



# Analysis of Traffic Crash Data in Kentucky (2012-2016)

Kentucky Transportation Center Research Report – KTC-17-22/KSP2-17-1F

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**Research Report  
KTC-17-22/KSP2-17-1F**

**ANALYSIS OF TRAFFIC CRASH DATA  
IN KENTUCKY (2012 - 2016)**

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## EXECUTIVE SUMMARY

This report documents an analysis of traffic crash data in Kentucky for the years of 2012 through 2016. 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 31<sup>st</sup> report providing a combination of those two report areas. Traffic crash data for the five-year period of 2012 through 2016 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 2012 through 2016 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 2012 through 2016.

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 state-

maintained highways and some local roads. In the past this information was obtained from the Highway Performance Monitoring System (HPMS) file. Starting with 2012 data, the Highway Information File (HIS) file was used. Data for a five-year period of 2012 through 2016 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 starting 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.

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

where

- $C_c$  = critical crash rate
- $C_a$  = average crash rate
- $K$  = 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.

$$N_c = N_a + K\sqrt{N_a} + 0.5 \quad (2)$$

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 vehicle-miles (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 2012 through 2016 crash statistics on streets and highways having known traffic volumes, route numbers, and mileposts is shown in Table 1. Due to the improved method of locating the crash, the number of total crashes identified was higher in 2012 through 2016 compared to previous years. Some of the variance can be attributed to the inconsistencies in reporting locations on the crash reports. The overall crash rate in 2016 was 281 crashes per 100 million vehicle-miles (C/100 MVM). The crash rates for the previous four years varied from 226 to 264 C/100 MVM. The increase in the overall crash rates since 2012 is less as a result of an actual increase in crashes than the result of an improvement in the matching process.

The fatal crash rate in 2016 was more than the previous four-year average. 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 2016 was 50 C/100MVM, which is an increase of 10.5 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. The larger increase in the total crash rate compared to the injury and fatal rates was the result of more consistent matching of injury and fatal crashes over the five years.

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 (2012 through 2016) 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 16 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. Interstates have the lowest fatal crash rate.

Data in Tables 2 and 3 show that the overall total crash rate on urban highways was about 114 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 44 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 five-year period are listed in Table 4. The 2016 rate in urban areas was higher than the average for the previous four years with a 15.6 percent increase in rural areas. Changes in crash rates are influenced by the improved matching of crashes to roadway sections since 2012. The changes in interstate and parkway crash rates were less sensitive because there was good matching for all of the years. Only a small percentage (about 14 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 2012 through 2016. 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 2012 through 2016 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 2012 through 2016 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 2012 through 2016. 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 (2014-2016) 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 2012 through 2016.

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 2012 through 2016 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 2012 through 2016.

#### **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 36 for total crashes (all roads), 18 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 36 counties determined to have a critical crash rate when total crashes were considered, 36 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 (state-maintained 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 rates in the state. When only identified roads are considered, Fayette County had 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. Crash rates were higher when all roads were considered compared to rates for only the identified system.

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 had the highest rate in the state while Bath 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, Clay, Perry, and Pike. The highest rates are generally for the smallest counties where there would be more driving on two-lane 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 2016 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 2012 through 2016 crash data. 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. Table 15 includes 115 cities. 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 10 cities where no data were available for the identified system.

Additional statistics are listed in Table 16 for the 114 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, Richmond, Newport, Bellvue, Ludlow and Junction 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 153 cities compared to the 114 cities in 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. Eighteen cities were identified as having total crash rates above critical. Louisville, 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, Somerset, Pikeville, and Prestonsburg have the highest fatal crash rates in their respective population ranges. Due to the small numbers of fatal crashes 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 4,367 per year for the past five years. Alcohol-related fatalities have averaged 163 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 in Kentucky varied in 2016 from about \$343 million using economic cost data up to about \$2.44 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 2016 the total increased slightly to 4,192 which represents a 5 percent increase 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 2016 (171) was about 6 percent higher than the previous four-year average (161).

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 Robertson, Butler, Casey, 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 Bracken, Pendleton, Knott, 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 2016 are Lexington, Covington, Newport, Dayton, and Marion.

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 (2012 through 2016) 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, Madison, Green, Bracken and Elliott. 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 show 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 19,074 in 2012 a low of 13,642 in 2016. The number of alcohol convictions in 2016 decreased 19.5 percent from the average of the previous four years.

A comparison was also made between the total alcohol filings, convictions, and non-convictions, by county, for the five years of 2012 through 2016 (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 84.5 percent. The percentages varied from a low of 53 percent in Leslie County to a high of 94.4 percent in Hancock 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 14 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 80.9 to 84.6 percent. Counties having the highest conviction percentages in the various population categories are

Hancock, 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 time period of 2012 through 2016, the highest number of convictions at 2,644 was in 2012. There has been a decrease in the number of reckless driving convictions since that year. The number in 2016 was a 3.1 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 1,771 in 2016. 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 7.1 percent in 2016. The number of drug-related fatal crashes also saw an increase 2016 (24.9 percent) compared to the previous four-year average. In 2016 there were 266 fatal drug-related crashes. The number of drug-related injury crashes also increased (by 17.5 percent) in 2016 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: Owsley, 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, Covington, Lawrenceburg, Pikeville, and Barbourville. Barbourville had the highest rate in the state at 4 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 83.0 percent in Oldham 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 2016 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 68 percent (from 17.67 percent for drivers not wearing safety belts to 5.69 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 2012 through 2016. 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 15 fatalities (children age three and under) occurring during the study period (2012-2016), 12 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 74 incapacitating injuries, 61 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 97 percent reduction in fatalities for children in restraints, a 96 percent reduction in incapacitating injuries, an 87 percent reduction in non-incapacitating injuries, and a 71 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 2016 the number of speed-related crashes increased by 2.2 percent when compared to the previous four-year average. For the five-year period (2012-2016), speed-related crashes represented 5 percent of all crashes, 8 percent of injury crashes, and 19 percent of fatal crashes. In 2016 the number of speed-related fatal crashes saw a decrease of 1.7 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 increased by 5.8 percent in 2016 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, Knox, 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 66,458 in 2012. There was a slight increase in 2016 after a trend of decreasing convictions for several years.

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 categories. Within each population category, those counties having the lowest speeding conviction rates per 1,000 licensed drivers are Elliott, Leslie, Letcher, Perry 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 speed-related 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 two-lane 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 85<sup>th</sup> 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 85<sup>th</sup> 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 (2016 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 7 percent of licensed drivers (including learner permits) in Kentucky. However, crash data show that teenage drivers are involved in a much higher percentage of traffic crashes. Using 2016 data, it was found that teenage drivers were involved in about 15 percent of all crashes, 18 percent of injury crashes,

and 9 percent of fatal crashes. Teenage drivers (including drivers with a learner permit) are overrepresented by a factor of 2.1 in all crashes, 2.6 for injury crashes, and 1.3 in fatal crashes.

The involvement rate of teenage drivers compared to all drivers in total and fatal crashes was analyzed (using 2016 data). Considering all crashes on public highways, the rate was 44 crashes per 1,000 drivers for all drivers compared to 91 crashes per 1,000 drivers for teenage drivers. Considering fatal crashes, the rate was 24 fatal crashes per 100,000 drivers for all drivers compared to 27 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 2016 were compared to an average of the preceding four years (2012-2015). There was an 9.9 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 2015 (136,338). The lowest number (123,258) occurred in 2013. The numbers of fatal crashes increased by 17.7 percent in 2016 compared to the previous four years while the number of fatalities increased by 18.5 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 6.7 percent and injuries increased 6.9 percent. The number of injuries varied from 34,180 in 2013 to 37,347 in 2016.

Vehicle-miles traveled climbed slightly over the five-year period ranging from 47.054 billion miles in 2013 to 49.196 billion miles in 2016. The vehicle miles traveled in 2016 saw an increase of 3 percent over the previous four-year average. There was an increase in total crash rate in 2016 of 6.6 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 2016 in the fatal crash rate (14 percent) and fatality rate (15.3 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 (1.7).

There were a total of 652,313 crashes in the five-year period, of which 3,353 (0.5 percent) were fatal crashes and 118,710 (18.2 percent) were injury crashes. Those crashes resulted in 3,651 fatalities and 177,055 injuries. There is a large range used when estimating

crash costs. Considering economic costs, an estimate for 2016 is \$2.7 billion for the cost of Kentucky traffic crashes (on public roads) or an average cost of about \$19,398 per crash using National Safety Council estimates of motor vehicle crash cost. Similarly, the comprehensive costs result in an estimate of \$18.9 billion for the cost of Kentucky traffic crashes or an average cost of about \$134,713 per crash.

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 2.2 percent in 2016 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 2016, pedestrian crashes accounted for only 0.8 percent of all crashes but 3.3 percent of injury crashes and 11 percent of fatal crashes. The number of pedestrian injury crashes decreased by 3.5 percent in 2016 compared to the previous four-year average while the number of fatal crashes in 2016 increased by 44.8 percent compared to the previous four-year average. Injury crashes ranged from 818 in 2016 to 860 in 2012 while fatal crashes ranged from 53 in 2012/2013 to 84 in 2016.

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 Hazard. 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 Fulton, Caldwell, Woodford, 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 Louisville, Covington, Newport, Alexandria, and Paintsville.

The number of bicycle crashes decreased by 8.5 percent in 2016 compared to the previous four year average. The number of bicycle crashes ranged from 410 in 2016 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 1.25 percent of injury crashes and 0.8 percent of fatal

crashes. The number of injury crashes decreased by 17.2 percent in 2016 and the number of fatal crashes increased by 80 percent (9 fatal crashes compared to an average of 5) compared to the 2012 through 2015 average. The range in injury crashes was from 276 in 2015 to 348 in 2013 while the number of fatal crashes ranged from 3 in 2013/2014 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, Marshall, 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 an increase in motorcycle crashes in 2016 (1.4 percent) compared to the 2012 through 2015 average. The numbers over the five-year period ranged from a high of 1,967 in 2012 to a low of 1,658 in 2014. This is a severe type of crash. Data in 2016 show that motorcycle crashes accounted for 1.4 percent of all crashes but 5.6 percent of injury crashes and 13.2 percent of fatal crashes. The numbers of injury crashes increased by 4.3 percent while the number of fatal crashes increased by 25 percent in 2016 compared to the 2012 through 2015 average. In the five-year period the number of injury crashes ranged from 1,248 in 2013 to 1,490 in 2012 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, Woodford, Floyd, 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 an increase in this type of crash in 2016 (0.8 percent) compared to the 2012 through 2015 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 16.7 percent in 2016 compared to 2012 through 2015. The number of injury crashes ranged from 85 in 2016 to 107 in 2014. There were three fatal crashes involving a school bus in 2016 and a total of 12 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 2016 (13 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 6.1 percent and the number of fatal crashes increased by 24 percent in 2016 compared to the previous four-year average. The number of injury crashes ranged from 1,189 in 2012 to 1,396 in 2015 while the number of fatal crashes ranged from 67 in 2014 to 93 in 2016. In 2016, truck crashes represented 6.5 percent of all crashes, 5.4 percent of injury crashes, and 11.7 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 Christian. The highest rate is in Mercer County with the highest number in Jefferson County. There were no train crashes in 68 of the 120 counties in the five-year period of 2012 through 2016.

The trend analysis for motor vehicle-train crashes is given in Table 39. There was a range in train crashes from 31 in 2012 to 55 in 2014 with a decrease of 2.3 percent in 2016 compared to the previous four-year average. The number of injury crashes decreased 21.4 percent from an average of 14 per year in the previous 4-year period to 11 in 2016. They ranged from a low of 1 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 50 percent decrease in 2016 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 5.24 percent in 2015 and 5.04 in 2016 which compares to the low of 4.15 percent in 2010. 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 <http://www.ktc.uky.edu/MapClick>. 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 stripes) 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 in 2016 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).



<u>Post Number</u>	<u>County</u>
1	Graves
2	Hopkins
3	Simpson
4	Meade
5	Oldham
6	Campbell
7	Mercer
8	Montgomery
9	Pike
10	None
11	Laurel
12	Shelby
13	Perry
14	Greenup
15	Marion
16	Henderson

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). The only city which met the criteria was Covington.

#### **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>Post Number</u>	<u>County</u>
1	Livingston
2	Todd
3	Simpson
4	Jefferson
5	Oldham
6	Robertson
7	Estill
8	Lewis
9	Johnson
10	Knox
11	Pulaski
12	Spencer
13	Leslie
14	Lawrence
15	Adair
16	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>Post Number</u>	<u>County</u>
1	Graves
2	Christian
3	Warren
4	Hardin
5	Henry
6	Campbell
7	Clark
8	Rowan
9	Pike
10	Knox
11	Laurel
12	Franklin
13	None
14	Boyd
15	None
16	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 85<sup>th</sup> percentile speed. Recommendations for speed limits on various types of roads in Kentucky have been developed which note that the large difference in 85<sup>th</sup> percentile speed and posted 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 Hazard, 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**

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, Marshall and McCracken counties had the highest motorcycle crash rate in their population categories (Table 45). and Louisville, 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 2012 - 2016 CRASH RATES\*

STATISTIC	2012	2013	2014	2015	2012-2015 Average	2016	Percent Change***
Crashes	91,205	102,943	106,122	96,902	99,293	116,160	17.0
Fatal Crashes	595	517	538	537	547	682	24.7
Injury Crashes	19,219	18,655	18,687	16,457	18,255	20,529	12.5
Mileage	28,380	28,430	28,178	28,247	28,309	28,123	-0.7
Crashes Per Mile	3.21	3.62	3.77	3.43	3.51	4.13	17.7
Vehicle Miles (Billion)	40.36	40.17	40.14	41.08	40.44	41.33	2.2
AADT	3,896	3,871	3,903	3,985	3,914	4,026	2.9
Crash Rate**	226	256	264	236	246	281	14.5
Fatal Crash Rate**	1.47	1.29	1.34	1.31	1.35	1.65	22.0
Injury Crash Rate**	48	46	47	40	45	50	10.5

\* 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 2016 compared to 2012 through 2015 average.

TABLE 2. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2012-2016)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM)		
			ALL	INJURY	FATAL
One-Lane	55	380	469	55	0.0
Two-Lane	22,985	1,350	273	57	2.9
Three-Lane	25	6,590	297	49	1.4
Four-Lane Divided (Non-Interstate or Parkway)	650	9,790	131	26	1.1
Four-Lane Undivided	21	13,320	154	34	1.4
Interstate	604	33,410	55	10	0.5
Parkway	532	9,960	66	14	0.8
All	24,871	2,550	172	35	1.8

\* Average for the five years.

TABLE 3. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2012-2016)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM)		
			ALL	INJURY	FATAL
Two-Lane	2,150	5,780	514	82	1.3
Three-Lane	41	10,190	703	105	0.8
Four-Lane Divided (Non-Interstate or Parkway)	764	18,520	431	75	1.3
Four-Lane Undivided	141	21,400	579	93	1.0
Interstate	209	75,320	117	18	0.4
Parkway	35	14,840	105	19	0.8
All **	3,399	14,100	368	60	1.0

\* Average for the five years.

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

TABLE 4. COMPARISON OF 2012 - 2016 CRASH RATES BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION

LOCATION	HIGHWAY TYPE	2012	2013	2014	2015	2012-2015 Average	2016	Percent Change*
Rural	One-Lane	348	596	305	574	456	729	59.8
	Two-Lane	265	269	278	264	269	290	7.9
	Three-Lane	323	325	270	278	299	296	-0.8
	Four-Lane Divided (Non-Interstate or Parkway)	136	141	141	93	128	141	10.6
	Four-Lane Undivided	197	174	130	85	146	174	19.0
	Interstate	49	54	57	57	54	58	6.6
	Parkway	62	70	63	68	66	70	6.8
	All	172	174	174	161	170	178	4.9
Urban	Two-Lane	467	528	530	478	501	565	12.9
	Three-Lane	717	800	669	558	686	795	15.9
	Four-Lane Divided	426	446	436	354	416	491	18.3
	Four-Lane Undivided	527	563	609	531	558	663	18.9
	Interstate	93	108	116	128	112	134	20.3
	Parkway	89	110	97	118	103	116	12.4
	All	345	374	377	330	357	412	15.6

\* Percent change from 2012 through 2015 to 2016.

TABLE 5. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2012-2016)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	179	182	0.14	1.41
	Two-Lane	154,510	76,617	0.49	0.82
	Three-Lane	877	82	2.40	0.89
	Four-Lane Divided (Non-Interstate or Parkway)	15,229	2,167	3.57	0.39
	Four-Lane Undivided	794	71	4.86	0.46
	Interstate	20,294	2,014	12.19	0.17
	Parkway	6,421	1,772	3.63	0.20
	All Rural	198,304	82,902	0.93	0.51
Urban	Two-Lane	116,533	7,166	2.11	1.54
	Three-Lane	5,409	138	3.72	2.11
	Four-Lane Divided	111,183	2,547	6.76	1.29
	Four-Lane Undivided	31,845	470	7.81	1.74
	Interstate	33,472	695	27.49	0.35
	Parkway	1,001	117	5.42	0.31
	All Urban**	322,004	11,331	5.15	1.10

\* 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 (2012-2016)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE-MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.98	4	3.28	8
	Two-Lane	2.02	6	6.72	14
	Three-Lane	10.70	20	35.65	52
	Four-Lane Divided (Non-Interstate or Parkway)	7.03	14	23.43	36
	Four-Lane Undivided	11.24	20	37.45	54
	Interstate	10.08	19	33.59	49
	Parkway	3.62	9	12.08	22
	All Rural	2.39	7	7.97	16
Urban	Two-Lane	16.26	27	54.20	74
	Three-Lane	39.21	56	130.70	161
	Four-Lane Divided	43.66	61	145.52	177
	Four-Lane Undivided	67.81	90	226.03	265
	Interstate	48.14	67	160.47	194
	Parkway	8.53	17	28.42	43
	All Urban**	28.42	43	94.73	120

\* 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 (2012-2016)

COUNTY	ALL ROADS							
	IDENTIFIED		TOTAL CRASHES		FATAL CRASHES		FATAL OR INJURY CRASHES	
	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Adair	1,423	175	1,467	151	20	2.1	308	32
Allen	1,619	237	2,202	264	21	2.5	480	57
Anderson	1,717	171	2,452	203	13	1.1	514	42
Ballard	742	194	887	191	16	3.4	201	43
Barren	4,934	209	6,200	226	46	1.7	1,291	47
Bath	556	71	711	81	13	1.5	162	18
Bell	2,947	252	3,277	240	24	1.8	712	52
Boone	18,240	284	22,908	302	57	0.8	3,266	43
Bourbon	2,394	287	2,926	279	17	1.6	469	45
Boyd	5,802	314	7,621	336	22	1.0	1,232	54
Boyle	3,516	317	4,173	306	18	1.3	732	54
Bracken	945	237	1,113	233	13	2.7	216	45
Breathitt	1,267	214	1,369	197	27	3.9	474	68
Breckinridge	963	146	1,212	144	22	2.6	396	47
Bullitt	8,106	194	9,717	199	49	1.0	2,102	43
Butler	1,317	185	1,347	161	20	2.4	266	32
Caldwell	1,782	226	1,919	212	14	1.5	422	47
Calloway	4,078	339	5,056	337	36	2.4	766	51
Campbell	12,128	346	14,836	350	44	1.0	1,816	43
Carlisle	370	162	389	140	8	2.9	169	61
Carroll	1,747	138	2,035	149	20	1.5	358	26
Carter	2,651	156	2,718	138	26	1.3	614	31
Casey	819	157	905	140	21	3.3	236	37
Christian	7,573	189	9,081	202	41	0.9	1,854	41
Clark	4,732	238	5,486	238	26	1.1	842	37
Clay	1,670	190	1,942	189	34	3.3	775	76
Clinton	778	196	946	202	11	2.3	210	45
Crittenden	865	276	941	238	11	2.8	318	81
Cumberland	495	179	607	186	5	1.5	128	39
Daviess	13,889	425	16,958	407	52	1.2	2,551	61
Edmonson	872	161	992	154	11	1.7	254	40
Elliott	269	176	294	146	2	1.0	89	44
Estill	704	156	740	129	10	1.7	175	30
Fayette	57,367	466	65,206	446	141	1.0	10,839	74
Fleming	853	154	1,156	170	8	1.2	234	34
Floyd	3,903	197	4,161	177	48	2.0	1,152	49
Franklin	6,945	280	7,735	264	18	0.6	1,092	37
Fulton	583	196	617	178	5	1.4	118	34
Gallatin	1,270	95	1,378	97	14	1.0	263	19
Garrard	1,524	198	1,880	207	15	1.7	422	47
Grant	2,952	129	3,697	148	20	0.8	663	27
Graves	3,466	200	4,352	208	38	1.8	981	47
Grayson	3,069	227	3,140	197	38	2.4	792	50
Green	769	224	838	194	17	3.9	184	43
Greenup	3,124	237	3,280	198	17	1.0	607	37
Hancock	641	158	685	140	5	1.0	200	41
Hardin	12,391	214	14,526	215	81	1.2	2,482	37
Harlan	2,338	203	2,532	186	27	2.0	668	49
Harrison	2,126	375	2,555	358	19	2.7	465	65
Hart	2,469	131	2,711	134	24	1.2	530	26
Henderson	6,377	291	7,882	302	24	0.9	1,479	57
Henry	1,927	148	1,962	137	17	1.2	383	27
Hickman	278	110	300	101	4	1.3	71	24
Hopkins	5,484	218	7,116	241	46	1.6	1,090	37
Jackson	853	225	974	202	13	2.7	282	58
Jefferson	93,363	338	154,090	457	396	1.2	26,915	80
Jessamine	5,082	331	7,171	356	26	1.3	1,231	61
Johnson	2,026	216	2,282	203	19	1.7	575	51
Kenton	21,831	334	27,375	350	43	0.6	3,574	46
Knott	1,124	160	1,207	147	16	1.9	415	50

