355
Muhlenberg	31,499	Henry	15,416	Nicholas	7,135
Marshall	31,448	Union	15,007	Cumberland	6,856
Harlan	29,278	Pendleton	14,877	Fulton	6,813
Perry	28,712	Estill	14,672	Menifee	6,306
Bell	28,691	Fleming	14,348	Carlisle	5,104
Meade	28,602	Trigg	14,339	Hickman	4,902
Boyle	28,432	Larue	14,193	Owsley	4,755
Carter	27,720	Morgan	13,923	Robertson	2,282

TOTAL 4,339,367

Table 9	. AVERAGE AND CRITICA	L CRASH RATES BY	POPULATION CATEGORY
	(2013-2017)		

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY	TOTAL POPULATION	TOTAL MILEAGE DRIVEN 100 MVM
UNDER 10,000	20	146,626	93.66
10,000 - 14,999	26	329,247	182.81
15,000 - 24,999	31	615,022	368.97
25,000 - 50,000	27	982,708	576.36
OVER 50,000	16	2,265,764	1.201.02

POPULATION CATEGORY	TOTAL NUMBER OF CRASHES	CRASHES PER 100 MVM	CRITICAL CRASH RATE (C/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	13,909	149	181	8
10,000 - 14,999	29,085	159	187	8
15,000 - 24,999	69,607	189	212	9
25,000 - 50,000	131,765	229	248	7
OVER 50,000	420,082	350	362	3

POPULATION CATEGORY	TOTAL NUMBER OF FATAL CRASHES	FATAL CRASHES PER 100 MVM	CRITICAL FATAL RATE (C/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	185	1.98	6.25	0
10,000 - 14,999	368	2.01	5.45	0
15,000 - 24,999	591	1.60	3.92	0
25,000 - 50,000	881	1.53	3.19	0
OVER 50,000	1,355	1.13	1.87	1

POPULATION CATEGORY	TOTAL NUMBER OF FATAL OR INJURY CRASHES	FATAL OR INJURY CRASHES PER 100 MVM	CRITICAL FATAL OR INJURY CRASH RATE (C/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	3,335	35.6	52.0	3
10,000 - 14,999	6,768	37.0	50.6	4
15,000 - 24,999	14,823	40.2	51.0	6
25,000 - 50,000	26,053	45.2	53.7	5
OVER 50,000	70,992	59.1	64.3	3

TABLE 10. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2013-2017)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
POPULAT	ION CATEGORY UN	IDER 10,000	POPULATIO	ON CATEGORY 15	,000-24,999
Nicholas	752 961	271 *	Harrison Taylor	2,527	351 *
Bracken	1,080	222 *	Mason	3,036	297 *
McLean	1,058	206 *	Bourbon	3,064	291 * 278 *
Trimble	808	196 *	Allen	2,244	262 *
Ballard	884	191 *	Rowan	4,018	258 * 225 *
Fulton	589	172	Woodford	4,387	224 *
Owsley	259	153	Union	1,470	209
Wolfe	776	149	Garrard	1,892	206
Hancock	688	141	Johnson	2,225	201
Menifee	376 341	137	Lincoln	2.131	193
Livingston	920	126	Clay	1,840	181
Hickman	349 334	125	Wavne	1,330	179
Lyon	1,305	95	Ohio	3,059	174
	TION CATEGORY 10	.000-14.999	Simpson	2,972	159
Pendleton	1,649	288 *	Knott	1,191	150
Netcalfe	1,217 976	219 * 214 *	Casey Grant	991 3 707	148 147
Çaldwell	1,941	211 *	Letcher	1,494	139
Jackson Green	977 843	199 * 195 *	Henry Adair	2,035	139 137
Breathitt	1,304	194 *	Breckinridge	1,161	137
Clinton Powell	925 1 543	194 * 178	Hart Lawrence	2,783	135 122
Todd	1,077	175	Rockcastle	2,512	103
Washington	1,315 1,153	171 168	POPULATIC Jessamine	25 ON CATEGORY 7 446	, 000-50,000 362 *
Butler	1,386	164	Calloway	5,133	341 *
Edmonson	1,028	161 156	Boyd Henderson	7,576 7,966	338 * 305 *
Larue	1,495	155	Boyle	4,153	303 *
Webster	1,286	149 142	Montgomery Franklin	4,105 7,612	265 * 259 *
Magoffin	880	139	Clark	5,668	243
Morgan	803 741	130	Muhlenberg	4,227	240
Lewis	702	106	Bell	3,206	239
Monroe	474	101	Barren	6,593	238
Bath	808	90	Nelson	5,550	218
Leslie	299	53	Graves	4,508	214
			Logan	2,884	199
			Grayson	3,135	196
			Knox	3,088	193
			Shelby Meade	6,681 2,260	191 181
			Harlan	2,375	179
			Whitley	5,208	173 172
			Marshall	3,994	159
			Carter	2,777	140 VER 50 000
			Jefferson	156,609	468 *
			Fayette	67,276	453 *
			Kenton	28.126	359
			Campbell	15,159	353
			Boone	22,952 23,800	312
			McCracken	11,419	282
			Madison	0,394 13.278	203 242
			Hardin	14,708	214
			Pike	5,761 6,983	204 204
			Bullitt	10,066	203
			Laurel	9,250 8,573	195

TABLE 11. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2013-2017)(IDENTIFIED SYSTEM)

COUNTY	NUMBER OF	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF	CRASH RATE (CRASHES PER 100 MVM)
POPULAT		NDER 10.000	POPULATIO	ON CATEGORY 1	5.000-24.999
Crittenden	897	284 *	Harrison	2,133	374 *
Robertson	592 145	267 * 239 *	l aylor Marion	3,204 2,370	356 *
McLean	990	236 *	Bourbon	2,493	300 *
Trimble	921 747	221 * 222 *	Mason	2.097	247 * 241 *
Ballard	759	200 *	Rowan	3,065	228 *
Cumberland	587 505	200 * 182	Johnson	1,240	215 *
Owsley	232	180	Mercer	1,768	205
Hancock	272	180	Spencer Garrard	1,166	204 200
Wolfe	745	163	Russell	1,433	197
Carlisle Lee	342 320	150 147	Lincoln Woodford	1,846	192 191
Livingston	829	130	McCreary	1,041	186
Hickman	261	129 125	Clav	2,820	183 182
Gallatin	1,280	92	Simpson	3,041	177
Lyon POPULAT	TION CATEGORY 10	91).000-14.999	Anderson Knott	1,756	176
Pendleton	1,354	311 *	Casey	876	165
Jackson	901 895	244 * 236 *	Wavne	1,347	163
Metcalfe	1,124	234 *	Henry	2,066	155
Green	801	234 * 233 *	Hart	2,534	154
Breathitt	1,223	216 *	Breckinridge	866	130
Butler	1,583	209 * 195	Grant	992 2.796	126
Clinton	762	191	Rockcastle	2,487	108
Magoffin	930 945	183	Calloway	3.864	5,000-50,000 320 *
Washington	1,183	175	Jessamine	4,980	318 *
Estill	925 732	163	Montgomery	3,884	305 ^ 301 *
Webster	1,142	155	Boyle	3,263	292 *
Larue	1,277	155	Muhlenberg	4,019	203 * 278 *
Trigg	1,450	145	Franklin	6,588	264 *
Carroll	1,765	143	Clark	2,979 5,086	260 * 253 *
Martin	506	125	Greenup	3,195	245
Lewis	405 574	105	Nelson	4,652	232
Bath	655	82	Knox	2,766	215
Leslie	205	55	Barren	5,051	213
			Logan	2,451	204
			Shelby	6,192	199
			Graves	3,454	199 198
			Meade	1,920	194
			Perry Whitley	2,579 4 927	194 183
			Carter	2,785	164
			Scott Marshall	5,465 3,462	162 159
			POPULATIO	ON CATEGORY O	VER 50,000
			Fayette Daviess	60,884 14 368	486 * 434 *
			Campbell	12,522	354 *
			Kenton	22,009	337 * 330 *
			Boone	19,248	294
			Pulaski McCracken	7,889 8,812	286 257
			Warren	15,898	249
			Oldham Madison	5,093 10,501	224 221
			Hardin	12,815	218
			Pike Bullitt	6,058 8,275	209 195
			Christian	7,694	181
		34	Laurel	6,809	168

TABLE 12. INJURY OR FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2013-2017)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
POPULAT	TION CATEGORY UN	DER 10,000	POPULATIO	ON CATEGORY 15	,000-24,999
COUNTY POPULAT Crittenden McLean Carlisle Nicholas Trimble Robertson Owsley Elliott Menifee Bracken Ballard Cumberland Hancock Wolfe Fulton Lee Hickman Livingston Lyon Gallatin POPULAT Breathitt Jackson Owen Pendleton Metcalfe Green Caldwell Magoffin Powell Clinton Todd Edmonson Washington Webster Morgan Fleming Butler Larue Trigg Estill Lewis Carroll Monroe Martin Bath Leslie	NUMBER OF CRASHES FION CATEGORY UN 317 310 157 139 195 38 76 90 111 202 190 132 183 177 104 81 88 214 283 248 FION CATEGORY 10, 450 280 253 301 265 193 408 280 374 199 243 256 310 325 229 231 273 308 344 174 171 362 116 124 187 112	DER 10,000 80 * 60 * 56 * 47 45 45 43 42 41 40 38 30 30 29 21 17 67 * 55 * 53 * 48 45 40 38 34 30 300 29 21 17 67 * 55 * 53 * 48 45 43 40 30 300 29 21 17 7 55 * 53 * 48 45 44 43 42 40 30 30 30 26 25 25 21 20 30	COUNTY POPULATIC Clay Harrison Union Allen Letcher Marion McCreary Johnson Knott Taylor Mason Spencer Bourbon Lincoln Breckinridge Rowan Mercer Garrard Anderson Ohio Wayne Casey Russell Woodford Simpson Lawrence Adair Grant Henry Hart Rockcastle POPULATIC Perry Jessamine Meade Henderson Boyd Bell Knox Boyle Calloway Montgomery Barren Muhlenberg Floyd Graves Graves Grayson Harlan Whitley Logan Nelson Marshall Scott Clark Hopkins Greenup Shelby Franklin Carter POPULATIC Jefferson Fayette McCracken Daviess Pike Warren Pulaski Kenton Boone Campbell Bullitt Laurel Christian	NUMBER OF CRASHES DN CATEGORY 15 729 439 380 462 575 436 342 543 390 537 483 340 483 529 380 701 457 399 519 736 335 256 326 717 663 321 298 647 381 532 487 DN CATEGORY 25 1,018 1,265 682 1,441 1,213 710 852 714 769 774 1,351 854 1,125 989 752 620 1,328 1,033 992 1,435 890 1,080 608 1,280 1,048 596 DN CATEGORY OV 26,799 11,018 1,265 63,564 3,564	PER 100 MVM) ,000-24,999 72 * 61 * 54 * 53 * 52 * 50 49 49 49 49 48 47 46 46 46 45 43 44 45 55 30 26 26 26 26 26 26 26 26 26 26 27 48 <t< td=""></t<>
			N A a all a ava	4 070	26

TABLE 13. FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2013-2017)(ALL ROADS)

COUNTY CRASHES PER 100 MVM) COUNTY CRASHES PER	ASHES R 100 MVM)
POPULATION CATEGORY UNDER 10,000 POPULATION CATEGORY 15,000-24,99	9
Owsley 8 4.7 Casey 22 Nicholas 11 4.0 Breckipridge 26	3.3
Ballard 17 3.7 McCreary 21	3.0
Menifee 9 3.4 Marion 24 Crittenden 13 3.3 Allen 23	2.9
Trimble 12 2.9 Clay 26	2.6
Lee 8 2.9 Lincoln 25 Carlisle 8 2.9 Adair 21	2.2
Wolfe 15 2.8 Russell 19	2.1
Bracken 11 2.3 Wayne 18	2.1
Fulton 6 1.8 Mercer 20	1.9
Livingston 11 1.5 Lawrence 17	1.9
Hickman 4 1.4 Harrison 14 Hancock 6 1.2 Mason 16	1.9 1.6
Gallatin 16 1.1 Johnson 18	1.6
Lyon 14 1.0 Laylor 18 McLean 5 1.0 Letcher 17	1.6 1.6
Robertson 0 0.0 Rowan 24	1.5
Green 19 4.4 Ohio 22	1.4 1.3
Breathitt 28 4.2 Garrard 12	1.3
Magoffin 21 3.3 Anderson 15	1.2
Owen 14 3.1 Henry 18 Metcalfe 16 2.9 Simpson 20	1.2
Lewis 19 2.9 Hart 22	1.1
Butler 22 2.6 Woodford 19 Powell 21 2.4 Rockcastle 22	1.0 0.9
Estill 12 2.1 Grant 16	0.6
Todd 13 2.1 Meade 38	3.0
Clinton 10 2.1 Perry 41	2.6
Caldwell 16 1.7 Calloway 33	2.2
Webster 14 1.6 Bell 28 Triag 17 1.5 Floyd 46	2.1 2.0
Larue 14 1.5 Harlan 25	1.9
Pendleton 9 1.4 Marshall 49 Pendleton 8 1.4 Knox 30	1.9
Bath 12 1.3 Graves 41	1.9
Fleming 8 1.2 Barren 47	1.7
Morgan 6 1.0 Boyle 23 Martin 4 0.8 Whitley 45	1.7 1.5
Monroe 3 0.6 Muhlenberg 27	1.5
Montgomery 22 Carter 27	1.4 1.4
Hopkins 41	1.4
Jessamine 26	1.3
Greenup 19 Clark 29	1.2
Scott 43	1.1
Shelby 34 Boyd 21	1.0 0.9
Henderson 22	0.8
POPULATION CATEGORY OVER 50,00	0.7
Pike 76 Bulaski 55	2.2 *
Jefferson 438	1.3
Laurel 58 Daviess 53	1.3 1.3
McCracken 50	1.2
Vvarren 83 Hardin 75	1.1
Madison 56	1.0
Fayette 149	1.0
Campbell 41	1.0
Boone 57	0.5
Oldham 21 Kenton 48	0.7 0.6

TABLE 14. MISCELLANEOUS CRASH DATA FOR EACH COUNTY

								PERCENT OF	PERCENT OF		PERCENT	SAFETY	PERCENT OF
							2017	CRASHES	CRASHES	PERCENT	INJURY OR	BELT	CRASHES
	NU	MBER OF	CRASHE	ES BY YE	AR	2013-2016	PERCENT	INVOLVING	INVOLVING	FATAL	FATAL	USAGE	INVOLVING
COUNTY	2013	2014	2015	2016	2017	AVERAGE	CHANGE	ALCOHOL	DRUGS	CRASHES	CRASHES	RAIE	SPEEDING
Adair	271	299	307	226	250	276	-9.3	3.5	2.3	1.55	22.0	43.8	4.2
Allen	456	454	420	502	412	458	-10.0	4.5	1.1	1.02	20.6	54.0	3.4
Anderson	441	507	530	517	528	499	5.9	4.0	2.0	0.59	20.6	57.7	5.1
Ballard	192	170	165	168	189	174	8.8	5.4	1.7	1.92	21.5	48.4	4.0
Barren	1,139	1,172	1,363	1,498	1,421	1,293	9.9	3.0	1.1	0.71	20.5	57.9	3.7
Bath	124	96	159	211	218	148	47.8	4.2	1.7	1.49	23.1	42.0	2.8
Bell	621	555	667	757	606	650	-6.8	2.2	3.9	0.87	22.1	70.7	4.4
Boone	4,307	4,639	4,645	5,010	5,199	4,650	11.8	3.3	0.9	0.24	14.4	77.8	6.4
Bouldon	1 506	1 501	1 5 2 5	1 5 4 2	1 401	1 5 2 1	7.9	4.5	1.2	0.72	15.6	62.2	0.0
Boyle	840	777	866	854	816	834	-2.0	2.3	1.4	0.28	10.0	60.7	5.0
Bracken	231	179	240	222	208	218	-4.6	4.6	0.6	1.02	18.7	53.9	8.4
Breathitt	290	280	274	235	225	270	-16.6	3.0	3.6	2.15	34.5	53.8	5.0
Breckinridge	246	202	240	243	230	233	-1.2	4.9	0.3	2.24	32.7	50.3	4.7
Bullitt	1,821	2,173	1,971	2,071	2,030	2,009	1.0	3.2	0.8	0.52	20.9	80.6	3.0
Butler	278	291	291	237	289	274	5.4	5.1	0.8	1.59	19.7	57.3	8.9
Caldwell	385	386	376	437	357	396	-9.8	2.3	0.8	0.82	21.0	70.8	6.5
Calloway	944	967	1,041	1,073	1,108	1,006	10.1	3.9	1.3	0.64	15.0	65.0	3.7
Campbell	2,848	2,906	3,130	3,082	3,193	2,992	6.7	3.7	1.3	0.27	12.1	75.8	4.9
Carlisle	78	86	82	53	50	75	-33.1	4.6	2.3	2.29	45.0	67.0	9.5
Carroll	367	449	439	407	346	416	-16.7	3.7	1.3	0.90	18.0	70.7	5.2
Carter	532	540 172	221	576	592	546	8.4 19.9	3.3	1.7	0.97	21.5	61.1 45.6	6.8
Christian	1 718	1 707	1 919	1 955	1 957	1 825	7.2	4.2	2.8	0.46	20.7	45.0	5.4
Clark	1,018	1,076	1,313	1,000	1,234	1,109	11.3	3.2	1.0	0.51	15.7	67.6	4.3
Clay	381	370	388	354	347	373	-7.0	3.5	5.3	1.41	39.6	64.2	5.8
Clinton	132	111	224	250	208	179	16.0	3.0	1.4	1.08	21.5	49.4	1.9
Crittenden	182	197	206	186	190	193	-1.4	3.7	2.0	1.35	33.0	58.2	4.6
Cumberland	134	126	115	128	99	126	-21.3	4.5	1.8	1.33	21.9	46.5	3.7
Daviess	3,314	3,217	3,637	3,712	3,642	3,470	5.0	2.9	1.0	0.30	14.8	70.9	3.2
Edmonson	201	217	208	211	191	209	-8.7	4.0	0.8	0.88	24.9	63.7	8.8
Elliott	61	64	44	64	67	58	15.0	7.3	3.0	1.00	30.0	64.1	6.0
Estill	161	147	102	185	146	149	-1.8	3.9	3.2	1.62	23.5	53.1	3.9
Fayette	12,228	12,872	13,787	14,276	14,113	13,291	6.2	3.3	0.7	0.22	16.4	75.0	7.5
Fleming	240 763	210	249	780	206	230	-12.0	3.7	1.7	0.69	20.0	40.0 50.0	4.2
Franklin	1 454	1 471	1 622	1 549	1 516	1 524	-0.5	4.5	1.5	0.28	13.8	71.3	4.5
Fulton	126	124	128	138	73	129	-43.4	4.8	1.7	1.02	17.7	62.9	1.7
Gallatin	240	264	281	281	296	267	11.1	3.2	0.7	1.17	18.2	71.3	3.7
Garrard	337	380	402	400	373	380	-1.8	4.0	1.1	0.63	21.1	52.5	5.8
Grant	640	685	780	812	790	729	8.3	2.6	1.2	0.43	17.5	69.5	9.2
Graves	864	911	822	944	967	885	9.2	3.5	1.7	0.91	21.9	66.7	6.6
Grayson	604	626	586	688	631	626	0.8	3.8	1.6	1.21	24.0	64.7	3.2
Green	167	165	163	185	163	170	-4.1	3.2	0.8	2.25	22.9	48.1	3.1
Greenup	683	594	659	655	620	648	-4.3	3.2	1.3	0.59	18.9	67.6	3.8
Hardin	2 022	2 8/3	2 014	2 034	3 095	2 903	-0.5	3.0	0.6	0.67	20.0	73.0 66.2	5.0
Harlan	558	524	464	394	435	485	-10.3	3.1	52	1.05	26.1	66.3	3.4
Harrison	490	536	463	542	496	508	-2.3	3.8	1.3	0.55	17.4	59.9	5.4
Hart	525	532	636	535	555	557	-0.4	2.6	1.3	0.79	19.1	40.4	5.5
Henderson	1,563	1,536	1,687	1,671	1,509	1,614	-6.5	2.7	1.1	0.28	18.1	71.8	3.4
Henry	383	401	411	445	395	410	-3.7	4.3	0.8	0.88	18.7	70.8	7.3
Hickman	49	80	56	62	87	62	40.9	4.2	1.5	1.20	26.3	53.5	7.5
Hopkins	1,314	1,430	1,498	1,442	1,329	1,421	-6.5	2.5	1.2	0.58	15.4	70.5	5.4
Jackson	196	198	200	205	178	200	-10.9	3.2	1.7	1.74	28.7	64.5	6.3
Jefferson	28,503	29,687	32,639	33,914	31,866	31,186	2.2	2.5	0.7	0.28	17.1	81.1	3.4
Jessamine	1,309	1,464	1,467	1,597	1,609	1,459	10.3	3.4	1.4	0.35	17.0	65.9	5.6
Johnson	456	459 5 200	441 5 677	457 5 004	412 5 070	453	-9.1	3.1	3.2	0.81	24.4	68.4 77 F	3.2
Knott	0,269 251	0,009 266	0,077 228	3,901 224	3,970 222	0,039 242	۲.۵ ۸ ۹-	3.5 3.5	1.2	0.17	12.7	11.5 64.5	5.8 2 Q
		S CRASH				(continued)	-0.4	5.5	4.5	0.32	52.7	04.5	2.9

PERCENT OF PERCENT OF

PERCENT SAFETY PERCENT OF

							2017	CRASHES	CRASHES	PERCENT	INJURY OR	BELT	CRASHES
	NU	MBER OF	- CRASH	ES BY YE	AR	2013-2016	PERCENT	INVOLVING	INVOLVING	FATAL	FATAL	USAGE	INVOLVING
COUNTY	2013	2014	2015	2016	2017	AVERAGE	CHANGE*	ALCOHOL	DRUGS	CRASHES	CRASHES	RATE**	SPEEDING
Knox	584	465	717	690	632	614	2.9	2.7	4.6	0.97	27.6	66.5	6.6
Larue	289	236	317	331	322	293	9.8	3.6	1.5	0.94	20.6	58.2	6.0
Laurel	1,473	1,605	1,788	1,778	1,929	1,661	16.1	2.3	2.0	0.68	21.8	69.2	4.5
Lawrence	243	207	230	213	224	223	0.3	3.9	1.6	1.52	28.7	63.2	2.9
Lee	82	74	76	68	76	75	1.3	4.8	2.9	2.13	21.5	51.9	3.2
Leslie	87	68	29	75	40	65	-38.2	1.7	3.0	3.68	37.5	59.4	5.4
Letcher	286	308	240	307	353	285	23.8	4.1	4.1	1.14	38.5	51.2	3.7
Lewis	162	123	108	139	170	133	27.8	4.6	1.9	2.71	24.4	56.5	4.4
Lincoln	415	411	438	435	432	425	1.7	3.4	1.7	1.17	24.8	62.9	4.1
Livingston	189	181	174	186	190	183	4.1	3.9	1.7	1.20	23.3	71.1	7.5
Logan	504	552	612	647	569	579	-1.7	3.2	0.9	0.69	22.0	60.4	4.5
Lyon	228	261	295	297	224	270	-17.1	3.9	2.0	1.07	21.7	82.9	7.3
McCracken	2,031	2,015	2,394	2,576	2,403	2,254	6.6	3.0	1.0	0.44	23.8	65.1	5.4
McCreary	222	206	238	216	213	221	-3.4	3.1	4.2	1.92	31.2	51.3	5.5
McLean	174	179	233	228	244	204	19.9	4.4	1.9	0.47	29.3	60.3	6.0
Madison	2,440	2,522	2,763	2,775	2,778	2,625	5.8	3.3	1.3	0.42	14.9	69.4	8.0
Magoffin	189	180	184	169	158	181	-12.5	3.9	5.6	2.39	31.8	59.7	4.5
Marion	382	430	500	492	506	451	12.2	4.8	1.2	1.04	18.9	43.1	2.0
Marshall	730	726	837	829	872	781	11.7	4.0	1.5	1.23	24.8	60.7	5.7
Martin	94	121	14	138	119	92	29.7	3.1	3.5	0.82	25.5	55.4	3.3
Mason	566	628	613	619	610	607	0.6	51	1.4	0.53	15.9	53.5	6.1
Meade	425	404	472	487	472	447	5.6	6.4	0.8	1.68	30.2	47.3	4.3
Menifee		66	56	102	67	69	-2.2	5.0	23	2.64	32.6	48.9	2.3
Mercer	/87	183	108	18/	422	/88	-13.5	4.5	13	0.84	10.3	-0.5 60.6	5.5
Metcelfo	210	224	240	272	722	220	-10.0	4.5	0.7	1.21	21.0	42.4	3.5
Monroe	12	224	243	167	156	200	9.2	2.7	13	0.63	21.0	40.1	3.4
Montgomon	750	921	927	920	959	00 912	50.2	2.1	1.3	0.63	24.5	40.1	3.0
Morrgon	104	150	107	140	104	155	19.0	3.4	1.7	0.34	10.9	47.1	4.1
Mublooborg	702	150	137	021	900	155	10.9	3.7	2.4	0.75	20.5	57.9	1.1
Nelses	1 074	1 1 1 1	1 1 2 5	1 1 2 0	1 1 2 0	1 109	-0.0	2.0	2.1	0.04	20.2	60.1	3.8
Nelson	1,074	1,111	1,125	1,120	1,120	1,100	1.1	4.5	1.0	0.81	10.0	60.1	4.0
Nicholas	148	149	154	149	152	150	1.3	4.7	2.4	1.46	18.5	50.6	4.7
Ohio	531	559	612	1 000	700	590	18.7	3.7	1.7	0.72	24.1	69.0	5.3
Oldnam	1,011	1,164	1,179	1,266	1,141	1,155	-1.2	3.0	0.7	0.36	16.4	83.0	5.3
Owen	162	131	241	232	210	192	9.7	4.0	1.3	1.43	25.9	57.7	5.9
Owsley	41	35	57	92	34	56	-39.6	2.3	2.7	3.09	29.3	41.1	7.3
Pendleton	335	296	358	337	323	332	-2.6	3.9	1.3	0.49	18.3	68.5	5.6
Perry	709	768	743	728	707	737	-4.1	3.6	3.6	1.12	27.9	56.6	2.5
Pike	1,500	1,373	1,425	1,347	1,338	1,411	-5.2	4.4	5.4	1.09	28.6	62.3	5.1
Powell	335	293	336	327	252	323	-21.9	3.2	1.4	1.36	24.2	64.6	2.7
Pulaski	1,560	1,612	1,815	1,814	1,793	1,700	5.5	2.4	1.1	0.64	18.1	54.2	4.4
Robertson	25	19	25	52	44	30	45.5	5.5	1.2	0.00	23.0	53.3	5.5
Rockcastle	417	477	561	521	536	494	8.5	2.1	2.2	0.88	19.4	76.9	6.1
Rowan	737	791	834	830	826	798	3.5	2.6	1.3	0.60	17.4	54.6	4.6
Russell	313	310	346	377	363	337	7.9	3.0	2.0	1.11	19.1	58.7	2.1
Scott	1,331	1,515	1,583	1,670	1,663	1,525	9.1	3.3	0.7	0.55	18.5	60.8	5.0
Shelby	1,287	1,318	1,285	1,429	1,362	1,330	2.4	3.7	0.8	0.51	19.2	80.0	4.7
Simpson	587	599	548	608	630	586	7.6	3.8	0.9	0.67	22.3	60.0	9.0
Spencer	197	291	262	276	304	257	18.5	4.7	1.2	0.75	25.6	70.0	6.9
Taylor	643	646	727	742	760	690	10.2	2.7	0.9	0.51	15.3	53.3	3.7
Todd	233	189	197	222	236	210	12.2	4.3	0.8	1.21	22.6	63.8	6.1
Trigg	330	319	355	402	363	352	3.3	3.9	1.8	0.96	19.4	64.0	5.7
Trimble	117	164	179	156	192	154	24.7	4.6	1.4	1.49	24.1	77.1	6.4
Union	280	303	316	306	265	301	-12.0	3.3	1.1	0.88	25.9	76.3	6.9
Warren	4,126	4,233	4,605	4,945	5,043	4,477	12.6	3.0	0.9	0.36	18.2	63.0	4.7
Washington	232	288	271	270	254	265	-4.2	4.2	0.7	1.22	23.6	46.5	5.9
Wayne	204	349	369	360	257	321	-19.8	2.5	1.2	1.17	21.8	47.0	5.3
Webster	242	293	275	248	228	265	-13.8	2.3	1.5	1.09	25.3	66.3	4.4
Whitley	955	1,068	1,149	1,008	1,028	1,045	-1.6	3.0	2.2	0.86	25.5	74.0	5.9
Wolfe	159	154	176	136	151	156	-3.4	2.3	1.8	1.93	22.8	59.4	7.0
Woodford	807	853	851	943	933	864	8.0	4.2	0.8	0.43	16.3	70.6	6.4
				2.0			2.9						
STATEWIDE	123,258	127,326	136,338	140,547	136,979	131,867	3.9	3.2	1.2	0.51	18.4	67.9	4.9