TABLE 7. CRASH RATES BY COUNTY FOR IDENTIFIED SYSTEM AND ALL ROADS (2012-2016)(continued)

COUNTY	ALL ROADS							
	IDENTIFIED		TOTAL CRASHES		FATAL CRASHES		FATAL OR INJURY CRASHES	
	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Knox	2,701	211	3,046	192	36	2.3	861	54
Larue	1,283	154	1,447	150	18	1.9	320	33
Laurel	6,865	173	8,190	184	57	1.3	1,827	41
Lawrence	994	126	1,166	128	14	1.5	343	38
Lee	330	147	389	139	9	3.2	93	33
Leslie	266	54	299	51	10	1.7	109	19
Letcher	1,314	147	1,445	131	15	1.4	553	50
Lewis	553	101	687	105	19	2.9	163	25
Lincoln	1,788	189	2,131	186	19	1.7	546	48
Livingston	795	125	894	123	10	1.4	212	29
Logan	2,480	208	2,864	200	24	1.7	641	45
Lyon	1,159	91	1,306	97	14	1.0	282	21
McCracken	9,318	275	11,113	278	55	1.4	2,735	68
McCreary	1,040	187	1,121	165	18	2.6	362	53
McLean	925	220	1,005	196	4	0.8	298	58
Madison	10,530	229	12,952	244	59	1.1	1,929	36
Magoffin	943	172	900	138	20	3.1	282	43
Marion	2,193	332	2,214	271	26	3.2	413	51
Marshall	3,349	154	3,865	154	48	1.9	974	39
Martin	522	124	516	100	6	1.2	146	28
Mason	2,105	241	3,007	293	16	1.6	485	47
Meade	1,921	195	2,236	181	33	2.7	667	54
Menifee	236	114	338	128	5	1.9	110	42
Mercer	1,938	226	2,408	228	19	1.8	494	47
Metcalfe	1,046	216	1,169	209	18	3.2	264	47
Monroe	356	93	382	82	7	1.5	96	20
Montgomery	3,696	290	4,024	265	21	1.4	775	51
Morgan	751	141	804	126	7	1.1	225	35
Muhlenberg	3,860	265	4,219	239	19	1.1	882	50
Nelson	4,711	228	5,597	224	46	1.8	1,099	44
Nicholas	573	256	755	271	10	3.6	139	50
Ohio	2,599	171	2,942	170	30	1.7	750	43
Oldham	4,951	220	5,590	201	20	0.7	941	34
Owen	823	225	887	195	14	3.1	236	52
Owsley	221	170	252	147	10	5.8	76	44
Pendleton	1,348	309	1,709	298	8	1.4	295	52
Perry	2,865	209	3,791	232	47	2.9	1,031	63
Pike	6,244	208	7,374	209	85	2.4	2,166	61
Powell	1,581	208	1,611	186	27	3.1	408	47
Pulaski	7,696	284	8,416	252	54	1.6	1,519	45
Robertson	120	197	134	164	1	1.2	30	37
Rockcastle	2,303	104	2,402	102	26	1.1	501	21
Rowan	2,956	221	3,943	257	23	1.5	710	46
Russell	1,488	205	1,693	193	21	2.4	329	37
Scott	5,510	169	7,507	204	43	1.2	1,424	39
Shelby	6,046	197	6,535	190	34	1.0	1,219	35
Simpson	2,885	172	2,924	159	19	1.0	654	36
Spencer	1,059	190	1,203	166	10	1.4	305	42
Taylor	3,027	339	3,402	306	21	1.9	533	48
Todd	898	175	1,045	169	15	2.4	253	41
Trigg	1,425	146	1,704	154	17	1.5	350	32
Trimble	733	216	797	192	16	3.9	195	47
Union	1,342	232	1,514	215	11	1.6	396	56
Warren	16,162	259	21,819	303	75	1.0	4,055	56
Washington	1,175	178	1,294	172	17	2.3	312	41
Wayne	1,203	171	1,580	183	23	2.7	349	40
Webster	1,125	151	1,290	149	13	1.5	352	41
Whitley	4,823	182	5,213	176	46	1.6	1,336	45
Wolfe	772	165	790	147	16	3.0	186	35
Woodford	3,366	199	4,228	221	20	1.0	718	37
STATEWIDE	513,332	253	652,313	272	3,353	1.4	122,059	51

\* 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 CRITICAL CRASH RATES BY POPULATION CATEGORY  
(2012-2016)

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY	TOTAL POPULATION	TOTAL MILEAGE DRIVEN 100 MVM		
UNDER 10,000	20	146,626	93.07		
10,000 - 14,999	26	329,247	182.49		
15,000 - 24,999	31	615,022	364.92		
25,000 - 50,000	27	982,708	573.12		
OVER 50,000	16	2,265,764	1,188.68		

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	13,871	149	182	7
10,000 - 14,999	28,771	158	185	9
15,000 - 24,999	68,723	188	212	10
25,000 - 50,000	130,797	228	247	7
OVER 50,000	410,151	345	357	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	178	1.91	6.14	0
10,000 - 14,999	380	2.08	5.58	0
15,000 - 24,999	609	1.67	4.05	0
25,000 - 50,000	877	1.53	3.19	0
OVER 50,000	1,309	1.10	1.84	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	3,394	36.5	53.1	3
10,000 - 14,999	6,832	37.4	51.1	4
15,000 - 24,999	15,072	41.3	52.3	5
25,000 - 50,000	26,190	45.7	54.3	3
OVER 50,000	70,571	59.4	64.6	3

TABLE 10. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2012-2016)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Nicholas	755	271 *	Harrison	2,555	358 *
Crittenden	941	238 *	Taylor	3,402	306 *
Bracken	1,113	233 *	Mason	3,007	293 *
McLean	1,005	196 *	Bourbon	2,926	279 *
Trimble	797	192 *	Marion	2,214	271 *
Ballard	887	191 *	Allen	2,202	264 *
Cumberland	607	186 *	Rowan	3,943	257 *
Fulton	617	178	Mercer	2,408	228 *
Robertson	134	164	Woodford	4,228	221 *
Wolfe	790	147	Union	1,514	215 *
Owsley	252	147	Garrard	1,880	207
Elliott	294	146	Anderson	2,452	203
Hancock	685	140	Johnson	2,282	203
Carlisle	389	140	Russell	1,693	193
Lee	389	139	Clay	1,942	189
Menifee	338	128	Lincoln	2,131	186
Livingston	894	123	Wayne	1,580	183
Hickman	300	101	Ohio	2,942	170
Gallatin	1,378	97	Spencer	1,203	166
Lyon	1,306	97	McCreary	1,121	165
<b>POPULATION CATEGORY 10,000-14,999</b>			Simpson	2,924	159
Pendleton	1,709	298 *	Adair	1,467	151
Caldwell	1,919	212 *	Grant	3,697	148
Metcalfe	1,169	209 *	Knott	1,207	147
Clinton	946	202 *	Breckinridge	1,212	144
Jackson	974	202 *	Casey	905	140
Breathitt	1,369	197 *	Henry	1,962	137
Owen	887	195 *	Hart	2,711	134
Green	838	194 *	Letcher	1,445	131
Powell	1,611	186 *	Lawrence	1,166	128
Washington	1,294	172	Rockcastle	2,402	102
Fleming	1,156	170	<b>POPULATION CATEGORY 25,000-50,000</b>		
Todd	1,045	169	Jessamine	7,171	356 *
Butler	1,347	161	Calloway	5,056	337 *
Trigg	1,704	154	Boyd	7,621	336 *
Edmonson	992	154	Boyle	4,173	306 *
Larue	1,447	150	Henderson	7,882	302 *
Webster	1,290	149	Montgomery	4,024	265 *
Carroll	2,035	149	Franklin	7,735	264 *
Magoffin	900	138	Hopkins	7,116	241
Estill	740	129	Bell	3,277	240
Morgan	804	126	Muhlenberg	4,219	239
Lewis	687	105	Clark	5,486	238
Martin	516	100	Perry	3,791	232
Monroe	382	82	Barren	6,200	226
Bath	711	81	Nelson	5,597	224
Leslie	299	51	Graves	4,352	208
			Scott	7,507	204
			Logan	2,864	200
			Greenup	3,280	198
			Grayson	3,140	197
			Knox	3,046	192
			Shelby	6,535	190
			Harlan	2,532	186
			Meade	2,236	181
			Floyd	4,161	177
			Whitley	5,213	176
			Marshall	3,865	154
			Carter	2,718	138
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Jefferson	154,090	457 *
			Fayette	65,206	446 *
			Daviess	16,958	407 *
			Kenton	27,375	350
			Campbell	14,836	350
			Warren	21,819	303
			Boone	22,908	302
			McCracken	11,113	278
			Pulaski	8,416	252
			Madison	12,952	244
			Hardin	14,526	215
			Pike	7,374	209
			Christian	9,081	202
			Oldham	5,590	201
			Bullitt	9,717	199
			Laurel	8,190	184

\* Critical crash rate

TABLE 11. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2012-2016)(IDENTIFIED SYSTEM)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Crittenden	865	276 *	Harrison	2,126	375 *
Nicholas	573	256 *	Taylor	3,027	339 *
Bracken	945	237 *	Marion	2,193	332 *
McLean	925	220 *	Bourbon	2,394	287 *
Trimble	733	216 *	Mason	2,105	241 *
Robertson	120	197 *	Allen	1,619	237 *
Fulton	583	196 *	Union	1,342	232 *
Ballard	742	194 *	Mercer	1,938	226 *
Cumberland	495	179	Rowan	2,956	221 *
Elliott	269	176	Johnson	2,026	216 *
Owsley	221	170	Russell	1,488	205
Wolfe	772	165	Woodford	3,366	199
Carlisle	370	162	Garrard	1,524	198
Hancock	641	158	Spencer	1,059	190
Lee	330	147	Clay	1,670	190
Livingston	795	125	Lincoln	1,788	189
Menifee	236	114	McCreary	1,040	187
Hickman	278	110	Adair	1,423	175
Gallatin	1,270	95	Simpson	2,885	172
Lyon	1,159	91	Anderson	1,717	171
<b>POPULATION CATEGORY 10,000-14,999</b>			Ohio	2,599	171
Pendleton	1,348	309 *	Wayne	1,203	171
Caldwell	1,782	226 *	Knott	1,124	160
Owen	823	225 *	Casey	819	157
Jackson	853	225 *	Henry	1,927	148
Green	769	224 *	Letcher	1,314	147
Metcalfe	1,046	216 *	Breckinridge	963	146
Breathitt	1,267	214 *	Hart	2,469	131
Powell	1,581	208 *	Grant	2,952	129
Clinton	778	196 *	Lawrence	994	126
Butler	1,317	185	Rockcastle	2,303	104
Washington	1,175	178	<b>POPULATION CATEGORY 25,000-50,000</b>		
Todd	898	175	Calloway	4,078	339 *
Magoffin	943	172	Jessamine	5,082	331 *
Edmonson	872	161	Boyle	3,516	317 *
Estill	704	156	Boyd	5,802	314 *
Larue	1,283	154	Henderson	6,377	291 *
Fleming	853	154	Montgomery	3,696	290 *
Webster	1,125	151	Franklin	6,945	280 *
Trigg	1,425	146	Muhlenberg	3,860	265 *
Morgan	751	141	Bell	2,947	252 *
Carroll	1,747	138	Clark	4,732	238
Martin	522	124	Greenup	3,124	237
Lewis	553	101	Nelson	4,711	228
Monroe	356	93	Grayson	3,069	227
Bath	556	71	Hopkins	5,484	218
Leslie	266	54	Knox	2,701	211
			Perry	2,865	209
			Barren	4,934	209
			Logan	2,480	208
			Harlan	2,338	203
			Graves	3,466	200
			Shelby	6,046	197
			Floyd	3,903	197
			Meade	1,921	195
			Whitley	4,823	182
			Scott	5,510	169
			Carter	2,651	156
			Marshall	3,349	154
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Fayette	57,367	466 *
			Daviess	13,889	425 *
			Campbell	12,128	346 *
			Jefferson	93,363	338 *
			Kenton	21,831	334 *
			Boone	18,240	284
			Pulaski	7,696	284
			McCracken	9,318	275
			Warren	16,162	259
			Madison	10,530	229
			Oldham	4,951	220
			Hardin	12,391	214
			Pike	6,244	208
			Bullitt	8,106	194
			Christian	7,573	189
			Laurel	6,865	173

\* Critical crash rate

TABLE 12. INJURY OR FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY  
(IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2012-2016)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Crittenden	318	81 *	Clay	775	76 *
Carlisle	169	61 *	Harrison	465	65 *
McLean	298	58 *	Allen	480	57 *
Nicholas	139	50	Union	396	56 *
Trimble	195	47	McCreary	362	53 *
Bracken	216	45	Marion	413	51
Owsley	76	44	Johnson	575	51
Elliott	89	44	Letcher	553	50
Ballard	201	43	Knott	415	50
Menifee	110	42	Lincoln	546	48
Hancock	200	41	Taylor	533	48
Cumberland	128	39	Mercer	494	47
Robertson	30	37	Garrard	422	47
Wolfe	186	35	Breckinridge	396	47
Fulton	118	34	Mason	485	47
Lee	93	33	Rowan	710	46
Livingston	212	29	Bourbon	469	45
Hickman	71	24	Ohio	750	43
Lyon	282	21	Spencer	305	42
Gallatin	263	19	Anderson	514	42
<b>POPULATION CATEGORY 10,000-14,999</b>			Wayne	349	40
Breathitt	474	68 *	Lawrence	343	38
Jackson	282	58 *	Russell	329	37
Pendleton	295	52 *	Woodford	718	37
Owen	236	52 *	Casey	236	37
Metcalfe	264	47	Simpson	654	36
Powell	408	47	Adair	308	32
Caldwell	422	47	Henry	383	27
Clinton	210	45	Grant	663	27
Green	184	43	Hart	530	26
Magoffin	282	43	Rockcastle	501	21
Webster	352	41	<b>POPULATION CATEGORY 25,000-50,000</b>		
Todd	253	41	Perry	1,031	63 *
Washington	312	41	Jessamine	1,231	61 *
Edmonson	254	40	Henderson	1,479	57 *
Morgan	225	35	Boyle	732	54
Fleming	234	34	Meade	667	54
Larue	320	33	Boyd	1,232	54
Butler	266	32	Knox	861	54
Trigg	350	32	Bell	712	52
Estill	175	30	Montgomery	775	51
Martin	146	28	Calloway	766	51
Carroll	358	26	Grayson	792	50
Lewis	163	25	Muhlenberg	882	50
Monroe	96	20	Harlan	668	49
Leslie	109	19	Floyd	1,152	49
Bath	162	18	Graves	981	47
			Barren	1,291	47
			Whitley	1,336	45
			Logan	641	45
			Nelson	1,099	44
			Scott	1,424	39
			Marshall	974	39
			Hopkins	1,090	37
			Greenup	607	37
			Clark	842	37
			Franklin	1,092	37
			Shelby	1,219	35
			Carter	614	31
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Jefferson	26,915	80 *
			Fayette	10,839	74 *
			McCracken	2,735	68 *
			Daviess	2,551	61
			Pike	2,166	61
			Warren	4,055	56
			Kenton	3,574	46
			Pulaski	1,519	45
			Boone	3,266	43
			Bullitt	2,102	43
			Campbell	1,816	43
			Christian	1,854	41
			Laurel	1,827	41
			Hardin	2,482	37
			Madison	1,929	36
			Oldham	941	34

\* Critical crash rate

TABLE 13. FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2012-2016)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Owsley	10	5.8	Clay	34	3.3
Trimble	16	3.9	Casey	21	3.3
Nicholas	10	3.6	Marion	26	3.2
Ballard	16	3.4	Wayne	23	2.7
Lee	9	3.2	Harrison	19	2.7
Wolfe	16	3.0	McCreary	18	2.6
Carlisle	8	2.9	Breckinridge	22	2.6
Crittenden	11	2.8	Allen	21	2.5
Bracken	13	2.7	Russell	21	2.4
Menifee	5	1.9	Adair	20	2.1
Cumberland	5	1.5	Taylor	21	1.9
Fulton	5	1.4	Knott	16	1.9
Livingston	10	1.4	Mercer	19	1.8
Hickman	4	1.3	Lincoln	19	1.7
Robertson	1	1.2	Garrard	15	1.7
Elliott	2	1.0	Johnson	19	1.7
Lyon	14	1.0	Ohio	30	1.7
Hancock	5	1.0	Bourbon	17	1.6
Gallatin	14	1.0	Union	11	1.6
McLean	4	0.8	Mason	16	1.6
<b>POPULATION CATEGORY 10,000-14,999</b>			Mason	16	1.6
Green	17	3.9	Rowan	23	1.5
Breathitt	27	3.9	Lawrence	14	1.5
Metcalfe	18	3.2	Letcher	15	1.4
Magoffin	20	3.1	Spencer	10	1.4
Owen	14	3.1	Hart	24	1.2
Powell	27	3.1	Henry	17	1.2
Lewis	19	2.9	Anderson	13	1.1
Jackson	13	2.7	Rockcastle	26	1.1
Todd	15	2.4	Simpson	19	1.0
Butler	20	2.4	Woodford	20	1.0
Washington	17	2.3	Grant	20	0.8
Clinton	11	2.3	<b>POPULATION CATEGORY 25,000-50,000</b>		
Larue	18	1.9	Perry	47	2.9
Edmonson	11	1.7	Meade	33	2.7
Estill	10	1.7	Grayson	38	2.4
Leslie	10	1.7	Calloway	36	2.4
Caldwell	14	1.5	Knox	36	2.3
Webster	13	1.5	Floyd	48	2.0
Trigg	17	1.5	Harlan	27	2.0
Bath	13	1.5	Marshall	48	1.9
Carroll	20	1.5	Bell	24	1.8
Monroe	7	1.5	Nelson	46	1.8
Pendleton	8	1.4	Graves	38	1.8
Fleming	8	1.2	Logan	24	1.7
Martin	6	1.2	Barren	46	1.7
Morgan	7	1.1	Hopkins	46	1.6
			Whitley	46	1.6
			Montgomery	21	1.4
			Carter	26	1.3
			Boyle	18	1.3
			Jessamine	26	1.3
			Scott	43	1.2
			Muhlenberg	19	1.1
			Clark	26	1.1
			Shelby	34	1.0
			Greenup	17	1.0
			Boyd	22	1.0
			Henderson	24	0.9
			Franklin	18	0.6
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Pike	85	2.4 *
			Pulaski	54	1.6
			McCracken	55	1.4
			Laurel	57	1.3
			Jefferson	396	1.2
			Hardin	81	1.2
			Daviess	52	1.2
			Madison	59	1.1
			Warren	75	1.0
			Bullitt	49	1.0
			Campbell	44	1.0
			Fayette	141	1.0
			Christian	41	0.9
			Boone	57	0.8
			Oldham	20	0.7
			Kenton	43	0.6