* Percent change in the 2017 crash total from the previous four year total

** Based on observation data collected by Area Development Districts in 2006 (no data were collected since 2006)

		IDENTIFIED	SYSTEM	ALL RO	ADS
CITY	POPULATION	TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
	507 227	22.102	245	122 501	AE
Louisville	297,337 205,902	33,123	340 027	133,501	40
Rewling Croop	290,003	14,009	037	16 026	40
Owenshare	50,007 57,005	4,049	340	10,920	20
Owensboro	57,265	4,423	782	13,795	48
Covington	40,640	5,027	362	8,962	44
Hopkinsville	31,577	2,821	313	5,317	34
Richmond	31,364	905	654	7,093	45
Florence	29,951	5,214	310	11,041	74
Georgetown	29,098	1,201	474	4,762	33
Henderson	28,757	2,317	406	5,691	40
Elizabethtown	28,531	2,235	233	6,732	47
Nicholasville	28,015	981	325	5,039	36
Jeffersontown	26,595	900	333	5,127	39
Frankfort	25.527	3.246	416	5,200	41
Paducah	25.024	1.630	347	7,786	62
Independence	24 757	2 104	401	2 240	18
Radcliff	21 688	758	610	3 089	20
Ashland	21,000	1 /60	/77	1 20E	23
Madicanvilla	21,004	1,402	+// E00	4,390	4 I 20
	19,591	1,705	202	3,698	30
	18,368	1,649	848	3,554	39
Erlanger	18,082	1,715	1,163	4,297	48
Murray	17,741	1,257	491	3,356	38
Fort Thomas	16,325	516	685	1,540	19
Danville	16,218	672	481	3,289	41
Newport	15,273	2,117	1,223	4,757	62
Shively	15.264	500	656	4,965	65
Shelbyville	14,045	820	678	2,723	39
Glasgow	14 028	629	549	3 220	46
Berea	13 561	804	448	2 401	35
Bardatown	11 700	1 157	440	2,401	55
Chaphardovilla	11,700	1,157	497	3,219	70
	11,222	1,152	750	3,900	70
Somerset	11,196	1,471	446	4,875	87
∟yndon	11,002	***	***	1,034	19
Lawrenceburg	10,505	300	404	1,130	22
Mayfield	10,024	233	535	1,923	38
Mount Washington	9,117	616	648	1,613	35
Campbellsville	9,108	1,258	660	2,361	52
Mavsville	9.011	713	308	1.888	42
Edgewood	8.575	150	1,194	936	22
Versailles	8,568	328	502	1 637	38
Paris	8 553	1 037	471	1,662	30
Alevandria	0,000 Q //77	1,007 QO1	258	1 271	20
	0,411	001	000	1,371	32 1 E
EISITIETE	8,451	3/9	282	040 4 000	15
r iankiin Llamadahuwa	8,408	364	462	1,862	44
Harrodsburg	8,340	354	404	1,284	31
Fort Mitchell	8,207	706	921	1,598	39
La Grange	8,082	234	526	1,362	34
London	7,993	1,664	243	3,603	90
Villa Hills	7,489	57	271	245	7
Oak Grove	7.489	***	***	1.389	37
Flatwoods	7,423	397	398	538	15
Corbin		001	699	1 919	53
	7 304	540		1,010	
Muddletown	7,304	540 ***	***	2 441	83
Middletown	7,304 7,218	540 *** 416	***	2,441	68 26
Middletown Russellville Highland Haighta	7,304 7,218 6,960	540 *** 416 722	*** 320	2,441 1,265	68 36
Middletown Russellville Highland Heights Bikoville	7,304 7,218 6,960 6,923	540 *** 416 733	*** 320 258	2,441 1,265 1,314	68 36 38
Middletown Russellville Highland Heights Pikeville	7,304 7,218 6,960 6,923 6,903	540 *** 416 733 1,201	*** 320 258 288	2,441 1,265 1,314 2,893	68 36 38 84
Middletown Russellville Highland Heights Pikeville Mount Sterling	7,304 7,218 6,960 6,923 6,903 6,895	540 *** 416 733 1,201 999	*** 320 258 288 721	2,441 1,265 1,314 2,893 <u>1</u> ,816	68 36 38 84 53
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead	7,304 7,218 6,960 6,923 6,903 6,895 6,845	540 *** 416 733 1,201 999 908	*** 320 258 288 721 424	2,441 1,265 1,314 2,893 1,816 2,247	68 36 38 84 53 66
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield	7,304 7,218 6,960 6,923 6,903 6,895 6,845 6,845 6,699	540 *** 416 733 1,201 999 908 660	*** 320 258 288 721 424 738	2,441 1,265 1,314 2,893 1,816 2,247 1,437	68 36 38 84 53 66 43
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield Taylor Mill	7,304 7,218 6,960 6,923 6,903 6,895 6,845 6,699 6,604	540 *** 416 733 1,201 999 908 660 190	*** 320 258 288 721 424 738 404	2,441 1,265 1,314 2,893 1,816 2,247 1,437 1,095	68 36 38 84 53 66 43 33
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield Taylor Mill Cvnthiana	7,304 7,218 6,960 6,923 6,903 6,895 6,845 6,699 6,604 6,402	540 *** 416 733 1,201 999 908 660 190 347	*** 320 258 288 721 424 738 404 598	2,441 1,265 1,314 2,893 1,816 2,247 1,437 1,095 1,151	68 36 38 84 53 66 43 33 36
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield Taylor Mill Cynthiana Princeton	7,304 7,218 6,960 6,923 6,903 6,895 6,845 6,699 6,604 6,402 6,329	540 *** 416 733 1,201 999 908 660 190 347 678	*** 320 258 288 721 424 738 404 598 515	2,441 1,265 1,314 2,893 1,816 2,247 1,437 1,095 1,151 1,051	68 36 38 84 53 66 43 33 36 33
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield Taylor Mill Cynthiana Princeton Monticollo	7,304 7,218 6,960 6,923 6,903 6,895 6,845 6,699 6,604 6,402 6,329 6,498	540 *** 416 733 1,201 999 908 660 190 347 678 200	*** 320 258 288 721 424 738 404 598 515	2,441 1,265 1,314 2,893 1,816 2,247 1,437 1,095 1,151 1,051	68 36 38 84 53 66 43 33 36 33
Middletown Russellville Highland Heights Pikeville Mount Sterling Morehead Leitchfield Taylor Mill Cynthiana Princeton Monticello	7,304 7,218 6,960 6,923 6,903 6,895 6,895 6,845 6,699 6,604 6,402 6,329 6,188 5,320	540 *** 416 733 1,201 999 908 660 190 347 678 290	*** 320 258 288 721 424 738 404 598 515 186	2,441 1,265 1,314 2,893 1,816 2,247 1,437 1,095 1,151 1,051 1,046	68 36 38 84 53 66 43 33 36 33 34

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500(FOR IDENTIFIED SYSTEM AND ALL ROADS FOR 2013-2017)

		IDENTIFIED S	SYSTEM	ALL ROADS			
		TOTAL	CRASH	TOTAL	CRASH		
CITY	POPULATION	CRASHES	RATE*	CRASHES	RATE**		
Bollovuo	5 055	100	1 269	020	29		
Cold Spring	5,955	422	1,200	030	20		
Cold Spillig	5,912	709	431	1,274	43		
Lobanon	5,725	904	505	2,002	90		
Lebanon	5,039	/ /	347	765	40		
Deuten	5,379	20	F00	703	20		
Williamaburg	5,550	52	JZZ 174	401	17		
Westwood	5,245	524	1/4	900	31		
Creatwood	4,740	***	***	066	40		
Vine Crove	4,531	040	200	900	43		
	4,520	240	200	425	19		
	4,450	203	207	2,101	94		
Columbia	4,452	131	310	004	31		
Ludiow	4,407	254	862	418	19		
Benton	4,349	255	381	940	43		
Greenville	4,312	389	510	846	39		
Scottsville	4,226	423	422	858	41		
Grayson	4,217	380	604	844	40		
Carrollton	3,938	235	434	614	31		
Williamstown	3,925	***	***	631	32		
Crittenden	3,815	***	***	417	22		
Southgate	3,803	427	789	791	42		
Crescent Springs	3,801	***	***	1,109	58		
Wilmore	3,686	129	454	296	16		
Walton	3,635	604	1,027	974	54		
Stanford	3,487	211	277	662	38		
Paintsville	3,459	383	437	1,107	64		
Lancaster	3,442	211	638	535	31		
West Liberty	3,435	115	259	227	13		
Beaver Dam	3,409	249	362	591	35		
Russell	3,380	577	405	932	55		
Morganfield	3,285	126	204	437	27		
Prestonsburg	3,255	497	409	1,584	97		
Hodgenville	3,206	81	211	472	29		
Providence	3,193	112	309	204	13		
Barbourville	3,165	241	452	719	45		
Crestview Hills	3,148	***	***	1,935	123		
Marion	3,039	108	530	298	20		
Wilder	3,035	***	***	1,170	77		
Park Hills	2,970	260	742	148	10		
Indian Hills	2,868	***	***	212	15		
Dawson Springs	2,764	211	614	247	18		
Stanton	2,733	370	395	430	32		
Irvine	2.715	69	161	139	10		
Hartford	2.672	105	317	316	24		
Lakeside Park	2.668	426	599	293	22		
Flemingsburg	2.658	40	647	489	37		
Brandenburg	2,643	247	341	663	50		
Calvert City	2,566	162	194	531	41		
Cadiz	2,558	103	149	566	44		
Eddvville	2,554	137	100	398	31		
Springfield	2,519	100	304	444	35		
	_,						

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500 (FOR IDENTIFIED SYSTEM AND ALL ROADS FOR 2013-2017)(continued)

Crashes per 100 million vehicle-miles.
Crashes per 1,000 population.
No data available.

TABLE 16. MISCELLANEOUS CRASH DATA FOR CITIES HAVING POPULATION OVER 2,500 (2013-2017) (ALL ROADS)

		FATAL CE	RASHES	PEDEST MOTOR VE CRAS	RIAN EHICLE SHES	BICYC MOTOR V CRAS	CLE (EHICLE SHES	MOTOR	CYCLE	PERCENT OF CRASHES INVOLVING	PERCENT OF CRASHES INVOLVING
CITY POPU	JLATION	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	SPEEDING	ALCOHOL
Louisvillo	507 227	292	1 29	1 850	6 20	710	2 40	1 405	47	3.5	2.6
	295 803	149	1.20	791	5 30	363	2.40	595	4.7	5.5 7 4	2.0
Bowling Green	58 067	26	0.90	107	3 70	82	2.00	167	5.8	4.0	2.3
Owensboro	57.265	20	0.73	100	3.50	93	3.20	156	5.4	2.4	2.4
Covington	40.640	12	0.59	174	8.60	70	3.40	72	3.5	3.4	4.5
Hopkinsville	31,577	16	1.01	38	2.40	26	1.60	77	4.9	4.0	3.3
Richmond	31,364	15	0.96	51	3.30	27	1.70	81	5.2	7.7	3.0
Florence	29,951	18	1.20	89	5.90	23	1.50	105	7.0	4.6	2.5
Georgetown	29,098	12	0.82	43	3.00	10	0.70	50	3.4	3.3	2.8
Henderson	28,757	13	0.90	51	3.50	32	2.20	66	4.6	2.7	2.3
Elizabethtown	28,531	12	0.84	34	2.40	16	1.10	89	6.2	3.6	2.4
Nicholasville	28,015	17	1.21	39	2.80	12	0.90	52	3.7	3.8	2.9
Jeffersontown	26,595	7	0.53	33	2.50	16	1.20	31	2.3	1.9	2.4
Frankfort	25,527	11	0.86	39	3.10	12	0.90	50	3.9	3.8	3.0
Paducah	25,024	20	1.60	51	4.10	38	3.00	103	8.2	4.2	2.2
Independence	24,757	2	0.16	16	1.30	6	0.50	34	2.7	10.8	3.8
Radcliff	21,688	12	1.11	31	2.90	10	0.90	72	6.6	2.8	3.6
Ashland	21,684	5	0.46	52	4.80	25	2.30	56	5.2	2.5	1.9
Madisonville	19,591	12	1.23	22	2.20	13	1.30	32	3.3	3.9	1.8
Winchester	18,368	5	0.54	30	3.30	8	0.90	31	3.4	2.6	2.9
Erlanger	18,082	9	1.00	30	3.30	8	0.90	41	4.5	6.0	2.8
Murray	17,741	9	1.01	29	3.30	23	2.60	29	3.3	1.7	2.4
Fort Thomas	16,325	6	0.74	11	1.30	2	0.20	13	1.6	4.5	3.8
Danville	16,218	8	0.99	28	3.50	15	1.80	32	3.9	4.2	2.4
Newport	15,273	4	0.52	87	11.40	34	4.50	39	5.1	3.6	3.0
Shalbarilla	13,204	21	3.34	107	14.00	24 12	3.10	79	10.4	3.5	3.Z 2.2
Glasgow	14,045	9	1.20	23	2.50	13	0.60	20	3.7	2.0	3.3
Boroa	12,020	12	1.71	10	2.00	4	0.00	20	3.7 4 1	1.0	2.4
Bardstown	11 700	11	1.02	10	1 90	12	2 10	20	4.1 6.0	4.5	3.1
Shenherdsville	11 222	10	1.57	30	5.30	11	2.10	44	7.8	17	2.6
Somerset	11 196	17	3.04	27	4 80	6	1 10	49	8.8	31	1.0
Lyndon	11.002	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Lawrenceburg	10.505	5	0.95	8	1.50	1	0.20	16	3.0	2.8	2.4
Mayfield	10,024	2	0.40	21	4.20	9	1.80	16	3.2	2.4	1.4
Mount Washington	9,117	6	1.32	3	0.70	0	0.00	22	4.8	1.5	2.4
Campbellsville	9,108	3	0.66	25	5.50	3	0.70	29	6.4	1.3	1.7
Maysville	9,011	3	0.67	21	4.70	3	0.70	15	3.3	3.7	3.5
Edgewood	8,575	2	0.47	8	1.90	2	0.50	6	1.4	7.7	1.7
Versailles	8,568	4	0.93	16	3.70	5	1.20	17	4.0	3.1	3.8
Paris	8,553	4	0.94	14	3.30	4	0.90	16	3.7	3.2	3.1
Alexandria	8,477	3	0.71	10	2.40	8	1.90	16	3.8	5.1	2.1
Elsmere	8,451	1	0.24	17	4.00	6	1.40	4	0.9	2.9	3.6
Franklin	8,408	7	1.67	12	2.90	4	1.00	21	5.0	4.1	3.2
Harrodsburg	8,340	6	1.44	10	2.40	2	0.50	15	3.6	3.3	3.5
Fort Mitchell	8,207	1	0.24	11	2.70	1	0.20	13	3.2	5.3	2.6
La Grange	8,082	3	0.74	13	3.20	5	1.20	12	3.0	2.8	1.5
London	7,993	11	2.75	11	2.80	7	1.80	34	8.5	2.1	1.4
Villa Hills	7,489	0	0.00	1	0.30	1	0.30	5	1.3	10.6	3.7
Oak Grove	7,489	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Flatwoods	7,423	2	0.54	6	1.60	1	0.30	3	0.8	3.0	2.6
	7,304	4	1.10	12	3.30	3	0.80	21	5.8	3.9	2.4
Russellville	1,210	U	0.00	U	0.00	0	0.00	U 4 4	0.0	0.0	0.0
	0,90U	3	U.00 1 70	۵ ۱ <i>۲</i>	2.3U	5	1.40	11	3.Z	4./	3.0
Rightana Heights	0,923 6,002	б С	1.13	15	4.30	3	0.90	10	2.9	0.1 2 4	2.5
FINEVIIIE Mount Starling	0,903	9	2.01	10	0.20 4 40	4	1.20	J∠ 17	9.3	3.4	3.I 2.4
Morehead	6.845	2	1 /6	נו 19	4.40 5 30	5	1.50	20	4.9 5.9	2.0	2.4 1 <i>1</i>
Leitchfield	6 600	e 2	1 70	10	3.00	2	0.60	10	5.0	2.0	1. 4 2.6
Taylor Mill	6 604	1	0.30	2	0.60	2	0.00	19	3.6	2.0 11 2	2.0
Cynthiana	6 402	4	1 25	- 16	5.00	4	1 20	11	3.0	4.3	3.0
Princeton	6.329	4	1 26	12	3 80		1.30	19	6.0	 5 2	17
1 111001011	0,020	-	1.20	14	0.00	7	1.00	13	0.0	5.2	1.7

		FATAL CR	ASHES	PEDESTRIAN MOTOR VEHICLE CRASHES		BICYCLE MOTOR VEHICLE CRASHES		MOTORCYCLE CRASHES		PERCENT OF CRASHES INVOLVING	PERCENT OF CRASHES INVOLVING
CITY PC	OPULATION	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	SPEEDING	ALCOHOL
Monticello	6 188	2	0.65	8	2 60	5	1 60	٥	20	3.2	13
Central City	5 978	2	0.05	8	2.00	2	0.70	9 14	2.9	3.Z 2.7	1.3
Bollovuo	5,970	2	0.07	20	2.00	2	1 20	14	4.7	2.1	3.3
Cold Spring	5,955	5	1.60	20	3.40	4	0.00	15	5.1	5.2	4.2
Cold Spring	5,912	J 4	1.09	10	2 90	1	0.00	10	77	0.2	2.5
Lobanon	5,725	4	1.40	11	4.00	1	0.30	14	5.1	2.9	2.0
Lebanon	5,339	5	0.00	0	4.00	2	0.70	14	0.0	1.2	2.0
Davton	5 3 3 8	0	0.00	14	5.20	1	0.00	0	0.0	0.0	0.0 7.4
Williamshura	5,330	0	2.00	14	3.20	3	1 10	11	1.1	2.4	2.0
Crestwood	1 531	0	0.00	10	0.00	0	0.00	0	4.2	2.0	2.0
Vine Grove	4,531	2	0.00	3	1 30	3	1 30	1	1.8	6.0	3.3
Hazard	4,520	2	3 50	17	7.60	1	0.40	31	13.0	1.8	2.7
Columbia	4,450	8	3.59	2	0.00	1	1.80	51	27	1.0	2.1
Ludlow	4,407	0	0.00	2	3.60		2 30	3	1 /	1.0	53
Benton	4,407	3	1.38	6	2.00	3	1 40	12	5.5	3.0	1.0
Greenville	4,349	1	0.46	0	1 00	0	0.00	12	12	3.0 2.1	1.9
Scottsville	4,312	6	2.84	7	3 30	1	0.00	13	6.2	2.1	2.0
Graveon	4,220	3	1 / 2	10	4 70	1	0.50	5	2.4	2.0	1.8
Carrollton	3 938	1	0.51	4	2.00	2	1 00	5	3.6	2.6	2.1
Williamstown	3 925	2	1.02	4	2.00	1	0.50	, 8	4 1	9.2	3.2
Crittenden	3 815	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Southgate	3 803	0	0.00	8	4 20	2	1 10	9	47	5.0	3.5
Crescent Spring	1s 3.801	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Wilmore	3 686	0	0.00	2	1 10	1	0.50	2	11	3.4	2.4
Walton	3 635	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Stanford	3 487	3	1 72	4	2 30	ů 0	0.00	9	5.2	2.9	1.8
Paintsville	3 459	9	5 20	12	6.90	7	4 00	9	5.2	1.5	1.0
Lancaster	3,442	1	0.58	.=	4.10	2	1.20	8	4.6	2.4	3.2
West Liberty	3,435	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Beaver Dam	3,409	4	2.35	1	0.60	3	1.80	7	4.1	1.4	2.0
Russell	3,380	2	1.18	3	1.80	0	0.00	14	8.3	2.1	1.9
Morganfield	3.285	3	1.83	- 1	0.60	2	1.20	3	1.8	2.3	0.7
Prestonsburg	3.255	10	6.14	13	8.00	2	1.20	15	9.2	2.4	2.4
Hodgenville	3.206	0	0.00	4	2.50	0	0.00	4	2.5	3.2	2.3
Providence	3,193	0	0.00	0	0.00	0	0.00	2	1.3	3.9	2.5
Barbourville	3,165	5	3.16	7	4.40	3	1.90	9	5.7	2.8	2.2
Crestview Hills	3.148	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Marion	3,039	1	0.66	3	2.00	1	0.70	7	4.6	4.0	3.4
Wilder	3,035	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Park Hills	2,970	1	0.67	3	2.00	0	0.00	2	1.3	6.1	4.1
Indian Hills	2,868	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Dawson Springs	s 2,764	1	0.72	4	2.90	2	1.40	4	2.9	7.3	4.5
Stanton	2,733	1	0.73	2	1.50	1	0.70	7	5.1	1.2	1.4
Irvine	2,715	1	0.74	2	1.50	0	0.00	4	2.9	5.8	2.9
Hartford	2,672	2	1.50	1	0.70	0	0.00	9	6.7	1.9	1.6
Lakeside Park	2,668	1	0.75	4	3.00	0	0.00	4	3.0	4.8	2.4
Flemingsburg	2,658	0	0.00	4	3.00	0	0.00	6	4.5	1.6	2.2
Brandenburg	2,643	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Calvert City	2,566	2	1.56	1	0.80	1	0.80	10	7.8	6.0	3.8
Cadiz	2,558	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Eddyville	2,554	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Springfield	2,519	1	0.79	3	2.40	2	1.60	5	4.0	2.3	1.4
	-										
STATEWIDE	2,057,100	1,112	1.08	4,635	4.5	1,910	1.86	4,540	4.4	4.0	2.6

TABLE 16. MISCELLANEOUS CRASH DATA FOR CITIES HAVING POPULATION OVER 2,500 (2013-2017) (ALL ROADS)(continued)

* Crashes per 10,000 population

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE	CITY	NUMBER OF CRASHES (2013-2017)	AVERAGE RATE (C/100 MVM)*
OVER 200,000	2	421	Lexington Louisville	14,689 33,123	837 345
20,000-60,000	16	377	Owensboro Richmond Radcliff Ashland Georgetown Frankfort Henderson Independence Covington Paducah Bowling Green Jeffersontown Nicholasville Hopkinsville Florence Elizabethtown	4,423 905 758 1,462 1,201 3,246 2,317 2,104 5,027 1,630 4,049 900 981 2,821 5,214 2,235	782 654 619 477 474 416 406 401 362 347 340 333 325 313 310 233
10,000-19,999	16	630	Newport Erlanger Winchester Shepherdsville Fort Thomas Shelbyville Shively Glasgow Mayfield Madisonville Bardstown Murray Danville Berea Somerset Lawrenceburg	$\begin{array}{c} 2,117\\ 1,715\\ 1,649\\ 1,152\\ 516\\ 820\\ 500\\ 629\\ 233\\ 1,705\\ 1,157\\ 1,257\\ 672\\ 804\\ 1,471\\ 300 \end{array}$	$\begin{array}{c} 1,223\\ 1,163\\ 848\\ 750\\ 685\\ 678\\ 656\\ 549\\ 535\\ 502\\ 497\\ 491\\ 481\\ 448\\ 446\\ 404\end{array}$
5,000-9,999	33	404	Bellevue Edgewood Fort Mitchell Leitchfield Mount Sterling Corbin Campbellsville Mount Washington Cynthiana Fort Wright Lebanon La Grange Dayton Princeton Versailles Central City Paris Franklin Cold Spring Morehead Taylor Mill Harrodsburg Flatwoods Alexandria Russellville Maysville	$\begin{array}{c} 422\\ 150\\ 706\\ 660\\ 999\\ 540\\ 1,258\\ 616\\ 347\\ 954\\ 717\\ 234\\ 32\\ 678\\ 328\\ 569\\ 1,037\\ 364\\ 769\\ 908\\ 190\\ 354\\ 397\\ 801\\ 416\\ 713\end{array}$	$\begin{array}{c} 1,268\\ 1,194\\ 921\\ 738\\ 721\\ 699\\ 660\\ 648\\ 598\\ 553\\ 547\\ 526\\ 522\\ 515\\ 502\\ 480\\ 471\\ 462\\ 431\\ 424\\ 404\\ 404\\ 398\\ 358\\ 320\\ 308\end{array}$

TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION CATEGORY (2013-2017)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (2013-2017)	AVERAGE RATE (C/100 MVM)*
5,000-9,999 (con	t.) 33	404	Pikeville Elsmere Villa Hills Highland Heights London Monticello Williamsburg	1,201 379 57 733 1,664 290 524	288 282 271 258 243 186 174
2,500-4,999	36	381	Walton Ludlow Southgate Park Hills Flemingsburg Lancaster Dawson Springs Grayson Lakeside Park Marion Greenville Wilmore Barbourville Paintsville Carrollton Scottsville Prestonsburg Russell Stanton Benton Beaver Dam Brandenburg Columbia Hartford Providence Springfield Vine Grove Stanford West Liberty Hodgenville Hazard Morganfield Calvert City Irvine Cadiz Eddyville	$\begin{array}{c} 604\\ 254\\ 427\\ 260\\ 40\\ 211\\ 211\\ 380\\ 426\\ 108\\ 389\\ 129\\ 241\\ 383\\ 235\\ 423\\ 497\\ 577\\ 370\\ 255\\ 249\\ 247\\ 131\\ 105\\ 112\\ 100\\ 248\\ 211\\ 115\\ 81\\ 503\\ 126\\ 162\\ 69\\ 103\\ 137\\ \end{array}$	$\begin{array}{c} 1,027\\ 862\\ 789\\ 742\\ 647\\ 638\\ 614\\ 604\\ 599\\ 530\\ 510\\ 454\\ 452\\ 437\\ 434\\ 422\\ 409\\ 405\\ 395\\ 381\\ 362\\ 341\\ 318\\ 317\\ 309\\ 304\\ 288\\ 277\\ 259\\ 211\\ 207\\ 204\\ 194\\ 161\\ 149\\ 100\\ \end{array}$
1,000-2,499	55	285	Cave City Uniontown Jackson Carlisle Morgantown Junction City Mount Vernon Louisa Worthington Munfordville Edmonton Clay City Salyersville Harlan Russell Springs Loyall Albany	$\begin{array}{c} 416\\ 19\\ 281\\ 45\\ 124\\ 36\\ 202\\ 192\\ 16\\ 48\\ 209\\ 104\\ 182\\ 410\\ 264\\ 5\\ 75\end{array}$	757 682 602 513 499 496 484 483 454 423 418 417 374 372 350 333 330

TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION CATEGORY (2013-2017)(continued)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (2013-2017)	AVERAGE RATE (C/100 MVM)*
1,000-2,499 (con	t.) 55	285	Liberty Raceland Burkesville Greensburg Warsaw Manchester Owenton Eminence Owingsville Elkton Hardinsburg Fulton Dry Ridge Cumberland Clay Cloverport Clinton Falmouth Pineville Catlettsburg Livermore Lebanon Junction Beattyville Sebree Olive Hill Nortonville Tompkinsville Earlington Sturgis Whitesburg Jamestown Anchorage South Shore Jenkins Vanceburg Lewisport Hickman Horse Cave	$\begin{array}{c} 175\\ 69\\ 73\\ 176\\ 3\\ 206\\ 75\\ 137\\ 96\\ 46\\ 66\\ 230\\ 40\\ 78\\ 14\\ 51\\ 51\\ 12\\ 30\\ 238\\ 73\\ 33\\ 48\\ 104\\ 35\\ 111\\ 139\\ 83\\ 38\\ 186\\ 128\\ 29\\ 41\\ 20\\ 6\\ 4\\ 14\\ 8\end{array}$	$\begin{array}{c} 310\\ 302\\ 301\\ 287\\ 280\\ 279\\ 278\\ 275\\ 273\\ 272\\ 253\\ 250\\ 249\\ 233\\ 225\\ 224\\ 224\\ 221\\ 218\\ 216\\ 205\\ 190\\ 183\\ 183\\ 179\\ 174\\ 172\\ 162\\ 157\\ 156\\ 153\\ 145\\ 128\\ 107\\ 100\\ 77\\ 68\end{array}$

TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION CATEGORY (2013-2017)(continued)

* Crashes per 100 million vehicle-miles

TABLE 18. TOTAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER) (2013-2017)(ALL ROADS)

	CRASHES	(CRASHES PER			(CRASHES PER
CITY	(2013-2017)	1000 POPULATION)	CITY	(2013-2017)	1000 POPULATION)
		VED 200 000			PX 2 500 4 000
	67 263	45.5	Crestview Hills	1 935	122.9 *
Louisville	133,501	44.7	Prestonsburg	1.584	97.3 *
POPULAT	ION CATEGORY 2	0,000-60000	Hazard	2,101	94.3 *
Florence	11,041	73.7 *	Wilder	1,170	77.1 *
Paducah Bawling Croon	7,786	62.2 *	Paintsville	1,107	64.0 *
Owenshoro	13 795	30.3 48.2	Russell	932	55.1 *
Elizabethtown	6.732	47.2	Walton	974	53.6 *
Richmond	7,093	45.2	Brandenburg	663	50.2
Covington	8,962	44.1	Barbourville	719	45.4
Frankfort	5,200	40.7	Cadiz	566	44.3
Henderson	4,390	40.5	Crestwood	940	43.2
Jeffersontown	5,127	38.6	Southgate	791	41.6
Nicholasville	5,039	36.0	Calvert City	531	41.4
Hopkinsville	5,317	33.7	Scottsville	858	40.6
Georgetown	4,762	32.7	Grayson	844	40.0
Radcilli	3,089	28.5	Greenville Stanford	840	39.2 38.0
POPULATI	ON CATEGORY 1	0.000-19.999	Staniolu	662	38.0
Somerset	4,875	87.1 *	Springfield	444	35.3
Shepherdsville	3,900	69.5 *	Beaver Dam	591	34.7
Shively	4,965	65.1 *	Williamstown	631	32.2
Newport	4,/5/	62.3 55.0	Stanton	430	31.5
Erlanger	4,297	47.5	Eddyville	398	31.2
Glasgow	3,220	45.9	Lancaster	535	31.1
Danville	3,289	40.6	Columbia	684	30.7
Shelbyville	2,723	38.8	Hodgenville	472	29.4
Winchester Mayfield	3,554 1 923	38.7 38.4	Hartford	437	20.0 23.7
Murrav	3,356	37.8	Lakeside Park	293	22.0
Madisonville	3,698	37.8	Crittenden	417	21.9
Berea	2,401	35.4	Marion	298	19.6
Lawrenceburg	1,130	21.5	Ludlow	418	19.0
Fort Inomas	1,540	18.9	Vine Grove	425	18.8
POPULAT	TION CATEGORY	5.000-9.999	Wilmore	296	16.1
Fort Wright	2,802	97.9 *	Indian Hills	212	14.8
London	3,603	90.2 *	West Liberty	227	13.2
Pikeville	2,893	83.8 *	Providence	204	12.8
Morehead	2,441	65.7 *	Park Hills	139	10.2
Mount Sterling	1.816	52.7	T dik Tillis	140	10.0
Corbin	1,919	52.5			
Campbellsville	2,361	51.8			
Franklin Cold Spring	1,862	44.3			
Leitchfield	1,274	43.1 42.9			
Mavsville	1.888	41.9			
Lebanon	1,119	40.4			
Fort Mitchell	1,598	38.9			
Paris	1,662	38.9			
Highland Heights	1,037	38.0			
Oak Grove	1,389	37.1			
Williamsburg	960	36.6			
Russellville	1,265	36.4			
Cynthiana Mount Washington	1,151	36.U 35.4			
Monticello	1.046	33.8			
La Grange	1,362	33.7			
Central City	1,001	33.5			
Princeton	1,051	33.2			
Alexandria	1,095	33.2 22 2			
Harrodsburg	1.284	30.8			
Union	765	28.4			
Bellevue	838	28.1			
Edgewood	936	21.8			
Elsmere	401 646	17.3			
Flatwoods	538	14.5			
Villa Hills	245	6.5			