\* Critical crash rate



TABLE 14. MISCELLANEOUS CRASH DATA FOR EACH COUNTY

COUNTY	NUMBER OF CRASHES BY YEAR					2012-2015 AVERAGE	2016 PERCENT CHANGE*	PERCENT OF CRASHES INVOLVING ALCOHOL	PERCENT OF CRASHES INVOLVING DRUGS	PERCENT FATAL CRASHES	PERCENT INJURY OR FATAL CRASHES	SAFETY BELT USAGE RATE**	PERCENT OF CRASHES INVOLVING SPEEDING
	2012	2013	2014	2015	2016								
Adair	364	271	299	307	226	310	-27.2	3.4	2.0	1.36	21.0	43.8	3.7
Allen	370	456	454	420	502	425	18.1	4.4	1.0	0.95	21.8	54.0	3.9
Anderson	457	441	507	530	517	484	6.9	3.8	1.9	0.53	21.0	57.7	5.4
Ballard	192	192	170	165	168	180	-6.5	5.0	1.6	1.80	22.7	48.4	4.6
Barren	1,028	1,139	1,172	1,363	1,498	1,176	27.4	3.2	1.0	0.74	20.8	57.9	3.8
Bath	121	124	96	159	211	125	68.8	4.6	2.5	1.83	22.8	42.0	3.5
Bell	677	621	555	667	757	630	20.2	2.2	3.9	0.73	21.7	70.7	3.8
Boone	4,307	4,307	4,639	4,645	5,010	4,475	12.0	3.4	0.8	0.25	14.3	77.8	6.9
Bourbon	513	550	576	628	659	567	16.3	4.7	1.1	0.58	16.0	62.2	6.9
Boyd	1,536	1,506	1,501	1,535	1,543	1,520	1.5	2.1	1.3	0.29	16.2	66.9	3.5
Boyle	836	840	777	866	854	830	2.9	3.4	1.3	0.43	17.5	60.7	4.6
Bracken	241	231	179	240	222	223	-0.3	4.9	0.6	1.17	19.4	53.9	7.2
Breathitt	290	290	280	274	235	284	-17.1	3.1	3.4	1.97	34.6	53.8	4.3
Breckinridge	281	246	202	240	243	242	0.3	4.3	0.5	1.82	32.7	50.3	3.8
Bullitt	1,681	1,821	2,173	1,971	2,071	1,912	8.3	3.6	0.9	0.50	21.6	80.6	3.0
Butler	250	278	291	291	237	278	-14.6	5.6	0.7	1.48	19.7	57.3	8.9
Caldwell	335	385	386	376	437	371	17.9	2.2	0.7	0.73	22.0	70.8	7.5
Calloway	1,031	944	967	1,041	1,073	996	7.8	3.8	1.1	0.71	15.2	65.0	4.0
Campbell	2,870	2,848	2,906	3,130	3,082	2,939	4.9	3.9	1.1	0.30	12.2	75.8	5.0
Carlisle	90	78	86	82	53	84	-36.9	5.4	2.8	2.06	43.4	67.0	9.3
Carroll	373	367	449	439	407	407	0.0	4.2	1.3	0.98	17.6	70.7	5.1
Carter	533	532	540	537	576	536	7.6	3.7	1.6	0.96	22.6	61.1	6.4
Casey	141	280	172	221	91	204	-55.3	5.4	2.7	2.32	26.1	45.6	4.3
Christian	1,782	1,718	1,707	1,919	1,955	1,782	9.7	3.7	0.9	0.45	20.4	65.8	5.5
Clark	1,052	1,018	1,076	1,136	1,204	1,071	12.5	3.2	1.0	0.47	15.3	67.6	4.5
Clay	449	381	370	388	354	397	-10.8	3.8	5.4	1.75	39.9	64.2	7.3
Clinton	229	132	111	224	250	174	43.7	3.6	1.2	1.16	22.2	49.4	1.9
Crittenden	170	182	197	206	186	189	-1.5	4.3	1.7	1.17	33.8	58.2	4.9
Cumberland	104	134	126	115	128	120	6.9	5.1	2.1	0.82	21.1	46.5	3.8
Daviess	3,078	3,314	3,217	3,637	3,712	3,312	12.1	3.2	1.0	0.31	15.0	70.9	3.1
Edmonson	155	201	217	208	211	195	8.1	4.2	0.8	1.11	25.6	63.7	8.9
Elliott	61	61	64	44	64	58	11.3	4.8	2.4	0.68	30.3	64.1	6.1
Estill	145	161	147	102	185	139	33.3	5.0	2.7	1.35	23.6	53.1	3.9
Fayette	12,043	12,228	12,872	13,787	14,276	12,733	12.1	3.6	0.6	0.22	16.6	75.0	7.7
Fleming	211	246	218	249	232	231	0.4	3.8	1.6	0.69	20.2	46.5	4.9
Floyd	907	763	829	873	789	843	-6.4	4.8	5.4	1.15	27.7	59.9	4.7
Franklin	1,639	1,454	1,471	1,622	1,549	1,547	0.2	3.4	1.4	0.23	14.1	71.3	4.8
Fulton	101	126	124	128	138	120	15.2	5.7	1.5	0.81	19.1	62.9	3.1
Gallatin	312	240	264	281	281	274	2.5	4.2	0.9	1.02	19.1	71.3	3.8
Garrard	361	337	380	402	400	370	8.1	3.7	1.1	0.80	22.4	52.5	6.8
Grant	780	640	685	780	812	721	12.6	2.7	1.1	0.54	17.9	69.5	10.2
Graves	811	864	911	822	944	852	10.8	3.8	1.5	0.87	22.5	66.7	6.9
Grayson	636	604	626	586	688	613	12.2	4.2	1.6	1.21	25.2	64.7	3.0
Green	158	167	165	163	185	163	13.3	2.9	0.4	2.03	22.0	48.1	3.2
Greenup	689	683	594	659	655	656	-0.2	3.2	1.1	0.52	18.5	67.6	4.3
Hancock	134	141	120	135	155	133	17.0	4.7	0.4	0.73	29.2	73.6	5.8
Hardin	2,913	2,922	2,843	2,914	2,934	2,898	1.2	3.4	1.1	0.56	17.1	66.2	5.2
Harlan	592	558	524	464	394	535	-26.3	2.8	5.1	1.07	26.4	66.3	3.1
Harrison	524	490	536	463	542	503	7.7	4.1	1.6	0.74	18.2	59.9	5.3
Hart	483	525	532	636	535	544	-1.7	2.8	1.3	0.89	19.5	40.4	5.3
Henderson	1,425	1,563	1,536	1,687	1,671	1,553	7.6	2.9	1.2	0.30	18.8	71.8	3.2
Henry	322	383	401	411	445	379	17.3	4.9	1.0	0.87	19.5	70.8	8.0
Hickman	53	49	80	56	62	60	4.2	5.0	1.3	1.33	23.7	53.5	6.3
Hopkins	1,432	1,314	1,430	1,498	1,442	1,419	1.7	2.6	1.1	0.65	15.3	70.5	5.6
Jackson	175	196	198	200	205	192	6.6	3.8	2.2	1.33	29.0	64.5	5.6
Jefferson	29,347	28,503	29,687	32,639	33,914	30,044	12.9	2.7	0.7	0.26	17.5	81.1	3.4
Jessamine	1,334	1,309	1,464	1,467	1,597	1,394	14.6	3.6	1.3	0.36	17.2	65.9	5.2
Johnson	469	456	459	441	457	456	0.2	3.6	3.9	0.83	25.2	68.4	2.9
Kenton	5,219	5,269	5,309	5,677	5,901	5,369	9.9	3.7	1.1	0.16	13.1	77.5	6.4
Knott	238	251	266	228	224	246	-8.9	4.0	4.8	1.33	34.4	64.5	3.2

TABLE 14. MISCELLANEOUS CRASH DATA FOR EACH COUNTY (continued)

COUNTY	NUMBER OF CRASHES BY YEAR					2012-2015 AVERAGE	2016 PERCENT CHANGE*	PERCENT OF CRASHES INVOLVING ALCOHOL	PERCENT OF CRASHES INVOLVING DRUGS	PERCENT FATAL CRASHES	PERCENT INJURY OR FATAL CRASHES	SAFETY BELT USAGE RATE**	PERCENT OF CRASHES INVOLVING SPEEDING
	2012	2013	2014	2015	2016								
Knox	590	584	465	717	690	589	17.1	2.9	4.8	1.18	28.3	66.5	7.2
Larue	274	289	236	317	331	279	18.6	3.8	1.3	1.24	22.1	58.2	8.2
Laurel	1,546	1,473	1,605	1,788	1,778	1,603	10.9	2.3	1.9	0.70	22.3	69.2	4.8
Lawrence	273	243	207	230	213	238	-10.6	4.0	1.6	1.20	29.4	63.2	2.8
Lee	89	82	74	76	68	80	-15.3	3.3	2.6	2.31	23.9	51.9	2.1
Leslie	40	87	68	29	75	56	33.9	2.3	3.0	3.34	36.5	59.4	5.7
Letcher	304	286	308	240	307	285	7.9	4.6	4.0	1.04	38.3	51.2	3.3
Lewis	155	162	123	108	139	137	1.5	5.2	1.6	2.77	23.7	56.5	4.4
Lincoln	432	415	411	438	435	424	2.6	3.6	1.5	0.89	25.6	62.9	3.9
Livingston	164	189	181	174	186	177	5.1	4.5	2.1	1.12	23.7	71.1	7.8
Logan	549	504	552	612	647	554	16.7	3.5	0.9	0.84	22.4	60.4	4.5
Lyon	225	228	261	295	297	252	17.7	4.1	2.2	1.07	21.6	82.9	7.3
McCracken	2,097	2,031	2,015	2,394	2,576	2,134	20.7	3.4	0.9	0.49	24.6	65.1	5.5
McCreary	239	222	206	238	216	226	-4.5	2.9	4.1	1.61	32.3	51.3	5.7
McLean	191	174	179	233	228	194	17.4	3.6	1.1	0.40	29.7	60.3	5.5
Madison	2,452	2,440	2,522	2,763	2,775	2,544	9.1	3.4	1.3	0.46	14.9	69.4	8.1
Magoffin	178	189	180	184	169	183	-7.5	3.2	4.9	2.22	31.3	59.7	4.7
Marion	410	382	430	500	492	431	14.3	4.9	1.1	1.17	18.7	43.1	1.8
Marshall	743	730	726	837	829	759	9.2	4.1	1.4	1.24	25.2	60.7	5.5
Martin	149	94	121	14	138	95	46.0	2.3	3.9	1.16	28.3	55.4	4.8
Mason	581	566	628	613	619	597	3.7	5.2	1.3	0.53	16.1	53.5	6.6
Meade	448	425	404	472	487	437	11.4	6.1	0.8	1.48	29.8	47.3	4.4
Menifee	64	50	66	56	102	59	72.9	6.5	2.4	1.48	32.5	48.9	3.0
Mercer	456	487	483	498	484	481	0.6	4.6	1.2	0.79	20.5	60.6	6.0
Metcalfe	213	210	224	249	273	224	21.9	3.9	0.6	1.54	22.6	42.4	3.0
Monroe	64	42	35	74	167	54	210.7	2.4	0.8	1.83	25.1	40.1	2.6
Montgomery	777	750	831	827	839	796	5.4	3.5	1.7	0.52	19.3	47.1	3.9
Morgan	185	184	150	137	148	164	-9.8	4.2	3.1	0.87	28.0	57.9	8.2
Muhlenberg	792	782	832	892	921	825	11.7	3.2	1.9	0.45	20.9	61.8	3.9
Nelson	1,167	1,074	1,111	1,125	1,120	1,119	0.1	4.8	0.9	0.82	19.6	60.1	4.1
Nicholas	155	148	149	154	149	152	-1.7	4.4	2.5	1.32	18.4	50.6	4.4
Ohio	583	531	559	612	657	571	15.0	3.8	1.7	1.02	25.5	69.0	5.6
Oldham	970	1,011	1,164	1,179	1,266	1,081	17.1	3.3	0.7	0.36	16.8	83.0	4.9
Owen	121	162	131	241	232	164	41.7	4.4	1.4	1.58	26.6	57.7	6.8
Owsley	27	41	35	57	92	40	130.0	2.8	3.6	3.97	30.2	41.1	7.9
Pendleton	383	335	296	358	337	343	-1.7	4.7	1.2	0.47	17.3	68.5	6.4
Perry	843	709	768	743	728	766	-4.9	3.4	3.0	1.24	27.2	56.6	2.6
Pike	1,729	1,500	1,373	1,425	1,347	1,507	-10.6	4.6	5.4	1.15	29.4	62.3	5.6
Powell	320	335	293	336	327	321	1.9	3.4	1.9	1.68	25.3	64.6	2.5
Pulaski	1,615	1,560	1,612	1,815	1,814	1,651	9.9	2.4	1.1	0.64	18.0	54.2	4.4
Robertson	13	25	19	25	52	21	153.7	8.2	1.5	0.75	22.4	53.3	5.2
Rockcastle	426	417	477	561	521	470	10.8	2.3	2.3	1.08	20.9	76.9	6.2
Rowan	751	737	791	834	830	778	6.6	2.7	1.2	0.58	18.0	54.6	4.7
Russell	347	313	310	346	377	329	14.6	2.5	2.3	1.24	19.4	58.7	1.9
Scott	1,408	1,331	1,515	1,583	1,670	1,459	14.4	3.4	0.7	0.57	19.0	60.8	5.3
Shelby	1,216	1,287	1,318	1,285	1,429	1,277	11.9	3.8	0.7	0.52	18.7	80.0	4.8
Simpson	582	587	599	548	608	579	5.0	3.5	0.8	0.65	22.4	60.0	9.9
Spencer	177	197	291	262	276	232	19.1	5.0	1.2	0.83	25.4	70.0	7.3
Taylor	644	643	646	727	742	665	11.6	2.9	0.7	0.62	15.7	53.3	3.6
Todd	204	233	189	197	222	206	7.9	5.1	1.2	1.44	24.2	63.8	8.0
Trigg	298	330	319	355	402	326	23.5	4.2	1.7	1.00	20.5	64.0	5.1
Trimble	181	117	164	179	156	160	-2.7	5.5	1.0	2.01	24.5	77.1	5.6
Union	309	280	303	316	306	302	1.3	3.2	1.3	0.73	26.2	76.3	6.8
Warren	3,910	4,126	4,233	4,605	4,945	4,219	17.2	3.0	0.9	0.34	18.6	63.0	4.7
Washington	233	232	288	271	270	256	5.5	4.9	0.5	1.31	24.1	46.5	5.6
Wayne	298	204	349	369	360	305	18.0	3.2	1.4	1.46	22.1	47.0	5.8
Webster	232	242	293	275	248	261	-4.8	2.7	1.4	1.01	27.3	66.3	4.6
Whitley	1,033	955	1,068	1,149	1,008	1,051	-4.1	2.7	2.0	0.88	25.6	74.0	6.5
Wolfe	165	159	154	176	136	164	-16.8	2.9	1.9	2.03	23.5	59.4	6.6
Woodford	774	807	853	851	943	821	14.8	4.4	0.8	0.47	17.0	70.6	7.1
STATEWIDE	124,844	123,258	127,326	136,338	140,547	127,942	9.9	3.3	1.2	0.51	18.7	67.9	5.0

\* Percent change in the 2016 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)

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500  
(FOR IDENTIFIED SYSTEM AND ALL ROADS FOR 2012-2016)

CITY	POPULATION	IDENTIFIED SYSTEM		ALL ROADS	
		TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
Louisville	597,337	33,329	342	131,929	44
Lexington	295,803	14,119	790	65,188	44
Bowling Green	58,067	4,569	376	16,057	55
Owensboro	57,265	3,971	671	13,311	47
Covington	40,640	4,922	358	8,638	43
Hopkinsville	31,577	2,999	328	5,332	34
Richmond	31,364	1,028	693	6,878	44
Florence	29,951	4,882	316	10,604	71
Georgetown	29,098	1,329	513	4,520	31
Henderson	28,757	2,359	414	5,628	39
Elizabethtown	28,531	2,149	227	6,716	47
Nicholasville	28,015	1,075	351	4,870	35
Jeffersonton	26,595	942	350	4,940	37
Frankfort	25,527	3,515	444	5,287	41
Paducah	25,024	1,991	411	7,531	60
Independence	24,757	2,166	419	2,203	18
Radcliff	21,688	723	562	3,120	29
Ashland	21,684	1,496	480	4,422	41
Madisonville	19,591	1,887	546	3,790	39
Winchester	18,368	1,507	770	3,474	38
Erlanger	18,082	1,631	1,059	4,131	46
Murray	17,741	1,463	552	3,363	38
Fort Thomas	16,325	478	633	1,452	18
Danville	16,218	867	650	3,300	41
Newport	15,273	2,050	1,139	4,703	62
Shively	15,264	412	542	4,814	63
Shelbyville	14,045	715	610	2,629	37
Glasgow	14,028	535	493	2,922	42
Berea	13,561	816	453	2,292	34
Bardstown	11,700	1,185	512	3,185	54
Shepherdsville	11,222	1,162	693	3,662	65
Somerset	11,196	1,472	458	4,747	85
Lyndon	11,002	***	***	1,019	19
Lawrenceburg	10,505	260	358	1,067	20
Mayfield	10,024	283	481	1,817	36
Mount Washington	9,117	559	658	1,565	34
Campbellsville	9,108	1,167	609	2,273	50
Maysville	9,011	720	315	1,863	41
Edgewood	8,575	53	829	962	22
Versailles	8,568	335	639	1,578	37
Paris	8,553	1,000	450	1,629	38
Alexandria	8,477	722	321	1,319	31
Elsmere	8,451	306	236	639	15
Franklin	8,408	350	434	1,838	44
Harrodsburg	8,340	390	448	1,269	30
Fort Mitchell	8,207	625	855	1,532	37
La Grange	8,082	213	494	1,337	33
London	7,993	1,635	246	3,386	85
Villa Hills	7,489	62	285	253	7
Oak Grove	7,489	***	***	1,337	36
Flatwoods	7,423	374	368	540	15
Corbin	7,304	576	709	1,958	54
Middletown	7,218	***	***	2,223	62
Russellville	6,960	427	327	1,250	36
Highland Heights	6,923	650	252	1,260	36
Pikeville	6,903	1,120	267	2,859	83
Mount Sterling	6,895	1,042	628	1,795	52
Morehead	6,845	877	406	2,184	64
Leitchfield	6,699	599	655	1,409	42
Taylor Mill	6,604	156	311	1,091	33
Cynthiana	6,402	360	555	1,181	37
Princeton	6,329	612	455	1,013	32
Monticello	6,188	346	213	1,094	35
Central City	5,978	520	443	1,028	34

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500  
(FOR IDENTIFIED SYSTEM AND ALL ROADS FOR 2012-2016)(continued)

CITY	POPULATION	IDENTIFIED SYSTEM		ALL ROADS	
		TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
Bellevue	5,955	401	1,126	839	28
Cold Spring	5,912	808	461	1,299	44
Fort Wright	5,723	1,025	582	2,710	95
Lebanon	5,539	660	501	1,067	39
Union	5,379	***	***	766	29
Dayton	5,338	22	411	441	17
Williamsburg	5,245	527	162	932	36
Westwood	4,746	***	***	***	***
Crestwood	4,531	***	***	922	41
Vine Grove	4,520	215	264	392	17
Hazard	4,456	630	252	2,134	96
Columbia	4,452	144	352	723	33
Ludlow	4,407	259	889	447	20
Benton	4,349	293	419	916	42
Greenville	4,312	352	420	830	39
Scottsville	4,226	378	360	816	39
Grayson	4,217	290	450	801	38
Carrollton	3,938	245	441	615	31
Williamstown	3,925	***	***	618	32
Crittenden	3,815	***	***	409	21
Southgate	3,803	460	826	778	41
Crescent Springs	3,801	***	***	1,071	56
Wilmore	3,686	118	421	257	14
Walton	3,635	553	848	926	51
Stanford	3,487	194	256	614	35
Paintsville	3,459	452	518	1,116	65
Lancaster	3,442	185	549	518	30
West Liberty	3,435	102	233	240	14
Beaver Dam	3,409	248	305	543	32
Russell	3,380	592	404	982	58
Morganfield	3,285	172	243	461	28
Prestonsburg	3,255	461	385	1,610	99
Hodgenville	3,206	80	172	475	30
Providence	3,193	114	307	218	14
Barbourville	3,165	250	425	683	43
Crestview Hills	3,148	***	***	1,893	120
Marion	3,039	105	516	294	19
Wilder	3,035	***	***	1,123	74
Park Hills	2,970	230	659	137	9
Indian Hills	2,868	***	***	193	14
Dawson Springs	2,764	200	583	245	18
Stanton	2,733	371	386	433	32
Irvine	2,715	56	124	123	9
Hartford	2,672	102	270	305	23
Lakeside Park	2,668	446	574	284	21
Flemingsburg	2,658	37	660	430	32
Brandenburg	2,643	286	315	583	44
Calvert City	2,566	131	162	454	35
Cadiz	2,558	120	168	585	46
Eddyville	2,554	144	108	399	31
Springfield	2,519	99	315	443	35

\* 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 (2012-2016) (ALL ROADS)

CITY	POPULATION	FATAL CRASHES		PEDESTRIAN MOTOR VEHICLE CRASHES		BICYCLE MOTOR VEHICLE CRASHES		MOTORCYCLE CRASHES		PERCENT OF CRASHES INVOLVING SPEEDING	PERCENT OF CRASHES INVOLVING ALCOHOL
		NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*		
Louisville	597,337	357	1.20	1,525	5.10	603	2.00	1,175	3.9	3.5	2.8
Lexington	295,803	141	0.95	619	4.20	299	2.00	482	3.3	7.7	3.6
Bowling Green	58,067	22	0.76	83	2.90	60	2.10	128	4.4	4.1	2.3
Owensboro	57,265	21	0.73	75	2.60	68	2.40	128	4.5	2.3	2.7
Covington	40,640	9	0.44	151	7.40	58	2.90	60	3.0	3.5	4.8
Hopkinsville	31,577	13	0.82	25	1.60	22	1.40	60	3.8	4.4	3.2
Richmond	31,364	15	0.96	41	2.60	16	1.00	69	4.4	7.5	3.0
Florence	29,951	16	1.07	76	5.10	17	1.10	84	5.6	5.1	2.6
Georgetown	29,098	11	0.76	35	2.40	9	0.60	39	2.7	3.5	2.9
Henderson	28,757	14	0.97	38	2.60	30	2.10	52	3.6	2.4	2.5
Elizabethtown	28,531	12	0.84	27	1.90	13	0.90	71	5.0	3.4	2.3
Nicholasville	28,015	18	1.29	29	2.10	9	0.60	44	3.1	3.4	3.0
Jeffersontown	26,595	6	0.45	26	2.00	14	1.10	25	1.9	2.0	2.4
Frankfort	25,527	9	0.71	34	2.70	9	0.70	37	2.9	3.9	3.2
Paducah	25,024	20	1.60	42	3.40	33	2.60	84	6.7	4.4	2.3
Independence	24,757	2	0.16	13	1.10	5	0.40	27	2.2	12.3	3.9
Radcliff	21,688	13	1.20	24	2.20	9	0.80	59	5.4	2.3	3.7
Ashland	21,684	4	0.37	41	3.80	21	1.90	42	3.9	2.5	1.7
Madisonville	19,591	11	1.12	20	2.00	11	1.10	21	2.1	4.0	1.7
Winchester	18,368	5	0.54	20	2.20	6	0.70	24	2.6	3.0	2.8
Erlanger	18,082	10	1.11	25	2.80	5	0.60	36	4.0	7.4	2.6
Murray	17,741	10	1.13	24	2.70	21	2.40	24	2.7	2.1	2.3
Fort Thomas	16,325	7	0.86	6	0.70	1	0.10	12	1.5	4.8	3.9
Danville	16,218	7	0.86	23	2.80	12	1.50	27	3.3	3.8	2.4
Newport	15,273	5	0.65	72	9.40	30	3.90	31	4.1	3.3	4.0
Shively	15,264	19	2.49	75	9.80	20	2.60	69	9.0	3.4	3.4
Shelbyville	14,045	8	1.14	20	2.80	12	1.70	18	2.6	2.8	3.4
Glasgow	14,028	12	1.71	14	2.00	3	0.40	18	2.6	1.8	2.5
Berea	13,561	8	1.18	10	1.50	2	0.30	20	2.9	4.8	1.6
Bardstown	11,700	10	1.71	8	1.40	11	1.90	23	3.9	2.4	2.8
Shepherdsville	11,222	10	1.78	29	5.20	9	1.60	38	6.8	1.9	2.9
Somerset	11,196	19	3.39	22	3.90	4	0.70	36	6.4	3.3	1.5
Lyndon	11,002	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Lawrenceburg	10,505	4	0.76	5	1.00	1	0.20	7	1.3	2.5	2.3
Mayfield	10,024	2	0.40	16	3.20	7	1.40	12	2.4	2.1	1.7
Mount Washington	9,117	8	1.75	3	0.70	0	0.00	19	4.2	1.5	2.7
Campbellsville	9,108	3	0.66	21	4.60	2	0.40	26	5.7	1.3	1.7
Maysville	9,011	3	0.67	17	3.80	3	0.70	14	3.1	4.2	3.5
Edgewood	8,575	1	0.23	3	0.70	2	0.50	6	1.4	9.7	2.2
Versailles	8,568	2	0.47	11	2.60	5	1.20	14	3.3	3.7	3.7
Paris	8,553	4	0.94	13	3.00	4	0.90	14	3.3	3.1	3.3
Alexandria	8,477	4	0.94	9	2.10	8	1.90	12	2.8	5.1	2.1
Elsmere	8,451	1	0.24	13	3.10	5	1.20	3	0.7	3.0	4.4
Franklin	8,408	7	1.67	11	2.60	3	0.70	17	4.0	4.7	3.2
Harrodsburg	8,340	3	0.72	6	1.40	2	0.50	14	3.4	3.7	3.5
Fort Mitchell	8,207	1	0.24	9	2.20	0	0.00	12	2.9	5.0	2.9
La Grange	8,082	1	0.25	9	2.20	4	1.00	6	1.5	2.5	1.8
London	7,993	8	2.00	9	2.30	5	1.30	25	6.3	2.2	1.7
Villa Hills	7,489	0	0.00	1	0.30	0	0.00	4	1.1	10.7	3.6
Oak Grove	7,489	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Flatwoods	7,423	1	0.27	2	0.50	0	0.00	2	0.5	3.5	1.9
Corbin	7,304	5	1.37	10	2.70	3	0.80	17	4.7	4.4	2.3
Middletown	7,218	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Russellville	6,960	2	0.57	7	2.00	4	1.10	11	3.2	4.7	2.8
Highland Heights	6,923	5	1.44	11	3.20	3	0.90	7	2.0	6.3	2.7
Pikeville	6,903	7	2.03	14	4.10	3	0.90	27	7.8	3.5	3.4
Mount Sterling	6,895	1	0.29	15	4.40	0	0.00	11	3.2	2.0	2.8
Morehead	6,845	3	0.88	14	4.10	4	1.20	16	4.7	2.0	1.6
Leitchfield	6,699	4	1.19	8	2.40	2	0.60	18	5.4	2.2	2.5
Taylor Mill	6,604	1	0.30	1	0.30	1	0.30	9	2.7	11.8	4.7
Cynthiana	6,402	5	1.56	15	4.70	3	0.90	9	2.8	4.0	2.8
Princeton	6,329	3	0.95	5	1.60	3	0.90	15	4.7	6.4	1.6

TABLE 16. MISCELLANEOUS CRASH DATA FOR CITIES HAVING POPULATION OVER 2,500 (2012-2016) (ALL ROADS)(continued)

CITY	POPULATION	FATAL CRASHES		PEDESTRIAN MOTOR VEHICLE CRASHES		BICYCLE MOTOR VEHICLE CRASHES		MOTORCYCLE CRASHES		PERCENT OF CRASHES INVOLVING SPEEDING	PERCENT OF CRASHES INVOLVING ALCOHOL
		NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*		
Monticello	6,188	4	1.29	8	2.60	4	1.30	9	2.9	3.7	2.4
Central City	5,978	2	0.67	6	2.00	2	0.70	9	3.0	2.4	3.1
Bellevue	5,955	1	0.34	18	6.00	4	1.30	8	2.7	3.1	4.5
Cold Spring	5,912	5	1.69	8	2.70	0	0.00	11	3.7	6.2	2.0
Fort Wright	5,723	2	0.70	10	3.50	0	0.00	20	7.0	2.8	2.3
Lebanon	5,539	4	1.44	6	2.20	2	0.70	11	4.0	1.0	3.3
Union	5,379	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Dayton	5,338	0	0.00	9	3.40	0	0.00	2	0.7	2.7	7.5
Williamsburg	5,245	5	1.91	9	3.40	3	1.10	7	2.7	3.5	1.9
Crestwood	4,531	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Vine Grove	4,520	4	1.77	1	0.40	3	1.30	3	1.3	5.9	3.1
Hazard	4,456	11	4.94	13	5.80	1	0.40	21	9.4	1.9	2.4
Columbia	4,452	6	2.70	1	0.40	3	1.30	5	2.2	1.5	2.1
Ludlow	4,407	0	0.00	5	2.30	5	2.30	2	0.9	4.7	4.3
Benton	4,349	2	0.92	3	1.40	3	1.40	11	5.1	4.0	2.3
Greenville	4,312	1	0.46	4	1.90	0	0.00	7	3.2	2.0	2.2
Scottsville	4,226	4	1.89	6	2.80	1	0.50	11	5.2	1.7	2.5
Grayson	4,217	3	1.42	10	4.70	1	0.50	3	1.4	1.9	2.2
Carrollton	3,938	2	1.02	3	1.50	2	1.00	6	3.0	3.3	3.6
Williamstown	3,925	3	1.53	3	1.50	1	0.50	6	3.1	9.1	3.6
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	7	3.70	1	0.50	7	3.7	6.2	3.7
Crescent Springs	3,801	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Wilmore	3,686	0	0.00	1	0.50	1	0.50	1	0.5	3.1	3.5
Walton	3,635	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Stanford	3,487	2	1.15	3	1.70	0	0.00	9	5.2	3.9	1.6
Paintsville	3,459	9	5.20	9	5.20	7	4.00	7	4.0	1.3	1.2
Lancaster	3,442	1	0.58	4	2.30	2	1.20	7	4.1	2.1	3.1
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	4	2.3	1.7	2.0
Russell	3,380	2	1.18	3	1.80	0	0.00	11	6.5	3.0	2.0
Morganfield	3,285	1	0.61	1	0.60	2	1.20	3	1.8	3.0	0.4
Prestonsburg	3,255	10	6.14	7	4.30	1	0.60	11	6.8	2.1	2.7
Hodgenville	3,206	2	1.25	2	1.20	0	0.00	3	1.9	4.4	2.5
Providence	3,193	1	0.63	0	0.00	0	0.00	2	1.3	4.6	2.8
Barbourville	3,165	7	4.42	6	3.80	1	0.60	5	3.2	2.5	2.6
Crestview Hills	3,148	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Marion	3,039	2	1.32	3	2.00	1	0.70	7	4.6	4.8	4.8
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	2	1.30	0	0.00	2	1.3	5.8	4.4
Indian Hills	2,868	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Dawson Springs	2,764	1	0.72	4	2.90	2	1.40	3	2.2	6.1	4.1
Stanton	2,733	3	2.20	2	1.50	0	0.00	6	4.4	0.7	0.7
Irvine	2,715	0	0.00	2	1.50	0	0.00	2	1.5	4.9	1.6
Hartford	2,672	1	0.75	0	0.00	0	0.00	3	2.2	2.0	1.3
Lakeside Park	2,668	1	0.75	4	3.00	0	0.00	3	2.2	3.9	3.2
Flemingsburg	2,658	0	0.00	3	2.30	0	0.00	6	4.5	2.3	2.3
Brandenburg	2,643	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Calvert City	2,566	3	2.34	1	0.80	1	0.80	9	7.0	6.6	4.4
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	2	1.59	3	2.40	1	0.80	5	4.0	2.3	2.0
STATEWIDE	2,057,100	1,045	1.02	3,721	3.6	1,577	1.53	3,678	3.6	4.1	2.8

\* Crashes per 10,000 population

TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION CATEGORY (2012-2016)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (2012-2016)	AVERAGE RATE (C/100 MVM)*
OVER 200,000	2	412	Lexington	14,119	790
			Louisville	33,329	342
20,000-60,000	16	387	Richmond	1,028	693
			Owensboro	3,971	671
			Radcliff	723	562
			Georgetown	1,329	513
			Ashland	1,496	480
			Frankfort	3,515	444
			Independence	2,166	419
			Henderson	2,359	414
			Paducah	1,991	411
			Bowling Green	4,569	376
			Covington	4,922	358
			Nicholasville	1,075	351
			Jeffersontown	942	350
			Hopkinsville	2,999	328
Florence	4,882	316			
Elizabethtown	2,149	227			
10,000-19,999	16	623	Newport	2,050	1,139
			Erlanger	1,631	1,059
			Winchester	1,507	770
			Shepherdsville	1,162	693
			Danville	867	650
			Fort Thomas	478	633
			Shelbyville	715	610
			Murray	1,463	552
			Madisonville	1,887	546
			Shively	412	542
			Bardstown	1,185	512
			Glasgow	535	493
			Mayfield	283	481
			Somerset	1,472	458
			Berea	816	453
			Lawrenceburg	260	358
			5,000-9,999	33	388
Fort Mitchell	625	855			
Edgewood	53	829			
Corbin	576	709			
Mount Washington	559	658			
Leitchfield	599	655			
Versailles	335	639			
Mount Sterling	1,042	628			
Campbellsville	1,167	609			
Fort Wright	1,025	582			
Cynthiana	360	555			
Lebanon	660	501			
La Grange	213	494			
Cold Spring	808	461			
Princeton	612	455			
Paris	1,000	450			
Harrodsburg	390	448			
Central City	520	443			
Franklin	350	434			
Dayton	22	411			
Morehead	877	406			
Flatwoods	374	368			
Russellville	427	327			
Alexandria	722	321			
Maysville	720	315			
Taylor Mill	156	311			

TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION  
CATEGORY (2012-2016)(continued)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (2012-2016)	AVERAGE RATE (C/100 MVM)*
5,000-9,999 (cont.)	33	388	Villa Hills	62	285
			Pikeville	1,120	267
			Highland Heights	650	252
			London	1,635	246
			Elsmere	306	236
			Monticello	346	213
			Williamsburg	527	162
2,500-4,999	36	366	Ludlow	259	889
			Walton	553	848
			Southgate	460	826
			Flemingsburg	37	660
			Park Hills	230	659
			Dawson Springs	200	583
			Lakeside Park	446	574
			Lancaster	185	549
			Paintsville	452	518
			Marion	105	516
			Grayson	290	450
			Carrollton	245	441
			Barbourville	250	425
			Wilmore	118	421
			Greenville	352	420
			Benton	293	419
			Russell	592	404
			Stanton	371	386
			Prestonsburg	461	385
			Scottsville	378	360
			Columbia	144	352
			Brandenburg	286	315
			Springfield	99	315
			Providence	114	307
			Beaver Dam	248	305
			Hartford	102	270
			Vine Grove	215	264
			Stanford	194	256
			Hazard	630	252
			Morganfield	172	243
			West Liberty	102	233
			Hodgenville	80	172
			Cadiz	120	168
			Calvert City	131	162
			Irvine	56	124
			Eddyville	144	108
1,000-2,499	55	274	Junction City	39	671
			Cave City	395	653
			Jackson	318	608
			Carlisle	47	581
			Uniontown	13	558
			Worthington	14	499
			Louisa	193	491
			Mount Vernon	175	433
			Albany	102	431
			Edmonton	211	407
			Morgantown	117	401
			Clay City	110	382
			Russell Springs	294	381
			Warsaw	4	379
			Munfordville	54	376
			Harlan	418	351
Salyersville	173	330			



TABLE 17. CRASH RATES ON IDENTIFIED STREETS BY CITY AND POPULATION  
CATEGORY (2012-2016)(continued)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (2012-2016)	AVERAGE RATE (C/100 MVM)*
1,000-2,499 (cont.)	55	274	Raceland	70	325
			Dry Ridge	54	318
			Hardinsburg	78	307
			Manchester	224	300
			Loyall	5	297
			Clay	18	285
			Eminence	151	272
			Burkesville	66	261
			Falmouth	12	261
			Owingsville	91	254
			Owenton	71	254
			Elkton	43	252
			Greensburg	178	250
			Liberty	146	236
			Jamestown	189	229
			Catlettsburg	271	225
			Fulton	211	223
			Lebanon Junction	36	207
			Olive Hill	36	198
			Earlington	102	196
			Beattyville	56	196
			Livermore	70	186
			Sebree	114	179
			Cumberland	72	179
			Pineville	30	178
			Cloverport	45	170
			Clinton	45	170
			Nortonville	119	163
			Horse Cave	20	161
			Tompkinsville	119	150
			Whitesburg	175	144
			Sturgis	35	137
			Vanceburg	11	135
			South Shore	35	118
			Anchorage	20	113
			Lewisport	3	76
			Hickman	13	69
			Jenkins	7	44

\* Crashes per 100 million vehicle-miles

TABLE 18. TOTAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER)  
(2012-2016)(ALL ROADS)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 1000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 1000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	131,929	44.2	Crestview Hills	1,893	120.3 *
Lexington	65,188	44.1	Prestonsburg	1,610	98.9 *
POPULATION CATEGORY 20,000-60,000			Hazard	2,134	95.8 *
Florence	10,604	70.8 *	Wilder	1,123	74.0 *
Paducah	7,531	60.2 *	Paintsville	1,116	64.5 *
Bowling Green	16,057	55.3	Russell	982	58.1 *
Elizabethtown	6,716	47.1	Crescent Springs	1,071	56.4 *
Owensboro	13,311	46.5	Walton	926	50.9
Richmond	6,878	43.9	Cadiz	585	45.7
Covington	8,638	42.5	Brandenburg	583	44.1
Frankfort	5,287	41.4	Barbourville	683	43.2
Ashland	4,422	40.8	Benton	916	42.1
Henderson	5,628	39.1	Southgate	778	40.9
Jeffersonton	4,940	37.1	Crestwood	922	40.7
Nicholasville	4,870	34.8	Scottsville	816	38.6
Hopkinsville	5,332	33.8	Greenville	830	38.5
Georgetown	4,520	31.1	Grayson	801	38.0
Radcliff	3,120	28.8	Calvert City	454	35.4
Independence	2,203	17.8	Stanford	614	35.2
POPULATION CATEGORY 10,000-19,999			Columbia	723	32.5
Somerset	4,747	84.8 *	Flemingsburg	430	32.4
Shepherdsville	3,662	65.3 *	Beaver Dam	543	31.9
Shively	4,814	63.1 *	Stanton	433	31.7
Newport	4,703	61.6 *	Williamstown	618	31.5
Bardstown	3,185	54.4	Eddyville	399	31.2
Erlanger	4,131	45.7	Carrollton	615	31.2
Glasgow	2,922	41.7	Lancaster	518	30.1
Danville	3,300	40.7	Hodgenville	475	29.6
Madisonville	3,790	38.7	Morganfield	461	28.1
Murray	3,363	37.9	Hartford	305	22.8
Winchester	3,474	37.8	Crittenden	409	21.4
Shelbyville	2,629	37.4	Lakeside Park	284	21.3
Mayfield	1,817	36.3	Ludlow	447	20.3
Berea	2,292	33.8	Marion	294	19.3
Lawrenceburg	1,067	20.3	Dawson Springs	245	17.7
Lyndon	1,019	18.5	Vine Grove	392	17.3
Fort Thomas	1,452	17.8	West Liberty	240	14.0
POPULATION CATEGORY 5,000-9,999			Wilmore	257	13.9
Fort Wright	2,710	94.7 *	Providence	218	13.7
London	3,386	84.7 *	Indian Hills	193	13.5
Pikeville	2,859	82.8 *	Park Hills	137	9.2
Morehead	2,184	63.8 *	Irvine	123	9.1
Middletown	2,223	61.6 *			
Corbin	1,958	53.6			
Mount Sterling	1,795	52.1			
Campbellsville	2,273	49.9			
Cold Spring	1,299	43.9			
Franklin	1,838	43.7			
Leitchfield	1,409	42.1			
Maysville	1,863	41.3			
Lebanon	1,067	38.5			
Paris	1,629	38.1			
Fort Mitchell	1,532	37.3			
Cynthiana	1,181	36.9			
Versailles	1,578	36.8			
Highland Heights	1,260	36.4			
Russellville	1,250	35.9			
Oak Grove	1,337	35.7			
Williamsburg	932	35.5			
Monticello	1,094	35.4			
Central City	1,028	34.4			
Mount Washington	1,565	34.3			
La Grange	1,337	33.1			
Taylor Mill	1,091	33.0			
Princeton	1,013	32.0			
Alexandria	1,319	31.1			
Harrodsburg	1,269	30.4			
Union	766	28.5			
Bellevue	839	28.2			
Edgewood	962	22.4			
Dayton	441	16.5			
Elsmere	639	15.1			
Flatwoods	540	14.5			
Villa Hills	253	6.8			

\* Critical crash rate

TABLE 19. FATAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(2012-2016)(ALL ROADS)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	357	1.20	Prestonsburg	10	6.14
Lexington	141	0.95	Paintsville	9	5.20
POPULATION CATEGORY 20,000-60,000			Hazard	11	4.94
Paducah	20	1.60	Barbourville	7	4.42
Nicholasville	18	1.29	Columbia	6	2.70
Radcliff	13	1.20	Beaver Dam	4	2.35
Florence	16	1.07	Calvert City	3	2.34
Henderson	14	0.97	Stanton	3	2.20
Richmond	15	0.96	Scottsville	4	1.89
Elizabethtown	12	0.84	Vine Grove	4	1.77
Hopkinsville	13	0.82	Springfield	2	1.59
Georgetown	11	0.76	Williamstown	3	1.53
Bowling Green	22	0.76	Grayson	3	1.42
Owensboro	21	0.73	Marion	2	1.32
Frankfort	9	0.71	Hodgenville	2	1.25
Jefferson town	6	0.45	Russell	2	1.18
Covington	9	0.44	Stanford	2	1.15
Ashland	4	0.37	Carrollton	2	1.02
Independence	2	0.16	Benton	2	0.92
POPULATION CATEGORY 10,000-19,999			Hartford	1	0.75
Somerset	19	3.39	Dawson Springs	1	0.72
Shively	19	2.49	Park Hills	1	0.67
Shepherdsville	10	1.78	Providence	1	0.63
Glasgow	12	1.71	Morganfield	1	0.61
Bardstown	10	1.71	Lancaster	1	0.58
Berea	8	1.18			
Shelbyville	8	1.14			
Murray	10	1.13			
Madisonville	11	1.12			
Erlanger	10	1.11			
Danville	7	0.86			
Fort Thomas	7	0.86			
Lawrenceburg	4	0.76			
Newport	5	0.65			
Winchester	5	0.54			
Mayfield	2	0.40			
POPULATION CATEGORY 5,000-9,999					
Pikeville	7	2.03			
London	8	2.00			
Williamsburg	5	1.91			
Mount Washington	8	1.75			
Cold Spring	5	1.69			
Franklin	7	1.67			
Cynthiana	5	1.56			
Lebanon	4	1.44			
Highland Heights	5	1.44			
Corbin	5	1.37			
Monticello	4	1.29			
Leitchfield	4	1.19			
Princeton	3	0.95			
Paris	4	0.94			
Alexandria	4	0.94			
Morehead	3	0.88			
Harrodsburg	3	0.72			
Fort Wright	2	0.70			
Maysville	3	0.67			
Central City	2	0.67			
Campbellsville	3	0.66			
Russellville	2	0.57			
Versailles	2	0.47			
Bellevue	1	0.34			
Taylor Mill	1	0.30			
Mount Sterling	1	0.29			
Flatwoods	1	0.27			
La Grange	1	0.25			
Fort Mitchell	1	0.24			
Elsmere	1	0.24			
Edgewood	1	0.23			

\* Critical crash rate

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (2012 - 2016)		PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL	
	ALL	AGE 16-20	ALL	AGE 16-20
POPULATION CATEGORY UNDER 10,000				
Robertson	11	0	8.2	0.0
Menifee	22	0	6.5	0.0
Fulton	35	2	5.7	1.9
Trimble	44	2	5.5	1.4
Carlisle	21	0	5.4	0.0
Cumberland	31	2	5.1	1.9
Hickman	15	0	5.0	0.0
Ballard	44	3	5.0	1.6
Bracken	54	6	4.9	3.6
Elliott	14	1	4.8	2.2
Hancock	32	4	4.7	2.4
Livingston	40	3	4.5	2.0
Nicholas	33	3	4.4	2.2
Crittenden	40	4	4.3	2.5
Gallatin	58	2	4.2	1.3
Lyon	53	5	4.1	2.6
McLean	36	0	3.6	0.0
Lee	13	1	3.3	1.7
Wolfe	23	1	2.9	0.9
Owsley	7	0	2.8	0.0
POPULATION CATEGORY 10,000 - 14,999				
Butler	76	5	5.6	1.7
Lewis	36	0	5.2	0.0
Todd	53	4	5.1	1.9
Estill	37	4	5.0	3.1
Washington	64	5	4.9	1.7
Pendleton	81	12	4.7	3.6
Bath	33	1	4.6	0.7
Owen	39	0	4.4	0.0
Edmonson	42	3	4.2	1.3
Morgan	34	1	4.2	0.8
Carroll	86	4	4.2	1.1
Trigg	71	5	4.2	1.6
Metcalfe	46	0	3.9	0.0
Fleming	44	2	3.8	0.7
Larue	55	5	3.8	1.7
Jackson	37	2	3.8	1.3
Clinton	34	6	3.6	3.5
Powell	54	8	3.4	2.7
Magoffin	29	3	3.2	1.9
Breathitt	42	6	3.1	3.2
Green	24	2	2.9	1.2
Webster	35	5	2.7	2.4
Monroe	9	0	2.4	0.0
Leslie	7	0	2.3	0.0
Martin	12	1	2.3	1.3
Caldwell	43	3	2.2	0.6
POPULATION CATEGORY 15,000 - 24,999				
Casey	49	4	5.4	1.9
Mason	157	6	5.2	0.9
Spencer	60	3	5.0	1.0
Henry	97	6	4.9	1.6
Marion	109	9	4.9	1.7
Bourbon	138	11	4.7	2.1
Mercer	111	10	4.6	1.8
Letcher	66	2	4.6	1.0
Woodford	187	13	4.4	1.6
Allen	97	4	4.4	0.8
Breckinridge	52	3	4.3	1.2
Harrison	106	15	4.1	3.0