TABLE 19. FATAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2013-2017)(ALL ROADS)

		A	NNUAL
1	NUMBER OF	CRASE	IRATE
- · · · · ·	CRASHES	(CRASHE	SPER
CITY	(2013-2017)	10,000 POPUL	ATION)
POPULATION	ICATEGORY	OVER 200,000	4 00
Louisville	383		1.28
Lexington	149		1.01
POPULATION	N CATEGORY	20,000-60000	4.00
Paducan	20		1.60
Nicholasville	17		1.21
Florence	18		1.20
Radcliff	12		1.11
Hopkinsville	16		1.01
Richmond	15		0.96
Bowling Green	26		0.90
Henderson	13		0.90
Frankfort	11		0.86
Elizabethtown	12		0.84
Georgetown	12		0.82
Owensboro	21		0.73
Covington	12		0.59
Jenersontown	1		0.53
Ashiand	5		0.46
		40.000.40.000	0.16
POPULATION	I CATEGORY	10,000-19,999	2 5 4
Snively	21		3.54
Somersel	17		3.04
Cleaner	10		1.70
Glasgow	12		1.71
Derea	11		1.02
Shallowille	0		1.37
Mediaepville	10		1.20
Murrov	12		1.23
Frianger	9		1.01
Donvillo	9		0.00
Lawroncoburg	05		0.99
Fort Thomas	5		0.95
Winchostor	0		0.74
Newport	5		0.54
Mayfield	4		0.32
		V 5 000-0 000	0.40
London	11	1 0,000-0,000	2 75
Pikeville	ι, β		2.70
Williamsburg	ő ő		2 29
Lebanon	5		1.81
Leitchfield	õ		1 79
Highland Heights	õ		1.73
Cold Spring	5		1.69
Franklin	7		1.67
Morehead	5		1.46
Harrodsburg	6		1.44
Fort Wright	4		1.40
Mount Washington	6		1.32
Princeton	4		1.26
Cynthiana	4		1.25
Corbin	4		1.10
Paris	4		0.94
Versailles	4		0.93
Russellville	3		0.86
La Grange	3		0.74
Alexandria	3		0.71
Maysville	3		0.67
Central City	2		0.67
Campbellsville	3		0.66
Monticello	2		0.65
Mount Sterling	2		0.58
Flatwoods	2		0.54
⊨agewood	2		0.47
Bellevue	1		0.34
Taylor IVIII	1		0.30
	1		0.24
LISILIEIE	1		0.24

CITY	NUMBER OF CRASHES (2013-2017)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPU		ORY 2 500-4 999
POPU Prestonsburg Paintsville Hazard Columbia Barbourville Scottsville Beaver Dam Morganfield Stanford Calvert City Hartford Grayson Benton Russell Williamstown Vine Grove Springfield Lakeside Park Irvine Dawson Springs	LATION CATEG 10 9 8 5 6 4 3 3 2 2 3 3 2 2 2 1 1 1 1 1	ORY 2,500-4,999 6.14 5.20 3.59 3.16 2.84 2.35 1.83 1.72 1.56 1.50 1.42 1.38 1.18 1.02 0.88 0.79 0.75 0.74 0.72
Park Hills	1	0.67
Lancaster	1	0.66
Carrollton	1	0.51

* Critical crash rate

	NUMBER O RELATEI	DF ALCOHOL- D CRASHES 3 - 2017)	PERCENT OF TOTAL CRASHES INVOLVING AL COHOL		
COUNTY	ALL	AGE 16-20	ALL	AGE 16-20	
F II: - #	POPULA		R 10,000	F 4	
Ellioli	22	3	7.3 E E	5.1	
Robertson	9	0	5.5 5.4	0.0	
Dallalu Monifoo	40	4	5.4	2.0	
	18	2	4.8	3.6	
Fulton	28	2	4.8	17	
Nicholas	35	3	4.0	2.0	
Bracken	50	6	4.6	3.3	
Carlisle	16	0	4.6	0.0	
Trimble	37	3	4.6	1.7	
Cumberland	27	2	4.5	1.8	
McLean	47	1	4.4	0.5	
Hickman	14	0	4.2	0.0	
Livingston	36	2	3.9	1.2	
Lyon	51	5	3.9	2.3	
Crittenden	36	4	3.7	2.3	
Hancock	25	4	3.6	2.2	
Gallatin	43	2	3.2	1.1	
Wolfe	18	1	2.3	0.8	
Owsley	6	0	2.3	0.0	
			14 000		
Butler	71	3	5 - 14,555 5 1	0 0	
	32	0	4.6	0.9	
Todd	46	4	4.3	1.6	
Rath	34	1	4.0	0.6	
Washington	55	6	4.2	19	
Owen	39	1	4.0	0.6	
Edmonson	41	3	4.0	1.2	
Estill	29	3	3.9	2.0	
Triaa	69	6	3.9	1.6	
Pendleton	64	11	3.9	3.0	
Magoffin	34	4	3.9	2.3	
Metcalfe	47	1	3.9	0.4	
Morgan	30	1	3.7	0.7	
Carroll	75	4	3.7	1.0	
Fleming	43	4	3.7	1.3	
Larue	54	5	3.6	1.5	
Powell	50	8	3.2	2.4	
Green	27	2	3.2	1.2	
Jackson	31	2	3.2	1.1	
Martin	15	1	3.1	1.3	
Clinton	28	5	3.0	2.5	
Breathitt	39	6	3.0	3.2	
Monroe	13	0	2.7	0.0	
Caldwell	44	4	2.3	0.8	
vvebster	29	5	2.3	2.0	
Leslie	5	0	1.7	0.0	
	POPULA	TION CATEGORY 15,000	0 - 24,999		
Mason	154	5	5.1	0.7	
Breckinridge	57	6	4.9	2.1	
Marion	110	10	4.8	1.6	
Spencer	62	4	4.7	1.2	
Bourbon	139	11	4.5	1.9	
Mercer	107	9	4.5	1.4	
Allen	101	6	4.5	1.0	
Henry	87	6	4.3	1.5	
Casey	42	4	4.2	1.6	
Woodford	184	13	4.2	1.4	
Letcher	61	3	4.1	1.3	
Anderson	102	9	4.0	1.3	

TABLE 20. CRASHES INVOLVING ALCOHOL BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)

	(IN BREEK BI	BEGRE, SING I ER		(oonun		
	NUMBER C	F ALCOHOL-		PER	CENT OF TOTAL	
	RELATED	CRASHES		CRASHES INVOLVING		
	(2013 - 2017)			0.0.0	ALCOHOL	
COUNTY	(2013	ACE 16 20		AL 1		
COUNTY	ALL	AGE 16-20		ALL	AGE 16-20	
	POPULATION	CATEGORY 15,000 -	24,999 (conti	nued)		
Garrard	76	10		4.0	2.3	
Lawrence	44	2		3.9	1.0	
Harrison	97	20		3.8	33	
Simpson	112	5		3.8	0.8	
Ohio	112	10		2.0	0.0	
Onio	113	12		3.7	1.9	
Adair	48	6		3.5	1.8	
Clay	65	4		3.5	1.6	
Knott	42	5		3.5	2.7	
Lincoln	72	6		3.4	1.3	
Union	48	6		3.3	1.6	
McCreary	34	4		3.1	1.8	
lobrson	68	5		2.1	1.0	
Duesell	50	5		2.1	1.1	
Russell	51	6		3.0	1.3	
Taylor	95	13		2.7	1.3	
Grant	98	8		2.6	1.0	
Rowan	104	6		2.6	0.5	
Hart	71	6		2.6	1.3	
Wayne	38	5		2.5	1.3	
Rockoostlo	52	2		2.0	0.4	
Rockcastle	55	2		Z. I	0.4	
	POPULA	TION CATEGORY 25	,000 - 49,999			
Meade	144	5		6.4	0.7	
Floyd	179	9		4.5	1.4	
Nelson	249	15		4.5	1.2	
Marshall	158	10		4.0	1.0	
Calloway	100	15		3.0	0.8	
Calloway	190	13		0.9	0.0	
Grayson	119	1		3.8	0.9	
Shelby	246	13		3.7	0.9	
Perry	131	7		3.6	1.2	
Franklin	269	15		3.5	1.2	
Graves	157	12		3.5	1.1	
Montgomery	141	13		34	14	
lessamine	251	25		3.1	1.5	
Cortor	201	25		2.4	1.5	
Carter	93	0		3.3	1.4	
Scott	259	14		3.3	0.8	
Clark	184	12		3.2	1.0	
Greenup	104	8		3.2	1.1	
Logan	93	7		3.2	1.0	
Harlan	73	9		3.1	2.0	
Boyle	126	10		3.0	11	
Barron	106	15		3.0	0.0	
	190	10		3.0	0.9	
vvnitiey	154	16		3.0	1.5	
Muhlenberg	120	13		2.8	1.4	
Henderson	219	11		2.7	0.6	
Knox	84	7		2.7	1.1	
Hopkins	177	11		2.5	0.7	
Bovd	173	15		23	11	
Bell	60	8		2.0	1.1	
Dell	03	0		2.2	1.4	
	POPULA	HON CATEGORY 50	,000 - OVER			
Ріке	308	26		4.4	1.9	
Christian	345	26		3.7	1.5	
Campbell	561	31		3.7	0.9	
Kenton	996	59		3.5	1.1	
Madison	439	50		3.3	1 4	
Favette	2024	166		2.0	1 1	
Pagene	2224			3.3	1.1	
Boone	186	/2		33	1.2	
Hardin	482	29		3.3	0.9	
Bullitt	326	22		3.2	1.0	
Warren	699	61		3.0	0.9	
McCracken	347	25		3.0	1.0	
Oldham	173	13		3.0	0.8	
Davioss	E02	10		2.0	0.0	
Lavicss	000	42		2.9	0.9	
Jellerson	3972	141		2.5	0.5	
Pulaski	204	11		2.4	0.6	
Laurel	195	9	49	2.3	0.5	

TABLE 20. CRASHES INVOLVING ALCOHOL BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (continued)

TABLE 21. CRASHES INVOLVING ALCOHOL BY CITY AND POPULATION CATEGORY(IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

N	UMBER OF	PERCEN	ITAGE
			SHES
	RELATED	INVO	LVING
CITY	CRASHES	ALC	OHOL
-			
POPULATION	CATEGORY	OVER 200 000	
Lovington	2 2 2 2	0 VEI (200,000	2.2
Lexingion	2,222		3.3
Louisville	3,452		2.6
POPULATION	CATEGORY	20.000-60.000	
Covington	401	-,,	45
Independence	-01		2.0
independence	60		3.0
Radcliff	110		3.6
Hopkinsville	178		3.3
Frankfort	157		3.0
Pichmond	215		2.0
Richmonu	210		3.0
Nicholasville	148		2.9
Georgetown	134		2.8
Florence	277		25
Elizabethtown	161		24
	101		2.4
Jenersontown	121		2.4
Owensboro	335		2.4
Bowling Green	392		2.3
Henderson	132		23
Deduceb	160		2.0
Paducan	100		2.2
Ashland	85		1.9
POPUI ATION	CATEGORY	10 000-19 999	
Fort Thomas	58	10,000 10,000	38
Navas	470		5.0
Newport	1/3		3.0
Shelbyville	91		3.3
Shively	157		3.2
Bardetown	100		3.1
Minchester	100		3.1
winchester	104		2.9
Erlanger	119		2.8
Shepherdsville	103		2.6
Murray	70		21
Louropooburg	13		2.7
Lawrenceburg	21		2.4
Glasgow	78		2.4
Danville	78		2.4
Madisonville	66		18
Poroo	20		1.0
Delea	30		1.0
Somerset	70		1.4
Mayfield	27		1.4
	V CATEGOR	Y 5 000-9 999	
Douton	24	. 0,000 0,000	7 /
Dayion	34		7.4
Bellevue	35		4.2
Taylor Mill	46		4.2
Versailles	63		38
Villa Hills	õ		37
			3.7
Eismere	23		3.0
Maysville	66		3.5
Harrodsburg	45		3.5
Central City	33		33
Frenklin	50		0.0
	60		3.2
Pikeville	90		3.1
Paris	52		3.1
Russellville	38		3.0
Cynthiana	34		3.0
Cyntinana	04		5.0
Lebanon	31		2.8
Flatwoods	14		2.6
Fort Mitchell	41		2.6
Leitchfield	37		26
Highland Hoights	22		2.0
	55		2.5
Fort wright	69		2.5
Corbin	46		2.4
Mount Sterling	44		2.4
Mount Washington	38		21
Cold Spring	00		2.7
Cold Shilling	29		2.3
Alexandria	29		2.1
Williamsburg	19		2.0
Princeton	18		17
Campbelleville	20		17
	29		1.1
⊏aãemooa	16		1./
La Grange	21		1.5
London	52		1.4
Morehead	32		1 4
Monticello	14		12
	14		1.0

	NUMBER OF ALCOHOL- RELATED	PERCENTAGE OF CRASHES INVOLVING
CITY	CRASHES	ALCOHOL
POPU	LATION CATEGORY	2.500-4.999
Ludlow	22	5.3
Dawson Springs	11	4.5
Park Hills	6	4.1
Calvert City	20	3.8
Southgate	28	3.5
Marion	10	3.4
Vine Grove	14	3.3
Lancaster	17	3.2
Williamstown	20	3.2
Irvine	4	2.9
Hazard	56	2.7
Scottsville	22	2.6
Wilmore	57	2.5
Proctonchurg	20	2.4
Hodgenville	11	2.4
Columbia	16	2.0
Flemingshurg	11	2.0
Barbourville	16	2.2
Fleminashura	11	2.2
Carrollton	13	21
Greenville	17	2.0
Beaver Dam	12	2.0
Russell	18	1.9
Benton	18	1.9
Grayson	15	1.8
Stanford	12	1.8
Hartford	5	1.6
Springfield	6	1.4
Stanton	6	1.4
Paintsville	11	1.0

								ALCOHOL
						TOTAL		CONVICTIONS
							ALCOHOL CONVICTIONS	
COUNTY	2013	2014	2015	2016	2017	(FIVE YEARS)**	LICENSED DRIVERS	CRASH
000111	2010	2011	2010	2010	2011	(1112 12/110)		
Adair	51	48	47	72	67	285	4.6	5.9
Allen	59	56	54	61	44	274	4.1	2.7
Anderson	98	77	56	78	110	419	5.0	4.1
Ballard	46	39	25	29	14	153	5.2	3.2
Barren	158	167	150	118	144	/3/	5.0	3.8
Bath	3U 112	33	23	19	70	121	2.9	3.0
Boone	447	457	90 462	07 443	348	2 157	0.2 4 7	27
Bourbon	175	91	76	100	78	520	7.4	3.7
Boyd	235	226	189	191	285	1,126	6.8	6.5
Boyle	150	144	129	86	106	615	6.2	4.9
Bracken	13	11	13	22	11	70	2.3	1.4
Breathitt	79	66	60	68	53	326	7.2	8.4
Breckinridge	42	34	39	31	33	179	2.5	3.1
Bullitt	307	164	138	112	99	820	2.8	2.5
Caldwell	40 /0	53 40	49	37 11	 ⊿1	217	4.9	3.1
Calloway	238	242	164	134	219	997	4.0	4.0 5.0
Campbell	395	397	370	375	331	1.868	5.8	3.3
Carlisle	15	11	13	10	8	57	3.0	3.6
Carroll	101	59	57	69	47	333	9.4	4.4
Carter	103	78	75	73	82	411	4.4	4.4
Casey	85	74	54	46	48	307	5.9	7.3
Christian	303	245	214	200	165	1,127	5.7	3.3
Clark	112	198	167	129	97	703	5.5	3.8 7.2
Clay	60	48	43	29	101	472	7.0	7.3
Crittenden	29	22	25	29	27	132	4.3	3.7
Cumberland	33	20	34	37	47	171	7.1	6.3
Daviess	515	448	331	272	216	1,782	5.1	3.5
Edmonson	17	26	31	24	19	117	2.6	2.9
Elliott	18	9	6	10	7	50	2.3	2.3
Estill	52	87	65	37	58	299	6.0	10.3
Fayette	1,189	1,255	929	813	50	4,987	5.1	2.2
Flovd	231	186	217	208	140	982	7.8	5.5
Franklin	284	233	190	238	196	1.141	6.5	4.2
Fulton	33	47	71	61	96	308	15.4	11.0
Gallatin	68	39	43	49	22	221	7.5	5.1
Garrard	43	36	80	62	72	293	4.9	3.9
Grant	59	84	65	92	51	351	4.1	3.6
Graves	234	144	199	182	149	908	7.1	5.8
Green	90 27	101	141	90	107	535 90	5.9 2 3	4.5
Greenup	211	143	138	105	119	716	5.4	6.9
Hancock	29	17	16	13	9	84	2.6	3.4
Hardin	577	468	477	419	376	2,317	6.3	4.8
Harlan	136	140	124	122	119	641	7.1	8.8
Harrison	76	60	56	47	38	277	4.3	2.9
Hart	68	74	62	52	36	292	4.8	4.1
Henderson	241	233	237	205	165	1,081	6.7	4.9
Henry	105	122	78 18	03 13	84 17	45Z 77	7.8 4.8	5.Z
Hopkins	259	230	275	210	217	1,191	7.4	6.7
Jackson	25	17	25	24	54	145	3.2	4.7
Jefferson	1,710	1,363	862	668	744	5,347	2.1	1.3
Jessamine	214	149	157	231	172	923	5.2	3.7
Johnson	166	133	102	95	75	571	7.3	8.4
Kenton	594	522	442	529	523	2,610	4.6	2.6
Knott	55	82	101	98	62	398	8.0	9.5
	212	268	187	191 22	170	1,028	10.0	12.2
Laurel	74 587	582	530	554	483	∠30 2 736	4.0 1२.२	4.3 14 0
	501	002	200			2,700	10.0	11.0

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (2013 - 2017)

								ALCOHOL
						TOTAL	ANNUAL AVERAGE	CONVICTIONS
						ALCOHOL	ALCOHOL CONVICTIONS	PER ALCOHOL-
	- 2012	2014	2015	2010	2017	CONVICTIONS		RELATED
COUNTY	2013	2014	2015	2016	2017	(FIVE YEARS)	LICENSED DRIVERS	CRASH
Lawrence	58	53	58	59	41	269	5.0	6.1
Lee	28	20	22	14	38	122	5.6	6.8
Leslie	23	13	19	21	12	88	2.4	17.6
Letcher	93	81	44	77	57	352	4.6	5.8
Lewis	42	40	37	40	35	194	4.1	6.1
Lincoln	73	57	81	73	76	360	4.2	5.0
Livingston	38	24	31	36	21	150	4.2	4.2
Logan	135	129	117	106	94	581	6.1	6.2
Lyon	68	83	60	67	63	341	11.9	6.7
McCracken	396	380	403	221	297	1,697	7.1	4.9
McCreary	77	98	96	87	136	494	9.6	14.5
McLean	133	90	105	58	36	422	12.2	9.0
Madison	133	75	105	121	287	721	2.5	1.6
Magoffin	65	67	44	37	82	295	6.8	8.7
Marion	83	108	86	119	50	446	6.9	4.1
Marshall	513	308	316	339	146	1,622	13.5	10.3
Martin	68	152	102	86	54	462	13.2	30.8
Mason	28	25	26	34	67	180	3.0	1.2
Meade	145	88	78	52	50	413	4.2	2.9
Menifee	16	11	8	9	11	55	2.4	3.2
Mercer	57	47	51	70	78	303	3.7	2.8
Metcalfe	21	30	22	33	30	136	3.7	2.9
Montgomory	34	35 109	43	39	51	202	5.4	15.5
Morgon	90	100	00	13	14	417	4.4	3.0 E E
Muhlophorg	37 211	102	20 152	120	104	104	4.1	5.5
Nelson	1/6	192	192	120	104	772	1.2	0.0
Nicholas	61	32	/3	174	35	220	4.0	63
Ohio	72	62	75	129	87	425	5.7	3.8
Oldham	146	234	175	123	126	804	3.5	4.6
Owen	21	17	25	28	23	114	2.9	2.9
Owslev	12	18	10	43	13	96	6.3	16.0
Pendleton	33	25	24	22	25	129	2.5	2.0
Perry	106	85	93	82	78	444	4.7	3.4
Pike	177	162	102	109	103	653	3.2	2.1
Powell	83	69	45	52	57	306	6.9	6.1
Pulaski	301	221	258	211	195	1,186	5.2	5.8
Robertson	1	5	3	2	2	13	1.6	1.4
Rockcastle	54	70	66	62	61	313	5.5	5.9
Rowan	124	124	120	158	111	637	8.5	6.1
Russell	53	47	63	65	65	293	4.7	5.7
Scott	173	194	185	158	165	875	4.7	3.4
Shelby	229	205	211	204	160	1,009	6.6	4.1
Simpson	64	51	42	55	65	277	4.2	2.5
Spencer	74	54	40	52	62	282	4.0	4.5
Taylor	110	88	81	67	65	411	4.7	4.3
lodd	57	66	58	38	19	238	6.1	5.2
Irigg	100	94	92	87	55	428	8.5	6.2
Irimble	40	23	21	13	17	114	3.7	3.1
Union	63	402	65	38	29	277	5.5	5.8
Washington	635	493	464	443	398	2,433	6.1	3.5
Wayna	22	25	26	15	19	107	2.6	1.9
Wobstor	∠⊃ 27	33 16	44 25	40 17	∠⊃ 10	1/3	2.6	4.b
Whitley	21 166	101	20 100	4/	160	127	2.8	4.4
Wolfe	100	181	123	25	/00	140	0.0	0.Z 2 2
Woodford	216	20 176	29 152	107	120	771	0.2 8 1	0.3 4 2
	210	170	102	107	120		0.1	۲.۲
TOTAL *	18,030	16,208	14,443	13,642	12,797	75,120	5.0	3.6

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (2013 - 2017) (continued)

*Convictions in cases filed in the same calander year. **There were 26,377 arrests on average from 2013 to 2017.

 TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES)

 (2013 - 2017)

				ALCOHOL
		ANNUAL AVERAGE		CONVICTIONS
		ALCOHOL CONVICTIONS		PER ALCOHOL-
		PER 1,000		RELATED
POPULATION	COUNTY	LICENSED DRIVERS	COUNTY	CRASH
UNDER 10,000	Fulton	15.4	Owsley	16.0
	McLean	12.2	Fulton	11.0
	Lyon	11.9	McLean	9.0
	Nicholas	8.7	Wolfe	8.3
	Gallatin	7.5	Lee	6.8
	Cumberland	7.1	Lyon	6.7
	Owsley	6.3	Cumberland	6.3
	vvoite	6.2	Nicholas	6.3
	Lee	5.6	Hickman	5.5
	Ballaru	5.2	Gallatin	5.1
	Crittenden	4.0	Crittenden	4.2
	Livingston	4.3	Carlielo	3.7
	Trimble	37	Hancock	34
	Carlisle	3.0	Menifee	32
	Hancock	2.6	Ballard	3.2
	Menifee	2.4	Trimble	3.1
	Elliott	2.3	Elliott	2.3
	Bracken	2.3	Robertson	1.4
	Robertson	1.6	Bracken	1.4
10,000-14,999	Martin	13.2	Martin	30.8
	Carroll	9.4	Leslie	17.6
	Trigg	8.5	Monroe	15.5
	Breathitt	7.2	Estill	10.3
	Powell	6.9	Magoffin	8.7
	Magoffin	6.8	Breathitt	8.4
	Todd	6.1	Clinton	7.1
	Estill	6.0	Fleming	6.4
	Clinton	5.8	I rigg	6.2
	Fleming	5.4	Powell	6.1
	Butlor	5.4	Lewis	0.1
	Caldwell	4.9	Todd	5.0
		4.0	Caldwell	5.2 4 8
	Lewis	4 1	Jackson	4 7
	Morgan	4.1	Carroll	4.4
	Metcalfe	3.7	Webster	4.4
	Jackson	3.2	Larue	4.3
	Owen	2.9	Bath	3.6
	Bath	2.9	Green	3.3
	Webster	2.8	Butler	3.1
	Edmonson	2.6	Owen	2.9
	Washington	2.6	Metcalfe	2.9
	Pendleton	2.5	Edmonson	2.9
	Leslie	2.4	Pendleton	2.0
	Green	2.3	Washington	1.9
15,000-24,999	McCreary	9.6	McCreary	14.5
	Rowan	8.5	Knott	9.5
	VVOOdford Knott	8.1	Jonnson	8.4
	Knou	0.U 7 9	Clasey	7.3
		7.0	Bowon	7.3
	Bourbon	7.0	Lawrence	0.1
	lohnson	7.4	Δdair	5.1
	Marion	69	Rockcastle	5.9
	Casev	5.9	Union	5.8
	Rockcastle	5.5	Letcher	5.8
	Union	5.5	Russell	5.0
	Ohio	5.1	Henry	5.2
	Lawrence	5.0	Lincoln	5.0
	Anderson	5.0	Wayne	4.6
	Garrard	4.9	Spencer	4.5
	Hart	4.8	Taylor	4.3
	Russell	4.7	Woodford	4.2

TABLE 23.	ALCOHOL	CONVICTION	RATES IN DEC	CREASING (ORDER (B	Y COUNTY	POPULATION	CATEGORIES	5)
(2	2013 - 2017) (continued)							

				ALCOHOL
		ANNUAL AVERAGE		CONVICTIONS
	COUNTY	ALCOHOL CONVICTIONS		PER ALCOHOL-
		PER 1,000		RELATED
POPULATION		LICENSED DRIVERS	COUNTY	CRASH
15,000-24,999	Taylor	4.7	Hart	4.1
(cont'd)	Adair	4.6	Anderson	4.1
	Letcher	4.6	Marion	4.1
	Harrison	4.3	Garrard	3.9
	Lincoln	4.2	Ohio	3.8
	Simpson	4.2	Bourbon	3.7
	Grant	4.1	Grant	3.6
	Allen	4.1	Breckinridge	3.1
	Spencer	4.0	Harrison	2.9
	Mercer	3.7	Mercer	2.8
	Mason	3.0	Allen	2.7
	Wayne	2.6	Simpson	2.5
	Breckinridge	2.5	Mason	1.2
25,000 - 49,999	Marshall	13.5	Knox	12.2
	Knox	10.0	Marshall	10.3
	Calloway	8.1	Harlan	8.8
	Floyd	7.8	Bell	7.4
	Hopkins	7.4	Greenup	6.9
	Muhlenberg	7.2	Hopkins	6.7
	Graves	7.1	Muhlenberg	6.6
	Harlan	7.1	Boyd	6.5
	Whitley	6.8	Logan	6.2
	Boyd	6.8	Graves	5.8
	Henderson	6.7	Floyd	5.5
	Shelby	6.6	vvnitiey	5.2
	Franklin	0.5	Calloway	5.0
	Bell	6.2	Henderson	4.9
	Воуіе	6.2	Boyle	4.9
	Logan	0.1	Grayson	4.5
	Grayson	5.9	Carter	4.4
	Clark	5.5	Franklin	4.2
	Greenup	5.4	Sheiby	4.1
	Dessamme	5.2	Barran	3.0
	Darre	5.0	Darren	3.0
	Pelly	4.7	Dorn	3.7
	Nolson	4.7	Scott	3.4
	Montgomory	4.0	Nolcon	3.4
	Carter	4.4	Montgomery	3.1
	Meade	4.4	Meade	2.9
50,000 - OVER	Laurel	13.3	Laurel	14.0
	McCracken	7.1	Pulaski	5.8
	Hardin	6.3	McCracken	4.9
	Warren	6.1	Hardin	4.8
	Campbell	5.8	Oldham	4.6
	Christian	5.7	Daviess	3.5
	Pulaski	5.2	Warren	3.5
	Daviess	5.1	Campbell	3.3
	Fayette	5.1	Christian	3.3
	Boone	4.7	Boone	2.7
	Kenton	4.6	Kenton	2.6
	Oldham	3.5	Bullitt	2.5
	Pike	3.2	Fayette	2.2
	Bullitt	2.8	Pike	2.1
	Madison	2.5	Madison	1.6
	Jefferson	2.1	Jefferson	1.3

TABLE 24.	PERCENTAGE OI	DRIVERS CON	VICTED OF D	UI FILINGS (BY COUNTY) (2013 -	2017)	*

	TOTAL DUI	TOTAL DUI	TOTAL DUI	CONVICTION
COUNTY	FILED	CONVICTED	NON-CONVICTED	PERCENTAGE**
Adair	528	285	71	80.1
Allen	509	274	27	91.0
Anderson	735	419	63	86.9
Ballard	261	153	46	76.9
Barren	1,564	131	230	/5./
Ball	200	510	23	04.0 66 9
Boono	1,014	2 157	204	00.0
Bourbon	817	520	73	87.0
Boyd	1 662	1 126	224	83.4
Boyle	980	615	85	87.9
Bracken	106	70	19	78.7
Breathitt	572	326	43	88.3
Breckinridge	266	179	34	84.0
Bullitt	1,910	820	252	76.5
Butler	377	217	62	77.8
Caldwell	297	210	32	86.8
Calloway	1,397	997	182	84.6
Campbell	2,561	1,868	333	84.9
Carlisle	101	57	22	72.2
Carroll	698	333	137	70.9
Carter	860	411	112	78.6
Casey	475	307	75	80.4
Christian	1,792	1,127	254	81.6
Clark	1,082	703	75	90.4
	1,092	472	293	61.7
Clinton	412	198	19	91.2
Crittenden	172	132	10	89.2
Davioss	3 302	1 792	379	02.2
Edmonson	3,302	1,7 02	378	02.J 70.5
Elliott	107	50	49	76.9
Estill	444	299	42	87.7
Favette	6.908	4.987	483	91.2
Fleming	561	277	64	81.2
Floyd	1,740	982	180	84.5
Franklin	2,171	1,141	233	83.0
Fulton	592	308	123	71.5
Gallatin	445	221	118	65.2
Garrard	423	293	51	85.2
Grant	677	351	137	71.9
Graves	1,782	908	260	77.7
Grayson	807	535	75	87.7
Green	179	90	21	81.1
Greenup	1,037	/16	96	88.2
Hancock	123	84	8	91.3
Harlan	3,004	2,317	573	0U.Z
Harrison	1,790	277	124	03.0 85.8
Hart	586	202	114	71 0
Henderson	1 916	1 081	183	85.5
Henry	718	452	89	83.5
Hickman	157	77	40	65.8
Hopkins	1.792	1.191	214	84.8
Jackson	242	145	39	78.8
Jefferson	12,785	5,347	962	84.8
Jessamine	1,414	923	116	88.8
Johnson	1,003	571	133	81.1
Kenton	3,832	2,610	403	86.6
Knott	660	398	79	83.4
Knox	1,859	1,028	272	79.1
Larue	431	230	70	76.7

|--|

TOTAL DUITOTAL DUITOTAL DUITOTAL DUICONVICTEDNON-CONVICTEDPERCEILaurel 3.692 2.736 319 Lawrence 461 269 46 Lee 204 122 10 Lesile 235 88 70 Lether 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 668 McCracken 2.802 1.697 404 McCreary 961 494 160 Madison 1.199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2.327 1.622 338 Marde 590 413 81 Marson 281 180 33 Meade 590 413 81 Menfee 83 55 7 Mercer 487 303 51 Montgomery 704 417 71 Morgan 340 164 47 Muhenberg 1.322 772 147 Netson 1.222 772 147	
COUNTY FILED CONVICTED NON-CONVICTED PERCEI Laurel 3,692 2,736 319 Lawrence 461 269 46 Lee 204 122 10 Leslie 235 88 70 Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCracken 2,802 1,697 404 McCracken 2,802 1,697 404 McCracken 2,802 1,697 404 Macison 1,199 721 167 Magoffin 492 295 44 Marini 729 462 89 Mason 281 180 33 Merde 55 7	VICTION
Laurel 3.692 2.736 319 Lawrence 461 269 46 Lee 204 122 10 Leslie 235 88 70 Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCracken 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Mason 281 180 33 Meade 590 413 81 Mercer 487 303 51 <td< td=""><td>ENTAGE</td></td<>	ENTAGE
Laurel 3,692 2,736 319 Lawrence 461 269 46 Lee 204 122 10 Leslie 235 88 70 Lether 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCrary 961 494 160 McCrary 961 444 68 Macison 1,199 721 167 Magoffin 492 295 44 Marin 729 462 89 Mason 281 180 33 Menifee 83 55 7 Mercer 487 303 51 Mercaffe </td <td></td>	
Lawrence 461 269 46 Lee 204 122 10 Leslie 235 88 70 Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCrark 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Morroe	89.6
Lee 204 122 10 Lesilie 235 88 70 Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 729 462 89 Mason 281 180 33 Metaife 73 136 27 Menore 350 202 37 Mercer 437 303 51 Metaife 213 136 27 Monroe <td>85.4</td>	85.4
Leslie 235 88 70 Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCracken 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metalfe 213 136 27 Monr	92.4
Letcher 609 352 76 Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Mason 281 180 33 Meade 590 413 81 Mercer 83 55 7 Mercer 83 55 7 Mortin 71 71 167 Mortin	55.7
Lewis 273 194 29 Lincoln 558 360 64 Livingston 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCrarken 2,802 1,697 404 McCracken 2,802 1,697 404 McCrarken 2,802 1,697 404 McCrarken 2,802 1,697 404 McCrarken 2,802 1,697 404 McCrarken 1,19 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 350 202 37	82.2
Lincoln Lincol Lincol Lincol Lincol Lincoln 232 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Montoe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 <td>87.0</td>	87.0
Livingston33036004Livingston23215029Logan900581157Lyon54234168McCracken2,8021,697404McCreary961494160McLean790422107Madison1,199721167Magoffin49229544Marion74644686Marshall2,3271,622338Martin72946289Mason28118033Meade59041381Menifee83557Mercer48730351Metcalfe21313627Montgomery70441771Montgomery34016447Muhlenberg1,34978794Netson1,222772147	84.0
Liningson 252 150 29 Logan 900 581 157 Lyon 542 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Matin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 M	07.0
Logan 500 561 157 Lyon 502 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Matin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Monroe 303 51 14 Monroe 303 51 14 Monroe 303 51 14 Monroe 340 164 47 Muhlenberg 1,349 787 94 Melson<	00.0
Lyon 542 341 68 McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Motogomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	/0./
McCracken 2,802 1,697 404 McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Monroe 350 202 37 Monroe 350 202 37 Monrgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	83.4
McCreary 961 494 160 McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Mongomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	80.8
McLean 790 422 107 Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Monroe 350 202 37 Mongan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	75.5
Madison 1,199 721 167 Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	79.8
Magoffin 492 295 44 Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	81.2
Marion 746 446 86 Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	87.0
Marshall 2,327 1,622 338 Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Mortgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	83.8
Martin 729 462 89 Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	82.8
Mason 281 180 33 Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Mortgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	83.8
Meade 590 413 81 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Nuhlenberg 1,349 787 94 Nelson 1,222 772 147	84 5
Meade 330 413 61 Menifee 83 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Nuhlenberg 1,349 787 94 Nelson 1,222 772 147	83.6
Member 63 55 7 Mercer 487 303 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Nuhlenberg 1,349 787 94 Nelson 1,222 772 147	00.0
Mercer 467 503 51 Metcalfe 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Nuhlenberg 1,349 787 94 Nelson 1,222 772 147	00.1
Metcare 213 136 27 Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Mulenberg 1,349 787 94 Nelson 1,222 772 147	0.00
Monroe 350 202 37 Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	83.4
Montgomery 704 417 71 Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	84.5
Morgan 340 164 47 Muhlenberg 1,349 787 94 Nelson 1,222 772 147	85.5
Muhlenberg 1,349 787 94 Nelson 1,222 772 147	77.7
Nelson 1,222 772 147	89.3
NI 1 1 000 07	84.0
Nicholas 394 220 37	85.6
Ohio 857 425 155	73.3
Oldham 1.262 804 61	92.9
Qwen 246 114 49	69.9
Owsley 171 96 14	87.3
Pendleton 208 129 24	84.3
Derny 1312 444 147	75.1
1 city 1,512 4444 147	71.1
Fike 2,333 035 202	70.0
Poweii 340 300 62	70.9
Pulaski 2,288 1,186 303	/9./
Robertson 28 13 3	81.3
Rockcastle 821 313 141	68.9
Rowan 979 637 88	87.9
Russell 600 293 62	82.5
Scott 1,449 875 159	84.6
Shelby 1,721 1,009 131	88.5
Simpson 474 277 36	88.5
Spencer 546 282 60	82 5
Taylor 698 411 87	82.5
Todd 346 238 50	82.6
Tring 675 429 101	02.0 90.0
Timpla 073 420 101	70.7
Initial ZZ4 114 Z9 111 29 114 29	19.1
Union 449 2// 58	82.7
Warren 4,735 2,433 618	79.7
Washington 204 107 31	77.5
Wayne 380 173 31	84.8
Webster 270 127 44	74.3
Whitley 1,317 799 143	84.8
Wolfe 260 149 24	86.1
Woodford 1.097 771 70	91 7
TOTAL 131,886 75.120 15.151	83.2

TOTAL 131,886 * Obtained from Administrative Office of the Courts.

** Conviction percentage is equal to the number of DUI convictions divided by the sum of DUI convictions and non-convictions. The data apply to DUIs resolved in the calendar year of the arrest. Data does not include pending cases.

	AVERAGE				
	CONVICTION		TOTA	L DUI TOTA	L DUI CONVICTION
POPULATION CATEGORY	PERCENTAGE	COUNTY	ARRI	ESTS CONVICT	IONS PERCENTAGE*
	00.0		004	100	00.4
UNDER 10,000	80.9	Lee	204	122	92.4
		Hancock	123	84	91.3
		Crittenden	172	132	89.2
		Menifee	83	55	88.7
		Owsley	171	96	87.3
		VVOIIE	200	149	80.1 95.6
		Livingston	294	220	00.0
		Livingston	232	2/1	03.0
		Cumberland	312	171	82.2
		Robertson	28	13	81 3
		McLean	790	422	79.8
		Trimble	224	114	79.7
		Bracken	106	70	78.7
		Flliott	107	50	76.9
		Ballard	261	153	76.9
		Carlisle	101	57	72.2
		Fulton	592	308	71.5
		Hickman	157	77	65.8
		Gallatin	445	221	65.2
10,000-14,999	80.1	Clinton	412	198	91.2
		Breathitt	572	326	88.3
		Estill	444	299	87.7
		Magoffin	492	295	87.0
		Lewis	273	194	87.0
		Caldwell	297	210	86.8
		Monroe	350	202	84.5
		Pendleton	208	129	84.3
		Bath	233	121	84.0
		Martin	729	462	83.8
		Metcalfe	213	136	83.4
		Todd	346	238	82.6
		Fleming	561	277	81.2
		Green	179	90	81.1
		Trigg	675	428	80.9
		Powell	540	306	78.9
		Jackson	242	145	78.8
		Butler	3//	217	77.8
		Morgan	340	164	77.7
		vvasnington	204	107	77.5
		Laiue	431	230	70.7
		Corroll	270	222	74.3
		Edmonson	212	117	70.5
			212	117	69.9
			240	88	55 7
		Lesile	200	00	00.7
15.000-24.999	82.0	Woodford	1.097	771	91.7
	02.0	Allen	509	274	91.0
		Simpson	474	277	88.5
		Rowan	979	637	87.9
		Bourbon	817	520	87.7
		Anderson	735	419	86.9
		Harrison	477	277	85.8
		Mercer	487	303	85.6
		Lawrence	461	269	85.4
		Garrard	423	293	85.2
		Lincoln	558	360	84.9
		Wayne	380	173	84.8
		Mason	281	180	84.5
		Breckinridge	266	179	84.0
		Marion	746	446	83.8

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER) (2013 - 2017)

	AVERAGE				
POPULATION CATEGORT	FERGENTAGE	COUNT	ARRESTS	CONVICTIONS	FERGENTAGE
15,000-24,999		Henry	718	452	83.5
(continued)		Knott	660	398	83.4
		Union	449	277	82.7
		Russell	600	293	82.5
		Taylor	698	411	82.5
		Spencer	546	282	82.5
		Letcher	609	352	82.2
		Johnson	1,003	571	81.1
		Casey	475	307	80.4
		Adair	528	285	80.1
		McCreary	961	494	75.5
		Ohio	857	425	73.3
		Grant	677	351	71.9
		Hart	586	292	71.9
		Rockcastle	821	313	68.9
		Clay	1,092	472	61.7
25,000-49,999	83.2	Clark	1,082	703	90.4
		Muhlenberg	1,349	787	89.3
		Jessamine	1,414	923	88.8
		Shelby	1,721	1,009	88.5
		Greenup	1,037	716	88.2
		Boyle	980	615	87.9
		Grayson	807	535	87.7
		Henderson	1,916	1,081	85.5
		Montgomery	704	417	85.5
		Whitley	1,317	799	84.8
		Hopkins	1,792	1,191	84.8
		Scott	1,449	875	84.6
		Calloway	1,397	997	84.6
		Floyd	1,740	982	84.5
		Nelson	1,222	772	84.0
		Harlan	1,796	641	83.8
		Meade	590	413	83.6
		Boya	1,662	1,126	83.4
		Franklin	2,171	1,141	83.0
		Knox	2,327	1,022	02.0
			1,859	1,020 591	79.1
		Carter	860	JO1 /11	78.6
		Graves	1 782	908	70.0
		Barren	1,762	737	75.7
		Perry	1,312	444	75.1
		Bell	1,814	510	66.8
	00.0		1 000	004	<u></u>
50,000 - OVER	83.2	Oldnam	1,262	804	92.9
		Fayette	6,908	4,987	91.2
		Laurei	3,692	2,736	89.6
		Boone	3,162	2,157	87.6
		Kenton	3,832	2,610	86.6
		Campbell	2,501	1,868	84.9
		Deviess	12,100	0,047 1 700	04.0 92.5
		Christian	3,30∠ 1,702	1,70Z	02.0 91.6
		Madison	1,192	1,1∠ <i>1</i> 701	01.0 91.2
		McCrackon	2802	1 607	90 8
		Hardin	2,002	2 317	80.2
		Warren	1 735	2,317	79.7
		Pulaski	2 288	1 186	79.7
		Bullitt	1,910	820	76.5
		Pike	2,355	653	71.4

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER) (2013 - 2017) (continued)

*Refer to Table 24 for conviction rate calculation.

				<u> </u>	,	TOTAL RECKLESS	ANNUAL AVERAGE RECKLESS DRIVING
						CONVICTIONS	PER 1.000
COUNTY	2013	2014	2015	2016	2017	(FIVE YEARS)	LICENSED DRIVERS
Adair	12	7	13	13	13	58	0.9
Allen	4	8	7	1	13	31	0.5
Anderson	16	28	21	28	31	124	1.5
Ballard	6	5	11	13	5	40	1.4
Barren	52	42	39	50	39	222	1.5
Bath	6	7	3	1	3	20	0.5
Bell	8	13	14	4	9	48	0.6
Boone	41	39	41	36	39	196	0.4
Bourbon	10	19	10	15	28	131	1.0
Boyle	27	37	33	38	16	151	0.0
Bracken	4	1	2	6	7	20	0.6
Breathitt	13	16	5	8	4	46	1.0
Breckinridge	8	5	1	2	9	25	0.4
Bullitt	81	65	61	35	30	272	0.9
Butler	2	3	2	4	3	14	0.3
Caldwell	5	8	10	19	28	70	1.5
Calloway	11	15	23	18	16	83	0.7
Carlisle	42	33	25	23	20	101	0.5
Carroll	12	12	2	5	6	39	0.4
Carter	17	10	26	15	19	87	0.9
Casey	10	6	1	10	3	30	0.6
Christian	55	50	48	37	45	235	1.2
Clark	19	13	15	9	9	65	0.5
Clay	31	9	13	12	9	74	1.2
Clinton	4	7	3	5	7	26	0.8
Crittenden	2	2	4	3	15	18	0.6
Cumberiand	8 50	8	54	11	15	23	2.2
Edmonson	7	40	3		6	203	0.0
Elliott	1	3	1	6	2	13	0.6
Estill	2	1	2	1	1	7	0.1
Fayette	150	111	84	89	95	529	0.5
Fleming	8	0	10	9	19	46	0.9
Floyd	34	14	27	24	29	128	1.0
Franklin	68	19	50	54	47	238	1.4
Fullon Gallatin	3 18	50	8	7 14	0 20	80 63	4.0
Garrard	15	6	14	12	7	54	0.9
Grant	5	16	16	9	7	53	0.6
Graves	53	21	61	51	32	218	1.7
Grayson	27	28	33	33	46	167	1.8
Green	3	31	4	3	4	45	1.1
Greenup	18	1	10	18	9	56	0.4
Hancock	4	10	2	8	2	26	0.8
Harlan	03 25	2 74	70 21	14	14	509 148	0.0
Harrison	10	26	7	9	6	58	0.9
Hart	19	12	10	9	19	69	1.1
Henderson	42	10	52	56	38	198	1.2
Henry	26	43	19	13	15	116	2.0
Hickman	4	17	0	2	1	24	1.5
Hopkins	40	2	28	28	29	127	0.8
Jackson	7	42	3	6	9	67	1.5
Jerrerson	205	3	218	254	364	1,044	0.4
Johnson	∠0 27	209 22	ו <i>ו</i> פ	29 11	10	297 87	1./
Kenton	70	19	76	69	70	304	0.5
Knott	1	70	1	2	. 3	75	1.5
Knox	13	3	36	12	6	70	0.7
Larue	9	24	9	7	14	63	1.2
Laurel	28	8	11	22	14	83	0.4

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (2013 - 2017)
COLINITY	2013	2014	2015	2016	2017	RECKLESS DRIVING CONVICTIONS	RECKLESS DRIVING CONVICTIONS PER 1,000
000111	2013	2014	2013	2010	2017		
Lawrence	10	29	15	14	7	75	1.4
Lee	0	9	4	2	3	18	0.8
Leslie	7	2	3	3	1	16	0.4
Letcher	3	1	/	1	5	1/	0.2
Lewis	3	4	5	3	4	19	0.4
Lincoln	19	2 18	20	12	22	75	0.9
Livingston	19	10	9 25	26	29	112	1.0
Lvon	24	18	64	52	64	222	7.8
McCracken	58	39	39	34	35	205	0.9
McCreary	8	39	13	8	10	78	1.5
McLean	2	8	4	4	4	22	0.6
Madison	24	3	37	30	15	109	0.4
Magoffin	8	28	3	1	8	48	1.1
Marion	20	5	28	22	20	95	1.5
Marshall	15	18	14	17	10	74	0.6
Marun	0 15	10	11	9 16	5	41	1.2
Meade	33	9 15	28	33	25	134	1.0
Menifee	2	27	20	3		36	1.4
Mercer	10	3	11	14	11	49	0.6
Metcalfe	12	10	6	3	6	37	1.0
Monroe	7	14	5	1	4	31	0.8
Montgomery	11	5	16	14	15	61	0.6
Morgan	12	17	3	3	2	37	0.9
Muhlenberg	21	4	34	38	33	130	1.2
Nelson	23	25	36	38	36	158	0.9
Nicholas	3	35	10	(1	62	2.4
Oldham	10	2	4	4	5	25	0.3
Owen	7	4	5	2	2	30 16	0.2
Owsley	8	2	1	4	5	20	1.3
Pendleton	12	3	2	8	10	35	0.7
Perry	3	7	8	27	27	72	0.8
Pike	35	5	29	19	25	113	0.6
Powell	10	28	6	9	5	58	1.3
Pulaski	18	12	14	22	20	86	0.4
Robertson	0	8	1	1	1	11	1.4
Rockcastle	23	2	9	10	7	51	0.9
Rowan	17	15	19	19	18	88	1.2
Russell	/ 31	10	73	8 30	10	48	0.8
Shelby	33	28	34	34	24	150	1.0
Simpson	9	40	28	28	19	124	1.9
Spencer	9	25	14	9	5	62	0.9
Taylor	13	4	16	18	14	65	0.7
Todd	20	12	10	17	10	69	1.8
Trigg	17	10	59	37	27	150	3.0
Trimble	3	25	3	4	1	36	1.2
Union	5	2	17	19	13	56	1.1
Warren	81	9	65	80	60	295	0.7
Wayno	/	74	9	9 15	12	111	2.7
Webster	9	5	9	10 1/	9 10	48 15	0.7
Whitley	16	13	25	32	20	40 106	0.9
Wolfe	2	16	1	3	0	22	0.9
Woodford	13	4	18	10	14	59	0.6
TOTAL	2,472	2,250	2,380	2,361	2,345	11,808	0.9

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (2013 - 2017) (continued)

		PERCENT		NUMBER OF	PERCENT OF TOTAL
COUNTY	CRASHES	CRASHES	COUNTY	CRASHES	URASHES
POPULA	TION CATEGORY UND	ER 10,000	POPULAT	ION CATEGORY 15,00	0-24,999
Elliott Lee	9 11	3.0 2.9	Clay Knott	97 53	5.3 4.5
Owsley	7	2.7	McCreary	46	4.2
Nicholas Carlisle	18 8	2.4	Letcher	61 72	4.1
Menifee	, 8	2.3	Casey	28	2.8
Crittenden	19 26	2.0	Adair Rockcastle	31 55	2.3
McLean	20	1.9	Anderson	51	2.0
Wolfe	14	1.8	Russell	34	2.0
Ballard	15	1.7	Lincoln	37	1.7
Fulton	10	1.7	Lawrence	18	1.6
Hickman	5	1.7	Rowan	51	1.4
Trimble	11	1.4	Harrison	33	1.3
Gallatin	10	0.7	Hart	30	1.3
Hancock	4	0.6	Bourbon	37	1.2
POPULA		0.0 00-14.999	Marion	44 28	1.2
Magoffin	49	5.6	Wayne	18	1.2
Breathitt Martin	47 17	3.6	Spencer	16 25	1.2
Estill	24	3.2	Garrard	21	1.1
Leslie Morgan	9 19	3.0 2.4	Union Simpson	16 26	1.1 0.9
Lewis	13	1.9	Taylor	<u>30</u>	0.9
l rigg Jackson	32 17	1.8 1 7	Henry Woodford	17 36	0.8 0.8
Bath	14	1.7	Breckinridge	<u> </u>	0.3
Fleming Webster	20 19	1./ 1.5	Flovd	ION CATEGORY 25,00 222	1 0-50,000 5.6
Larue	23	1.5	Harlan	124	5.2
Powell	13	1.4	Bell	143	4.6 3.9
Carroll	27	1.3	Perry	133	3.6
Owen	21 13	1.3	Muhlenberg	87	2.2
Monroe	6	1.3	Carter	46	1.7
Todd Edmonson	9	0.8	Graves	68 76	1.7 1 7
Butler	1 <u>1</u>	0.8	Grayson	49	1.6
Green Caldwell	7 15	0.8 0.8	Franklin Marshall	117 58	1.5 1.5
Washington	9	0.7	Boyd	104	1.4
Metcalle	8	0.7	Greenup	42	1.4
			Calloway	65	1.3
			Bovle	84 48	1.2
			Henderson	85	1.1
			Nelson	53	1.1
			Clark	56	1.0
			Shelby	25 52	0.9
			Meadé	18	0.8
			POPULAT		R 50,000
			Pike	376	5.4
			Laurei Campbell	168 195	2.0
			Madison	178	1.3
			Kenton Pulaski	331 92	1.2 1 1
			Hardin	158	1.1
			Daviess McCracken	183 110	1.U 1 0
			Christian	<u>ģ</u>	1.Ŏ
			vvarren Boone	200	0.9
			Bullitt	83	<u>ŏ.</u> §
			Fayette Oldham	483	0.7 0.7
		61	Jefferson	1,045	Ŏ.7

 TABLE 27. PERCENTAGE OF CRASHES INVOLVING DRUGS BY COUNTY AND POPULATION CATEGORY

 (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)(ALL ROADS)

TABLE 28. PERCENTAGE OF CRASHES INVOLVING DRUGS BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

	NUMBER	PERCE	NTAGE
	OF DRUG-	OF CR	ASHES
	RELATED	INVC) VING
CITY	CRASHES	1	RUGS
		L	
		OVER 200.000	
FOFULATION	CATEGORT	OVER 200,000	07
Louisville	906		0.7
Lexington	483		0.7
[°] POPULATION	CATEGORY	20.000-60.000	
Covington	142	,	16
Nicholasville	82		1.0
Freedutert	02		1.0
Frankion	11		1.5
Ashland	62		1.4
Radcliff	43		1.4
Richmond	90		1.3
Independence	26		12
Handaraan	20		1 1
	02		1.1
Hopkinsville	53		1.0
Owensboro	126		0.9
Florence	89		0.8
Paducah	64		0.8
Georgetown	34		0.0
Elizabethtown	44		0.7
	44		0.7
Bowling Green	106		0.6
Jeffersontown	25		0.5
POPULATION	CATEGORY	10.000-19.999	
Lawrenceburg	23	10,000 10,000	20
Fort Thomas	20		2.0
Chivalu	01		2.0
Snively	61		1.2
Madisonville	41		1.1
Glasgow	36		1.1
Somerset	53		1.1
Newport	10		10
Boroo	-10		1.0
Delea	24		1.0
Erlanger	40		0.9
Mayfield	18		0.9
Bardstown	25		0.8
Danville	25		0.8
Winchester	30		0.8
Shalbyyilla	10		0.0
Murray	10		0.7
Murray	24		0.7
Shepherdsville	25		0.6
POPULATION	N CATEGOR	Y 5,000-9,999	
Davton	15		33
Pikovillo	85		2 0
Pollovuo	21		2.5
	21		2.5
Taylor IVIII	23		2.1
Corbin	37		1.9
Central City	19		1.9
Cvnthiana	17		1.5
Williamshurg	14		15
Loitobfield	10		1.0
	19		1.5
London	46		1.3
Lebanon	14		1.3
Maysville	22		1.2
Mount Sterling	22		1.2
Harrodsburg	14		1 1
Puscellville	14		1.1
	14		1.1
Flatwoods	6		1.1
Cold Spring	14		1.1
Princeton	10		1.0
Fort Wright	27		1.0
Versailles	17		10
Dorio	15		0.0
Falls	10		0.9
Highland Heights	10		0.8
Morehead	19		0.8
Franklin	15		0.8
Villa Hills	2		0.8
Campbellsville	10		0.8
Monticello	19		0.0
Fort Mitchell	0		0.0
	9		0.6
Lismere	3		0.5
La Grange	7		0.5
Edgewood	5		0.5
Alexandria	ž		0.3
Mount Washington	т Л		0.2
mount mashington	4		0.2

	NUMBER OF DRUG- RELATED	PERCENTAGE OF CRASHES INVOLVING
CITY	CRASHES	DRUGS
CITY POPULAT Barbourville Providence Hazard Prestonsburg Irvine Park Hills Marion Lancaster Southgate Ludlow Beaver Dam Stanford Vine Grove Scottsville Paintsville Carrollton Morganfield Flemingsburg Grayson Flemingsburg Hartford Hodgenville Calvert City Columbia	RELATED CRASHES TION CATEGORY 2 30 8 72 48 4 4 4 7 12 17 8 10 11 7 14 17 9 6 7 12 17 8 10 11 7 4 5 6 7	4.2 3.9 3.4 3.0 2.9 2.7 2.3 2.2 2.1 1.9 1.7 1.6 1.6 1.5 1.5 1.4 1.4 1.4 1.4 1.4 1.4 1.3 1.1 1.1 1.0
Stanton Williamstown Benton Dawson Springs Lakeside Park Wilmore	3 3 5 1 1 1	0.7 0.5 0.5 0.4 0.3 0.3

TABLE 29. SAFETY BELT USAGE BY	COUNTY AND POPULATION CATEG	ORY (IN DESCENDING ORDER)	(OBSERVED SURVEY BY ADD OF ALL
FRONT SEAT OCCUPANTS IN 2007)		

	/	PERCENT		PERCENT
		SEAT BELT		SEAT BELT
COUNTY		USAGE*	COUNTY	USAGE*
	POPULATION CATEGORY UNDER 10,000		POP	ULATION CATEGORY 15,000-24,999 (CONT'D)
Lyon		82.9	Mercer	60.6
Trimble		77.1	Simpson*	60.0
Hancock		73.6	Harrison	59.9
Gallatin		71.3	Russell	58.7
Livingston*		71.1	Anderson	57.7
Carlisle		67.0	Rowan	54.6
Elliott		64.1	Allen	54.0
Fulton		62.9	Mason	53.5
McLean		60.3	Taylor	53.3
Wolfe		59.4	Garrard	52.5
Crittenden		58.2	McCreary	51.3
Bracken		53.9	Letcher	51.2
Hickman		53.5	Breckinridge	50.3
Robertson*		53.3	Wayne	47.0
		51.9	Casey	47.0
Nicholas		50.6	Adair*	43.8
Monifee		18.0	Marion	43.0
Ballard		40.5	Hart	40.4
Cumborland		40.4	Halt	
Motoolfo		40.5	Shalby	FOF 0LATION CATEGORT 25,000-50,000
Qualau		42.4	Sheiby	80.0
Owsley		41.1	whitey	74.0
	POPULATION CATEGORY 10,000-14,999	70.0	Henderson	/1.8
Caldwell		70.8	Franklin	/1.3
Carroll		70.7	Bell	70.7
Pendleton		68.5	Hopkins	70.5
Webster		66.3	Laurel	69.2
Powell		64.6	Greenup	67.6
Jackson		64.5	Clark	67.6
Trigg		64.0	Boyd	66.9
Todd*		63.8	Graves	66.7
Edmonson		63.7	Knox*	66.5
Magoffin		59.7	Harlan	66.3
Leslie*		59.4	Jessamine	65.9
Larue		58.2	Calloway	65.0
Morgan		57.9	Muhlenberg	61.8
Owen		57.7	Carter	61.1
Butler		57.3	Scott	60.8
Lewis*		56.5	Marshall	60.7
Martin		55.4	Boyle	60.7
Breathitt		53.8	Logan	60.4
Ectill*		53.0	Nelson	60.4
Clinton		10.1	Floyd	50.0
Groop		40.4	Barran	53.9
Weehington		40.1	Darren	57.9
Floming		40.5	Meade	50.0
Pieth		40.5	Montgomony	47.3
Bath		42.0	wontgomery	
Monroe		40.1		POPULATION CATEGORY OVER 50,000
	POPULATION CATEGORY 15,000-24,999		Oldham*	83.0
Rockcastle		76.9	Jefferson*	81.1
Union		76.3	Bullitt	80.6
Henry		70.8	Boone	77.8
Woodford		70.6	Kenton	77.5
Spencer*		70.0	Campbell	75.8
Grant		69.5	Fayette	75.0
Ohio*		69.0	Daviess	70.9
Johnson*		68.4	Madison	69.4
Grayson		64.7	Hardin	66.2
Knott		64.5	Christian	65.8
Clay		64.2	McCracken	65.1
Lawrence*		63.2	Warren	63.0
Lincoln		62.9	Pike	62.3
Bourbon		62.2	Pulaski*	54.2

See page 21 for counties with potential for intensive promotional campaigns. Selected based on safety belt usage, crash rates, location in state (one in each KSP post) and dates of past campaign recommendations. * Usage rate based on an annual seat belt study conducted by the Area Development Districts throughout the state.