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (2012 - 2016)		PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL	
	ALL	AGE 16-20	ALL	AGE 16-20
POPULATION CATEGORY 15,000 - 24,999 (continued)				
Lawrence	47	3	4.0	1.7
Knott	48	5	4.0	2.9
Ohio	113	11	3.8	1.9
Clay	74	5	3.8	2.1
Anderson	93	7	3.8	1.2
Garrard	70	9	3.7	2.3
Johnson	83	2	3.6	0.5
Lincoln	77	4	3.6	0.9
Simpson	103	4	3.5	0.8
Adair	50	5	3.4	1.6
Union	49	5	3.2	1.4
Wayne	51	6	3.2	1.7
McCreary	33	4	2.9	2.0
Taylor	98	13	2.9	1.5
Hart	76	5	2.8	1.2
Rowan	108	6	2.7	0.6
Grant	98	6	2.7	0.8
Russell	42	6	2.5	1.6
Rockcastle	56	2	2.3	0.5
POPULATION CATEGORY 25,000 - 49,999				
Meade	137	3	6.1	0.5
Floyd	199	9	4.8	1.5
Nelson	267	16	4.8	1.4
Grayson	131	8	4.2	1.2
Marshall	160	8	4.1	0.9
Shelby	250	11	3.8	0.8
Calloway	192	14	3.8	0.8
Graves	164	13	3.8	1.4
Carter	101	8	3.7	1.7
Jessamine	255	23	3.6	1.5
Montgomery	142	11	3.5	1.3
Logan	100	11	3.5	1.7
Perry	130	4	3.4	0.7
Franklin	265	16	3.4	1.4
Boyle	141	9	3.4	1.1
Scott	252	14	3.4	0.9
Greenup	106	9	3.2	1.3
Clark	177	10	3.2	1.0
Muhlenberg	136	13	3.2	1.5
Barren	199	15	3.2	1.1
Henderson	230	10	2.9	0.6
Knox	88	6	2.9	1.1
Harlan	70	8	2.8	1.9
Whitley	143	14	2.7	1.4
Hopkins	183	11	2.6	0.7
Bell	73	8	2.2	1.6
Boyd	161	12	2.1	1.0
POPULATION CATEGORY 50,000 - OVER				
Pike	337	21	4.6	1.7
Campbell	577	24	3.9	0.8
Christian	338	24	3.7	1.5
Kenton	1015	56	3.7	1.2
Bullitt	353	26	3.6	1.3
Fayette	2325	155	3.6	1.2
Boone	785	63	3.4	1.2
Madison	443	47	3.4	1.5
Hardin	494	24	3.4	0.8
McCracken	374	24	3.4	1.1
Oldham	183	16	3.3	1.1
Daviess	546	41	3.2	1.0
Warren	650	57	3.0	1.0
Jefferson	4223	151	2.7	0.6
Pulaski	202	10	2.4	0.6
Laurel	191	10	2.3	0.7

TABLE 21. CRASHES INVOLVING ALCOHOL BY CITY AND POPULATION CATEGORY(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF ALCOHOL-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING ALCOHOL	CITY	NUMBER OF ALCOHOL-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING ALCOHOL
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Lexington	2,322	3.6	Marion	14	4.8
Louisville	3,688	2.8	Park Hills	6	4.4
POPULATION CATEGORY 20,000-60,000			Calvert City	20	4.4
Covington	417	4.8	Ludlow	19	4.3
Independence	87	3.9	Dawson Springs	10	4.1
Radcliff	116	3.7	Southgate	29	3.7
Frankfort	167	3.2	Williamstown	22	3.6
Hopkinsville	172	3.2	Carrollton	22	3.6
Richmond	206	3.0	Wilmore	9	3.5
Nicholasville	147	3.0	Lakeside Park	9	3.2
Georgetown	129	2.9	Vine Grove	12	3.1
Owensboro	356	2.7	Lancaster	16	3.1
Florence	275	2.6	Providence	6	2.8
Henderson	143	2.5	Prestonsburg	43	2.7
Jeffersontown	121	2.4	Barbourville	18	2.6
Elizabethtown	154	2.3	Scottsville	20	2.5
Paducah	171	2.3	Hazard	51	2.4
Bowling Green	366	2.3	Flemingsburg	10	2.3
Ashland	77	1.7	Benton	21	2.3
POPULATION CATEGORY 10,000-19,999			Flemingsburg	10	2.3
Newport	187	4.0	Greenville	18	2.2
Fort Thomas	56	3.9	Grayson	18	2.2
Shively	164	3.4	Columbia	15	2.1
Shelbyville	90	3.4	Russell	20	2.0
Shepherdsville	105	2.9	Springfield	9	2.0
Winchester	98	2.8	Beaver Dam	11	2.0
Bardstown	89	2.8	Stanford	10	1.6
Erlanger	107	2.6	Irvine	2	1.6
Glasgow	73	2.5	Hartford	4	1.3
Danville	80	2.4	Paintsville	13	1.2
Lawrenceburg	25	2.3	Stanton	3	0.7
Murray	78	2.3			
Madisonville	66	1.7			
Mayfield	31	1.7			
Berea	36	1.6			
Somerset	71	1.5			
POPULATION CATEGORY 5,000-9,999					
Dayton	33	7.5			
Taylor Mill	51	4.7			
Bellevue	38	4.5			
Elsmere	28	4.4			
Versailles	59	3.7			
Villa Hills	9	3.6			
Maysville	65	3.5			
Harrodsburg	44	3.5			
Pikeville	98	3.4			
Lebanon	35	3.3			
Paris	54	3.3			
Franklin	59	3.2			
Central City	32	3.1			
Fort Mitchell	45	2.9			
Cynthiana	33	2.8			
Mount Sterling	50	2.8			
Russellville	35	2.8			
Highland Heights	34	2.7			
Mount Washington	42	2.7			
Leitchfield	35	2.5			
Monticello	26	2.4			
Fort Wright	61	2.3			
Corbin	46	2.3			
Edgewood	21	2.2			
Alexandria	28	2.1			
Cold Spring	26	2.0			
Williamsburg	18	1.9			
Flatwoods	10	1.9			
La Grange	24	1.8			
London	56	1.7			
Campbellsville	39	1.7			
Princeton	16	1.6			
Morehead	35	1.6			

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (2012 - 2016)

COUNTY						TOTAL	ANNUAL AVERAGE	ALCOHOL
	2012	2013	2014	2015	2016	ALCOHOL	ALCOHOL CONVICTIONS	CONVICTIONS
						(FIVE YEARS)**	PER 1,000	PER ALCOHOL-
							LICENSED DRIVERS	RELATED
								CRASH
Adair	61	51	48	47	72	279	4.5	5.6
Allen	54	59	56	54	61	284	4.2	2.9
Anderson	81	98	77	56	78	390	4.7	4.2
Ballard	57	46	39	25	29	196	6.6	4.5
Barren	183	158	167	150	118	776	5.2	3.9
Bath	23	30	33	23	19	128	3.1	3.9
Bell	105	113	141	90	87	536	6.4	7.3
Boone	605	447	457	462	443	2,414	5.3	3.1
Bourbon	157	175	91	76	100	599	8.5	4.3
Boyd	289	235	226	189	191	1,130	6.8	7.0
Boyle	171	150	144	129	86	680	6.8	4.8
Bracken	16	13	11	13	22	75	2.4	1.4
Breathitt	82	79	66	60	68	355	7.7	8.5
Breckinridge	47	42	34	39	31	193	2.8	3.7
Bullitt	240	307	164	138	112	961	3.3	2.7
Butler	57	48	53	49	37	244	5.5	3.2
Caldwell	47	49	40	36	44	216	4.6	5.0
Calloway	219	238	242	164	134	997	8.1	5.2
Campbell	365	395	397	370	375	1,902	6.0	3.3
Carlisle	10	15	11	13	10	59	3.1	2.8
Carroll	78	101	59	57	69	364	10.3	4.2
Carter	89	103	78	75	73	418	4.4	4.1
Casey	84	85	74	54	46	343	6.5	7.0
Christian	352	303	245	214	200	1,314	6.6	3.9
Clark	146	112	198	167	129	752	5.9	4.2
Clay	157	111	81	78	101	528	8.5	7.1
Clinton	45	60	48	43	29	225	6.6	6.6
Crittenden	36	29	22	25	29	141	4.6	3.5
Cumberland	32	33	20	34	37	156	6.4	5.0
Daviess	597	515	448	331	272	2,163	6.2	4.0
Edmonson	24	17	26	31	24	122	2.8	2.9
Elliott	10	18	9	6	10	53	2.4	3.8
Estill	41	52	87	65	37	282	5.6	7.6
Fayette	1,271	1,189	1,255	929	813	5,457	5.6	2.3
Fleming	40	52	47	59	60	258	5.0	5.9
Floyd	236	231	186	217	208	1,078	8.4	5.4
Franklin	202	284	233	190	238	1,147	6.6	4.3
Fulton	57	33	47	71	61	269	13.4	7.7
Gallatin	77	68	39	43	49	276	9.3	4.8
Garrard	39	43	36	80	62	260	4.3	3.7
Grant	39	59	84	65	92	339	4.0	3.5
Graves	207	234	144	199	182	966	7.5	5.9
Grayson	95	90	101	141	96	523	5.8	4.0
Green	20	27	18	19	9	93	2.3	3.9
Greenup	283	211	143	138	105	880	6.5	8.3
Hancock	61	29	17	16	13	136	4.2	4.3
Hardin	764	577	468	477	419	2,705	7.4	5.5
Harlan	176	136	140	124	122	698	7.5	10.0
Harrison	50	76	60	56	47	289	4.5	2.7
Hart	77	68	74	62	52	333	5.5	4.4
Henderson	210	241	233	237	205	1,126	7.0	4.9
Henry	85	105	122	78	63	453	7.9	4.7
Hickman	11	15	14	18	13	71	4.4	4.7
Hopkins	268	259	230	275	210	1,242	7.7	6.8
Jackson	27	25	17	25	24	118	2.6	3.2
Jefferson	1,924	1,710	1,363	862	668	6,527	2.5	1.5
Jessamine	202	214	149	157	231	953	5.4	3.7
Johnson	124	166	133	102	95	620	7.8	7.5
Kenton	603	594	522	442	529	2,690	4.8	2.7
Knott	56	55	82	101	98	392	7.7	8.2
Knox	204	212	268	187	191	1,062	10.2	12.1
Larue	64	74	33	39	33	243	4.7	4.4
Laurel	646	587	582	530	554	2,899	14.0	15.2

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (2012 - 2016) (continued)

COUNTY						TOTAL	ANNUAL AVERAGE	ALCOHOL
	2012	2013	2014	2015	2016	ALCOHOL CONVICTIONS (FIVE YEARS)**	ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	CONVICTIONS PER ALCOHOL- RELATED CRASH
Lawrence	39	58	53	58	59	267	5.0	5.7
Lee	26	28	20	22	14	110	4.9	8.5
Leslie	21	23	13	19	21	97	2.6	13.9
Letcher	72	93	81	44	77	367	4.7	5.6
Lewis	71	42	40	37	40	230	4.9	6.4
Lincoln	80	73	57	81	73	364	4.3	4.7
Livingston	44	38	24	31	36	173	4.9	4.3
Logan	179	135	129	117	106	666	7.0	6.7
Lyon	75	68	83	60	67	353	12.2	6.7
McCracken	389	396	380	403	221	1,789	7.4	4.8
McCreary	59	77	98	96	87	417	8.0	12.6
McLean	120	133	90	105	58	506	14.6	14.1
Madison	133	133	75	105	121	567	2.0	1.3
Magoffin	70	65	67	44	37	283	6.5	9.8
Marion	65	83	108	86	119	461	7.1	4.2
Marshall	602	513	308	316	339	2,078	17.2	13.0
Martin	86	68	152	102	86	494	13.8	41.2
Mason	55	28	25	26	34	168	2.8	1.1
Meade	115	145	88	78	52	478	4.9	3.5
Menifee	25	16	11	8	9	69	3.0	3.1
Mercer	61	57	47	51	70	286	3.5	2.6
Metcalfe	32	21	30	22	33	138	3.9	3.0
Monroe	40	34	35	43	39	191	5.0	21.2
Montgomery	68	96	108	66	73	411	4.3	2.9
Morgan	41	37	20	25	63	186	4.6	5.5
Muhlenberg	185	211	192	152	128	868	7.9	6.4
Nelson	154	146	154	184	174	812	4.9	3.0
Nicholas	43	61	32	43	49	228	8.9	6.9
Ohio	100	72	62	75	129	438	5.2	3.9
Oldham	187	146	234	175	123	865	3.8	4.7
Owen	28	21	17	25	28	119	3.1	3.1
Owsley	34	12	18	10	43	117	7.7	16.7
Pendleton	50	33	25	24	22	154	2.9	1.9
Perry	121	106	85	93	82	487	5.1	3.7
Pike	194	177	162	102	109	744	3.6	2.2
Powell	85	83	69	45	52	334	7.5	6.2
Pulaski	242	301	221	258	211	1,233	5.5	6.1
Robertson	1	1	5	3	2	12	1.5	1.1
Rockcastle	82	54	70	66	62	334	5.8	6.0
Rowan	203	124	124	120	158	729	9.7	6.8
Russell	46	53	47	63	65	274	4.4	6.5
Scott	162	173	194	185	158	872	4.8	3.5
Shelby	236	229	205	211	204	1,085	7.2	4.3
Simpson	78	64	51	42	55	290	4.4	2.8
Spencer	98	74	54	40	52	318	4.6	5.3
Taylor	90	110	88	81	67	436	4.9	4.4
Todd	55	57	66	58	38	274	7.0	5.2
Trigg	104	100	94	92	87	477	9.4	6.7
Trimble	55	40	23	21	13	152	4.8	3.5
Union	102	63	82	65	38	350	6.9	7.1
Warren	628	635	493	464	443	2,663	6.8	4.1
Washington	23	22	25	26	15	111	2.7	1.7
Wayne	39	25	33	44	46	187	2.8	3.7
Webster	54	27	16	25	47	169	3.7	4.8
Whitley	177	166	191	123	151	808	6.9	5.7
Wolfe	24	17	26	29	35	131	5.5	5.7
Woodford	148	216	176	152	107	799	8.4	4.3
TOTAL *	19,074	18,030	16,208	14,443	13,642	81,397	5.4	3.7

\*Convictions in cases filed in the same calander year.

\*\*There were 27,889 arrests on average from 2012 to 2016.



TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES)  
(2012 - 2016)

POPULATION	COUNTY	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	ALCOHOL CONVICTIONS PER ALCOHOL- RELATED CRASH
UNDER 10,000	McLean	14.6	Owsley	16.7
	Fulton	13.4	McLean	14.1
	Lyon	12.2	Lee	8.5
	Gallatin	9.3	Fulton	7.7
	Nicholas	8.9	Nicholas	6.9
	Owsley	7.7	Lyon	6.7
	Ballard	6.6	Wolfe	5.7
	Cumberland	6.4	Cumberland	5.0
	Wolfe	5.5	Gallatin	4.8
	Lee	4.9	Hickman	4.7
	Livingston	4.9	Ballard	4.5
	Trimble	4.8	Livingston	4.3
	Crittenden	4.6	Hancock	4.3
	Hickman	4.4	Elliott	3.8
	Hancock	4.2	Crittenden	3.5
	Carlisle	3.1	Trimble	3.5
	Menifee	3.0	Menifee	3.1
	Elliott	2.4	Carlisle	2.8
	Bracken	2.4	Bracken	1.4
	Robertson	1.5	Robertson	1.1
10,000-14,999	Martin	13.8	Martin	41.2
	Carroll	10.3	Monroe	21.2
	Trigg	9.4	Leslie	13.9
	Breathitt	7.7	Magoffin	9.8
	Powell	7.5	Breathitt	8.5
	Todd	7.0	Estill	7.6
	Clinton	6.6	Trigg	6.7
	Magoffin	6.5	Clinton	6.6
	Estill	5.6	Lewis	6.4
	Butler	5.5	Powell	6.2
	Monroe	5.0	Fleming	5.9
	Fleming	5.0	Morgan	5.5
	Lewis	4.9	Todd	5.2
	Larue	4.7	Caldwell	5.0
	Caldwell	4.6	Webster	4.8
	Morgan	4.6	Larue	4.4
	Metcalfe	3.9	Carroll	4.2
	Webster	3.7	Bath	3.9
	Owen	3.1	Green	3.9
	Bath	3.1	Butler	3.2
	Pendleton	2.9	Jackson	3.2
	Edmonson	2.8	Owen	3.1
	Washington	2.7	Metcalfe	3.0
	Jackson	2.6	Edmonson	2.9
	Leslie	2.6	Pendleton	1.9
	Green	2.3	Washington	1.7
15,000-24,999	Rowan	9.7	McCreary	12.6
	Bourbon	8.5	Knott	8.2
	Clay	8.5	Johnson	7.5
	Woodford	8.4	Union	7.1
	McCreary	8.0	Clay	7.1
	Henry	7.9	Casey	7.0
	Johnson	7.8	Rowan	6.8
	Knott	7.7	Russell	6.5
	Marion	7.1	Rockcastle	6.0
	Union	6.9	Lawrence	5.7
	Casey	6.5	Adair	5.6
	Rockcastle	5.8	Letcher	5.6
	Hart	5.5	Spencer	5.3
	Ohio	5.2	Lincoln	4.7
	Lawrence	5.0	Henry	4.7
	Taylor	4.9	Taylor	4.4
	Letcher	4.7	Hart	4.4
	Anderson	4.7	Bourbon	4.3

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES)  
(2012 - 2016) (continued)

POPULATION	COUNTY	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	ALCOHOL CONVICTIONS PER ALCOHOL- RELATED CRASH
15,000-24,999 (cont'd)	Spencer	4.6	Woodford	4.3
	Adair	4.5	Marion	4.2
	Harrison	4.5	Anderson	4.2
	Simpson	4.4	Ohio	3.9
	Russell	4.4	Garrard	3.7
	Garrard	4.3	Breckinridge	3.7
	Lincoln	4.3	Wayne	3.7
	Allen	4.2	Grant	3.5
	Grant	4.0	Allen	2.9
	Mercer	3.5	Simpson	2.8
	Wayne	2.8	Harrison	2.7
	Mason	2.8	Mercer	2.6
	Breckinridge	2.8	Mason	1.1
	25,000 - 49,999	Marshall	17.2	Marshall
Knox		10.2	Knox	12.1
Floyd		8.4	Harlan	10.0
Calloway		8.1	Greenup	8.3
Muhlenberg		7.9	Bell	7.3
Hopkins		7.7	Boyd	7.0
Harlan		7.5	Hopkins	6.8
Graves		7.5	Logan	6.7
Shelby		7.2	Muhlenberg	6.4
Logan		7.0	Graves	5.9
Henderson		7.0	Whitley	5.7
Whitley		6.9	Floyd	5.4
Boyle		6.8	Calloway	5.2
Boyd		6.8	Henderson	4.9
Franklin		6.6	Boyle	4.8
Greenup		6.5	Shelby	4.3
Bell		6.4	Franklin	4.3
Clark		5.9	Clark	4.2
Grayson		5.8	Carter	4.1
Jessamine		5.4	Grayson	4.0
Barren		5.2	Barren	3.9
Perry		5.1	Perry	3.7
Nelson		4.9	Jessamine	3.7
Meade		4.9	Meade	3.5
Scott		4.8	Scott	3.5
Carter		4.4	Nelson	3.0
Montgomery	4.3	Montgomery	2.9	
50,000 - OVER	Laurel	14.0	Laurel	15.2
	McCracken	7.4	Pulaski	6.1
	Hardin	7.4	Hardin	5.5
	Warren	6.8	McCracken	4.8
	Christian	6.6	Oldham	4.7
	Daviess	6.2	Warren	4.1
	Campbell	6.0	Daviess	4.0
	Fayette	5.6	Christian	3.9
	Pulaski	5.5	Campbell	3.3
	Boone	5.3	Boone	3.1
	Kenton	4.8	Bullitt	2.7
	Oldham	3.8	Kenton	2.7
	Pike	3.6	Fayette	2.3
	Bullitt	3.3	Pike	2.2
	Jefferson	2.5	Jefferson	1.5
	Madison	2.0	Madison	1.3

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI FILINGS (BY COUNTY) (2012 - 2016)\*

COUNTY	TOTAL DUI FILED	TOTAL DUI CONVICTED	TOTAL DUI NON-CONVICTED	CONVICTION PERCENTAGE**
Adair	485	279	57	83.0
Allen	499	284	26	91.6
Anderson	667	390	55	87.6
Ballard	312	196	53	78.7
Barren	1,507	776	224	77.6
Bath	254	128	30	81.0
Bell	1,798	536	206	72.2
Boone	3,418	2,414	301	88.9
Bourbon	937	599	73	89.1
Boyd	1,578	1,130	175	86.6
Boyle	1,084	680	94	87.9
Bracken	122	75	26	74.3
Breathitt	591	355	40	89.9
Breckinridge	271	193	23	89.4
Bullitt	2,266	961	312	75.5
Butler	413	244	58	80.8
Caldwell	280	216	26	89.3
Calloway	1,391	997	167	85.7
Campbell	2,611	1,902	334	85.1
Carlisle	100	59	20	74.7
Carroll	748	364	145	71.5
Carter	885	418	101	80.5
Casey	517	343	70	83.1
Christian	1,965	1,314	232	85.0
Clark	1,087	752	73	91.2
Clay	1,290	528	325	61.9
Clinton	437	225	24	90.4
Crittenden	187	141	15	90.4
Cumberland	283	156	31	83.4
Daviess	3,760	2,163	378	85.1
Edmonson	216	122	48	71.8
Elliott	110	53	15	77.9
Estill	416	282	35	89.0
Fayette	7,309	5,457	451	92.4
Fleming	518	258	56	82.2
Floyd	1,859	1,078	163	86.9
Franklin	2,180	1,147	201	85.1
Fulton	488	269	89	75.1
Gallatin	561	276	170	61.9
Garrard	383	260	44	85.5
Grant	640	339	127	72.7
Graves	1,905	966	292	76.8
Grayson	772	523	68	88.5
Green	185	93	15	86.1
Greenup	1,233	880	98	90.0
Hancock	187	136	8	94.4
Hardin	4,067	2,705	547	83.2
Harlan	1,907	698	123	85.0
Harrison	497	289	49	85.5
Hart	606	333	115	74.3
Henderson	1,951	1,126	181	86.2
Henry	723	453	81	84.8
Hickman	139	71	36	66.4
Hopkins	1,787	1,242	180	87.3
Jackson	203	118	33	78.1
Jefferson	15,080	6,527	1,060	86.0
Jessamine	1,419	953	118	89.0
Johnson	1,099	620	149	80.6
Kenton	3,814	2,690	347	88.6
Knott	659	392	70	84.8
Knox	1,944	1,062	308	77.5
Larue	426	243	46	84.1