 (2007 01						
 PERCENT USAGE						
 POPULATION CATEGORY						
 UNDER	10,000 -	15,000 -	25,000-	OVER		
 10,000	14,999	24,999	49,999	50,000		
59.0	57.5	59.1	64.3	71.2		

TABLE 30. SAFETY BELT USAGE BY COUNTY POPULATION CATEGORY (2007 OBSERVATIONAL DATA) (AREA DEVELOPMENT DISTRICTS)*

*2009 Statewide observational data resulted in a rate of 80 percent

TABLE 31. CRASH SEVERITY VERSUS SAFETY BELT USAGE (ALL DRIVERS)*

	NOT WEARING SAFETY BELT			RING (BELT	PERCENT
TYPE OF INJURY	NUMBER	PERCENT	NUMBER	PERCENT	REDUCTION
Fatal	1,102	5.46	950	0.09	98
Incapacitating	1,997	9.90	7,101	0.67	93
Non-Incapacitating	3,369	16.70	33,187	3.15	81
Possible Injury	3,471	17.20	59,630	5.66	67
Fatal or Incapacitating	3,099	15.36	8,051	0.76	95

* Based on 2013 through 2017 crash data. Total sample size for not wearing a safety belt was 20,175 compared to 1,053,851 for wearing a safety belt.

		_	RESTRAINT USED		D
VARIABLE	CATEGORY	NONE	SAFETY BELT	CHILD SEAT	ANY RESTRAINT
Numeron	Fatal	0	4	47	10
		3	1	17	18
Civen	Non Inconscitating	4	14	41	00 ///
	Rossible Injury	21 40	40	407	400
injury	None Detected	40	240	1,009	1,004
	None Delected	120	3,002	24,231	21,000
Percent	Fatal	1.43	0.03	0.06	0.06
With	Incapacitating	1.90	0.36	0.16	0.18
Given	Non-Incapacitating	12.86	1.23	1.55	1.51
Injury	Possible Injury	22.86	6.27	6.12	6.14
	None Detected	60.95	92.12	92.12	92.12
Percent	Front	3.23	26.80	69.97	96.77
Usage	Rear	0.73	16.12	83.16	99.27
By Seat Position	All Positions	0.90	16.87	82.23	99.10
Percent With Given Injury By Seat Position					
(Front)	Fatal	0.00	0.00	0.04	0.03
()	Incapacitating	2.83	0.11	0.00	0.03
	Non-Incapacitating	7.55	1.48	1.09	1.20
	Possible Injury	13.21	4.21	4.23	4.22
	None Detected	26.42	44.14	44.62	44.49
(Rear)	Fatal	0.96	0.01	0.04	0.04
(<i>)</i>	Incapacitating	0.32	0.19	0.11	0.13
	Non-Incapacitating	6.05	0.50	1.06	0.97
	Possible Injury	10.83	2.99	4.21	4.01
	None Detected	31.85	46.15	64.59	61.60
YEAR	2013	90	1,562	7,296	8,858
	2014	86	1,538	7,125	8,663
	2015	86	1,789	7,980	9,769
	2016	80	1,664	8,376	10,040
	2017	78	1,290	7,447	8,737

TABLE 32. USAGE AND EFFECTIVENESS OF CHILD SAFETY SEATS(CHILDREN AGE THREE AND UNDER) (2013 - 2017)

CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)	_
TABLE 33. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY COUNTY AND POPULATION	

COUNTY	NUMBER OF CRASHES	OF TOTAL CRASHES	COUNTY	NUMBER OF CRASHES	OF TOTAL CRASHES
POPULA	TION CATEGORY UND	ER 10,000	POPULATI	ON CATEGORY 15,00	00-24,999
Carlisle	33	9.5	Grant	341	9.2
Bracken	91 60	8.4	Simpson	268	9.0
Hickman	25	7.5	Union	102	6.9
Owsley	19	7.3	Spencer	92	6.9
Lyon	95 54	7.3	Bourbon	202	6.6
Trimble	54 52	6.4	Mason	200	6.1
McLean	64	6.0	Rockcastle	153	6.1
Elliott	18	6.0	Clay	107	5.8
Robertson	40	5.5	McCreary	60	5.6 5.5
Nicholas	35	4.7	Mercer	131	5.5
Crittenden	44 25	4.6	Hart	152	5.5
Cumberland	22	3.7	Wavne	82	5.3
Gallatin	51	3.7	Ohio	162	5.3
Lee Monifee	12	3.2	Anderson	128	5.1
Fulton	10	1.7	Rowan	184	4.6
POPULA	TION CATEGORY 10,00	00-14,999	Adair	57	4.2
Butler	124	8.9	Lincoln	8/ 130	4.1 3.7
Morgan	62	7.7	Letcher	56	3.7
Çaldwell	127	6.5	Allen	77	3.4
Jackson	62	6.3	Johnson	/1 30	3.2
Larue	90	6.0	Knott	34	2.9
Owen	58	5.9	Lawrence	32	2.9
vvasnington	78 100	5.9 5.7	Russell Marion	36 47	2.1
Pendleton	92	5.6	POPULATI	ON CATEGORY 25,00	00-50,000
Leslie	16	5.4	Carter	190	6.8
Breathitt	65	5.2 5.0	Knox	290	0.0 6.6
Magoffin	40	4.5	Whitley	306	5.9
Webster	57	4.4	Marshall	227	5.7
Flemina	49	4.4	Hopkins	381	5.4
Estill	29	3.9	Boyle	209	5.0
Monroe	18 /1	3.8	Scott	386	5.0
Martin	16	3.3	Franklin	345	4.5
Green	26	3.1	Logan	129	4.5
Bath Powell	23 42	2.8 2.7	Floyd Bell	176	4.4 4.4
Clinton	18	1.9	Meade	97	4.3
			Clark	245	4.3
			Nelson	221	4.1
			Muhlenberg	159	3.8
			Greenup	121	3.8
			Calloway	192	3.7
			Henderson	274	3.4
			Gravson	200 100	3.4 3.2
			Harlan	73	3.1
			Perry	91 ON CATEGORY OVE	2.5 R 50 000
			Madison	1 061	8.0
			Fayette	5,013	7.5
			Boone	1,516	6.4
			Hardin	798	5.4
			Christian	499	5.4
			McCracken	612 303	5.4
			Pike	355	5.1
			Campbell	750	4.9
			vvarren Laurel	1,080	4.7 4.5
			Pulaski	378	4.4
			Jefferson	5,399	3.4
		66	Bullitt	304	3.2 3.0

TABLE 34. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

CITY	NUMBER OF CRASHES (2013-2017)	PE OF CR	RCENT TOTAL ASHES
		OVER 200.000	
	5 010	0 V LIX 200,000	7 /
	4 733		3.5
		20 000-60000	5.5
Independence	2/1	20,000-00000	10.9
Dichmond	Z41 540		77
Eloropeo	549		1.1
Paducab	325		4.0
Honkinsville	21/		4.2
Rowling Groop	660		4.0
Nichologyillo	102		4.0
Frenkfort	192		3.0
	200		3.0
Covington	243		3.0
Covingion	303		3.4
Bedeliff	109		3.3
Kauciiii	00 150		2.0
	102		2.7
Ashlanu	112		2.0
Owensboro	333		2.4
Jenersontown		40.000.40.000	1.9
FUPULATIO	IN CATEGORY	10,000-19,999	~ ~
Enanger	259		6.0
Berea	108		4.5
FOR I NOMAS	69		4.5
Danville	139		4.2
Madisonville	143		3.9
Newport	169		3.6
Shively	1/3		3.5
Somerset	151		3.1
Lawrenceburg	32		2.8
Shelbyville	71		2.6
Winchester	93		2.6
Bardstown	79		2.5
Mayfield	46		2.4
Shepherdsville	68		1.7
Murray	58		1.7
Glasgow	50		1.6
POPULATIO	ON CATEGOR	Y 5,000-9,999	
Taylor Mill	123		11.2
Villa Hills	26		10.6
Edgewood	72		7.7
Cold Spring	79		6.2
Highland Heights	80		6.1
Fort Mitchell	85		5.3
Princeton	55		5.2
Alexandria	70		5.1
Russellville	60		4.7
Cvnthiana	50		4.3
Franklin	76		4.1
Corbin	74		3.9
Mavsville	70		3.7
Pikeville	99		3.4
Harrodsburg	42		3.3
Paris	53		3.2
Bellevue	27		3.2
Monticello	33		3.2
Versailles	50		3.1
Flatwoods	16		3.0
Elsmere	19		2.9
Fort Wright	80		2.9
La Grange	38		2.8
Central City	27		27
Williamsburg	25		26
Davton	11		24
London	7/		21
Morehead	/4 ⊿5		20
Mount Starling			2.0
Leitchfield	30		2.0
Mount Washington	29		2.U 1 F
Campbelleville	20		1.0
Lehanon	31		1.0
	13		1.2

CITY	NUMBER OF CRASHES	PERCENT OF TOTAL
	(2013-2017)	CRASHES
POPULA	TION CATEGORY 2	.500-4.999
Williamstown	58	9.2
Dawson Springs	18	7.3
Vine Grove	27	6.4
Park Hills	9	6.1
Calvert City	32	6.0
Irvine	8	5.8
Southgate	45	5.7
Lakeside Park	14	4.8
Marion	12	4.0
Providence	8	3.9
Benton	36	3.8
Ludlow	15	3.6
Wilmore	10	3.4
Hodgenville	15	3.2
Stanford	19	2.9
Barbourville	20	2.8
Carroliton	10	2.0
Drostopoburg	13	2.4
Springfield	30	2.4
Buscoll	10	2.3
Greenville	20	2.1
Scottsville	10	2.1
Gravson	16	1 9
Hartford	6	1.0
Hazard	38	1.0
Columbia	11	1.6
Fleminasbura		1.6
Paintsville	17	1.5
Beaver Dam	8	1.4

TABLE 35. S	SUMMARY O	F SPEEDING	CONVICTIONS BY	COUNTY	(2013 - 2017	7)
-------------	-----------	------------	----------------	--------	--------------	----

								SPEEDING
						TOTAL	ANNUAL AVERAGE	CONVICTIONS
						SPEEDING	SPEEDING CONVICTIONS	PER SPEED-
	0010	0011	0015	0010	0017	CONVICTIONS	PER 1,000	RELATED
	2013	2014	2015	2016	2017	(FIVE YEARS)	LICENSED DRIVERS	CRASH
Adair	188	222	245	243	245	1,143	18.5	20.1
Anderson	90 717	94 644	631	507	638	470 3 137	7.1 37.3	0.2
Ballard	70	76	48	36	69	299	10.2	8.5
Barren	396	320	323	438	521	1.998	13.4	8.2
Bath	140	101	81	83	69	474	11.3	20.6
Bell	385	445	524	578	540	2,472	30.1	17.5
Boone	1,351	1,001	1,177	1,332	1,515	6,376	13.8	4.2
Bourbon	414	331	384	442	319	1,890	27.0	9.4
Boyd	715	687	1,186	1,166	978	4,732	28.7	18.5
Boyle	225	170	62	49	84	590	5.9	2.8
Bracken	173	100	162	305	193	933	30.1	10.3
Breathitt	47	55	97	172	35	406	9.0	6.2
Breckinnage	180	137	104	97	154	072	9.5	12.2
Buttor	197	1,000	590	439	42	5,102	10.8	10.5
Caldwell	245	172	242	410	404	1 473	32.0	11.6
Calloway	155	226	225	249	174	1.029	8.4	5.4
Campbell	1.733	1.368	1.069	1.476	1.313	6.959	21.6	9.3
Carlisle	58	102	49	35	18	262	13.9	7.9
Carroll	314	206	175	209	214	1,118	31.5	10.8
Carter	507	336	390	324	180	1,737	18.6	9.1
Casey	60	60	53	49	98	320	6.1	10.7
Christian	1,228	917	893	645	587	4,270	21.5	8.6
Clark	257	165	165	116	106	809	6.4	3.3
Clay	167	187	221	252	239	1,066	17.2	10.0
Clinton	41	44 54	30	37	28	180	5.3	10.0
Cumberland	144	56	115	01	07 120	526	21.0	9.0
Daviess	1 804	1 784	1 652	1 343	1 161	7 744	21.3	13.8
Edmonson	105	64	120	71	47	407	9.2	4.5
Elliott	7	8	23	18	22	78	3.6	4.3
Estill	141	79	34	46	38	338	6.8	11.7
Fayette	3,278	2,903	3,681	4,121	5,278	19,261	19.6	3.8
Fleming	227	0	355	230	157	969	19.0	19.8
Floyd	218	301	208	240	124	1,091	8.6	6.2
Franklin	1,186	182	1,039	1,336	1,103	4,846	27.7	14.0
Fulton	89	833	143	73	59	1,197	59.8	119.7
Ganaun	406	107	404	125	419	2,123	12.3	41.0
Grant	480	433	337	549	495	1 971	22.9	5.8
Graves	534	542	401	291	333	2,101	16.4	7.1
Grayson	519	365	291	393	387	1,955	21.4	19.6
Green	36	391	44	52	34	557	13.9	21.4
Greenup	254	36	120	98	82	590	4.4	4.9
Hancock	56	152	98	80	68	454	14.0	11.4
Hardin	2,153	72	1,992	1,808	1,878	7,903	21.3	9.9
Harlan	193	2,089	196	203	217	2,898	32.0	39.7
Harrison	173	194	122	132	118	739	11.4	5.4
Hart	161	129	98	139	129	656	10.8	4.3
Henderson	1,021	121	1,201	1,181	1,450	5,034	31.4	18.4
Hickman	57	711	37	40	23	4,501	54.0	34.7
Hopkins	912	74	782	711	722	3.201	19.9	8.4
Jackson	73	1,153	12	47	88	1,373	30.6	22.1
Jefferson	7,013	14	4,361	4,047	3,546	18,981	7.3	3.5
Jessamine	756	5,869	642	686	808	8,761	49.6	21.2
Johnson	178	516	111	104	55	964	12.3	13.6
Kenton	1,237	96	1,476	1,194	1,074	5,077	9.0	3.1
Knott	29	1,438	50	12	5	1,534	30.8	45.1
Knox	271	59	220	185	221	956	9.3	4.7
Larue	163	239	147	276	270	1,095	21.2	12.2
	803 120	13	(4) 09	001 110	151	3,215 1 1/10	15.6	0.3 25.0
Lawience	100	007	90	112	101	1,148	21.4	35.9

TABLE 35. SUM	MARY OF	SPEEDING	CONVICTIONS	BY COUNTY	(2013 - 2017)	(continued)
---------------	---------	----------	-------------	-----------	---------------	-------------

						TOTAL SPEEDING	ANNUAL AVERAGE SPEEDING CONVICTIONS	SPEEDING CONVICTIONS PER SPEED-
COUNTY	2013	2014	2015	2016	2017	CONVICTIONS (FIVE YEARS)	PER 1,000 LICENSED DRIVERS	RELATED CRASH
Lee	59	57	14	12	13	155	7.1	12.9
Leslie	37	16	35	38	18	144	3.9	9.0
Letcher	31	18	146	62	59	316	4.1	5.6
Lewis	76	67	76	63	60	342	7.3	11.0
Lincoln	149	78	108	106	187	628	7.4	7.2
Livingston	212	146	165	202	196	921	26.0	13.3
Logan	308	161	366	321	261	1,417	14.9	11.0
Lyon	182	370	283	278	258	1,371	47.9	14.4
McCrean	1,309	202	120	178	450	3,190 1 301	13.3	0.Z 21.7
McLean	87	40	76	109	73	385	23.2	60
Madison	1 424	61	860	583	1 046	3 974	13.6	3.7
Magoffin	16	1.234	14	12	7	1.283	29.5	32.1
Marion	67	20	83	81	47	298	4.6	6.3
Marshall	691	71	414	772	461	2,409	20.1	10.6
Martin	3	671	10	15	12	711	20.4	44.4
Mason	357	1	591	440	402	1,791	29.5	9.7
Meade	522	459	440	214	233	1,868	18.9	19.3
Menifee	11	347	8	9	4	379	16.6	47.4
Mercer	230	13	361	255	309	1,168	14.4	8.9
Metcalfe	132	392	114	141	134	913	25.0	22.3
Monroe	14	112	13	18	30	187	5.0	10.4
Montgomery	145	20	174	130	41	510	5.4	3.0
Morgan	169	137	267	322	105	1,000	24.7	16.1
Muhlenberg	340	340	499	260	348	1,787	16.3	11.2
Nelson	592	369	720	804	591	3,076	18.4	13.9
Nicholas	8/	571	24	40	08	790	31.4	22.1 12.0
Oldham	709	44 037	675	420	440 021	2,233	20.7	13.0
Owen	96	527	197	164	72	1,056	27.0	18.2
Owsley	2	88	137	.3	.3	97	64	5.1
Pendleton	168	0	98	106	83	455	8.7	4.9
Perry	123	113	67	45	67	415	4.4	4.6
Pike	253	96	121	101	123	694	3.4	2.0
Powell	92	240	77	72	83	564	12.8	13.4
Pulaski	1,689	117	1,091	1,063	813	4,773	21.1	12.6
Robertson	4	1,183	4	1	2	1,194	147.9	132.7
Rockcastle	336	2	282	317	257	1,194	21.0	7.8
Rowan	273	282	359	244	159	1,317	17.5	7.2
Russell	60	206	65	112	83	526	8.4	14.6
Scott	1,065	83	488	515	654	2,805	15.2	7.3
Shelby	1,783	811	886	848	573	4,901	32.1	15.7
Simpson	100	1,257	259	151	105	1,872	28.4	7.0
Spencer	247	145	149	363	454	1,358	19.1	14.8
Tayloi	226	122	19	100	102	409	5.2	3.5
Triag	220	133	263	215	93	1 090	20.4	12.0
Trimble	74	288	56	92	45	555	17.8	10.5
Union	132	57	134	62	129	514	10.2	5.0
Warren	1.395	138	1,572	1,556	1.342	6.003	15.1	5.6
Washington	91	1,478	89	50	55	1,763	42.3	22.6
Wayne	22	52	55	103	136	368	5.5	4.5
Webster	105	19	139	151	58	472	10.2	8.3
Whitley	259	56	120	290	262	987	8.5	3.2
Wolfe	440	105	376	310	388	1,619	67.8	30.0
Woodford	799	344	883	698	1,184	3,908	41.0	14.0
TOTAL*	55,061	48,578	47,605	47,688	46,193	245,125	16.3	7.5

* Does not include speeding convictions where county was not specified.

TABLE 36.	SPEEDING	CONVICTION	RATES IN	DECREASING	G ORDER	(BY COUNTY	POPULA	TION CA	TEGORIES)	(2013 -	2017)
.,	0. 2200	00		D = 01 (2) (0) (1)	0.000	(2. 000			, .	,	,

		ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1 000		SPEEDING CONVICTIONS PER SPEED- REI ATED
CATEGORY	COUNTY	LICENSED DRIVERS	COUNTY	CRASH
UNDER 10,000	Robertson Gallatin	147.9 72.3	Robertson Fulton	132.7 119.7
	Wolfe	67.8	Menifee	47.4
	Fulton	59.8	Gallatin	41.6
	Hickman	54.0	Hickman	34.7
	Lyon	47.9	Wolfe	30.0
	Nicholoo	21 4	Cumberland	22.0
	Bracken	31.4	Nisheles	23.9
	bracken	30.1	INICHOIAS	22.7
	Livingston	26.0	Metcalfe	22.3
	Metcalfe	25.0	Lyon	14.4
	Cumberland	21.9	Livingston	13.3
	Irimble	17.8	Lee	12.9
	Menifee	16.6	Hancock	11.4
	Hancock	14.0	Irimble	10.7
	Carlisle	13.9	Bracken	10.3
	Crittenden	13.0	Crittenden	9.0
	McLean	11.2	Ballard	8.5
	Ballard	10.2	Carlisle	7.9
	Lee	7.1	McLean	6.0
	Owsley	6.4	Owsley	5.1
	Elliott	3.6	Elliott	4.3
10,000-14,999	Washington	42.3	Martin	44.4
	Caldwell	32.0	Magoffin	32.1
	Carroll	31.5	Washington	22.6
	Jackson	30.6	Jackson	22.1
	Magoffin	29.5	Green	21.4
	Owen	27.0	Bath	20.6
	Morgan	24.7	Fleming	19.8
	Trigg	21.6	Owen	18.2
	Larue	21.2	Morgan	16.1
	Todd	20.4	Powell	13.4
	Martin	20.4	Larue	12.2
	Fleming	19.0	Todd	12.0
	Green	13.9	Estill	11.7
	Powell	12.8	Caldwell	11.6
	Butler	11.5	Lewis	11.0
	Bath	11.3	Triga	10.9
	Webster	10.2	Carroll	10.8
	Edmonson	92	Monroe	10.4
	Breathitt	9.0	Clinton	10.0
	Pendleton	8.7	Leslie	9.0
	Lewis	7.3	Webster	8.3
	Estill	6.8	Breathitt	62
	Clinton	5.3	Pendleton	4.9
	Monroe	5.0	Edmonson	4.5
	Leslie	3.9	Butler	4.1
15,000 - 24.999	Henry	78.1	Knott	45.1
-,	Woodford	41.0	Lawrence	35.9
	Anderson	37.3	Henry	30.2
	Knott	30.8	Anderson	24.5
	Mason	29.5	McCrearv	21.7
	Simpson	28.4	Adair	20.1
	Bourbon	27.0	Gravson	19.6
	Ohio	26.7	Spencer	14 8
	McCreany	25.2	Russell	14.6
	Grant	22.2	Woodford	14.0
	Gravson	21 4	Ohio	12.8
		21.4	lohnson	13.6
	Rockcastle	21.7	Breckinridge	10.0
	NUCKCASILE	21.0	Dieckliniuge	12.2

TABLE 36. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (2013 - 2017) (continued)

POPULATION	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000		SPEEDING CONVICTIONS PER SPEED- RELATED
CATEGORY		LICENSED DRIVERS	COUNTY	CRASH
15,000 - 24,999 (cont'd)	Spencer Adair	19.1 18.5	Casey Clay	10.7 10.0
· · ·	Rowan	17.5	Mason	9.7
	Clay	17.2	Bourbon	9.4
	Garrard	15.6	Mercer	8.9
	Mercer	14.4	Garrard	8.6
	Johnson	12.3	Rockcastle	7.8
	Harrison	11.4	Lincoin	7.2
		10.0	Simpson	7.2
	Breckinridge	9.5	Marion	6.3
	Russell	8.4	Allen	6.2
	Lincoln	7.4	Grant	5.8
	Allen	7.1	Letcher	5.6
	Casey	6.1	Harrison	5.4
	Wayne	5.5	Union	5.0
	Taylor	5.2	Wayne	4.5
	Marion	4.6	Hart	4.3
	Letcher	4.1	l aylor	3.5
25,000 - 49,999	Jessamine	49.6	Harlan	39.7
	Shelby	32.1	Jessamine	21.2
	Harlan	32.0	Meade	19.3
	Henderson	31.4	Boyd	18.5
	Bell	30.1	Henderson	18.4
	Eranklin	20.7	Bell	17.5
	Marshall	20.1	Franklin	14.0
	Hopkins	19.9	Nelson	13.9
	Meade	18.9	Muhlenberg	11.2
	Carter	18.6	Logan	11.0
	Nelson	18.4	Marshall	10.6
	Graves	16.4	Carter	9.1
	Muhlenberg	16.3	Hopkins	8.4
	Laurel	15.6	Laurel	8.3
	Scott	15.2	Barren	8.2
	Logan	12.4	Scoll	7.3
	Knox	9.3	Floyd	62
	Flovd	8.6	Calloway	5.4
	Whitley	8.5	Greenup	4.9
	Calloway	8.4	Knox	4.7
	Clark	6.4	Perry	4.6
	Boyle	5.9	Clark	3.3
	Montgomery	5.4	Whitley	3.2
	Perry	4.4	Montgomery	3.0
	Greenup	4.4	Boyle	2.8
50,000 - OVER	Daviess	22.1	Daviess	13.8
	Campbell	21.6	Oldham	12.7
	Christian	21.5	Pulaski	12.6
	Hardin	21.3	Bullitt	10.5
	Pulaski	21.1		9.9
	rayette Oldham	19.0	Campbell	9.3
	Warren	10.0	Warren	0.0
	Boone	13.8	McCracken	5.0
	Madison	13.6	Boone	4.2
	McCracken	13.3	Fayette	3.8
	Bullitt	10.8	Madison	3.7
	Kenton	9.0	Jefferson	3.5
	Jefferson	7.3	Kenton	3.1
	Pike	3.4	Pike	2.0

TABLE 37. MOVING SPEED DATA FOR VARIOUS HIGHWAY TYPES (CARS)

	85 th PERCENTIL	E SPEED (MPH)
HIGHWAY TYPE AND SPEED LIMIT	BEFORE	AFTER
Rural		
Interstate		
65 mph before / 70 mph After	74.6	75.9
Parkway Four Lane		
65 mph before / 70 mph After	73.5	75.5
Parkway Two Lane		
55 mph	67.5	67.7
Four Lane (US Routes) Non-Interstate or Parkway 55 mph	63.9	65.3
Four Lane (KY Routes) Non-Interstate or Parkway 55 mph	65.7	65.6
Two Lane Full Width Shoulder 55 mph	65.2	65.7

TABLE 38. MOVING SPEED DATA FOR VARIOUS HIGHWAY TYPES (TRUCKS)

	85 th PERCENTIL	E SPEED (MPH)
HIGHWAY TYPE AND SPEED LIMIT	BEFORE	AFTER
Rural Interstate 65 mph before / 70 mph After	69.8	70.4
Parkway Four Lane 65 mph before / 70 mph After	69.5	70.7
Parkway Two Lane 55 mph	64.4	64.2
Four Lane (US Routes) Non-Interstate or Parkway 55 mph	62.6	63.1
Four Lane (KY Routes) Non-Interstate or Parkway 55 mph	62.7	61.7
Two Lane Full Width Shoulder 55 mph	62.4	61.8

TABLE 39. CRASH TREND ANALYSIS (2013 - 2017)

		Numl	ber in Vear		4-Year		2017 Percent
Crash Statistic	2013	2014	2015	2016 2	2013 - 2016	2017	Change*
Tatal Orach as	400.050	407 000	400.000	440 547	404.007		0.0
Total Grasnes	123,258	127,326	136,338	140,547	131,867	140,547	0.0
Fatal Crashes	590	612	694	763	665	763	14.7
Fatalities	638	672	761	834	726	834	14.9
Injury Crashes	22,868	22,958	23,803	25,004	23,658	25,004	5.7
Injuries	34 180	34 221	35 542	37 347	35 323	37 347	57
Fatal and Injury Crashes	23 458	23 570	24 407	25 767	24 323	25 767	5.0
	20,400	20,070	24,407	20,707	24,020	20,707	0.0
Licensed Drivers (Millions)	3.16	3.19	3.20	3.20	3.19	3.20	0.4
Registered vehicles (Millions)	3.40	3.83	3.80	3.89	3.75	3.89	3.7
Total Vehicle Miles (Billions)	47.054	47.972	48.761	49.196	48.246	49.196	2.0
Total Crash/100 MVM	262	265	280	286	273	286	4.6
Fatal Crash/100 MV/M	1 25	1 28	1 4 2	1 55	1 38	1 55	12.4
Fatalities/100 MV/M	1.20	1.20	1.42	1.00	1.00	1.00	12.4
	1.30	1.40	1.50	1.70	1.50	1.70	13.0
Injuries/100 MVM	73	/1	73	76	73	76	4.0
Speed Related Crashes	6,494	7,004	6,841	6,821	6,790	6,821	0.5
Speed Related Injury Crashes	1.865	1.846	1.878	1.979	1.892	1,979	4.6
Speed Related Fatal Crashes	99	108	131	113	113	113	0.0
Speed Convictions	55 061	19 579	47 605	17 699	40 722	17 699	4.1
Speed Convictions	55,001	40,570	47,005	47,000	49,755	47,000	-4.1
Alcohol Related Crashes	4 483	4 295	4 217	4 192	4 297	4 192	-24
Alcohol Related Injuny Crashes	1 502	1 432	1/18	1 363	1 451	1 363	6.1
Alcohol Related Estal Crashas	1,002	1,402	1,410	1,000	1,401	1,000	-0.1
Alconol Related Fatal Crashes	155	143	102	100	100	100	3.2
Alcohol Related Fatalities	163	156	175	171	166	171	3.0
DUI Filings	29,210	27,472	26,008	25,048	26,935	25,048	-7.0
DUI Convictions	18,030	16,208	14,443	13,642	15,581	13,642	-12.4
DUI Conviction Rate (Percent)**	86.0	85.7	83.7	80.8	84.0	80.8	-39
Number DUI Filings/Alcohol Related Fatality	179	176	149	146	163	146	-10.1
	4 5 4 0	4 550	4 000	4 774	4 077	1.011	40.0
Drug Related Crashes	1,540	1,558	1,838	1,771	1,677	1,844	10.0
Drug Related Injury Crashes	545	571	678	698	623	750	20.4
Drug Related Fatal Crashes	211	191	233	266	225	239	6.2
Pedestrian Related Crashes	1 066	1 053	1 096	1 094	1 077	1 094	16
Pedestrian Related Injuny Crashes	834	8/1	857	818	838	818	-2.4
Pedestrian Related Fistel Crashes	50	50	007	010	000	010	-2.4
Pedestrian Related Fatal Crashes	53	58	68	84	00	84	27.3
Bicycle/Motor Vehicle Related Crashes	495	462	405	410	443	410	-7.4
Bicycle Related Injury Crashes	348	312	276	255	298	255	-14.4
Bicycle Related Fatal Crashes	3	3	7	9	6	9	50.0
Matanuala Dalata d Orach as	4 000	4 050	4 707	4 705	4 745	4 705	4.4
Motorcycle Related Grasnes	1,689	1,658	1,727	1,785	1,715	1,785	4.1
Motorcycle Related Injury Crashes	1,248	1,269	1,272	1,377	1,292	1,377	6.6
Motorcycle Related Fatal Crashes	83	74	86	105	87	105	20.7
School Bus Crashes	813	564	852	750	745	570	-23.5
School Bus Injury Crashes	95	107	103	85	QR	60	-38.8
School Bus Estal Craches	30	107	100	00		00	100.0
School Dus Falai Clashes	1	3	3	3	3	U	-100.0
Truck Crashes	7,904	8,664	9,196	9,380	8,786	9,380	6.8
Truck Injury Crashes	1.250	1.261	1.396	1.352	1.315	1.352	2.8
Truck Fatal Crashes	72	67	90	93	81	93	14.8
Train Orachan			47	40	10		10.0
	39	55	47	42	46	41	-10.9
I rain injury Crashes	12	13	17	11	13	14	7.7
Train Fatal Crashes	4	5	3	2	4	3	-25.0

* Percent change from 2013-2016 average to 2017. ** Conviction rate excludes pending cases.

TABLE 40. NUMBER	OF CRASHES	S AND RATES BY	CRASH TYPE FOR	R EACH COUNTY

	PEDESTRI CRASHE	AN S	BICYCLE CRASHES		MOTORCY CRASHE	CLE ES	SCHOOL B CRASHES	US S	TRUCK CRASHE	s
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Adair	6	0.6	6	0.6	14	1.5	2	0.2	109	11.7
Allen	13	1.3	1	0.1	32	3.2	4	0.4	184	18.4
Anderson	8	0.7	2	0.2	39	3.6	14	1.3	174	16.2
Ballard	3	0.7	0	0.0	15	3.6	3	0.7	158	38.3
Barren	25	1.2	5	0.2	88	4.2	12	0.6	533	25.3
Bath	6	1.0	1	0.2	13	2.2	10	1.7	83	14.3
Bell	31	2.2	20	1.4	57	4.0	32	2.2	213	14.8
Boone	151	2.5	43	0.7	326	5.5	310	5.2	2667	44.9
Bourbon	14	1.4	6	0.6	51	5.1	16	1.6	231	23.1
Boyd	61	2.5	26	1.0	114	4.6	30	1.2	460	18.6
Boyle	31	2.2	16	1.1	52	3.7	22	1.5	250	17.6
Bracken	1	0.2	1	0.2	25	5.9	7	1.6	100	23.6
Breathitt	17	2.4	1	0.1	24	3.5	10	1.4	58	8.4
Breckinridge	6	0.6	2	0.2	26	2.6	6	0.6	94	9.4
Bullitt	62	1.7	17	0.5	170	4.6	59	1.6	1195	32.2
Butler	4	0.6	I T	0.2	22	3.5	5	0.8	128	20.2
Caldwell	15	2.3	5 25	0.8	39	6.0 2.0	11	1./	212	32.7
Calloway	35	1.9	25	1.3	/3	3.9	18	1.0	309	10.0
Campbell	18/	4.1	58	1.5	165	3.1 4.2	51	1.1	824	18.2
Carnisle	0	0.0	2	0.8	11	4.5	I	0.4	40	18.0
Carton	9	1.7	2	0.4	20	4.0	8	1.1	244	17.6
Caner	14	0.4	1	0.1	42	5.0	0	0.0	244	17.0
Casey	5	0.4	2	0.5	14	1.0	1	1.0	771	20.0
Clark	38	2.1	0	0.8	74	4.5	50	3.3	307	20.9
Clay	22	2.1	2	0.2	44	4.0	23	2.1	103	9.5
Clinton	1	0.2	0	0.0	14	4.0 2.7	0	0.0	63	12.3
Crittenden	5	1.1	1	0.0	35	2.7	1	0.2	105	22.5
Cumberland	7	2.0	1	0.2	18	53	1	0.2	44	12.8
Daviess	109	2.3	102	2.1	239	4.9	104	2.2	933	19.3
Edmonson	3	0.5	0	0.0	14	2.3	7	1.2	64	10.5
Elliott	3	0.8	0	0.0	10	2.5	0	0.0	21	5.3
Estill	7	1.0	2	0.3	14	1.9	3	0.4	26	3.5
Fayette	791	5.3	363	2.5	595	4.0	208	1.4	3608	24.4
Fleming	7	1.0	0	0.0	15	2.1	9	1.3	102	14.2
Floyd	32	1.6	3	0.2	56	2.8	61	3.1	231	11.7
Franklin	50	2.0	14	0.6	87	3.5	35	1.4	474	19.2
Fulton	2	0.6	2	0.6	8	2.3	1	0.3	66	19.4
Gallatin	3	0.7	2	0.5	31	7.2	5	1.2	371	86.4
Garrard	8	0.9	3	0.4	20	2.4	9	1.1	127	15.0
Grant	16	1.3	1	0.1	65	5.3	16	1.3	344	27.9
Graves	33	1.8	10	0.5	80	4.3	13	0.7	322	17.3
Grayson	15	1.2	3	0.2	58	4.5	10	0.8	264	20.5
Green	7	1.2	2	0.4	13	2.3	8	1.4	71	12.6
Greenup	14	0.8	5	0.3	46	2.5	15	0.8	151	8.2
Hancock	2	0.5	1	0.2	16	3.7	4	0.9	94	21.9
Hardin	83	1.6	33	0.6	271	5.1	83	1.6	1339	25.4
Harlan	29	2.0	5	0.3	41	2.8	22	1.5	147	10.0
Harrison	18	1.9	6	0.6	32	3.4	12	1.3	136	14.4
Hart	10	1.1	1	0.1	25	2.7	3	0.3	622	68.4
Henderson	55	2.4	35	1.5	104	4.5	34	1.5	612	26.5
Henry	9	1.2	1	0.1	27	3.5	5	0.6	441	57.2
Hickman	0	0.0	0	0.0	12	4.9	0	0.0	47	19.2
Hopkins	34	1.4	15	0.6	86	3.7	15	0.6	473	20.2
Jackson	5	0.7	1	0.1	25	3.7	2	0.3	63	9.3
Jefferson	2078	5.6	791	2.1	1586	4.3	1357	3.7	9899	26.7
Jessamine	47	1.9	15	0.6	96	4.0	64	2.6	433	17.8
Johnson	21	1.8	8	0.7	26	2.2	7	0.6	106	9.1
Kenton	305	3.8	106	1.3	268	3.4	160	2.0	2329	29.2
Knott	3	0.4	0	0.0	27	3.3	11	1.3	82	10.0

TABLE 40. NUMBER	OF CRASHES AND RATES BY	CRASH TYPE FOR EACH COUNTY (continued)	

	PEDESTF CRASH	RIAN ES	BICYCL CRASHE	E S	MOTORC CRASH	CYCLE HES	SCHOOL CRASH	. BUS IES	TRUC CRASH	K ES
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Knox	19	1.2	10	0.6	52	3.3	24	1.5	200	12.5
Larue	9	1.3	1	0.1	20	2.8	3	0.4	186	26.2
Laurel	37	1.3	14	0.5	101	3.4	30	1.0	780	26.5
Lawrence	3	0.4	2	0.3	31	3.9	7	0.9	94	11.9
Lee	4	1.0	0	0.0	2	0.5	9	2.3	26	6.6
Leslie	3	0.5	0	0.0	6	1.1	1	0.2	33	5.8
Letcher	15	1.2	0	0.0	35	2.9	12	1.0	152	12.4
Lewis	3	0.4	0	0.0	10	1.4	12	1.7	82	11.8
Lincoln	14	1.1	1	0.1	34	2.7	8	0.6	126	10.2
Livingston	6	1.3	2	0.4	26	5.5	6	1.3	92	19.3
Logan	9	0.7	8	0.6	41	3.1	9	0.7	268	20.0
Lyon	3	0.7	0	0.0	31	7.5	2	0.5	241	58.0
McCracken	73	2.2	47	1.4	212	6.5	41	1.3	783	23.9
McCreary	13	1.4	2	0.2	19	2.1	6	0.7	72	7.9
Mediaar	/	1.5	0	0.0	18	3.8	5	1.0	141	29.0
Magaffin	89	2.1	37	0.9	180	4.5	04	1.5	1031	24.9
Magonini	5	0.8	0	0.0	14	4.2	11	1.7	49	1.4
Marion	15	1.5	2	0.2	43	4.5	/	0.7	180	10.0
Marshan	18	1.0	8	0.4	7	4.9	9	0.0	412	6.3
Mason		2.9	4	0.0	36	4.1	12	1.4	190	21.7
Meade	11	0.8	- 1	0.5	43	3.0	12	0.3	115	8.0
Menifee	0	0.0	0	0.0	45	4.4	4	0.0	23	7.3
Mercer	15	1.4	3	0.0	31	2.9	15	1.4	146	13.7
Metcalfe	4	0.8	1	0.2	19	3.8	3	0.6	118	23.4
Monroe	1	0.2	0	0.0	4	0.7	2	0.4	33	6.0
Montgomery	24	1.8	2	0.2	43	3.2	40	3.0	297	22.4
Morgan	6	0.9	0	0.0	10	1.4	10	1.4	50	7.2
Muhlenberg	16	1.0	3	0.2	62	3.9	12	0.8	345	21.9
Nelson	18	0.8	15	0.7	89	4.1	15	0.7	429	19.8
Nicholas	4	1.1	0	0.0	10	2.8	3	0.8	51	14.3
Ohio	8	0.7	3	0.3	54	4.5	6	0.5	287	24.1
Oldham	23	0.8	21	0.7	65	2.2	58	1.9	642	21.3
Owen	4	0.7	0	0.0	22	4.1	11	2.0	71	13.1
Owsley	2	0.8	1	0.4	11	4.6	2	0.8	22	9.3
Pendleton	5	0.7	2	0.3	48	6.5	9	1.2	105	14.1
Perry	24	1.7	1	0.1	57	4.0	26	1.8	215	15.0
Pike	58	1.8	8	0.2	116	3.6	35	1.1	498	15.3
Powell	10	1.6	1	0.2	41	6.5	7	1.1	99	15.7
Pulaski	40	1.3	12	0.4	115	3.6	34	1.1	532	16.9
Robertson	0	0.0	0	0.0	5	4.4	0	0.0	6	5.3
Rockcastle	11	1.3	2	0.2	42	4.9	4	0.5	479	56.2
Rowan	26	2.2	9	0.8	69	5.9	14	1.2	270	23.1
Russell	7	0.8	0	0.0	30	3.4	8	0.9	128	14.6
Scott	63	2.7	11	0.5	98	4.2	41	1.7	766	32.5
Shelby	36	1.7	15	0.7	89	4.2	42	2.0	612	29.1
Simpson	15	1./	4	0.5	38 24	4.4	11	1.5	499	57.0
Spencer	0	0.7	0	0.0	54	4.0	9	1.1	15	8.8 12.6
Taylor	28	2.5	0	0.5	25	4.7	9	0.7	107	13.0
Triag	1	0.2	3	0.3	23	4.0	2	0.3	110	25.2
Trimble	0 5	1.1	ے 1	0.5	49	6.0 6.4	<u></u> Д	0.5	52	11.8
Union	3 7	0.0	і Л	0.2	28 27	3.6	4	1.2	130	17.3
Warren	129	23	+ 88	1.5	27	2.0 4.6	71	1.2	1275	22.4
Washington	129	0.9	2	0.3	16	+.0 2 7	6	1.2	1275	22.4
Wayne	10	1.0	5	0.5	10	1.8	10	1.0	135	11.5
Webster	1	0.1	1	0.1	20	2.9	7	1.0	140	20.6
Whitley	34	1.9	6	0.3	20 96	5.4	29	1.6	439	24.6
Wolfe	4	1.1	2	0.5	13	3.5		0.3	47	12.8
Woodford	25	2.0	9	0.7	64	5.1	25	2.0	398	31.9

* Five-Year (2013-2017) Total.

** Rates are annual crashes per 10,000 population.

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
					000-34 888
COUNTY POPULA Cumberland McLean Livingston Crittenden Trimble Nicholas Wolfe Lee Elliott Owsley Ballard Lyon Gallatin Fulton Hancock Bracken Menifee Carlisle Hickman Robertson POPULA Breathitt Caldwell Carroll Powell Larue Green Trigg Fleming Estill Bath Morgan Washington Magoffin Metcalfe Jackson Pendleton Owen Butler Martin Edmonson Leslie Lewis Monroe Todd Clinton Webster	TION CATEGORY 1 7 7 6 5 4 4 4 3 2 3 3 3 2 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PER 10,000 POP.) JNDER 10,000 2.0 1.5 1.3 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.0 0.8 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 1.1 1.1 1.1 1.1 1.1 1.1 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.1 1.0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.1 1.1	COUNTY POPULATI Mason Taylor Rowan Woodford Clay Harrison Johnson Simpson Marion Mercer McCreary Bourbon Allen Grant Rockcastle Henry Letcher Lincoln Hart Wayne Garrard Union Russell Spencer Ohio Anderson Adair Breckinridge Casey Lawrence Knott POPULATI Scott Boyle Bell Clark Franklin Harlan Jessamine Whitley Calloway Graves Montgomery Shelby Perry Floyd Hopkins Knox Barren Grayson Marshall Carter Muhlenberg Meade Nelson Greenup Logan POPULATI Scott Boyle Bell Clark Franklin Harlan Jessamine Whitley Calloway Graves Montgomery Shelby Perry Floyd Hopkins Knox Barren Grayson Marshall Carter Muhlenberg Meade Nelson Greenup Logan POPULATI Jefferson Fayette Campbell Kenton Boone Warren Daviess McCracken Maison Pike Bullitt Hardin Christian Pulaski	NUMBER OF CRASHES ON CATEGORY 15 25 28 26 25 22 18 21 15 15 15 13 14 13 16 11 9 15 14 10 10 8 7 7 6 8 8 8 6 6 3 3 3 0N CATEGORY 25 63 61 55 31 31 31 38 60 6 3 3 3 0 N CATEGORY 25 63 61 55 31 31 31 38 61 55 31 31 31 38 50 29 47 34 35 33 24 36 24 32 34 36 24 32 34 36 24 32 34 19 25 15 16 14 10 10 8 7 7 6 8 8 8 6 6 15 55 31 31 31 31 31 31 38 50 29 47 34 35 33 24 36 24 32 34 19 25 15 16 14 10 10 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 6 8 8 8 7 7 7 8 9 15 15 11 13 13 13 13 13 13 13 15 11 11 10 8 7 7 7 6 8 8 8 5 5 31 31 31 31 32 8 9 7 7 7 8 9 7 7 7 8 9 7 7 8 9 7 7 7 8 9 7 7 7 8 9 7 7 7 8 9 7 7 7 8 8 8 8	/err 50,000 PER 10,000 POP.) ,000-24,9999 2.9 2.2 2.0 2.0 1.9 1.8 1.7 1.5 1.4 1.4 1.4 1.3 1.3 1.3 1.3 1.3 1.3 1.2 1.2 1.1 1.1 1.1 1.0 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0
		11	Öldham	ž3	0.8

TABLE 41. PEDESTRIAN CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)(ALL ROADS)

TABLE 42. PEDESTRIAN CRASH RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

	NUMBER OF	AN CRASH	INUAL RATE
CITY	CRASHES		
	(2013-2017)		
POPULATIO	N CATEGORY	OVER 200,000	6.2
Louisville	791		0.2 5.3
POPULATIC	N CATEGORY	20.000-60000	0.0
Covington	174	-,	8.6
Florence	89		5.9
Ashland	52		4.8
Bowling Green	51 107		4.1
Henderson	51		3.5
Owensboro	100		3.5
Richmond	51		3.3
Frankfort	39		3.1
Radcliff	40 31		3.U 2.9
Nicholasville	39		2.8
Jeffersontown	33		2.5
Hopkinsville	38		2.4
Elizabethtown	34		2.4
		10 000-10 000	1.3
Shively	107	10,000-13,333	14.0
Newport	87		11.4
Shepherdsville	30		5.3
Somerset	27		4.8
Danville	21		4.Z 3.5
Winchester	30		3.3
Murray	29		3.3
Shelbyville	23		3.3
Erlanger	30		3.3
Berea	10		2.0
Madisonville	22		2.2
Bardstown	11		1.9
Lawrenceburg	8		1.5
			1.3
Bellevue	20	1 5,000-9,999	67
Campbellsville	25		5.5
Morehead	18		5.3
Dayton	14		5.2
Cynthiana	10		5.2 5.0
Mavsville	21		4.7
Mount Sterling	15		4.4
Highland Heights	15		4.3
Elsmere	17		4.0
Princeton	12		3.8
Williamsburg	10		3.8
Fort Wright	11		3.8
Versailles	16		3.7
Corbin	10		3.4 3.3
Paris	14		3.3
La Grange	13		3.2
Leitchfield	10		3.0
Franklin	12		2.9
Fort Mitchell	11		2.0
Monticello	8		2.6
Harrodsburg	10		2.4
Alexandria	10		2.4
Russellville	8		2.3
Edgewood	b g		∠.0 1 9
Flatwoods	6		1.6
Mount Washington	3		0.7
Taylor Mill	2		0.6
	1		0.3

CITY	NUMBER OF CRASHES (2013-2017)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	
CITY POPU Prestonsburg Hazard Paintsville Grayson Barbourville Southgate Lancaster Ludlow Scottsville Flemingsburg Lakeside Park Dawson Springs Benton	(2013-2017) (2013-2017) 13 17 12 10 7 8 7 8 7 8 7 4 4 4 4 4	10,000 POPULATION) ORY 2,500-4,999 8.0 7.6 6.9 4.7 4.4 4.2 4.1 3.6 3.3 3.0 3.0 2.9 2.8	
Hodgenville Springfield Stanford Carrollton Park Hills Marion Greenville Russell Irvine Stanton Vine Grove Wilmore Columbia Calvert City Hartford Morganfield	4 3 4 3 3 4 3 2 2 3 2 2 1 1 1	2.5 2.4 2.3 2.0 2.0 2.0 1.9 1.8 1.5 1.5 1.5 1.5 1.3 0.9 0.8 0.7 0.6	

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
ΡΟΡυί ΑΤ	ION CATEGORY UI	NDFR 10.000		N CATEGORY 15.000-	
POPULAT Carlisle Fulton Wolfe Gallatin Livingston Owsley Cumberland Hancock Trimble Crittenden Bracken Lyon Elliott Nicholas McLean Menifee Ballard Hickman Lee Robertson POPULAT Caldwell Todd Carroll Green Trigg Washington Estill Pendleton Metcalfe Butler Bath Powell Webster Breathitt Larue Jackson Magoffin Lewis Edmonson Leslie Morgan Monroe Owen Fleming Clinton Martin	ION CATEGORY UI	NDER 10,000 0.8 0.5 0.4 0.4 0.2 0.2 0.2 0.2 0.0 0.0 0.0 0.0	POPULATIC Rowan Woodford Johnson Harrison Adair Bourbon Taylor Union Mason Simpson Wayne Garrard Mercer Ohio Lawrence Casey Breckinridge Anderson McCreary Clay Marion Rockcastle Grant Lincoln Hart Allen Henry Spencer Knott Letcher Russell Calloway Boyle Boyd Shelby Nelson Logan Hopkins Jessamine Knox Franklin Scott Clark Graves Marshall Greenup Harlan Whitley Muhlenberg Grayson Floyd Barren Montgomery Perry Carter Meade POPULATIC Fayette Jefferson Daviess Warren McCracken Kenton Campbell Madison Christian Boone Oldham Hardin Bullitt Laurel Pulaski Pike	DN CATEGORY 15,000- 9 9 8 6 6 6 4 4 4 4 5 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	24,999 0.8 0.7 0.7 0.6 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

TABLE 43. BICYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)

TABLE 44. BICYCLE CRASH RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

	NUMBER OF	Al CRASH	NNUAL I RATE
	CRASHES	(CRASHE	SPER
	(2013-2017)	10,000 POPUL	ATION)
POPULATIC	N CATEGORY	OVER 200,000	25
Louisville	710		2.5
POPULATIO	ON CATEGORY	20,000-60000	
Covington	70		3.4
Paducah	93 38		3.2 3.0
Bowling Green	82		2.8
Ashland	25		2.3
Henderson	32		2.2
Hopkinsville	26		1.6
Florence	23		1.5
Jeffersontown	16		1.2
Nicholasville	10		0.9
Frankfort	12		0.9
Radcliff	10		0.9
Independence	10		0.7
POPULATIO	ON CATEGORY	10,000-19,999	0.0
Newport	34		4.5
Murray	24		2.6
Bardstown	12		2.1
Shepherdsville	11		2.0
Sneibyville Danville	13		1.9
Mayfield	9		1.8
Madisonville	13		1.3
Somerset	6		1.1
Winchester	8		0.9
Berea	5		0.7
Glasgow	4		0.6
Fort Thomas	2		0.2
POPULAT	ON CATEGOR	Y 5,000-9,999	
Alexandria	8		1.9
Monticello	5		1.6
Morehead	5		1.5
Elsmere	6		1.4
Bellevue	4		1.4
Princeton	4		1.3
Pikeville	4		1.2
Cvnthiana	4		1.2
La Grange	5		1.2
Williamsburg	3		1.1
Paris	4		0.9
Highland Heights	3		0.9
Corbin	3		0.8
Lebanon	3		0.7
Maysville	3		0.7
Central City	2		0.7
Edgewood	2		0.6
Harrodsburg	2		0.5
Dayton	1		0.4
Flatwoods	1		0.3
Taylor Mill	1		0.3
Villa Hills	1		0.3
Fort Mitchell	1		0.2

CITY	NUMBER OF CRASHES (2013-2017)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPU	LATION CATEG	ORY 2,500-4,999
Paintsville	7	4.0
Ludiow	5	2.3
Columbia	4	1.8
Beaver Dam	3	1.8
Springfield	2	1.6
Benton	23	1.4
Vine Grove	3	1.3
Prestonsburg	2	1.2
Morgantield	2	1.2
Southgate	2	1.1
Carrollton	2	1.0
Calvert City	1	0.8
Stanton	1	0.7
Williamstown	1	0.5
Scottsville	1	0.5
vviimore	1	0.5

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULAT	ION CATEGORY U	NDER 10.000	POPULATIO	ON CATEGORY 15.0	00-24.999
POPULAT Lyon Crittenden Gallatin Trimble Bracken Livingston Cumberland Hickman Owsley Menifee Robertson Carlisle McLean Hancock Ballard Wolfe Nicholas Elliott Fulton Lee POPULAT Trigg Pendleton Powell Caldwell Carroll Owen Todd Metcalfe Jackson Butler Breathitt Webster Larue Clinton Washington Edmonson Green Bath Magoffin Fleming Estill Lewis Morgan Leslie Martin Monroe	TON CATEGORY U 31 35 31 28 25 26 18 12 11 14 5 11 18 16 15 13 10 10 8 2 20 14 16 14 13 13 12 25 22 24 20 20 14 16 14 15 13 10 10 8 22 25 22 24 20 20 14 16 14 15 13 10 10 8 22 25 22 24 20 20 14 16 17 17 48 41 39 26 22 24 20 20 14 16 17 17 48 41 39 26 27 27 27 27 27 27 27 27 27 27	NDER 10,000 7.5 7.2 6.4 5.5 5.3 4.9 4.4 4.4 4.3 3.8 7.3 5.2 2.3 0 0,000-14,999 6.5 6.0 4.8 4.1 4.0 3.8 7.3 5.2 2.3 0 8.5 6.5 6.0 4.8 4.1 4.0 3.8 7.3 5.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.3 2.9 2.2 7.2 3.2 2.2 1.1 1.9 1.4 1.1 1.0 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	POPULATIC Rowan Grant Woodford Bourbon Rockcastle Taylor Ohio Simpson Mason Spencer Clay Lawrence Anderson Union Henry Harrison Russell Knott Allen Letcher Mercer Hart Lincoln Breckinridge Garrard Johnson McCreary Casey Wayne Adair POPULATIC Whitley Marshall Boyd Grayson Henderson Graves Scott Barren Shelby Clark Nelson Jessamine Bell Perry Calloway Muhlenberg Boyle Hopkins Franklin Knox Montgomery Logan Meade Carter Harlan Floyd Greenup POPULATIC McCracken Boone Hardin Daviess Warren Bullitt Christian Madison Jefferson Fayette Campbell Pike Pulaski Kenton Laurel Oldham	DN CATEGORY 15,0 69 65 64 51 42 57 54 38 43 36 34 44 31 39 27 32 30 27 32 30 27 32 30 27 32 30 27 32 30 27 32 30 27 32 30 27 32 30 27 32 34 26 20 26 19 14 19 14 19 14 19 14 19 14 19 14 19 14 19 14 19 14 19 14 19 96 57 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 57 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 57 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 557 73 62 52 86 87 559 165 116 115 268 101 65	00-24,999 5.9 5.1 5.1 4.9 4.7 4.5 4.4 4.3 4.1 4.0 4.0 3.9 3.6 3.5 3.4 3.4 3.4 3.3 3.2 2.9 2.9 2.7 2.7 2.6 2.4 2.2 1.8 1.8 1.5 1.5 4.9 4.6 4.5 4.5 4.3 3.3 3.2 2.9 2.9 2.7 2.7 2.6 4.9 4.6 4.5 4.5 4.3 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2

TABLE 45. MOTORCYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)

TABLE 46. MOTORCYCLE CRASH RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

CITY	NUMBER OF CRASHES (2013-2017)	A CRASI (CRASHI 10.000 POPUL	NNUAL H RATE ES PER ATION)
	(/	-,	- /
POPULATIO	N CATEGORY	OVER 200,000	
Louisville	1,405		4.7
Lexington	595		4.0
POPULATIC	IN CATEGORY	20,000-60000	
Paducah	103		8.2
Florence	105		7.0
Radcliff	72		6.6
Elizabethtown	89		6.2
Bowling Green	167		5.8
Owensboro	156		54
Richmond	81		5.2
Ashland	56		5.2
Honkinsville	77		1 9
Henderson	66		4.6
Frankfort	50		30
Nicholasville	52		3.5
Covington	72		3.7
Correctown	50		3.5
Indopondonco	34		3.4 2.7
loffereentewn	0 4 04		2.1
		10 000 10 000	2.3
Shively		10,000-19,999	10.4
Silively	/9		10.4
Southerset	49		0.0 7 0
Snepherasville	44		7.8
Bardstown	35		6.0
Newport	39		5.1
Erlanger	41		4.5
Berea	28		4.1
Danville	32		3.9
Shelbyville	26		3.7
Glasgow	26		3.7
Winchester	31		3.4
Murray	29		3.3
Madisonville	32		3.3
Mayfield	16		3.2
Lawrenceburg	16		3.0
Fort Thomas	13		1.6
POPULATI	ON CATEGOR	Y 5,000-9,999	
Pikeville	32		9.3
London	34		8.5
Fort Wright	22		7.7
Campbellsville	29		6.4
Princeton	19		6.0
Corbin	21		5.8
Morehead	20		5.8
Leitchfield	19		5.7
Cold Spring	15		5.1
Lebanon	14		5.1
Franklin	21		5.0
Mount Sterling	17		4.9
Mount Washington	22		4.8
Central City	14		4.7
Williamsburg	11		4.2
Versailles	17		4.0
Alexandria	16		3.8
Paris	16		3.7
Tavlor Mill	12		3.6
Harrodsburg	15		3.6
Cynthiana	11		3.4
Maysville	15		3.3
Fort Mitchell	13		3.2
Russellville	11		32
La Grande	12		30
Highland Heights	10		29
Monticello	10		2.0
Rellevue	2 8		2.5
Edgewood	0		1 /
Villa Hille	0 5		1 2
Davton	2		1.0
Elsmere	5		0.9
Flatwoods	7 2		0.8
	0		0.0

CITY	NUMBER OF CRASHES (2013-2017)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	
		ORV 2 500 4 000	
POPUI Hazard Prestonsburg Russell Calvert City Hartford Scottsville Barbourville Benton Paintsville Stanford Stanton Southgate Marion Lancaster Flemingsburg Greenville Williamstown Beaver Dam Springfield Lakeside Park Irvine Dawson Springs Columbia Hodgenville Grayson Morganfield Vine Grove Ludlow Park Hills	ATION CATEG 31 15 14 10 9 13 9 12 9 7 7 8 6 9 7 8 6 9 7 8 6 9 8 7 5 4 4 4 4 5 3 4 4 5 3 4 3 2 2	DRY 2,500-4,999 13.9 9.2 8.3 7.8 6.7 6.2 5.7 5.2 5.2 5.1 4.7 4.6 4.6 4.6 4.5 4.2 4.1 4.1 4.0 3.0 2.9 2.9 2.9 2.7 2.5 2.4 1.8 1.8 1.4 1.3	
FIONIGENCE	Z	1.3	

	NUMBER OF	ANNUAL CRASH RATE (CRASHES		NUMBER OF	ANNUAL CRASH RATE (CRASHES
COUNTY	CRASHES	PER 10,000 POP.)	COUNTY	CRASHES	<u>PER 10,000 P</u> OP.)
COUNTY POPULAT Lee Bracken Livingston Gallatin McLean Hancock Trimble Nicholas Owsley Ballard Lyon Carlisle Wolfe Cumberland Fulton Crittenden Menifee Elliott Hickman Robertson POPULAT Owen Lewis Caldwell Bath Magoffin Morgan Breathitt Green Fleming Pendleton Edmonson Carroll Powell Webster Washington Martin Butler Metcalfe Larue Monroe Estill Jackson Trigg Todd Leslie Clinton	NUMBER OF CRASHES FION CATEGORY U 9 7 6 5 4 4 4 3 2 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.) INDER 10,000 2.3 1.6 1.3 1.2 1.0 0.9 0.9 0.9 0.9 0.8 0.8 0.7 0.5 0.4 0.3 0.3 0.3 0.3 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	COUNTY POPULATIC Clay Woodford Bourbon Mason Mercer Simpson Grant Harrison Knott Anderson Union Rowan Spencer Garrard Wayne Letcher Lawrence Russell McCreary Marion Taylor Johnson Breckinridge Lincoln Henry Rockcastle Ohio Allen Hart Adair Casey POPULATIC Clark Floyd Montgomery Jessamine Bell Shelby Perry Scott Whitley Henderson Harlan Knox Boyle Franklin Boyd Calloway Greenup Muhlenberg Grayson Graves	NUMBER OF CRASHES DN CATEGORY 15,0 23 25 16 12 15 11 16 12 11 14 9 9 10 12 7 8 6 7 9 9 10 12 7 8 6 8 5 4 6 4 3 2 2 5 9 6 1 40 6 4 3 2 2 5 9 6 1 40 6 4 3 2 2 5 9 6 1 40 6 4 3 2 2 5 9 5 9 6 1 40 6 4 3 2 2 5 9 5 9 6 1 40 6 4 3 2 2 5 9 10 12 7 5 9 5 7 6 8 8 5 4 6 6 4 3 2 2 5 9 7 6 8 8 5 4 6 6 4 3 2 2 5 9 7 6 8 8 5 4 6 6 7 9 9 7 6 8 8 5 4 6 6 7 9 9 7 6 8 8 5 4 6 6 7 9 9 7 6 8 8 5 4 6 6 7 9 9 7 6 8 8 5 4 6 6 8 5 7 7 9 9 7 6 8 8 5 4 6 6 8 5 7 7 9 7 6 8 8 5 4 4 6 7 7 9 7 6 8 8 5 4 4 6 8 5 7 7 9 7 6 8 8 5 4 4 6 8 5 5 9 6 1 4 9 2 7 7 6 8 8 5 4 4 6 8 5 5 9 6 1 4 9 9 7 7 6 8 8 5 4 4 6 8 5 9 7 7 6 8 8 5 5 9 6 1 4 9 7 7 6 8 8 5 5 9 6 1 4 0 8 5 7 8 6 1 4 0 8 5 5 9 6 1 4 0 8 5 5 9 6 1 4 0 8 5 5 9 6 1 4 0 8 5 5 9 8 5 9 8 1 4 1 2 5 9 8 1 4 1 2 2 1 2 5 0 8 5 1 3 1 1 2 1 2 5 9 8 1 1 2 1 2 5 0 8 1 1 2 1 1 2 5 1 1 1 1 2 5 1 1 1 1 1 1 2 1 1 1 1	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.) 00-24,999 2.1 2.0 1.6 1.4 1.4 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3
Leslie Clinton	1 0	0.2 0.0	Franklin Boyd Calloway Greenup Muhlenberg Grayson Graves Nelson Logan Marshall Carter Hopkins Barren Meade	325 30 18 15 12 10 13 15 9 9 8 15 12 4	1.4 1.2 1.0 0.8 0.8 0.8 0.7 0.7 0.7 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.3
		83	Boone Jefferson Daviess Kenton Oldham Hardin Bullitt Madison Fayette McCracken Warren Pike Pulaski Campbell Christian Laurel	310 1,357 104 160 58 83 59 64 208 41 71 35 34 51 38 30	5.2 3.7 2.2 2.0 1.9 1.6 1.6 1.5 1.4 1.3 1.2 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1