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI FILINGS (BY COUNTY) (2012 - 2016) (continued)

COUNTY	TOTAL DUI FILED	TOTAL DUI CONVICTED	TOTAL DUI NON-CONVICTED	CONVICTION PERCENTAGE
Laurel	3,892	2,899	322	90.0
Lawrence	462	267	45	85.6
Lee	186	110	11	90.9
Leslie	265	97	86	53.0
Letcher	608	367	72	83.6
Lewis	298	230	27	89.5
Lincoln	554	364	64	85.0
Livingston	263	173	31	84.8
Logan	960	666	149	81.7
Lyon	533	353	59	85.7
McCracken	2,911	1,789	397	81.8
McCreary	871	417	140	74.9
McLean	972	506	120	80.8
Madison	911	567	130	81.3
Magoffin	425	283	31	90.1
Marion	762	461	85	84.4
Marshall	2,853	2,078	357	85.3
Martin	779	494	102	82.9
Mason	241	168	29	85.3
Meade	694	478	85	84.9
Menifee	104	69	6	92.0
Mercer	464	286	47	85.9
Metcalfe	216	138	26	84.1
Monroe	337	191	46	80.6
Montgomery	687	411	73	84.9
Morgan	357	186	42	81.6
Muhlenberg	1,424	868	91	90.5
Nelson	1,242	812	133	85.9
Nicholas	419	228	32	87.7
Ohio	840	438	131	77.0
Oldham	1,337	865	60	93.5
Owen	236	119	46	72.1
Owsley	213	117	25	82.4
Pendleton	264	154	42	78.6
Perry	1,325	487	146	76.9
Pike	2,513	744	252	74.7
Powell	578	334	86	79.5
Pulaski	2,383	1,233	317	79.5
Robertson	30	12	5	70.6
Rockcastle	834	334	154	68.4
Rowan	1,124	729	87	89.3
Russell	581	274	68	80.1
Scott	1,396	872	148	85.5
Shelby	1,824	1,085	139	88.6
Simpson	480	290	36	89.0
Spencer	557	318	53	85.7
Taylor	715	436	84	83.8
Todd	379	274	46	85.6
Trigg	727	477	101	82.5
Trimble	285	152	35	81.3
Union	552	350	70	83.3
Warren	4,969	2,663	591	81.8
Washington	205	111	35	76.0
Wayne	360	187	25	88.2
Webster	334	169	46	78.6
Whitley	1,351	808	142	85.1
Wolfe	222	131	23	85.1
Woodford	1,116	799	69	92.1
TOTAL	139,446	81,397	14,917	84.5

\* 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.

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY  
(IN DESCENDING ORDER) (2012 - 2016)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL DUI ARRESTS	TOTAL DUI CONVICTIONS	CONVICTION PERCENTAGE*
UNDER 10,000	80.9	Hancock	187	136	94.4
		Menifee	104	69	92.0
		Lee	186	110	90.9
		Crittenden	187	141	90.4
		Nicholas	419	228	87.7
		Lyon	533	353	85.7
		Wolfe	222	131	85.1
		Livingston	263	173	84.8
		Cumberland	283	156	83.4
		Owsley	213	117	82.4
		Trimble	285	152	81.3
		McLean	972	506	80.8
		Ballard	312	196	78.7
		Elliott	110	53	77.9
		Fulton	488	269	75.1
		Carlisle	100	59	74.7
		Bracken	122	75	74.3
		Robertson	30	12	70.6
		Hickman	139	71	66.4
		Gallatin	561	276	61.9
10,000-14,999	81.1	Clinton	437	225	90.4
		Magoffin	425	283	90.1
		Breathitt	591	355	89.9
		Lewis	298	230	89.5
		Caldwell	280	216	89.3
		Estill	416	282	89.0
		Green	185	93	86.1
		Todd	379	274	85.6
		Metcalfe	216	138	84.1
		Larue	426	243	84.1
		Martin	779	494	82.9
		Trigg	727	477	82.5
		Fleming	518	258	82.2
		Morgan	357	186	81.6
		Bath	254	128	81.0
		Butler	413	244	80.8
		Monroe	337	191	80.6
		Powell	578	334	79.5
		Webster	334	169	78.6
		Pendleton	264	154	78.6
		Jackson	203	118	78.1
		Washington	205	111	76.0
		Owen	236	119	72.1
		Edmonson	216	122	71.8
Carroll	748	364	71.5		
Leslie	265	97	53.0		
15,000-24,999	83.1	Woodford	1,116	799	92.1
		Allen	499	284	91.6
		Breckinridge	271	193	89.4
		Rowan	1,124	729	89.3
		Bourbon	937	599	89.1
		Simpson	480	290	89.0
		Wayne	360	187	88.2
		Anderson	667	390	87.6
		Mercer	464	286	85.9
		Spencer	557	318	85.7
		Lawrence	462	267	85.6
		Garrard	383	260	85.5
		Harrison	497	289	85.5
		Mason	241	168	85.3
		Lincoln	554	364	85.0

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY  
(IN DESCENDING ORDER) (2012 - 2016) (continued)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL DUI ARRESTS	TOTAL DUI CONVICTIONS	CONVICTION PERCENTAGE*
15,000-24,999 (continued)		Knott	659	392	84.8
		Henry	723	453	84.8
		Marion	762	461	84.4
		Taylor	715	436	83.8
		Letcher	608	367	83.6
		Union	552	350	83.3
		Casey	517	343	83.1
		Adair	485	279	83.0
		Johnson	1,099	620	80.6
		Russell	581	274	80.1
		Ohio	840	438	77.0
		McCreary	871	417	74.9
		Hart	606	333	74.3
		Grant	640	339	72.7
		Rockcastle	834	334	68.4
	Clay	1,290	528	61.9	
25,000-49,999	84.6	Clark	1,087	752	91.2
		Muhlenberg	1,424	868	90.5
		Greenup	1,233	880	90.0
		Jessamine	1,419	953	89.0
		Shelby	1,824	1,085	88.6
		Grayson	772	523	88.5
		Boyle	1,084	680	87.9
		Hopkins	1,787	1,242	87.3
		Floyd	1,859	1,078	86.9
		Boyd	1,578	1,130	86.6
		Henderson	1,951	1,126	86.2
		Nelson	1,242	812	85.9
		Calloway	1,391	997	85.7
		Scott	1,396	872	85.5
		Marshall	2,853	2,078	85.3
		Franklin	2,180	1,147	85.1
		Whitley	1,351	808	85.1
		Harlan	1,907	698	85.0
		Montgomery	687	411	84.9
		Meade	694	478	84.9
		Logan	960	666	81.7
		Carter	885	418	80.5
		Barren	1,507	776	77.6
		Knox	1,944	1,062	77.5
Perry	1,325	487	76.9		
Graves	1,905	966	76.8		
Bell	1,798	536	72.2		
50,000 - OVER	84.5	Oldham	1,337	865	93.5
		Fayette	7,309	5,457	92.4
		Laurel	3,892	2,899	90.0
		Boone	3,418	2,414	88.9
		Kenton	3,814	2,690	88.6
		Jefferson	15,080	6,527	86.0
		Daviess	3,760	2,163	85.1
		Campbell	2,611	1,902	85.1
		Christian	1,965	1,314	85.0
		Hardin	4,067	2,705	83.2
		McCracken	2,911	1,789	81.8
		Warren	4,969	2,663	81.8
		Madison	911	567	81.3
		Pulaski	2,383	1,233	79.5
		Bullitt	2,266	961	75.5
		Pike	2,513	744	74.7

\*Refer to Table 24 for conviction rate calculation.

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (2012 - 2016)

COUNTY	2012	2013	2014	2015	2016	TOTAL RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Adair	15	12	7	13	13	60	1.0
Allen	7	4	8	7	1	27	0.4
Anderson	18	16	28	21	28	111	1.3
Ballard	6	6	5	11	13	41	1.4
Barren	65	52	42	39	50	248	1.7
Bath	6	6	7	3	1	23	0.5
Bell	4	8	13	14	4	43	0.5
Boone	61	41	39	41	36	218	0.5
Bourbon	16	15	19	16	13	79	1.1
Boyd	40	38	25	25	15	143	0.9
Boyle	21	27	37	33	38	156	1.6
Bracken	5	4	1	2	6	18	0.6
Breathitt	18	13	16	5	8	60	1.3
Breckinridge	6	8	5	1	2	22	0.3
Bullitt	72	81	65	61	35	314	1.1
Butler	4	2	3	2	4	15	0.3
Caldwell	8	5	8	10	19	50	1.1
Calloway	6	11	15	23	18	73	0.6
Campbell	23	42	33	25	23	146	0.5
Carlisle	2	2	1	2	1	8	0.4
Carroll	16	12	12	4	5	49	1.4
Carter	21	17	10	26	15	89	0.9
Casey	8	10	6	1	10	35	0.7
Christian	73	55	50	48	37	263	1.3
Clark	19	19	13	15	9	75	0.6
Clay	22	31	9	13	12	87	1.4
Clinton	7	4	7	3	5	26	0.8
Crittenden	1	2	2	4	3	12	0.4
Cumberland	14	8	8	11	11	52	2.1
Daviess	63	59	40	54	47	263	0.8
Edmonson	7	7	7	3	3	27	0.6
Elliott	2	1	3	1	6	13	0.6
Estill	0	2	1	2	1	6	0.1
Fayette	142	150	111	84	89	576	0.6
Fleming	9	8	0	10	9	36	0.7
Floyd	27	34	14	27	24	126	1.0
Franklin	52	68	19	50	54	243	1.4
Fulton	1	3	56	8	7	75	3.7
Gallatin	12	18	5	6	14	55	1.9
Garrard	10	15	6	14	12	57	1.0
Grant	10	5	16	16	9	56	0.7
Graves	42	53	21	61	51	228	1.8
Grayson	24	27	28	33	33	145	1.6
Green	0	3	31	4	3	41	1.0
Greenup	15	18	1	10	18	62	0.5
Hancock	0	4	10	2	8	24	0.7
Hardin	125	83	2	78	74	362	1.0
Harlan	23	25	74	21	14	157	1.7
Harrison	8	10	26	7	9	60	0.9
Hart	16	19	12	10	9	66	1.1
Henderson	26	42	10	52	56	186	1.2
Henry	24	26	43	19	13	125	2.2
Hickman	1	4	17	0	2	24	1.5
Hopkins	48	40	2	28	28	146	0.9
Jackson	4	7	42	3	6	62	1.4
Jefferson	251	205	3	218	254	931	0.4
Jessamine	30	26	209	17	29	311	1.8
Johnson	23	27	22	8	11	91	1.1
Kenton	74	70	19	76	69	308	0.6
Knott	4	1	70	1	2	78	1.5
Knox	18	13	3	36	12	82	0.8
Larue	10	9	24	9	7	59	1.1
Laurel	41	28	8	11	22	110	0.5

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (2012 - 2016) (continued)

COUNTY	2012	2013	2014	2015	2016	RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Lawrence	12	10	29	15	14	80	1.5
Lee	3	0	9	4	2	18	0.8
Leslie	6	7	2	3	3	21	0.6
Letcher	7	3	1	7	1	19	0.2
Lewis	7	3	4	5	3	22	0.5
Lincoln	19	19	2	20	12	72	0.8
Livingston	18	11	18	9	13	69	1.9
Logan	23	19	13	25	26	106	1.1
Lyon	24	24	18	64	52	182	6.3
McCracken	70	58	39	39	34	240	1.0
McCreary	8	8	39	13	8	76	1.5
McLean	9	2	8	4	4	27	0.8
Madison	20	24	3	37	30	114	0.4
Magoffin	3	8	28	3	1	43	1.0
Marion	12	20	5	28	22	87	1.3
Marshall	23	15	18	14	17	87	0.7
Martin	3	6	10	11	9	39	1.1
Mason	15	15	9	14	16	69	1.1
Meade	37	33	15	28	33	146	1.5
Menifee	4	2	27	1	3	37	1.6
Mercer	9	10	3	11	14	47	0.6
Metcalf	16	12	10	6	3	47	1.3
Monroe	8	7	14	5	1	35	0.9
Montgomery	23	11	5	16	14	69	0.7
Morgan	13	12	17	3	3	48	1.2
Muhlenberg	27	21	4	34	38	124	1.1
Nelson	11	23	25	36	38	133	0.8
Nicholas	5	3	35	10	7	60	2.3
Ohio	11	10	2	4	4	31	0.4
Oldham	11	7	4	12	8	42	0.2
Owen	1	0	7	5	2	15	0.4
Owsley	9	8	2	1	4	24	1.6
Pendleton	14	12	3	2	8	39	0.7
Perry	15	3	7	8	27	60	0.6
Pike	48	35	5	29	19	136	0.7
Powell	1	10	28	6	9	54	1.2
Pulaski	42	18	12	14	22	108	0.5
Robertson	0	0	8	1	1	10	1.2
Rockcastle	22	23	2	9	10	66	1.2
Rowan	22	17	15	19	19	92	1.2
Russell	4	7	16	7	8	42	0.7
Scott	34	31	7	23	30	125	0.7
Shelby	34	33	28	34	34	163	1.1
Simpson	17	9	40	28	28	122	1.9
Spencer	10	9	25	14	9	67	1.0
Taylor	12	13	4	16	18	63	0.7
Todd	9	20	12	10	17	68	1.7
Trigg	21	17	10	59	37	144	2.8
Trimble	0	3	25	3	4	35	1.1
Union	18	5	2	17	19	61	1.2
Warren	85	81	9	65	80	320	0.8
Washington	3	7	74	9	9	102	2.5
Wayne	7	9	6	9	15	46	0.7
Webster	10	7	5	9	14	45	1.0
Whitley	8	16	13	25	32	94	0.8
Wolfe	2	2	16	1	3	24	1.0
Woodford	13	13	4	18	10	58	0.6
TOTAL	2,644	2,472	2,250	2,380	2,361	12,107	0.9



TABLE 27. PERCENTAGE OF CRASHES INVOLVING DRUGS BY COUNTY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES) (2012-2016)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES	COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Owsley	9	3.6	Clay	104	5.4
Carlisle	11	2.8	Knott	58	4.8
Lee	10	2.6	McCreary	46	4.1
Nicholas	19	2.5	Letcher	58	4.0
Menifee	8	2.4	Johnson	88	3.9
Elliott	7	2.4	Casey	24	2.7
Lyon	29	2.2	Rockcastle	55	2.3
Cumberland	13	2.1	Russell	39	2.3
Livingston	19	2.1	Adair	29	2.0
Wolfe	15	1.9	Anderson	47	1.9
Crittenden	16	1.7	Ohio	49	1.7
Ballard	14	1.6	Lawrence	19	1.6
Robertson	2	1.5	Harrison	40	1.6
Fulton	9	1.5	Lincoln	33	1.5
Hickman	4	1.3	Wayne	22	1.4
McLean	11	1.1	Union	20	1.3
Trimble	8	1.0	Mason	39	1.3
Gallatin	12	0.9	Hart	36	1.3
Bracken	7	0.6	Rowan	47	1.2
Hancock	3	0.4	Mercer	29	1.2
<b>POPULATION CATEGORY 10,000-14,999</b>			<b>POPULATION CATEGORY 25,000-50,000</b>		
Magoffin	44	4.9	Spencer	14	1.2
Martin	20	3.9	Grant	42	1.1
Breathitt	47	3.4	Bourbon	31	1.1
Morgan	25	3.1	Marion	25	1.1
Leslie	9	3.0	Garrard	20	1.1
Estill	20	2.7	Allen	23	1.0
Bath	18	2.5	Henry	19	1.0
Jackson	21	2.2	Simpson	23	0.8
Powell	31	1.9	Woodford	35	0.8
Trigg	29	1.7	Taylor	25	0.7
Lewis	11	1.6	Breckinridge	6	0.5
Fleming	19	1.6	<b>POPULATION CATEGORY OVER 50,000</b>		
Owen	12	1.4	Pike	397	5.4
Webster	18	1.4	Laurel	158	1.9
Larue	19	1.3	Madison	169	1.3
Carroll	26	1.3	Kenton	294	1.1
Todd	13	1.2	Campbell	170	1.1
Clinton	11	1.2	Hardin	154	1.1
Pendleton	21	1.2	Pulaski	92	1.1
Monroe	3	0.8	Daviess	170	1.0
Edmonson	8	0.8	Warren	186	0.9
Butler	9	0.7	Bullitt	85	0.9
Caldwell	13	0.7	Christian	82	0.9
Metcalfe	7	0.6	McCracken	103	0.9
Washington	7	0.5	Boone	178	0.8
Green	3	0.4	Oldham	37	0.7
			Jefferson	1,006	0.7
			Fayette	410	0.6

TABLE 28. PERCENTAGE OF CRASHES INVOLVING DRUGS BY CITY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF DRUG-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING DRUGS	CITY	NUMBER OF DRUG-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING DRUGS
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	879	0.7	Barbourville	27	4.0
Lexington	410	0.6	Providence	8	3.7
POPULATION CATEGORY 20,000-60,000			Prestonsburg	51	3.2
Covington	140	1.6	Hazard	62	2.9
Nicholasville	75	1.5	Vine Grove	9	2.3
Henderson	74	1.3	Lancaster	12	2.3
Ashland	56	1.3	Park Hills	3	2.2
Richmond	87	1.3	Paintsville	22	2.0
Frankfort	68	1.3	Beaver Dam	10	1.8
Radcliff	36	1.2	Greenville	14	1.7
Independence	21	1.0	Southgate	13	1.7
Owensboro	116	0.9	Marion	5	1.7
Hopkinsville	44	0.8	Carrollton	10	1.6
Paducah	59	0.8	Irvine	2	1.6
Elizabethtown	47	0.7	Stanford	9	1.5
Georgetown	33	0.7	Morganfield	6	1.3
Florence	76	0.7	Grayson	10	1.2
Bowling Green	103	0.6	Flemingsburg	5	1.2
Jeffersonton	26	0.5	Scottsville	9	1.1
POPULATION CATEGORY 10,000-19,999			Flemingsburg	5	1.2
Lawrenceburg	21	2.0	Ludlow	5	1.1
Fort Thomas	23	1.6	Hartford	3	1.0
Shively	60	1.2	Stanton	4	0.9
Somerset	52	1.1	Columbia	6	0.8
Glasgow	31	1.1	Benton	6	0.7
Madisonville	37	1.0	Williamstown	4	0.6
Newport	41	0.9	Dawson Springs	1	0.4
Berea	21	0.9	Hodgenville	2	0.4
Winchester	31	0.9	Lakeside Park	1	0.4
Shelbyville	20	0.8	Wilmore	1	0.4
Danville	27	0.8	Russell	2	0.2
Erlanger	33	0.8			
Murray	22	0.7			
Shepherdsville	25	0.7			
Bardstown	21	0.7			
Mayfield	12	0.7			
POPULATION CATEGORY 5,000-9,999					
Pikeville	81	2.8			
Dayton	12	2.7			
Bellevue	19	2.3			
Taylor Mill	22	2.0			
Cynthiana	22	1.9			
Central City	19	1.8			
Corbin	34	1.7			
Leitchfield	20	1.4			
Williamsburg	13	1.4			
London	43	1.3			
Harrodsburg	15	1.2			
Russellville	15	1.2			
Maysville	22	1.2			
Mount Sterling	21	1.2			
Lebanon	13	1.2			
Edgewood	11	1.1			
Paris	17	1.0			
Highland Heights	12	1.0			
Versailles	16	1.0			
Flatwoods	5	0.9			
Franklin	14	0.8			
Campbellsville	18	0.8			
Cold Spring	11	0.8			
Monticello	9	0.8			
Fort Mitchell	11	0.7			
Princeton	7	0.7			
Morehead	16	0.7			
Elsmere	4	0.6			
Villa Hills	1	0.4			
Fort Wright	12	0.4			
Alexandria	5	0.4			
La Grange	4	0.3			
Mount Washington	5	0.3			

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

COUNTY	PERCENT SEAT BELT USAGE*	COUNTY	PERCENT SEAT BELT USAGE*
POPULATION CATEGORY UNDER 10,000		POPULATION 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
Lee	51.9	Casey	45.6
Nicholas	50.6	Adair*	43.8
Menifee	48.9	Marion	43.1
Ballard	48.4	Hart	40.4
Cumberland	46.5	POPULATION CATEGORY 25,000-50,000	
Metcalfe	42.4	Shelby	80.0
Owsley	41.1	Whitley	74.0
POPULATION CATEGORY 10,000-14,999		Henderson	71.8
Caldwell	70.8	Franklin	71.3
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
Estill*	53.1	Nelson	60.1
Clinton	49.4	Floyd	59.9
Green	48.1	Barren	57.9
Washington	46.5	Perry	56.6
Fleming	46.5	Meade	47.3
Bath	42.0	Montgomery	47.1
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.