TABLE 47. SCHOOL BUS CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)

TABLE 48. SCHOOL BUS CRASH RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2013-2017)

	NUMBER OF	A CRASI	NNUAL H RATE
CITY	(2013-2017)	10,000 POPUL	ATION)
POPULATIO	N CATEGORY	OVER 200.000	
Louisville	1,200		4.0
		20,000,60000	1.4
Florence	72	20,000-60000	48
Nicholasville	48		3.4
Independence	34		2.7
Owensboro	/2		2.5
Jeffersontown	31		2.4
Georgetown	29		2.0
Radcliff	21		1.9
Covington	36		1.8
Paducah	23		1.8
Henderson	25		1.7
Elizabethtown	22		1.5
Hopkinsville Bowling Green	23		1.5
Ashland	8		0.7
POPULATIC	N CATEGORY	10,000-19,999	••••
Shively	57		7.5
Snepherdsville	23		4.1 3.8
Somerset	21		3.8
Shelbyville	19		2.7
Danville	15		1.8
Bardstown	15		1.7
Erlanger	14		1.5
Lawrenceburg	7		1.3
Berea	9		1.3
Glasgow	6		0.9
Fort Thomas	7		0.9
Madisonville	6		0.6
	ON CATEGOR	V 5 000-0 000	0.4
Versailles	18	1 0,000 0,000	4.2
Edgewood	16		3.7
Pikeville	12		3.5
Mount Sterling	14		3.3
Cynthiana	9		2.8
Paris	12		2.8
Corbin	10		2.7
Harrodsburg	10		2.3
Villa Hills	9		2.4
Maysville	10		2.2
Fort Wright	05		1.9
Monticello	5		1.6
La Grange	6		1.5
Williamsburg	4		1.5
Princeton	4		1.3
Campbellsville	6		1.3
Taylor Mill	4		1.2
Dayton Central City	ა კ		1.1
Leitchfield	3		0.9
Morehead	3		0.9
Russellville	3		0.9
Lebanon	3		0.0
Highland Heights	2		0.6
Elsmere	2		0.5
Bellevue Fort Mitchell	1		0.3
	I		0.2

ANNUAL NUMBER OF CRASHES (CRASHES PER (2013-2017)CRASHES (CRASHES PER 10,000 POPULATION)POPULATION CATEGORY 2,500-4,999Prestonsburg14POPULATION CATEGORY 2,500-4,999Prestonsburg64.5Springfield443.2Hazard773.1Vine Grove73.1Lakeside Park442.9Carrollton5Stanton42.5Barbourville4						
POPULATION CATEGORY 2,500-4,999 Prestonsburg 14 8.6 Flemingsburg 6 4.5 Springfield 4 3.2 Hazard 7 3.1 Vine Grove 7 3.1 Lakeside Park 4 3.0 Stanton 4 2.9 Carrollton 5 2.5 Barbourville 4 2.5	CITY	NUMBER OF CRASHES (2013-2017)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)			
Prestonsburg 14 8.6 Flemingsburg 6 4.5 Springfield 4 3.2 Hazard 7 3.1 Vine Grove 7 3.1 Lakeside Park 4 3.0 Stanton 4 2.9 Carrollton 5 2.5 Barbourville 4 2.5	POPULATION CATEGORY 2,500-4,999					
Hartford 3 2.2 Dawson Springs 2 1.4 Providence 2 1.3 Park Hills 2 1.3 Lancaster 2 1.2 Russell 2 1.2 Morganfield 2 1.2 Paintsville 2 1.2 Beaver Dam 2 1.2 Wilmore 2 1.1 Greenville 2 0.9 Grayson 2 0.9 Stanford 1 0.6 Scottsville 1 0.5	Prestonsburg Flemingsburg Springfield Hazard Vine Grove Lakeside Park Stanton Carrollton Barbourville Hartford Dawson Springs Providence Park Hills Lancaster Russell Morganfield Paintsville Beaver Dam Wilmore Greenville Grayson Stanford Scottsville	14 6 4 7 7 4 4 5 4 3 2 2 2 2 2 2 2 2 2 2 2 2 2 1 1	8.6 4.5 3.2 3.1 3.0 2.9 2.5 2.5 2.5 2.5 2.5 2.5 1.4 1.3 1.3 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2			

			,		
		ANNUAL CRASH RATE			ANNUAL CRASH RATE
COUNTY	NUMBER OF CRASHES	(CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	(CRASHES PER 10,000 POP.)
POPULA	TION CATEGORY L	JNDER 10.000	POPULATI	ON CATEGORY 15	,000-24,999
Gallatin	371	86.4	Hart	622	<u>68.4</u>
Lyon Ballard	241	58.0	Simpson	499	57.6
McLean	141	29.6	Rockcastle	479	56.2
Bracken	100	23.6	Woodford	398	31.9
Hancock	94	22.5 21.9	Ohio	344 287	27.9 24 1
Fulton	66	19.4	Rowan	270	23.1
Livingston	92 47	19.3 19.2	Bourbon Mason	231	23.1 21.7
Carlisle	46	18.0	Marion	186	18.8
Nicholas	51 47	14.3	Allen	184	18.4
Cumberland	44	12.8	Anderson	174	16.2
Trimble	52	11.8	Garrard	127	15.0
Menifee	23	7.3	Harrison	136	14.4
Lee	26	6.6	Mercer	146	13.7
Robertson	6	5.3	Casey	100	12.5
POPULA	TION CATEGORY 1	0,000-14,999	Letcher	152	12.4
Caldwell	212	32.7	Adair	109	11.5
Larue	186	26.2	Wayne	120	11.5
Metcalfe	118	23.2 23.4	Knott	82	10.2
Washington	133	22.7	Clay	103	9.5
Butler	140	20.6	Johnson	94 106	9.4 9.1
Todd	116	18.6	Spencer	75	8.8
Bath	83	14.3	POPULATI	ON CATEGORY 25	,000-50,000
Fleming	102	14.2	Scott	766	32.5
Owen	71	13.1	Henderson	612	29.1 26.5
Green	71	12.6	Marshall	412	26.2
Lewis	82	11.8	Whitley	439	23.3 24.6
Edmonson	64 63	10.5	Montgomery	297 307	22.4
Breathitt	58	8.4	Muhlenberg	345	22.3
Magoffin	49 50	7.4	Grayson	264 473	20.5
Martin	41	6.3	Logan	268	20.2
Monroe	33	6.0	Nelson	429	19.8
Estill	26	3.5	Boyd	460	18.6
			Jessamine	433	17.8
			Boyle	250	17.6
			Gráves	322	17.3
			Perry	215	15.0
			Bell Knox	213 200	14.8 12.5
			Floyd	231	11.7
			Harlan Greenup	147 151	10.0 8.2
			Meade	115	8.0
			Boone		/ER 50,000
			Bullitt	1,195	32.2
			Kenton	2,329	29.2
			Laurel	780	26.5
			Hardin Madison	1,339	25.4
			Fayette	3,608	24.4
			McCracken Warren	783 1 275	23.9
			Öldham	642	21.3
			Christian	771 033	20.9
			Campbell	824	18.2
		85	Pulaski Pike	532 498	16.9 15.3

TABLE 49. TRUCK CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013-2017)

		ANNUAL	<u> </u>		ANNUAL
		CRASH RATE			CRASH RATE
	NUMBER OF	(CRASHES PER		NUMBER OF	(CRASHES PER
COUNTY	CRASHES	10,000 POP.)	COUNTY	CRASHES	10,000 POP.)
		· · · · ·			
POPULATION	N CATEGORY UN	DER 10,000	POP	ULATION CATEGORY 15,000)-24,999 (cont.)
Carlisle	1	0.39	Harrison	1	0.11
Metcalfe	0	0.00	Anderson	1	0.09
Marion	0	0.00	Taylor	0	0.00
Livingston	0	0.00	Johnson	0	0.00
Crittenden	0	0.00	Rowan	0	0.00
Trimble	0	0.00	Clay	0	0.00
Gallatin	0	0.00	Wayne	0	0.00
Hancock	0	0.00	Breckinric	ige U	0.00
Bracken	0	0.00	Bourbon	0	0.00
Lyon	0	0.00	Allen	0	0.00
	0	0.00	Mason Adair	0	0.00
Elliott	0	0.00	Adali Buscoll	0	0.00
Wolfe	0	0.00	Spencer	0	0.00
Nicholas	0	0.00	Garrard	0	0.00
Cumberland	0	0.00	Casey	0	0.00
Fulton	0	0.00	Lawrence		0.00
Menifee	0	0.00	Union	0	0.00
Hickman	0	0.00	P	OPULATION CATEGORY 25	.000-49.999
Owslev	0	0.00	Hopkins	10	0.43
Robertson	0	0.00	Clark	4	0.22
POPULATION	A CATEGORY 10,	000 - 14,999	Shelby	4	0.19
Webster	4	0.59	Henderso	n 4	0.17
Lewis	4	0.58	Barren	3	0.14
Carroll	1	0.18	Bell	2	0.14
Breathitt	1	0.14	Floyd	2	0.10
Pendleton	0	0.00	Boyd	2	0.08
Estill	0	0.00	Meade	1	0.07
Fleming	0	0.00	Harlan	1	0.07
Trigg	0	0.00	Muhlenbe	erg 1	0.06
Larue	0	0.00	Knox	1	0.06
Morgan	0	0.00	Greenup	1	0.05
Jackson	0	0.00	Laurel	1	0.03
Martin	0	0.00	Franklin	0	0.00
	0	0.00	Jessamin	e U	0.00
NicCreary	0	0.00	Scoll	0	0.00
Duller	0	0.00	Collower	0	0.00
Todd	0	0.00	Calloway	0	0.00
Edmonson	0	0.00	Whitley	0	0.00
Washington	0	0.00	McCracke		0.00
Rath	0	0.00	Perry	0	0.00
Leslie	0	0.00	Boyle	0	0.00
Green	0	0.00	Carter	0	0.00
Monroe	0	0.00	Logan	0	0.00
Owen	0	0.00	Montgom	ery 0	0.00
Clinton	0	0.00	P	OPULATION CATEGORY 50,	,000 - OVER
POPULATION	A CATEGORY 15,	000 - 24,999	Oldham	12	0.40
Mercer	10	0.94	Christian	13	0.35
Magoffin	6	0.66	Daviess	15	0.31
Grant	6	0.49	Warren	11	0.19
Hart	4	0.44	Pike	6	0.18
Henry	3	0.39	Campbell	6	0.13
Grayson	5	0.39	Hardin	7	0.13
Simpson	3	0.35	Pulaski	4	0.13
McLean	3	0.34	Kenton	10	0.13
Lincoln	4	0.32	Jefferson	45	0.12
Ohio	3	0.25	Boone	4	0.07
Knott	2	0.24	Marshall	2	0.05
Letcher	2	0.16	Fayette	4	0.03
Woodford	2	0.16	Bullitt	1	0.03
Rockcastle	1	0.12	Madison	0	0.00

TABLE 50. MOTOR VEHICLE-TRAIN CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2013 - 2017)

	NUMBER OF CRASHES INVOLVING	PERCENT OF ALL CRASHES INVOLVING
TIME PERIOD	VEHICLE DEFECTS	VEHICLE DEFECTS
October 1976 - May 1978 (20 Months Before Repeal of Law)	14,440	5.86
June 1978 - December 1979 (19 Months After Repeal of Law)	16,527	7.09
1980-1984	46,397	7.43
1985-1989	46,552	6.64
1990-1994	40,393	6.09
1995-1999	33,655	5.27
2000	7,834	4.98
2001	7,325	4.79
2002	7,338	4.77
2003	6,882	4.47
2004	6,811	4.33
2005	7,050	4.01
2000	0,000 6 671	4.30
2007	6 106	4.37
2009	6,269	4.24
2010	6,246	4.15
2011	7,886	5.25
2012	8,030	6.43
2013	7,623	6.18
2014	7,831	5.18
2015	8,450	5.24
2016	8,334	5.04
2017	8,213	6.00

TABLE 51. CRASHES INVOLVING VEHICLE DEFECT BEFORE AND AFTER REPEAL OF VEHICLE INSPECTION LAW







APPENDIX A

STATEWIDE CRASH RATES AS A FUNCTION OF SEVERAL VARIABLES

Highways are grouped into various system classifications. Three common types of groupings include: 1) functional classification, 2) federal-aid system, and 3) administrative classification. Statewide crash rates were determined for each of those groupings. The following is a summary of the findings.

Average statewide rates by functional classification are listed in Table A-1. Highways are grouped into a rural or urban category and then into systems such as arterial, collector, and local. Rates are determined considering all crashes, injury crashes only, and fatal crashes only. The highest overall crash rates are for urban minor arterials followed by urban principal arterials (non-interstate or freeway). The lowest overall rates are for rural principal arterials (interstate) followed by other rural principal arterials and urban principal arterials (interstate and other freeway). Injury crash rates for the various categories are ordered similar to overall crash rates. However, the ordering for the fatal crash rates is very different. The highest fatal crash rates are for rural collectors and rural local roadways. Urban principal arterials (interstate and other freeway) have the lowest fatal crash rate with several other urban classifications, as well as rural interstates.

Statewide crash rates by administrative classification are listed in Table A-2. The rate for the primary system is lowest and the rate for the unclassified system is the highest. Rates for the secondary and rural secondary systems are between those two levels.

The benefits of providing a median and increasing the median width are shown in Table A-3. The crash rate for rural highways having four or more lanes that are divided and have a median width of less than 30 feet is less than that for an undivided highway. The crash rate is decreased more when comparing a highway that is divided with a median width of more than 30 feet to a highway having a median width of less than 30 feet.

The effect of access control is described in Table A-4. The large reduction in the crash rate for highways having full control of access compared to those with partial or no access control is shown. However, the crash rate for partial control of access is closer to no access control than to full access control.

An analysis of crash rates for rural highways by federal-aid system and terrain is presented in Table A-5. Each county was given a terrain classification as flat, rolling, or mountainous since a classification was not available for each road segment. Considering the entire system, the rates are similar for all terrain classifications within each federal-aid system.

Rates by rural-urban designation are shown in Table A-6. The lowest rate is for rural areas

The relationship between crash rate and traffic volume (average annual daily traffic) for various federal-aid highway classifications is illustrated in Table A-7. The rate for the federal-aid primary and federal-aid urban generally increased with increasing volume. There was no specific trend in rates on federal-aid secondary and non-federal aid roads with volume.

The percentage of crashes occurring during wet, snow, or icy pavement conditions or during darkness by rural or urban highway type classification is given in Table A-8. The overall percentage of crashes occurring during wet pavement conditions is 22 percent on rural roadways and 16 percent on urban roadways.

There are large variations in the percentage of crashes occurring on the various highway types during snow or icy conditions. This five-year statewide percentage would change depending on the amount of snowfall any given year. The percentage on rural roads (5.1 percent) is substantially higher than that on urban roads (2.7 percent).

The highest percentages of ice or snow crashes are on interstates and parkways with the highest being 9.3 percent on rural interstate.

There are also large variations in the percentage of crashes occurring during darkness. The overall percentage is higher on rural roads (31 percent) than urban roads (23 percent). The highest percentage is on rural parkways, followed by rural interstates.
		AVERAGE		CF	RASH RATES	
	FUNCTIONAL	TOTAL	AVERAGE	(CRASH	ES PER 100 M	/M)
LOCATION	CLASSIFICATION	MILEAGE	AADT	ALL	INJURY	FATAL
Rural	Principal Arterial, Interstate	612	34,043	57	10	0.5
	Principal Arterial, Other Freeway	1,744	8,251	109	21	1.2
	Minor Arterial	2,349	4,057	221	43	2.0
	Major Collector	5,825	1,845	302	63	3.2
	Minor Collector	9,325	626	314	73	3.2
	Local System	4,804	328	295	66	3.3
Urban	Principal Arterial, Interstate	211	75,964	123	19	0.4
	Principal Arterial, Other Freeway	73	30,807	150	23	0.6
	Other Principal Arterial	608	19,539	487	81	1.4
	Minor Arterial	1,288	10,668	522	84	1.2
	Collector	1,062	4,323	505	72	1.2
	Local System	186	1,364	574	73	2.2

TABLE A-1. STATEWIDE CRASH RATES BY FUNCTIONAL CLASSIFICATION (2013 - 2017)

TABLE A-2. STATEWIDE CRASH RATES BY ADMINISTRATIVE CLASSIFICATION (2013 - 2017)

AVERAGE								
ADMINISTRATIVE	TOTAL	TOTAL	AVERAGE	CRASH RATES				
CLASSIFICATION	CRASHES	MILEAGE	AADT	(CRASHES PER 100 MVM)				
Primary	*	*	*	*				
Secondary	*	*	*	*				
Rural Secondary	*	*	*	*				
Unclassified	*	*	*	*				

* Data not collected

(RURAL ROADS WITH FOUR OR MORE LANES (2013 - 2017))						
	AVERAGE					
TOTAL	TOTAL	AVERAGE	CRASH RATES			
CRASHES	MILEAGE	AADT	(CRASHES PER 100 MVM)			
19,959	987	14,062	79			
443	25	10,166	96			
21,558	718	25,042	66			
	TOTAL CRASHES 19,959 443 21,558	AVERAGE TOTAL TOTAL CRASHES MILEAGE 19,959 987 443 25 21,558 718	AVERAGE TOTAL TOTAL AVERAGE CRASHES MILEAGE AADT 19,959 987 14,062 443 25 10,166 21,558 718 25,042			

TABLE A-3. STATEWIDE CRASH RATES BY MEDIAN TYPE (RURAL ROADS WITH FOUR OR MORE LANES (2013 - 2017))

TABLE A-4. STATEWIDE CRASH RATES BY ACCESS CONTROL (2013 - 2017)

		AVERAGE		
	TOTAL	TOTAL	AVERAGE	CRASH RATES
ACCESS CONTROL	CRASHES	MILEAGE	AADT	(CRASHES PER 100 MVM)
Full Control	70,051	1,394	31,667	87
Partial Control	48,492	1,058	10,112	248
No Control	397,132	25,763	2,213	382

TABLE A-5. STATEWIDE CRASH RATES FOR RURAL HIGHWAYS BY FEDERAL-AID SYSTEM AND TERRAIN (2013 - 2017)

	CRASH RATES BY	TERRAIN CLA	SSIFICATION	
	(CRA	SHES/100MVM)		
FEDERAL-AID SYSTEM	FLAT	ROLLING	MOUNTAINOUS	
	100	05		
Interstate	103	65	68	
Federal-Aid Primary	151	146	132	
Federal-Aid Secondary	259	296	245	
Non Federal-Aid	253	345	266	
All	217	184	170	

TABLE A-6. STATEWIDE CRASH RATES BY RURAL-URBAN DESIGNATION (2013 - 2017)

		AVERAGE		
	TOTAL	TOTAL	AVERAGE	CRASH RATES
AREA TYPE	CRASHES	MILEAGE	AADT	(CRASHES PER 100 MVM)
Rural	192,308	24,788	2,550	167
Small Urban Area	324,280	3,460	14,099	364
Urbanized Area	*	*	*	*

* Data not collected

TABLE A-7. RELATIONSHIP BETWEEN CRASH RATE AND TRAFFIC VOLUME (2013 - 2017)

		CRASH RATE	S	
		(CRASHES E	PER 100 MVM)	
VOLUME RANGE	FEDERAL-AID	FEDERAL-AID	FEDERAL-AID	NON-FEDERAL
(AADT)	PRIMARY	URBAN	SECONDARY	AID
0-999	435	1,247	337	328
1,000-2,499	305	618	303	485
2,500-4,999	185	540	287	300
5,000-9,999	187	550	268	326
10,000-19,999	184	539	330	406
20,000-29,999	354	575	354	753
30,000-39,999	463	613	**	**
40,000 or more	237	559	296	317

** No data in this volume range.

TABLE A-8. PERCENTAGE OF CRASHES OCCURING DURING WET OR SNOW OR ICE PAVEMENT CONDITIONS OR DURING DARKNESS BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION

		PERG	CENT OF ALL CRASHES	
LOCATION	HIGHWAY TYPE	WET	SNOW OR ICE	DARKNESS
Rural	One-Lane	15	4.8	14
	Two-Lane	22	4.5	29
	Three-Lane	17	2.2	33
	Four-Lane Divided	18	3.6	30
	(Non-Interstate or Park	way)		
	Four-Lane Undivid	19	4.4	29
	Interstate	27	9.3	36
	Parkway	21	9.1	43
	All Rural	22	5.1	31
Urban	Two-Lane	16	3.0	22
	Three-Lane	15	2.2	23
	Four-Lane Divided	14	1.9	21
	(Non-Interstate or Park	way)		
	Four-Lane Undivid	18	2.0	22
	Interstate	16	4.5	29
	Parkway	21	5.9	34
	All Urban	16	2.7	23

APPENDIX B

CRASH DATA FOR THREE-YEAR PERIOD (2015-2017)

	τοται	CRASHES RATES (CRASHES PER 100 MVN				
HIGHWAY TYPE	MILEAGE*	AADT	ALL	INJURY	FATAL	
One-Lane	25	560	697	100	0.0	
Two-Lane	22,904	1,320	263	55	2.9	
Three-Lane	30	6,510	281	41	1.9	
Four-Lane Divided (Non-Interstate or Par	617 rkway)	9,560	110	22	1.1	
Four-Lane Undivided	18	13,930	123	26	1.5	
Interstate	626	34,700	57	10	0.5	
Parkway	508	10,130	67	13	0.9	
All	24,727	2,560	162	33	1.7	

TABLE B-1. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2015-2017)

* Average for the three years.

TADLE D-2. STATEWIDE URDAN GRASH RATES DI HIGHWAI TIPE GLASSIFIGATION (2013-2017)	TABLE B-2. STATEWIDE URBAN CRASH RATES F	BY HIGHWAY TYPE CLASSIFICATION (2015-2017)
---	--	--

	τοται		CRASHES RATES (CRASHES PER 100 MVM)			
HIGHWAY TYPE	MILEAGE*	AADT	ALL	INJURY	FATAL	
Two-Lane Three-Lane Four-Lane Divided (Non-Interstate or Parl Four-Lane Undivided Interstate Parkway	2,160 46 815 (way) 145 219 33	5,800 10,270 18,440 21,240 75,230 14,420	493 659 406 574 130 117	76 90 67 89 20 20	1.3 1.2 1.4 1.3 0.5 1.5	
All **	3,482	14,320	357	56	1.0	

* Average for the three years.

** Includes small number of one-, five-, and six-lane highways.

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane Two-Lane Three-Lane Four-Lane Divided (Non-Interstate or Parkway) Four-Lane Undivided Interstate Parkway All Rural	105 87,076 601 7,089 331 13,619 3,781 112,602	82 76,346 100 2,058 59 2,086 1,694 82,423	0.20 0.48 2.38 3.49 5.09 12.67 3.70 0.94	2.09 0.79 0.84 0.33 0.37 0.17 0.20 0.49
Urban	Two-Lane Three-Lane Four-Lane Divided Four-Lane Undivided Interstate Parkway All Urban**	67,672 3,422 66,846 19,409 23,450 611 194,837	7,201 154 2,717 485 730 111 11,608	2.12 3.75 6.73 7.75 27.46 5.26 5.23	1.48 1.98 1.22 1.72 0.39 0.35 1.07

TABLE B-3. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2015-2017)

* Average for the three years. The length of a spot is defined to be 0.3 mile. ** Includes small number of miles of one-, five-, and six-lane highways.

TABLE B-4. STATEWIDE AVERAGE AND CRITICAL NUMBERS OF CRASHES FOR "SPOTS" AND ONE-MILE SECTIONS BY HIGHWAY TYPE CLASSIFICATION (2015-2017)

				CRASHE	S PER	
RURAL		CRASHES F	PER SPOT*	ONE MILE SECTION		
OR			CRITICAL		CRITICAL	
URBAN	HIGHWAY TYPE	AVERAGE	NUMBER	AVERAGE	NUMBER	
Rural	One-Lane	1.28	5	4.26	10	
	Two-Lane	1.14	4	3.80	9	
	Three-Lane	6.01	13	20.03	32	
	Four-Lane Divided (Non-Interstate or Parkway)	3.44	9	11.48	21	
	Four-Lane Undivided	5.62	12	18.74	30	
	Interstate	6.53	14	21.77	34	
	Parkway	2.23	7	7.44	15	
	All Rural	1.37	5	4.55	11	
Urban	Two-Lane	9.40	18	31.32	46	
	Three-Lane	22.22	35	74.06	97	
	Four-Lane Divided	24.60	38	82.02	106	
	Four-Lane Undivided	40.02	57	133.40	164	
	Interstate	32.12	47	107.07	134	
	Parkway	5.53	12	18.43	30	
	All Urban**	16.78	28	55.95	76	

* The length of a spot is defined to be 0.3 mile.
 ** Includes small number of miles of one-, five-, and six-lane highways.

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane Two-Lane Three-Lane Four-Lane Divided	105 87,076 601 7,089	247 229,037 300 6,173	0.20 0.48 2.38 3.49	0.70 0.26 0.28 0.11
	(Non-Interstate or Parkway) Four-Lane Undivided Interstate Parkway All Rural	331 13,619 3,781 112,602	177 6,257 5,083 247,270	5.09 12.67 3.70 0.94	0.12 0.06 0.07 0.16
Urban	Two-Lane Three-Lane Four-Lane Divided Four-Lane Undivided Interstate Parkway All Urban**	67,672 3,422 66,846 19,409 23,450 611 194,837	21,604 462 8,150 1,455 2,190 332 34,824	2.12 3.75 6.73 7.75 27.46 5.26 5.23	0.49 0.66 0.41 0.57 0.13 0.12 0.36

TABLE B-5. STATEWIDE CRASH RATES FOR 0.1 MILE "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2015-2017)

* Average for the three years. The length of a spot is defined to be 0.1 mile. ** Includes small number of miles of one-, five-, and six-lane highways.

TABLE B-6. STATEWIDE AVERAGE AND CRITICAL NUMBERS OF CRASHES FOR 0.1 MILE "SPOTS" AND ONE-MILE SECTIONS BY HIGHWAY TYPE CLASSIFICATION (2015-2017)

				CRAS	HES PER	
RURAL		CRASHES	PER SPOT*	ONE MI	ONE MILE SECTION	
OR			CRITICAL		CRITICAL	
URBAN	HIGHWAY TYPE	AVERAGE	NUMBER	AVERAGE	NUMBER	
Rural	One-Lane	0.43	3	4.26	10	
	Two-Lane	0.38	2	3.80	9	
	Three-Lane	2.00	6	20.03	32	
	Four-Lane Divided (Non-Interstate or Parkway)	1.15	4	11.48	21	
	Four-Lane Undivided	1.87	6	18.74	30	
	Interstate	2.18	6	21.77	34	
	Parkway	0.74	3	7.44	15	
	All Rural	0.46	3	4.55	11	
Urban	Two-Lane	3.13	8	31.32	46	
	Three-Lane	7.41	15	74.06	97	
	Four-Lane Divided	8.20	16	82.02	106	
	Four-Lane Undivided	13.34	23	133.40	164	
	Interstate	10.71	20	107.07	134	
	Parkway	1.84	6	18.43	30	
	All Urban**	5.59	12	55.95	76	

* The length of a spot is defined to be 0.1 mile.
** Includes small number of miles of one-, five-, and six-lane highways.

CRITICAL CRASH RATE (C/MV)										
	BY HIGHWAY TYPE									
AADT	ONE-LANE	TWO-LANE	THREE-LANE							
100	11.78	8.80	8.97							
500	4.53	2.95	3.04							
1,000	3.22	1.97	2.04							
2,500	2.19	1.24	1.29							
5,000	1.71	0.91	0.95							
7,500	1.51	0.78	0.82							
10,000	1.40	0.70	0.74							
15,000	1.26	0.61	0.65							
20,000	1.18	0.56	0.59							

TABLE B-7. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(2015-2017)

TABLE B-8. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2015-2017)

CRITICAL CRASH RATE (C/MV)										
	BY HIGHWAY TYPE									
	FOUR-LANE DIVIDED									
	(NON-INTERSTATE	FOUR-LANE								
AADT	AND PARKWAY)	UNDIVIDED	INTERSTATE	PARKWAY						
500	2.18	2.24	1.83	1.90						
1.000	1.38	1.43	1.12	1.18						
2.500	0.81	0.84	0.62	0.66						
5.000	0.57	0.59	0.42	0.45						
10,000	0.41	0.44	0.30	0.32						
15,000	0.35	0.37	0.25	0.27						
20,000	0.32	0.33	0.22	0.24						
30,000	0.27	0.29	0.19	0.20						
40,000	0.25	0.27	0.17	0.18						
50,000	0.23	0.25	0.15	0.17						

CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE								
AADT	TWO-LANE	THREE-LANE						
500 1,000 2,500 5,000 7,500 10,000 15,000 20,000 30,000 40,000	3.84 2.67 1.76 1.35 1.18 1.08 0.97 0.90 0.82 0.77	4.40 3.12 2.11 1.65 1.45 1.34 1.21 1.13 1.04 0.99						

TABLE B-9. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(2015-2017)

TABLE B-10. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2015-2017)

CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE									
	FOUR-LANE DIVIDED								
	(NON-INTERSTATE	FOUR-LANE							
AADT	AND PARKWAY)	UNDIVIDED	INTERSTATE	PARKWAY					
1,000 5,000 10,000 15,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000	2.44 1.21 0.95 0.85 0.79 0.71 0.67 0.64 0.62 0.60 0.59 0.58 0.57	2.89 1.49 1.20 1.08 1.01 0.92 0.88 0.84 0.82 0.80 0.78 0.77 0.76	$\begin{array}{c} 1.47\\ 0.62\\ 0.46\\ 0.39\\ 0.35\\ 0.31\\ 0.28\\ 0.26\\ 0.25\\ 0.24\\ 0.23\\ 0.23\\ 0.22\end{array}$	1.43 0.59 0.44 0.37 0.33 0.29 0.27 0.25 0.24 0.23 0.22 0.21 0.21					

APPENDIX C

CRITICAL "NUMBERS OF CRASHES" TABLES

	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)									
HIGHWAY TYPE	0.4	1	2	5	10	15	20			
One-Lane	6	12	20	41	74	105	136			
Two-Lane	7	14	23	48	86	123	160			
Three-Lane	24	50	90	205	389	570	750			
Four-Lane Divided (Non-Interstate and Park	17 way)	34	61	136	255	372	487			
Four-Lane Undivided	23	49	89	203	386	566	744			
Interstate	24	51	92	211	401	587	772			
Parkway	11	22	38	82	152	219	286			

TABLE C-1. CRITICAL NUMBERS OF CRASH RATES ON RURAL HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (2013-2017)

TABLE C-2. CRITICAL NUMBERS OF CRASH RATES ON URBAN HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (2013-2017)

		CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)						
HIGHWAY TYPE	0.4	1	2	5	8	10		
Two-Lane	34	73	134	309	479	592		
Three-Lane (Non-Interstate and Park	70 wav)	157	296	702	1,100	1,365		
Four-Lane Divided	76	172	326	774	1,214	1,506		
Four-Lane Undivided	115	263	503	1,207	1,903	2,364		
Interstate	90	205	389	929	1,460	1,813		
Parkway	21	44	80	181	279	344		

APPENDIX D

CRITICAL CRASH RATE TABLES FOR HIGHWAY SECTIONS

	CF	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)							
AADT	0.5	1	2	5	10				
100	3,188	2,312	1,748	1,288	1,070				
200	2,312	1,748	1,379	1,070	922				
300	1,953	1,514	1,222	976	857				
400	1,748	1,379	1,131	922	819				
500	1,612	1,288	1,070	884	794				
700	1,439	1,172	991	836	760				
1,000	1,288	1,070	922	794	731				
1,500	1,150	976	857	754	703				
2,000	1,070	922	819	731	687				
2,500	1,016	884	794	715	676				
3,000	976	857	775	703	667				

TABLE D-1. CRITICAL CRASH RATES FOR RURAL ONE-LANE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

TABLE D-2. CRITICAL CRASH RATES FOR RURAL TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CF	CRITICAL CRASH RATE (C/100 MVM) FOR THE						
AADT	0.5	<u>GIVEN SI</u>	2	<u>1 H (IVILES)</u> 5	10	20		
100	2 210	1 527	1 102	763	607	502		
300	1.255	928	716	540	457	399		
500	1.001	763	607	476	412	369		
1.000	763	607	502	412	369	338		
1,500	664	540	457	385	350	325		
2,000	607	502	430	369	338	317		
3,000	540	457	399	350	325	308		
4,000	502	430	381	338	317	303		
5,000	476	412	369	331	312	299		
7,000	442	389	353	321	305	294		
8,000	430	381	347	317	303	292		
9,000	420	374	342	314	301	291		
10,000	412	369	338	312	299	290		

TABLE D-3. CRITICAL CRASH RATES FOR RURAL THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CF	CRITICAL CRASH RATE (C/100 MVM) FOR THE								
AADT	0.5	0.5 1 2 3 5								
100	2,276	1,580	1,144	966	797					
300	1,301	966	748	656	568					
500	1,041	797	636	568	501					
1,000	797	636	528	481	436					
1,500	695	568	481	444	407					
2,000	636	528	454	422	391					
3,000	568	481	422	397	371					
4,000	528	454	403	381	359					
5,000	501	436	391	371	352					
6,000	481	422	381	364	346					
7,000	466	412	374	358	341					
8,000	454	403	368	353	338					
9,000	444	397	364	349	335					
10,000	436	391	359	346	332					

	CR	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)						
AADT	0.5	1	2	5	10			
500	655	476	361	267	223			
1,000	476	361	286	223	192			
2,500	334	267	223	185	166			
5,000	267	223	192	166	153			
7,500	239	204	179	158	148			
10,000	223	192	171	153	144			
15,000	204	179	162	148	140			
20,000	192	171	157	144	138			
30,000	179	162	151	140	135			
40,000	171	157	147	138	133			
50,000	166	153	144	136	132			

TABLE D-4. CRITICAL CRASH RATES FOR RURAL FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(2013-2017)

TABLE D-5. CRITICAL CRASH RATES FOR RURAL FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CR	CRITICAL CRASH RATE (C/100 MVM) FOR THE						
AADT	0.5	1	2	5	10			
500	691	506	387	288	242			
1,000	506	387	308	242	210			
2,500	358	288	242	202	182			
5,000	288	242	210	182	168			
7,500	259	221	196	174	163			
10,000	242	210	188	168	159			
20,000	210	188	172	159	152			
30,000	196	178	166	155	149			
40,000	188	172	162	152	148			
50,000	182	168	159	151	146			

TABLE D-6. CRITICAL CRASH RATES FOR RURAL INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CR	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)						
AADT	0.5	1	2	5	10	20		
500	453	314	228	158	126	105		
1,000	314	228	172	126	105	90		
2,500	207	158	126	99	86	77		
5,000	158	126	105	86	77	71		
7,500	138	113	96	81	74	69		
10,000	126	105	90	77	71	67		
20,000	105	90	80	71	67	64		
30,000	96	84	76	69	65	63		
40,000	90	80	73	67	64	62		
50,000	86	77	71	66	63	61		

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)								
AADT	0.5	1	2	5	10	20			
400	552	382	275	191	151	125			
700	408	292	218	158	130	110			
1,000	342	250	191	142	119	103			
1,500	283	212	166	127	109	96			
2,000	250	191	151	119	103	92			
3,000	212	166	135	109	96	87			
4,000	191	151	125	103	92	84			
5,000	176	142	119	99	89	83			
7,000	158	130	110	94	86	80			
10,000	142	119	103	89	83	78			
20,000	119	103	92	83	78	75			
40,000	103	92	84	78	75	72			

TABLE D-7. CRITICAL CRASH RATES FOR RURAL PARKWAY SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

TABLE D-8. CRITICAL CRASH RATES FOR URBAN TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE					
		GIVEN SE	CTION LENG	TH (MILES)		
AADT	0.5	1	2	5	10	
500	1,476	1,170	964	790	705	
1,000	1,170	964	825	705	646	
2,500	914	790	705	631	595	
5,000	790	705	646	595	569	
7,500	737	668	620	578	557	
10,000	705	646	605	569	551	
15,000	668	620	587	557	543	
20,000	646	605	576	551	538	
30,000	620	587	563	543	532	
40,000	605	576	556	538	529	
50,000	595	569	551	535	527	

TABLE D-9. CRITICAL CRASH RATES FOR URBAN THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE					
		GIVEN SE	ECTION LENG	TH (MILES)		
AADT	0.5	1	2	5	10	
500	1,791	1,444	1,210	1,010	912	
1,000	1,444	1,210	1,050	912	844	
2,500	1,152	1,010	912	827	785	
5,000	1,010	912	844	785	755	
7,500	949	869	814	766	742	
10,000	912	844	797	755	734	
15,000	869	814	776	742	725	
20,000	844	797	763	734	719	
30,000	814	776	749	725	713	
40,000	797	763	740	719	709	
50,000	785	755	734	715	706	

	CR	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)						
AADT	0.5	1	2	5	10			
1,000	1,026	837	709	599	545			
2,500	790	677	599	532	498			
5,000	677	599	545	498	475			
10,000	599	545	508	475	459			
15,000	565	522	491	465	451			
20,000	545	508	482	459	447			
25,000	532	498	475	454	444			
30,000	522	491	470	451	442			
40,000	508	482	463	447	439			
50,000	498	475	459	444	437			
60,000	491	470	455	442	435			

TABLE D-10. CRITICAL CRASH RATES FOR URBAN FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(2013-2017)

TABLE D-11. CRITICAL CRASH RATES FOR URBAN FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)						
AADT	0.5	1	2	5	10		
1.000	1,282	1,064	916	789	726		
2,500	1,010	879	789	710	671		
5,000	879	789	726	671	644		
10,000	789	726	682	644	625		
15,000	750	699	663	632	616		
20,000	726	682	652	625	611		
25,000	710	671	644	620	608		
30,000	699	663	638	616	605		
40,000	682	652	630	611	601		
50,000	671	644	625	608	599		
60,000	663	638	620	605	597		

TABLE D-12. CRITICAL CRASH RATES FOR URBAN INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

	CI	CRITICAL CRASH RATE (C/100 MVM) FOR THE						
		GIVEN SECTION LENGTH (MILES)						
AADT	0.5	1	2	5	10			
1,000	477	362	287	223	193			
5,000	268	223	193	167	154			
10,000	223	193	172	154	145			
20,000	193	172	157	145	138			
30,000	180	163	151	141	136			
40,000	172	157	147	138	134			
50,000	167	154	145	137	133			
60,000	163	151	143	136	132			
70,000	160	149	141	135	131			
80,000	157	147	140	134	131			
90,000	155	146	139	133	130			
100,000	154	145	138	133	130			

	CRITICAL CRASH RATE (C/100 MVM) FOR THE						
AADT	0.5	1	2	5	10	20	
500	619	447	337	247	205	176	
1,000	447	337	265	205	176	156	
2,500	311	247	205	169	151	139	
5,000	247	205	176	151	139	130	
7,500	220	187	163	143	133	126	
10,000	205	176	156	139	130	124	
15,000	187	163	147	133	126	122	
20,000	176	156	142	130	124	120	
30,000	163	147	136	126	122	118	
40,000	156	142	133	124	120	117	
90,000	140	131	125	119	117	115	
50,000	151	139	130	123	119	116	

TABLE D-13. CRITICAL CRASH RATES FOR URBAN PARKWAY SECTIONS (FIVE-YEAR PERIOD)(2013-2017)

APPENDIX E

CRITICAL CRASH RATE TABLES FOR "SPOTS" (SPOT IS DEFINED AS 0.3 MILE IN LENGTH)

	-		· · · · · · · · · · · · · · · · · · ·					
CRITICAL CRASH RATE (C/MV)								
	BY HI	GHWAY TYPE						
AADT	ONE-LANE	TWO-LANE	THREE-LANE					
100 500 1,000 2,500 5,000 7,500 10,000 15,000	12.47 5.87 4.55 3.45 2.93 2.71 2.58 2.42	8.93 3.76 2.78 1.99 1.62 1.46 1.37 1.26	9.19 3.91 2.90 2.09 1.71 1.54 1.45 1.33					
20,000	2.33	1.20	1.27					

TABLE E-1. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(2013-2017)

TABLE E-2. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(2013-2017)

CRITICAL CRASH RATE (C/MV)							
BY HIC	SHWAY TYPE						
FOUR-LANE DIVIDED							
(NON-INTERSTATE	FOUR-LANE						
AND PARKWAY)	UNDIVIDED	INTERSTATE	PARKWAY				
2.56	2.68	1.83	1.95				
1.80	1.90	1.23	1.33				
1.21	1.29	0.78	0.85				
0.94	1.01	0.58	0.64				
0.76	0.82	0.45	0.50				
0.69	0.74	0.39	0.44				
0.64	0.70	0.36	0.40				
0.59	0.64	0.32	0.36				
0.56	0.61	0.30	0.34				
0.54	0.59	0.29	0.33				
	CRITICAL CR BY HIC FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY) 2.56 1.80 1.21 0.94 0.76 0.69 0.64 0.59 0.56 0.54	CRITICAL CRASH RATE (C/MV BY HIGHWAY TYPE FOUR-LANE DIVIDED (NON-INTERSTATE FOUR-LANE AND PARKWAY) UNDIVIDED 2.56 2.68 1.80 1.90 1.21 1.29 0.94 1.01 0.76 0.82 0.69 0.74 0.64 0.70 0.59 0.64 0.56 0.61 0.54 0.59	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE FOUR-LANE DIVIDED KNON-INTERSTATE FOUR-LANE AND PARKWAY) UNDIVIDED INTERSTATE 2.56 2.68 1.83 1.80 1.90 1.23 1.21 1.29 0.78 0.94 1.01 0.58 0.76 0.82 0.45 0.69 0.74 0.39 0.64 0.70 0.36 0.59 0.64 0.32 0.56 0.61 0.30 0.54 0.59 0.29				

CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE								
AADT	TWO-LANE	THREE-LANE						
500 1,000 2,500 5,000 7,500 10,000 15,000 20,000 30,000 40,000	5.39 4.14 3.12 2.63 2.41 2.29 2.15 2.06 1.96 1.90	6.46 5.05 3.89 3.33 3.08 2.94 2.77 2.67 2.67 2.56 2.49						

TABLE E-3. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(2013-2017)

TABLE E-4. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(2013-2017)

CRITICAL CRASH RATE (C/MV)											
	(NON-INTERSTATE	FOUR-LANE									
AADT	AND PARKWAY)	UNDIVIDED	INTERSTATE	PARKWAY							
1.000	3.67	4.53	1.80	1.70							
5,000	2.27	2.92	0.94	0.87							
10,000	1.96	2.56	0.76	0.70							
15,000	1.83	2.41	0.69	0.63							
20,000	1.75	2.32	0.64	0.59							
30,000	1.66	2.21	0.59	0.54							
40,000	1.61	2.14	0.56	0.51							
50,000	1.57	2.10	0.54	0.49							
60,000	1.54	2.07	0.52	0.48							
70,000	1.52	2.04	0.51	0.46							
80,000	1.50	2.02	0.50	0.46							
90,000	1.49	2.01	0.50	0.45							
100,000	1.48	1.99	0.49	0.44							

APPENDIX F

TOTAL CRASH RATES FOR CITIES INCLUDED IN 2000 CENSUS

			ANNUAL				
	1	NUMBER OF	CRASHES			NUMBER OF	CRASHES
		CRASHES	PER 1000			CRASHES	PER 1000
CITY	POPULATION		POPULATION	CITY	POPULATION		POPULATION
Adairville	852	44	10	California	130	*	*
Albany	2,033	228	22	Calvert City	2,566	531	41
Alexandria	8,477	1,371	32	Camargo	1,081	116	22
Allen	193	120	124	Cambridge	175	*	*
Anchorage	2.348	130	11	Campbellsburg	813	140	34
Annville	470	*	*	Campbellsville	9.108	2.361	52
Arlington	324	27	17	Campton	441	158	72
Ashland	21.684	4.396	41	Canevville	608	67	22
Auburn	1.340	143	21	Carlisle	2.010	221	22
Audubon Park	1 473	17	2	Carrollton	3,938	614	31
Augusta	1 190	124	21	Carrsville	50	*	*
Bancroft	494		_ 1	Catlettsburg	1 856	757	82
Barbourmeade	1 218	21	3	Cave City	2 240	510	46
Barbourville	3 165	719	45	Centertown	423	17	.0
Bardstown	11 700	3 219	55	Central City	5 978	1 001	34
Bardwell	723	26	7	Clarkson	875	138	32
Barlow	675	40	12	Clay	1 181	43	7
Beattwille	1 307	167	26	Clay City	1,101	*	*
Beaver Dam	3,409	501	20	Clinton	1,077	*	*
Bedford	500	145	48	Cloverport	1,000	10	٥
Beachwood Villago	1 2 2 4	145	40		5.012	43	9 13
Bellofonto	1,324	52	12	Coldetroom	3,912	1,274	+3
Bellemondo	000	JZ *	*	Columbia	4 452	694	21
Belleviue	5 055	020	20	Columbua	4,452	*	31 *
Dellevue	0,900	030	20	Concerd	170	2	14
Beilewood	321	2	1	Concord	30	2	52
Bennam	500	б 040	2	Corbin	7,304	1,919	53
Benion	4,349	940	43	Conntri	232	130	112
Berea	13,501	2,401	35	Corydon	720	10	10
Berry	264	5	4	Covington	40,640	8,962	44
Blaine	47	8	34	Crab Orchard	841	45	11
Blandville	95	74	47	Creekside	323	4 4 0 0	50
Bioomileid	838	71	17		3,801	1,109	58
Blue Ridge Manor	/6/	177	46	Crestview	475	10	4
Bonnieville	255	111	87	Crestview Hills	3,148	1,935	123
Booneville	81	75	185	Crestwood	4,531	966	43
Bowling Green	58,067	16,926	58	Crittenden	3,815	417	22
Bradfordsville	294	10	/	Crofton	749	72	19
Brandenburg	2,643	663	50	Crossgate	225	*	
Bremen	197	79	80	Cumberland	2,237	192	17
Briarwood	435	4	2	Cynthiana	6,402	1,151	36
Brodhead	1,211	75	12	Danville	16,218	3,289	41
Broeck Point	325	*	*	Dawson Springs	2,764	247	18
Bromley	763	48	13	Dayton	5,338	461	17
Brooksville	642	79	25	Dixon	786	100	25
Brownsboro Farm	648	*	*	Douglass Hills	5,549	*	*
Brownsville	836	196	47	Dover	252	23	18
Burgin	965	44	9	Drakesboro	515	97	38
Burkesville	1,521	160	21	Druid Hills	308	*	*
Burnside	611	491	161	Dry Ridge	2,191	823	75
Butler	612	60	20	Earlington	1,413	168	24
Cadiz	2,558	566	44	Eddyville	2,554	398	31
Calhoun	763	99	26	Edgewood	8,575	936	22

					,(
	1	NUMBER OF	CRASHES			NUMBER OF	CRASHES
		CRASHES	PER 1000			CRASHES	PER 1000
CITY	POPULATION		POPULATION	CITY	POPULATION		POPULATION
Edmonton	1 595	317	40	Hardin	615	97	32
Ekron	135	85	126	Hardinsburg	2 343	242	21
Elizabethtown	28 531	6 732	47	Harlan	1 745	735	84
Elkhorn City	982	143	29	Harrodsburg	8 340	1 284	31
Elkton	2 062	200	19	Hartford	2 672	316	24
Elsmere	8 451	646	15	Hawesville	945	148	24
Eminence	2 498	189	15	Hazard	4 456	2 101	94
Erlanger	18 082	4 297	48	Hazel	410	45	22
Fubank	319	54	34	Hebron Estates	930	*	*
Evarts	962	106	22	Henderson	28 757	5 691	40
Ewing	264	41	31	Hickman	2 3 9 5	25	-10
Fairfield	113	8	14	Hickory Hill	2,000	*	*
Fairview	286	11	8	Highland Heights	6 923	1.314	38
Falmouth	200	269	25	Hills And Dales	154	*	*
Ferguson	924	149	32	Hillview	6 1 1 9	*	*
Fincastle	838	*	*	Hindman	777	285	73
Flatwoods	7 423	538	15	Hiseville	240	13	11
Fleming-neon	759	*	*	Hodgenville	3 206	472	29
Flemingsburg	2 658	180	37	Hollow Creek	001	*	*
Florence	2,000	11 0/1	57	Hollwilla	537	*	*
Fordsvillo	29,901	77	20	Honkinsvillo	21 577	5 217	34
Forest Hills	524	130	23	Horse Cave	2 311	3,317	34
Fort Mitchell	444 8 207	1 509	30	Houston Acros	2,311	35	9
Fort Thomas	16 225	1,590	10	Huntors Hollow	296	*	*
Fort Wright	F 702	2,040	19	Hurothourpo	4 4 2 0	*	*
Fostor	5,725	2,002	*		4,420	*	*
Fusier Fountain Pun	217	10	11		1,011	21	15
Fox Choos	217	*	*	Hudon	405	51	10
Fox Cliase	520 25 527	5 200	44	Independence	24 757	2 240	30
Franklin	23,327	1,200	41		24,757	2,240	10
Fradania	0,400	1,002	44	Indian Hills	2,000	× 212	15
Fregonia	401	120	33	Indian Hills Ch. Sec.	1,005	1.47	41
Fulton	400	202	43	Inez	2 715	147	41
Complied	2,445	303	23	Invington	2,713	139	10
Garrateur	20.000	13	1	Invingion	1,101	00	14
Georgeiown	29,090	4,702	33	laakaan	400	30	17
Germaniown	104	23	30	Jackson	2,231	154	17
Glasgow	14 029	3 220	30	Jamestown	26 505	5 127	20
Glasgow	14,020	5,220	40	Jeffersonville	20,595	3,127	J9 40
Glencoe	500	*	*	Jenersonvine	1,500	303	49 *
Glenview Hille	000	*	*		2,203	109	10
Glenview Manar	303	*	*	Konton Valo	2,241	100	10
Gienview Manor	191	*	*	Kenton vale	110	70	40
Gouse Cleek	234	60	26	Kingolov	201	19	42
Gratz	79	09	30	Kuttawa	640	199	59
Grauz	10	9	23		049	1 262	34
Grayson	4,217	844	4U *		0,082	1,302	34
Green Spring	/ 68	200	00	Lalayette	105	5	6
Greensburg	2,103	300 27F	20	Lakeside Park	2,000	293	*
Groopville	1,100	210	40		202	EDE	24
Guthrio	4,312	040	39		3,44Z 074	535	31
Guunne	1,419	100	15		۵/4 ۵۰ ۶۵۶	4 4 2 0	00
ndhsun	742	111	30	Lawrenceburg	10,505	1,130	22

TABLE E-1 CRAS	SHES AND CRASH RA	TES FOR ALL CITIES	LISTED IN THE 2010	CENSUS (2013	2017)(continued)
TADLE F-1. UKA	SHES AND GRASH RA	IES FOR ALL GITTES	LISTED IN THE 2010	CENSUS (2013	-2017)(continueu)

			ANNUAL				
	1	NUMBER OF	CRASHES			NUMBER OF	CRASHES
		CRASHES	PER 1000			CRASHES	PER 1000
CITY	POPULATION		POPULATION	CITY	POPULATION		POPULATION
Lebanon	5,539	1,119	40	Murray Hill	619	*	*
Lebanon Junction	1,813	242	27	Nebo	236	23	20
Leitchfield	6,699	1,437	43	New Castle	912	74	16
Lewisburg	810	59	15	New Haven	855	45	11
Lewisport	1,670	77	9	Newport	15,273	4,757	62
Lexington	295,803	67,263	46	Nicholasville	28,015	5,039	36
Liberty	2,168	246	23	Norbourne Estates	441	2	1
Lincolnshire	148	*	*	Northfield	1,020	543	107
Livermore	1,365	110	16	Nortonville	1,204	132	22
Livingston	226	13	12	Norwood	372	*	*
London	7,993	3,603	90	Oak Grove	7,489	1,389	37
Loretto	713	82	23	Oakland	225	27	24
Louisa	2,467	500	41	Old Brownboro Place	348	*	*
Louisville	597,337	133,501	45	Olive Hill	1,599	177	22
Loyall	1,461	54	7	Orcharh Grass Hills	1,058	*	*
Ludlow	4,407	418	19	Owensboro	57,265	13,795	48
Lynch	747	10	3	Owenton	1,327	203	31
Lyndon	11,002	1,034	19	Owingsville	1,530	346	45
Lynnview	914	13	3	Paducah	25,024	7,786	62
Mackville	222	11	10	Paintsville	3,459	1,107	64
Madisonville	19,591	3,698	38	Paris	8,553	1,662	39
Manchester	1,255	431	69	Park City	537	98	37
Manor Creek	179	*	*	Park Hills	2.970	148	10
Marion	3.039	298	20	Park Lake	263	*	*
Martin	634	252	80	Parkway Village	650	*	*
Marvhill Estates	177	*	*	Pembroke	869	70	16
Mayfield	10,024	1,923	38	Perryville	751	36	10
Maysville	9,011	1,888	42	Pewee Valley	1,456	284	39
Mchenry	388	33	17	Phelps	893	128	29
Mckee	800	153	38	Pikeville	6.903	2.893	84
Mcroberts	784	17	4	Pineville	1.732	466	54
Meadowbrook Farm	163	*	*	Pioneer Village	1,130	*	*
Melbourne	401	30	15	Pippa Passes	533	46	17
Mentor	193	5	5	Plantation	832	58	14
Middletown	7.218	2.441	68	Pleasureville	834	36	9
Midway	1.641	229	28	Plum Sprinas	453	*	*
Millersburg	792	77	19	Poplar Hills	377	*	*
Milton	574	136	47	Powderly	745	154	41
Monterey	138	9	13	Prestonsburg	3,255	1,584	97
Monticello	6.188	1.046	34	Prestonville	161	34	42
Moorland	431	12	6	Princeton	6.329	1.051	33
Morehead	6.845	2.247	66	Prospect	2.788	*	*
Morganfield	3.285	437	27	Providence	3.193	204	13
Morgantown	2.394	413	35	Raceland	2.424	147	12
Mortons Gap	863	103	24	Radcliff	21.688	3.089	29
Mount Olivet	299	33	22	Ravenna	605	24	8
Mount Sterling	6.895	1.816	53	Raywick	157	*	*
Mount Vernon	2.477	726	59	Richlawn	435	*	*
Mount Washington	9.117	1.613	35	Richmond	31.364	7.093	45
Muldraugh	947	212	45	River Bluff	452	,*	*
Munfordville	1.615	457	57	Riverwood	446	757	340
Murrav	17 741	3.356	38	Rochester	152		4
···· ·· ·	,	0,000	50			0	•

TARLE F-1	CRASHES	AND CRASH	RATES FOR	ALL CITIES	LISTED IN	THE 2010	CENSUS	(2013-2017)	(continued)
TADLL I -I.	CRASHES	AND CRASH	RAILSION	ALL OTTILS		1112 2010	CLINGUS	(2013-2017)	(continueu)

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2010 CENSUS (2013-2017)(continued)

			ANNUAL				
	1	NUMBER OF	CRASHES			NUMBER OF	CRASHES
		CRASHES	PER 1000			CRASHES	PER 1000
CITY	POPULATION		POPULATION	CITY	POPULATION		POPULATION
Packport	266	17	12	Linton	693	19	14
Rockpon Polling Fields	200	*	*	Vancoburg	1 519	40	14
Polling Hills	050	160	22	Variceburg	9,510	1 627	19
Runnell	2 200	022	55	Visco	0,000	1,037	30
	3,300	932	33	VICCO	7 490	00	40
	2,441	1 265	71		7,409	240	1
Russellville	6,960	1,205	30	Vine Grove	4,520	425	19
	279	67	24	Walten	100	074	E A
Sacramento	408	57	24	Waffield	3,035	974	54
Sadieville	303	40	30	vvanieid	209	44	33
Salem	752	35	9	vvarsaw	1,615	171	21
Salt LICK	303	58	38	vvater valley	279	17	12
Salyersville	1,883	360	38	vvaterson Park	1,542		
Sanders	238	10	8	Waverly	308	31	20
Sandy Hook	675	67	20	Wayland	426	38	18
Sardis	103	9	18	Wellington	565	13	5
Science Hill	693	135	39	West Buechel	1,230	*	*
Scottsville	4,226	858	41	West Liberty	3,435	227	13
Sebree	1,603	103	13	West Point	797	191	48
Seneca Gardens	696	3	1	Westwood	4,746	*	*
Sharpsburg	323	26	16	Wheatcroft	160	16	20
Shelbyville	14,045	2,723	39	Wheelwright	780	26	7
Shepherdsville	11,222	3,900	70	White Plains	884	42	10
Shively	15,264	4,965	65	Whitesburg	2,139	387	36
Silver Grove	1,102	106	19	Whitesville	552	113	41
Simpsonville	2,484	406	33	Whitley City	1,170	292	50
Slaughters	216	10	9	Wickliffe	688	124	36
Smithfield	106	25	47	Wilder	3,035	1,170	77
Smithland	301	65	43	Wildwood	261	4	3
Smiths Grove	714	133	37	Williamsburg	5,245	960	37
Somerset	11,196	4,875	87	Williamstown	3,925	631	32
Sonora	513	134	52	Willisburg	282	26	18
South Carrollton	184	58	63	Wilmore	3,686	296	16
South Shore	1,122	*	*	Winchester	18,368	3,554	39
Southgate	3,803	791	42	Winding Falls	657	*	*
Sparta	231	57	49	Windy Hills	2,385	12	1
Spring Mill	342	*	*	Wingo	632	69	22
Spring Valley	400	*	*	Woodburg	117	*	*
Springfield	2,519	444	35	Woodburn	355	29	16
Stamping Ground	643	42	13	Woodland Hills	696	8	2
Stanford	3,487	662	38	Woodlawn	229	4	4
Stanton	2,733	430	32	Woodlawn Park	942	95	20
Strathmoor Manor	337	*	*	Worthington	1,609	37	5
Sturgis	1,898	104	11	Worthington Hills	973	*	*
Sycamore	70	*	*	Worthville	185	13	14
Taylor Mill	6.604	1,095	33	Wurtland	995	126	25
Taylorsville	763	286	75			-	
Ten Broeck	128	*	*				
Thornhill	146	*	*				
Tompkinsville	2 402	169	14				
Trenton	.384	20	10				
Union	5 379	765	28				
Uniontown	1 002	75	15				
	1,002	.0	10				