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

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

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

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

TYPE OF INJURY	NOT WEARING SAFETY BELT		WEARING SAFETY BELT		PERCENT REDUCTION
	NUMBER	PERCENT	NUMBER	PERCENT	
Fatal	1,125	5.49	924	0.09	98
Incapacitating	2,066	10.08	7,531	0.73	93
Non-Incapacitating	3,486	17.01	32,503	3.15	81
Possible Injury	3,622	17.67	58,754	5.69	68
Fatal or Incapacitating	3,191	15.57	8,455	0.82	95

\* Based on 2012 through 2016 crash data. Total sample size for not wearing a safety belt was 20,499 compared to 1,033,123 for wearing a safety belt.

TABLE 32. USAGE AND EFFECTIVENESS OF CHILD SAFETY SEATS  
(CHILDREN AGE THREE AND UNDER) (2012 - 2016)

VARIABLE	CATEGORY	RESTRAINT USED			
		NONE	SAFETY BELT	CHILD SEAT	ANY RESTRAINT
Number	Fatal	3	1	11	12
With	Incapacitating	13	13	48	61
Given	Non-Incapacitating	28	64	430	494
Injury	Possible Injury	49	270	1,599	1,869
	None Detected	135	3,754	24,208	27,962
Percent	Fatal	1.32	0.02	0.04	0.04
With	Incapacitating	5.70	0.32	0.18	0.20
Given	Non-Incapacitating	12.28	1.56	1.64	1.63
Injury	Possible Injury	21.49	6.58	6.08	6.15
	None Detected	59.21	91.52	92.06	91.99
Percent	Front	3.01	26.41	70.58	96.99
Usage	Rear	0.80	16.72	82.48	99.20
By Seat	All Positions	0.97	17.46	81.57	99.03
Position					
Percent With					
Given Injury By					
Seat Position					
(Front)	Fatal	0.00	0.00	0.00	0.00
	Incapacitating	4.63	0.11	0.04	0.06
	Non-Incapacitating	5.56	1.80	1.19	1.35
	Possible Injury	12.04	4.33	3.95	4.05
	None Detected	27.78	43.72	44.80	44.51
(Rear)	Fatal	0.86	0.01	0.03	0.03
	Incapacitating	2.30	0.17	0.13	0.14
	Non-Incapacitating	6.32	0.65	1.12	1.04
	Possible Injury	10.34	3.15	4.18	4.01
	None Detected	30.17	45.93	64.32	61.22
YEAR	2012	114	1,666	7,625	9,291
	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

TABLE 33. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES	COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Carlisle	36	9.3	Grant	376	10.2
Owsley	20	7.9	Simpson	290	9.9
Livingston	70	7.8	Henry	156	8.0
Lyon	95	7.3	Spencer	88	7.3
Bracken	80	7.2	Clay	141	7.3
Wolfe	52	6.6	Woodford	300	7.1
Hickman	19	6.3	Bourbon	201	6.9
Elliott	18	6.1	Union	103	6.8
Hancock	40	5.8	Garrard	127	6.8
Trimble	45	5.6	Mason	198	6.6
McLean	55	5.5	Rockcastle	149	6.2
Robertson	7	5.2	Mercer	144	6.0
Crittenden	46	4.9	Wayne	92	5.8
Ballard	41	4.6	McCreary	64	5.7
Nicholas	33	4.4	Ohio	164	5.6
Cumberland	23	3.8	Anderson	133	5.4
Gallatin	53	3.8	Harrison	136	5.3
Fulton	19	3.1	Hart	143	5.3
Menifee	10	3.0	Rowan	184	4.7
Lee	8	2.1	Casey	39	4.3
<b>POPULATION CATEGORY 10,000-14,999</b>			Lincoln	83	3.9
Butler	120	8.9	Allen	86	3.9
Edmonson	88	8.9	Breckinridge	46	3.8
Larue	118	8.2	Adair	55	3.7
Morgan	66	8.2	Taylor	124	3.6
Todd	84	8.0	Letcher	48	3.3
Caldwell	143	7.5	Knott	39	3.2
Owen	60	6.8	Johnson	67	2.9
Pendleton	109	6.4	Lawrence	33	2.8
Leslie	17	5.7	Russell	32	1.9
Washington	73	5.6	Marion	39	1.8
Jackson	55	5.6	<b>POPULATION CATEGORY 25,000-50,000</b>		
Trigg	87	5.1	Knox	218	7.2
Carroll	104	5.1	Graves	301	6.9
Fleming	57	4.9	Whitley	338	6.5
Martin	25	4.8	Carter	174	6.4
Magoffin	42	4.7	Hopkins	396	5.6
Webster	59	4.6	Marshall	213	5.5
Lewis	30	4.4	Scott	397	5.3
Breathitt	59	4.3	Jessamine	374	5.2
Estill	29	3.9	Shelby	316	4.8
Bath	25	3.5	Franklin	368	4.8
Green	27	3.2	Floyd	196	4.7
Metcalfe	35	3.0	Boyle	194	4.6
Monroe	10	2.6	Clark	249	4.5
Powell	41	2.5	Logan	129	4.5
Clinton	18	1.9	Meade	99	4.4
			Greenup	141	4.3
			Nelson	229	4.1
			Calloway	203	4.0
			Muhlenberg	164	3.9
			Montgomery	158	3.9
			Bell	126	3.8
			Barren	238	3.8
			Boyd	265	3.5
			Henderson	256	3.2
			Harlan	78	3.1
			Grayson	95	3.0
			Perry	100	2.6
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Madison	1,049	8.1
			Fayette	5,035	7.7
			Boone	1,573	6.9
			Kenton	1,742	6.4
			Pike	411	5.6
			Christian	502	5.5
			McCracken	608	5.5
			Hardin	757	5.2
			Campbell	738	5.0
			Oldham	275	4.9
			Laurel	392	4.8
			Warren	1,027	4.7
			Pulaski	368	4.4
			Jefferson	5,266	3.4
			Daviess	530	3.1
			Bullitt	294	3.0

TABLE 34. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF CRASHES (2012-2016)	PERCENT OF TOTAL CRASHES	CITY	NUMBER OF CRASHES (2012-2016)	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Lexington	5,032	7.7	Williamstown	56	9.1
Louisville	4,663	3.5	Calvert City	30	6.6
POPULATION CATEGORY 20,000-60,000			Southgate	48	6.2
Independence	270	12.3	Dawson Springs	15	6.1
Richmond	519	7.5	Vine Grove	23	5.9
Florence	543	5.1	Park Hills	8	5.8
Paducah	328	4.4	Irvine	6	4.9
Hopkinsville	237	4.4	Marion	14	4.8
Bowling Green	651	4.1	Ludlow	21	4.7
Frankfort	208	3.9	Providence	10	4.6
Georgetown	157	3.5	Hodgenville	21	4.4
Covington	304	3.5	Benton	37	4.0
Elizabethtown	229	3.4	Lakeside Park	11	3.9
Nicholasville	166	3.4	Stanford	24	3.9
Ashland	112	2.5	Carrollton	20	3.3
Henderson	134	2.4	Wilmore	8	3.1
Owensboro	302	2.3	Russell	29	3.0
Radcliff	71	2.3	Morganfield	14	3.0
Jeffersonton	100	2.0	Barbourville	17	2.5
POPULATION CATEGORY 10,000-19,999			Flemingsburg	10	2.3
Erlanger	304	7.4	Prestonsburg	34	2.1
Berea	111	4.8	Lancaster	11	2.1
Fort Thomas	69	4.8	Hartford	6	2.0
Madisonville	153	4.0	Greenville	17	2.0
Danville	127	3.8	Hazard	41	1.9
Shively	163	3.4	Grayson	15	1.9
Newport	157	3.3	Scottsville	14	1.7
Somerset	156	3.3	Beaver Dam	9	1.7
Winchester	103	3.0	Columbia	11	1.5
Shelbyville	73	2.8	Paintsville	15	1.3
Lawrenceburg	27	2.5			
Bardstown	75	2.4			
Murray	69	2.1			
Mayfield	38	2.1			
Shepherdsville	68	1.9			
Glasgow	52	1.8			
POPULATION CATEGORY 5,000-9,999					
Taylor Mill	129	11.8			
Villa Hills	27	10.7			
Edgewood	93	9.7			
Princeton	65	6.4			
Highland Heights	79	6.3			
Cold Spring	81	6.2			
Alexandria	67	5.1			
Fort Mitchell	77	5.0			
Russellville	59	4.7			
Franklin	87	4.7			
Corbin	86	4.4			
Maysville	78	4.2			
Cynthiana	47	4.0			
Monticello	40	3.7			
Harrodsburg	47	3.7			
Versailles	58	3.7			
Flatwoods	19	3.5			
Williamsburg	33	3.5			
Pikeville	100	3.5			
Bellevue	26	3.1			
Paris	50	3.1			
Elsmere	19	3.0			
Fort Wright	77	2.8			
Dayton	12	2.7			
La Grange	34	2.5			
Central City	25	2.4			
London	75	2.2			
Leitchfield	31	2.2			
Morehead	44	2.0			
Mount Sterling	36	2.0			
Mount Washington	24	1.5			
Campbellsville	29	1.3			
Lebanon	11	1.0			

TABLE 35. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (2012 - 2016)

COUNTY	2012	2013	2014	2015	2016	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED- RELATED CRASH
Adair	420	188	222	245	243	1,318	21.3	24.0
Allen	162	98	94	100	113	567	8.4	6.6
Anderson	843	717	644	631	507	3,342	40.0	25.1
Ballard	80	70	76	48	36	310	10.5	7.6
Barren	388	396	320	323	438	1,865	12.5	7.8
Bath	244	140	101	81	83	649	15.5	26.0
Bell	507	385	445	524	578	2,439	29.3	19.4
Boone	1,779	1,351	1,001	1,177	1,332	6,640	14.5	4.2
Bourbon	589	414	331	384	442	2,160	30.8	10.7
Boyd	999	715	687	1,186	1,166	4,753	28.5	17.9
Boyle	284	225	170	62	49	790	8.0	4.1
Bracken	326	173	100	162	305	1,066	34.3	13.3
Breathitt	71	47	55	97	172	442	9.6	7.5
Breckinridge	188	180	137	104	97	706	10.1	15.3
Bullitt	706	502	1,006	596	439	3,249	11.1	11.1
Butler	278	187	125	84	74	748	16.9	6.2
Caldwell	319	245	172	242	410	1,388	29.8	9.7
Calloway	168	155	226	225	249	1,023	8.4	5.0
Campbell	1,907	1,733	1,368	1,069	1,476	7,553	23.6	10.2
Carlisle	62	58	102	49	35	306	16.2	8.5
Carroll	355	314	206	175	209	1,259	35.8	12.1
Carter	592	507	336	390	324	2,149	22.7	12.4
Casey	125	60	60	53	49	347	6.6	8.9
Christian	1,383	1,228	917	893	645	5,066	25.6	10.1
Clark	392	257	165	165	116	1,095	8.6	4.4
Clay	257	167	187	221	252	1,084	17.4	7.7
Clinton	39	41	44	30	37	191	5.6	10.6
Crittenden	24	33	54	59	165	335	10.9	7.3
Cumberland	120	144	56	115	91	526	21.7	22.9
Daviess	2,387	1,804	1,784	1,652	1,343	8,970	25.6	16.9
Edmonson	112	105	64	120	71	472	10.6	5.4
Elliott	8	7	8	23	18	64	2.9	3.6
Estill	85	141	79	34	46	385	7.6	13.3
Fayette	3,246	3,278	2,903	3,681	4,121	17,229	17.6	3.4
Fleming	173	227	0	355	230	985	19.2	17.3
Floyd	226	218	301	208	240	1,193	9.3	6.1
Franklin	1,280	1,186	182	1,039	1,336	5,023	28.7	13.6
Fulton	56	89	833	143	73	1,194	59.3	62.8
Gallatin	457	408	107	464	725	2,161	73.1	40.8
Garrard	168	165	433	114	105	985	16.5	7.8
Grant	716	480	110	337	549	2,192	25.6	5.8
Graves	884	534	542	401	291	2,652	20.5	8.8
Grayson	729	519	365	291	393	2,297	25.3	24.2
Green	23	36	391	44	52	546	13.5	20.2
Greenup	274	254	36	120	98	782	5.8	5.5
Hancock	184	56	152	98	80	570	17.5	14.3
Hardin	2,962	2,153	72	1,992	1,808	8,987	24.5	11.9
Harlan	267	193	2,089	196	203	2,948	31.8	37.8
Harrison	145	173	194	122	132	766	11.9	5.6
Hart	190	161	129	98	139	717	11.8	5.0
Henderson	1,514	1,021	121	1,261	1,181	5,098	31.6	19.9
Henry	837	746	1,512	752	854	4,701	81.8	30.1
Hickman	66	57	711	37	40	911	56.0	47.9
Hopkins	1,566	912	74	782	711	4,045	24.9	10.2
Jackson	40	73	1,153	12	47	1,325	29.5	24.1
Jefferson	6,891	7,013	14	4,361	4,047	22,326	8.6	4.2
Jessamine	773	756	5,869	642	686	8,726	49.8	23.3
Johnson	143	178	516	111	104	1,052	13.2	15.7
Kenton	1,948	1,237	96	1,476	1,194	5,951	10.7	3.4
Knott	86	29	1,438	50	12	1,615	31.9	41.4
Knox	416	271	59	220	185	1,151	11.0	5.3
Larue	237	163	239	147	276	1,062	20.5	9.0
Laurel	1,211	803	73	747	881	3,715	18.0	9.5
Lawrence	442	180	607	98	112	1,439	26.7	43.6



TABLE 35. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (2012 - 2016) (continued)

COUNTY	2012	2013	2014	2015	2016	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED- RELATED CRASH
Lee	22	59	57	14	12	164	7.3	20.5
Leslie	35	37	16	35	38	161	4.3	9.5
Letcher	23	31	18	146	62	280	3.6	5.8
Lewis	88	76	67	76	63	370	7.8	12.3
Lincoln	252	149	78	108	106	693	8.1	8.3
Livingston	396	212	146	165	202	1,121	31.6	16.0
Logan	300	308	161	366	321	1,456	15.4	11.3
Lyon	273	182	370	283	278	1,386	48.0	14.6
McCracken	1,608	1,359	252	623	506	4,348	18.0	7.2
McCreary	72	53	791	120	178	1,214	23.3	19.0
McLean	202	87	40	76	109	514	14.8	9.3
Madison	1,591	1,424	61	860	583	4,519	15.7	4.3
Magoffin	28	16	1,234	14	12	1,304	29.8	31.0
Marion	88	67	20	83	81	339	5.2	8.7
Marshall	845	691	71	414	772	2,793	23.2	13.1
Martin	6	3	671	10	15	705	19.7	28.2
Mason	295	357	1	591	440	1,684	27.8	8.5
Meade	585	522	459	440	214	2,220	22.6	22.4
Menifee	7	11	347	8	9	382	16.7	38.2
Mercer	256	230	13	361	255	1,115	13.8	7.7
Metcalfe	165	132	392	114	141	944	26.4	27.0
Monroe	16	14	112	13	18	173	4.6	17.3
Montgomery	155	145	20	174	130	624	6.6	3.9
Morgan	234	169	137	267	322	1,129	27.9	17.1
Muhlenberg	524	340	340	499	260	1,963	17.8	12.0
Nelson	519	592	369	720	804	3,004	18.0	13.1
Nicholas	168	87	571	24	46	896	35.0	27.2
Ohio	1,227	769	44	554	420	3,014	35.8	18.4
Oldham	432	449	937	675	876	3,369	14.9	12.3
Owen	107	96	527	197	164	1,091	28.2	18.2
Owsley	0	2	88	1	3	94	6.2	4.7
Pendleton	249	168	0	98	106	621	11.8	5.7
Perry	57	123	113	67	45	405	4.3	4.1
Pike	381	253	96	121	101	952	4.6	2.3
Powell	128	92	240	77	72	609	13.7	14.9
Pulaski	2,094	1,689	117	1,091	1,063	6,054	26.8	16.5
Robertson	7	4	1,183	4	1	1,199	146.9	171.3
Rockcastle	602	336	2	282	317	1,539	26.9	10.3
Rowan	433	273	282	359	244	1,591	21.2	8.6
Russell	50	60	206	65	112	493	7.9	15.4
Scott	603	1,065	83	488	515	2,754	15.1	6.9
Shelby	1,894	1,783	811	886	848	6,222	41.5	19.7
Simpson	174	100	1,257	259	151	1,941	29.8	6.7
Spencer	278	247	145	149	363	1,182	17.1	13.4
Taylor	110	87	122	79	69	467	5.3	3.8
Todd	194	226	133	144	199	896	23.0	10.7
Trigg	200	213	178	263	215	1,069	21.1	12.3
Trimble	44	74	288	56	92	554	17.5	12.3
Union	189	132	57	134	62	574	11.3	5.6
Warren	1,664	1,395	138	1,572	1,556	6,325	16.2	6.2
Washington	138	91	1,478	89	50	1,846	44.6	25.3
Wayne	18	22	52	55	103	250	3.7	2.7
Webster	99	105	19	139	151	513	11.1	8.7
Whitley	279	259	56	120	290	1,004	8.6	3.0
Wolfe	526	440	105	376	310	1,757	73.4	33.8
Woodford	1,179	799	344	883	698	3,903	41.0	13.0
TOTAL*	66,458	55,061	48,578	47,605	47,688	265,390	17.6	8.1

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

TABLE 36. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (2012 - 2016)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
UNDER 10,000	Robertson	146.9	Robertson	171.3
	Wolfe	73.4	Fulton	62.8
	Gallatin	73.1	Hickman	47.9
	Fulton	59.3	Gallatin	40.8
	Hickman	56.0	Menifee	38.2
	Lyon	48.0	Wolfe	33.8
	Nicholas	35.0	Nicholas	27.2
	Bracken	34.3	Metcalfe	27.0
	Livingston	31.6	Cumberland	22.9
	Metcalfe	26.4	Lee	20.5
	Cumberland	21.7	Livingston	16.0
	Hancock	17.5	Lyon	14.6
	Trimble	17.5	Hancock	14.3
	Menifee	16.7	Bracken	13.3
	Carlisle	16.2	Trimble	12.3
	McLean	14.8	McLean	9.3
	Crittenden	10.9	Carlisle	8.5
	Ballard	10.5	Ballard	7.6
	Lee	7.3	Crittenden	7.3
	Owsley	6.2	Owsley	4.7
Elliott	2.9	Elliott	3.6	
10,000-14,999	Washington	44.6	Magoffin	31.0
	Carroll	35.8	Martin	28.2
	Magoffin	29.8	Bath	26.0
	Caldwell	29.8	Washington	25.3
	Jackson	29.5	Jackson	24.1
	Owen	28.2	Green	20.2
	Morgan	27.9	Owen	18.2
	Todd	23.0	Monroe	17.3
	Trigg	21.1	Fleming	17.3
	Larue	20.5	Morgan	17.1
	Martin	19.7	Powell	14.9
	Fleming	19.2	Estill	13.3
	Butler	16.9	Lewis	12.3
	Bath	15.5	Trigg	12.3
	Powell	13.7	Carroll	12.1
	Green	13.5	Todd	10.7
	Pendleton	11.8	Clinton	10.6
	Webster	11.1	Caldwell	9.7
	Edmonson	10.6	Leslie	9.5
	Breathitt	9.6	Larue	9.0
Lewis	7.8	Webster	8.7	
Estill	7.6	Breathitt	7.5	
Clinton	5.6	Butler	6.2	
Monroe	4.6	Pendleton	5.7	
Leslie	4.3	Edmonson	5.4	
15,000 - 24,999	Henry	81.8	Lawrence	43.6
	Woodford	41.0	Knott	41.4
	Anderson	40.0	Henry	30.1
	Ohio	35.8	Anderson	25.1
	Knott	31.9	Grayson	24.2
	Bourbon	30.8	Adair	24.0
	Simpson	29.8	McCreary	19.0
	Mason	27.8	Ohio	18.4
	Rockcastle	26.9	Johnson	15.7
	Lawrence	26.7	Russell	15.4
	Grant	25.6	Breckinridge	15.3
	Grayson	25.3	Spencer	13.4
	McCreary	23.3	Woodford	13.0

TABLE 36. SPEEDING CONVICTION RATES IN DECREASING ORDER ( BY COUNTY POPULATION CATEGORIES) (2012 - 2016) (continued)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED- RELATED CRASH
15,000 - 24,999 (cont'd)	Adair	21.3	Bourbon	10.7
	Rowan	21.2	Rockcastle	10.3
	Clay	17.4	Casey	8.9
	Spencer	17.1	Marion	8.7
	Garrard	16.5	Rowan	8.6
	Mercer	13.8	Mason	8.5
	Johnson	13.2	Lincoln	8.3
	Harrison	11.9	Garrard	7.8
	Hart	11.8	Mercer	7.7
	Union	11.3	Clay	7.7
	Breckinridge	10.1	Simpson	6.7
	Allen	8.4	Allen	6.6
	Lincoln	8.1	Letcher	5.8
	Russell	7.9	Grant	5.8
	Casey	6.6	Harrison	5.6
	Taylor	5.3	Union	5.6
	Marion	5.2	Hart	5.0
	Wayne	3.7	Taylor	3.8
	Letcher	3.6	Wayne	2.7
25,000 - 49,999	Jessamine	49.8	Harlan	37.8
	Shelby	41.5	Jessamine	23.3
	Harlan	31.8	Meade	22.4
	Henderson	31.6	Henderson	19.9
	Bell	29.3	Shelby	19.7
	Franklin	28.7	Bell	19.4
	Boyd	28.5	Boyd	17.9
	Hopkins	24.9	Franklin	13.6
	Marshall	23.2	Nelson	13.1
	Carter	22.7	Marshall	13.1
	Meade	22.6	Carter	12.4
	Graves	20.5	Muhlenberg	12.0
	Nelson	18.0	Logan	11.3
	Laurel	18.0	Hopkins	10.2
	Muhlenberg	17.8	Laurel	9.5
	Logan	15.4	Graves	8.8
	Scott	15.1	Barren	7.8
	Barren	12.5	Scott	6.9
	Knox	11.0	Floyd	6.1
	Floyd	9.3	Greenup	5.5
Clark	8.6	Knox	5.3	
Whitley	8.6	Calloway	5.0	
Calloway	8.4	Clark	4.4	
Boyle	8.0	Boyle	4.1	
Montgomery	6.6	Perry	4.1	
Greenup	5.8	Montgomery	3.9	
Perry	4.3	Whitley	3.0	
50,000 - OVER	Pulaski	26.8	Daviess	16.9
	Daviess	25.6	Pulaski	16.5
	Christian	25.6	Oldham	12.3
	Hardin	24.5	Hardin	11.9
	Campbell	23.6	Bullitt	11.1
	McCracken	18.0	Campbell	10.2
	Fayette	17.6	Christian	10.1
	Warren	16.2	McCracken	7.2
	Madison	15.7	Warren	6.2
	Oldham	14.9	Madison	4.3
	Boone	14.5	Jefferson	4.2
	Bullitt	11.1	Boone	4.2
	Kenton	10.7	Fayette	3.4
	Jefferson	8.6	Kenton	3.4
	Pike	4.6	Pike	2.3

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

HIGHWAY TYPE AND SPEED LIMIT	85 <sup>th</sup> PERCENTILE SPEED (MPH)	
	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)

HIGHWAY TYPE AND SPEED LIMIT	85 <sup>th</sup> PERCENTILE SPEED (MPH)	
	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 (2012 - 2016)

Crash Statistic	Number in Given Year				4-Year Average 2012 - 2015	2016	2016 Percent Change*
	2012	2013	2014	2015			
Total Crashes	124,844	123,258	127,326	136,338	127,942	140,547	9.9
Fatal Crashes	694	590	612	694	648	763	17.7
Fatalities	746	638	672	761	704	834	18.5
Injury Crashes	24,077	22,868	22,958	23,803	23,427	25,004	6.7
Injuries	35,765	34,180	34,221	35,542	34,927	37,347	6.9
Fatal and Injury Crashes	24,771	23,458	23,570	24,497	24,074	25,767	7.0
Licensed Drivers (Millions)	3.17	3.16	3.19	3.20	3.18	3.20	0.8
Registered Vehicles (Millions)	3.78	3.40	3.83	3.86	3.72	3.89	4.6
Total Vehicle Miles (Billions)	47.246	47.054	47.972	48.761	47.758	49.196	3.0
Total Crash/100 MVM	264	262	265	280	268	286	6.6
Fatal Crash/100 MVM	1.47	1.25	1.28	1.42	1.36	1.55	14.0
Fatalities/100 MVM	1.58	1.36	1.40	1.56	1.47	1.70	15.3
Injuries/100 MVM	76	73	71	73	73	76	4.0
Speed Related Crashes	6,343	6,494	7,004	6,841	6,671	6,821	2.2
Speed Related Injury Crashes	1,892	1,865	1,846	1,878	1,870	1,979	5.8
Speed Related Fatal Crashes	123	99	108	131	115	113	-1.7
Speed Convictions	66,458	55,061	48,578	47,605	54,426	47,688	-12.4
Alcohol Related Crashes	4,648	4,483	4,295	4,217	4,411	4,192	-5.0
Alcohol Related Injury Crashes	1,623	1,592	1,432	1,418	1,516	1,363	-10.1
Alcohol Related Fatal Crashes	136	153	143	162	149	160	7.4
Alcohol Related Fatalities	148	163	156	175	161	171	6.2
DUI Filings	31,708	29,210	27,472	26,008	28,600	25,048	-12.4
DUI Convictions	19,074	18,030	16,208	14,443	16,939	13,642	-19.5
DUI Conviction Rate (Percent)**	85.6	86.0	85.7	83.7	85.2	80.8	-5.2
Number DUI Filings/Alcohol Related Fatality	214	179	176	149	180	146	-18.6
Drug Related Crashes	1,677	1,540	1,558	1,838	1,653	1,771	7.1
Drug Related Injury Crashes	583	545	571	678	594	698	17.5
Drug Related Fatal Crashes	215	211	191	233	213	266	24.9
Pedestrian Related Crashes	1,064	1,066	1,053	1,096	1,070	1,094	2.2
Pedestrian Related Injury Crashes	860	834	841	857	848	818	-3.5
Pedestrian Related Fatal Crashes	53	53	58	68	58	84	44.8
Bicycle/Motor Vehicle Related Crashes	428	495	462	405	448	410	-8.5
Bicycle Related Injury Crashes	294	348	312	276	308	255	-17.2
Bicycle Related Fatal Crashes	6	3	3	7	5	9	80.0
Motorcycle Related Crashes	1,967	1,689	1,658	1,727	1,760	1,785	1.4
Motorcycle Related Injury Crashes	1,490	1,248	1,269	1,272	1,320	1,377	4.3
Motorcycle Related Fatal Crashes	93	83	74	86	84	105	25.0
School Bus Crashes	746	813	564	852	744	750	0.8
School Bus Injury Crashes	102	95	107	103	102	85	-16.7
School Bus Fatal Crashes	2	1	3	3	2	3	50.0
Truck Crashes	7,442	7,904	8,664	9,196	8,302	9,380	13.0
Truck Injury Crashes	1,189	1,250	1,261	1,396	1,274	1,352	6.1
Truck Fatal Crashes	70	72	67	90	75	93	24.0
Train Crashes	31	39	55	47	43	42	-2.3
Train Injury Crashes	12	12	13	17	14	11	-21.4
Train Fatal Crashes	4	4	5	3	4	2	-50.0

\* Percent change from 2012-2015 average to 2016.

\*\* Conviction rate excludes pending cases.

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

	PEDESTRIAN CRASHES		BICYCLE CRASHES		MOTORCYCLE CRASHES		SCHOOL BUS CRASHES		TRUCK CRASHES	
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Adair	5	0.5	5	0.5	12	1.3	2	0.2	87	9.3
Allen	11	1.1	1	0.1	29	2.9	4	0.4	148	14.8
Anderson	5	0.5	2	0.2	28	2.6	14	1.3	136	12.7
Ballard	3	0.7	0	0.0	12	2.9	3	0.7	111	26.9
Barren	20	0.9	4	0.2	65	3.1	10	0.5	424	20.1
Bath	6	1.0	1	0.2	10	1.7	9	1.6	60	10.4
Bell	26	1.8	16	1.1	49	3.4	25	1.7	167	11.6
Boone	117	2.0	32	0.5	250	4.2	245	4.1	2056	34.6
Bourbon	13	1.3	6	0.6	41	4.1	13	1.3	193	19.3
Boyd	49	2.0	22	0.9	82	3.3	26	1.0	372	15.0
Boyle	26	1.8	13	0.9	42	3.0	20	1.4	203	14.3
Bracken	1	0.2	1	0.2	21	4.9	6	1.4	78	18.4
Breathitt	12	1.7	0	0.0	23	3.3	7	1.0	50	7.2
Breckinridge	6	0.6	0	0.0	20	2.0	6	0.6	70	7.0
Bullitt	59	1.6	15	0.4	144	3.9	54	1.5	952	25.6
Butler	3	0.5	1	0.2	19	3.0	5	0.8	101	15.9
Caldwell	8	1.2	4	0.6	31	4.8	10	1.5	179	27.6
Calloway	29	1.6	23	1.2	59	3.2	14	0.8	228	12.3
Campbell	148	3.3	51	1.1	134	3.0	46	1.0	650	14.4
Carlisle	0	0.0	1	0.4	10	3.9	1	0.4	43	16.8
Carroll	7	1.3	2	0.4	22	4.1	5	0.9	286	52.9
Carter	13	0.9	1	0.1	39	2.8	7	0.5	215	15.5
Casey	2	0.3	2	0.3	10	1.3	0	0.0	74	9.3
Christian	38	1.0	25	0.7	133	3.6	34	0.9	636	17.2
Clark	26	1.5	7	0.4	59	3.3	47	2.6	303	17.0
Clay	18	1.7	2	0.2	36	3.3	19	1.7	88	8.1
Clinton	1	0.2	0	0.0	10	1.9	0	0.0	44	8.6
Crittenden	4	0.9	1	0.2	26	5.6	1	0.2	86	18.5
Cumberland	7	2.0	1	0.3	14	4.1	1	0.3	36	10.5
Daviess	82	1.7	75	1.6	195	4.0	90	1.9	758	15.7
Edmonson	3	0.5	0	0.0	11	1.8	7	1.2	56	9.2
Elliott	2	0.5	0	0.0	8	2.0	0	0.0	18	4.6
Estill	6	0.8	1	0.1	10	1.4	2	0.3	19	2.6
Fayette	619	4.2	299	2.0	482	3.3	160	1.1	2815	19.0
Fleming	5	0.7	0	0.0	11	1.5	9	1.3	90	12.5
Floyd	24	1.2	2	0.1	49	2.5	56	2.8	199	10.1
Franklin	43	1.7	11	0.4	64	2.6	32	1.3	388	15.7
Fulton	2	0.6	2	0.6	7	2.1	1	0.3	56	16.4
Gallatin	2	0.5	2	0.5	22	5.1	5	1.2	304	70.8
Garrard	6	0.7	3	0.4	19	2.2	8	0.9	105	12.4
Grant	12	1.0	1	0.1	51	4.1	15	1.2	290	23.5
Graves	25	1.3	8	0.4	65	3.5	13	0.7	241	13.0
Grayson	13	1.0	3	0.2	50	3.9	10	0.8	216	16.8
Green	6	1.1	1	0.2	11	2.0	8	1.4	56	9.9
Greenup	9	0.5	4	0.2	34	1.8	13	0.7	127	6.9
Hancock	2	0.5	1	0.2	14	3.3	3	0.7	74	17.3
Hardin	66	1.3	29	0.5	221	4.2	76	1.4	1049	19.9
Harlan	26	1.8	4	0.3	37	2.5	19	1.3	120	8.2
Harrison	17	1.8	3	0.3	25	2.7	10	1.1	109	11.6
Hart	8	0.9	1	0.1	21	2.3	3	0.3	529	58.1
Henderson	42	1.8	32	1.4	86	3.7	31	1.3	503	21.8
Henry	8	1.0	0	0.0	21	2.7	5	0.6	352	45.7
Hickman	0	0.0	0	0.0	7	2.9	0	0.0	38	15.5
Hopkins	31	1.3	13	0.6	64	2.7	13	0.6	400	17.1
Jackson	3	0.4	1	0.1	23	3.4	2	0.3	47	7.0
Jefferson	1695	4.6	673	1.8	1317	3.6	1154	3.1	8060	21.8
Jessamine	35	1.4	11	0.5	80	3.3	57	2.3	370	15.2
Johnson	18	1.5	7	0.6	20	1.7	5	0.4	85	7.3
Kenton	253	3.2	84	1.1	224	2.8	143	1.8	1755	22.0
Knott	1	0.1	0	0.0	24	2.9	10	1.2	69	8.4

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

	PEDESTRIAN CRASHES		BICYCLE CRASHES		MOTORCYCLE CRASHES		SCHOOL BUS CRASHES		TRUCK CRASHES	
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Knox	14	0.9	6	0.4	44	2.8	22	1.4	154	9.7
Larue	7	1.0	1	0.1	14	2.0	2	0.3	146	20.6
Laurel	31	1.1	9	0.3	75	2.5	23	0.8	620	21.1
Lawrence	2	0.3	2	0.3	27	3.4	5	0.6	74	9.3
Lee	4	1.0	0	0.0	1	0.3	7	1.8	23	5.8
Leslie	0	0.0	0	0.0	5	0.9	1	0.2	28	5.0
Letcher	10	0.8	0	0.0	22	1.8	10	0.8	126	10.3
Lewis	2	0.3	0	0.0	6	0.9	8	1.2	63	9.1
Lincoln	11	0.9	0	0.0	30	2.4	8	0.6	100	8.1
Livingston	5	1.1	1	0.2	24	5.0	6	1.3	73	15.3
Logan	8	0.6	6	0.4	35	2.6	8	0.6	215	16.0
Lyon	3	0.7	0	0.0	27	6.5	1	0.2	201	48.4
McCracken	59	1.8	41	1.3	173	5.3	40	1.2	620	18.9
McCreary	11	1.2	2	0.2	15	1.6	5	0.5	49	5.4
McLean	7	1.5	0	0.0	16	3.4	5	1.0	103	21.6
Madison	67	1.6	22	0.5	157	3.8	53	1.3	825	19.9
Magoffin	5	0.8	0	0.0	12	1.8	8	1.2	43	6.5
Marion	8	0.8	2	0.2	35	3.5	6	0.6	149	15.0
Marshall	10	0.6	6	0.4	66	4.2	8	0.5	317	20.2
Martin	2	0.3	0	0.0	6	0.9	6	0.9	36	5.6
Mason	20	2.3	4	0.5	33	3.8	12	1.4	146	16.7
Meade	10	0.7	0	0.0	34	2.4	4	0.3	90	6.3
Menifee	0	0.0	0	0.0	14	4.4	0	0.0	18	5.7
Mercer	9	0.8	3	0.3	30	2.8	13	1.2	113	10.6
Metcalfe	3	0.6	0	0.0	15	3.0	3	0.6	88	17.4
Monroe	1	0.2	0	0.0	4	0.7	2	0.4	15	2.7
Montgomery	22	1.7	2	0.2	33	2.5	35	2.6	244	18.4
Morgan	5	0.7	0	0.0	8	1.1	8	1.1	36	5.2
Muhlenberg	15	1.0	3	0.2	46	2.9	9	0.6	276	17.5
Nelson	15	0.7	14	0.6	72	3.3	14	0.6	343	15.8
Nicholas	3	0.8	0	0.0	7	2.0	2	0.6	40	11.2
Ohio	7	0.6	3	0.3	36	3.0	5	0.4	224	18.8
Oldham	14	0.5	18	0.6	47	1.6	51	1.7	518	17.2
Owen	3	0.6	0	0.0	19	3.5	10	1.8	51	9.4
Owsley	2	0.8	1	0.4	13	5.5	2	0.8	20	8.4
Pendleton	3	0.4	1	0.1	38	5.1	8	1.1	79	10.6
Perry	20	1.4	1	0.1	44	3.1	26	1.8	171	11.9
Pike	42	1.3	6	0.2	97	3.0	33	1.0	400	12.3
Powell	10	1.6	0	0.0	32	5.1	7	1.1	86	13.6
Pulaski	33	1.0	8	0.3	89	2.8	28	0.9	418	13.3
Robertson	0	0.0	0	0.0	4	3.5	0	0.0	4	3.5
Rockcastle	6	0.7	1	0.1	31	3.6	2	0.2	385	45.1
Rowan	21	1.8	7	0.6	57	4.9	12	1.0	214	18.3
Russell	5	0.6	0	0.0	23	2.6	7	0.8	103	11.7
Scott	52	2.2	9	0.4	78	3.3	38	1.6	628	26.6
Shelby	30	1.4	14	0.7	71	3.4	38	1.8	496	23.6
Simpson	14	1.6	3	0.3	31	3.6	9	1.0	383	44.2
Spencer	6	0.7	0	0.0	29	3.4	8	0.9	59	6.9
Taylor	24	2.0	5	0.4	48	3.9	5	0.4	140	11.4
Todd	1	0.2	2	0.3	21	3.4	2	0.3	91	14.6
Trigg	5	0.7	2	0.3	44	6.1	2	0.3	139	19.4
Trimble	3	0.7	1	0.2	24	5.4	4	0.9	36	8.2
Union	7	0.9	4	0.5	26	3.5	8	1.1	111	14.8
Warren	102	1.8	64	1.1	200	3.5	64	1.1	1001	17.6
Washington	4	0.7	1	0.2	14	2.4	5	0.9	104	17.8
Wayne	9	0.9	4	0.4	18	1.7	10	1.0	100	9.6
Webster	1	0.1	1	0.1	16	2.3	5	0.7	119	17.5
Whitley	31	1.7	6	0.3	73	4.1	21	1.2	352	19.8
Wolfe	3	0.8	1	0.3	10	2.7	1	0.3	41	11.1
Woodford	18	1.4	8	0.6	51	4.1	24	1.9	316	25.3

\* Five-Year (2012-2016) Total.

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



TABLE 41. PEDESTRIAN CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Cumberland	7	2.0	Mason	20	2.3
McLean	7	1.5	Taylor	24	2.0
Livingston	5	1.1	Rowan	21	1.8
Lee	4	1.0	Harrison	17	1.8
Crittenden	4	0.9	Clay	18	1.7
Wolfe	3	0.8	Simpson	14	1.6
Owsley	2	0.8	Johnson	18	1.5
Nicholas	3	0.8	Woodford	18	1.4
Lyon	3	0.7	Bourbon	13	1.3
Trimble	3	0.7	McCreary	11	1.2
Ballard	3	0.7	Allen	11	1.1
Fulton	2	0.6	Henry	8	1.0
Hancock	2	0.5	Grant	12	1.0
Elliott	2	0.5	Wayne	9	0.9
Gallatin	2	0.5	Lincoln	11	0.9
Bracken	1	0.2	Union	7	0.9
Menifee	0	0.0	Hart	8	0.9
Carlisle	0	0.0	Marion	8	0.8
Hickman	0	0.0	Letcher	10	0.8
Robertson	0	0.0	Mercer	9	0.8
<b>POPULATION CATEGORY 10,000-14,999</b>			<b>POPULATION CATEGORY 25,000-50,000</b>		
Breathitt	12	1.7	Spencer	6	0.7
Powell	10	1.6	Garrard	6	0.7
Carroll	7	1.3	Rockcastle	6	0.7
Caldwell	8	1.2	Ohio	7	0.6
Green	6	1.1	Russell	5	0.6
Bath	6	1.0	Breckinridge	6	0.6
Larue	7	1.0	Adair	5	0.5
Estill	6	0.8	Anderson	5	0.5
Magoffin	5	0.8	Casey	2	0.3
Trigg	5	0.7	Lawrence	2	0.3
Fleming	5	0.7	Knott	1	0.1
Morgan	5	0.7	<b>POPULATION CATEGORY OVER 50,000</b>		
Washington	4	0.7	Jefferson	1,695	4.6
Metcalfe	3	0.6	Fayette	619	4.2
Owen	3	0.6	Campbell	148	3.3
Butler	3	0.5	Kenton	253	3.2
Edmonson	3	0.5	Boone	117	2.0
Jackson	3	0.4	Warren	102	1.8
Pendleton	3	0.4	McCracken	59	1.8
Martin	2	0.3	Daviess	82	1.7
Lewis	2	0.3	Madison	67	1.6
Todd	1	0.2	Bullitt	59	1.6
Clinton	1	0.2	Hardin	66	1.3
Monroe	1	0.2	Pike	42	1.3
Webster	1	0.1	Laurel	31	1.1
Leslie	0	0.0	Christian	38	1.0
			Pulaski	33	1.0
			Oldham	14	0.5
			Scott	52	2.2
			Boyd	49	2.0
			Boyle	26	1.8
			Bell	26	1.8
			Henderson	42	1.8
			Harlan	26	1.8
			Franklin	43	1.7
			Whitley	31	1.7
			Montgomery	22	1.7
			Calloway	29	1.6
			Clark	26	1.5
			Shelby	30	1.4
			Jessamine	35	1.4
			Perry	20	1.4
			Graves	25	1.3
			Hopkins	31	1.3
			Floyd	24	1.2
			Muhlenberg	15	1.0
			Grayson	13	1.0
			Barren	20	0.9
			Knox	14	0.9
			Carter	13	0.9
			Meade	10	0.7
			Nelson	15	0.7
			Logan	8	0.6
			Marshall	10	0.6
			Greenup	9	0.5

TABLE 42. PEDESTRIAN CRASH RATES BY CITY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	1,525	5.1	Hazard	13	5.8
Lexington	619	4.2	Paintsville	9	5.2
POPULATION CATEGORY 20,000-60,000			Grayson	10	4.7
Covington	151	7.4	Prestonsburg	7	4.3
Florence	76	5.1	Barbourville	6	3.8
Ashland	41	3.8	Southgate	7	3.7
Paducah	42	3.4	Lakeside Park	4	3.0
Bowling Green	83	2.9	Dawson Springs	4	2.9
Frankfort	34	2.7	Scottsville	6	2.8
Richmond	41	2.6	Springfield	3	2.4
Henderson	38	2.6	Ludlow	5	2.3
Owensboro	75	2.6	Lancaster	4	2.3
Georgetown	35	2.4	Flemingsburg	3	2.3
Radcliff	24	2.2	Marion	3	2.0
Nicholasville	29	2.1	Greenville	4	1.9
Jefferson town	26	2.0	Russell	3	1.8
Elizabeth town	27	1.9	Stanford	3	1.7
Hopkinsville	25	1.6	Williamstown	3	1.5
Independence	13	1.1	Carrollton	3	1.5
POPULATION CATEGORY 10,000-19,999			Stanton	2	1.5
Shively	75	9.8	Benton	3	1.4
Newport	72	9.4	Park Hills	2	1.3
Shepherdsville	29	5.2	Hodgenville	2	1.2
Somerset	22	3.9	Calvert City	1	0.8
Mayfield	16	3.2	Beaver Dam	1	0.6
Danville	23	2.8	Morganfield	1	0.6
Shelbyville	20	2.8	Wilmore	1	0.5
Erlanger	25	2.8	Columbia	1	0.4
Murray	24	2.7			
Winchester	20	2.2			
Glasgow	14	2.0			
Madisonville	20	2.0			
Berea	10	1.5			
Bardstown	8	1.4			1.5
Lawrenceburg	5	1.0			
Fort Thomas	6	0.7			
POPULATION CATEGORY 5,000-9,999					
Bellevue	18	6.0			
Cynthiana	15	4.7			
Campbellsville	21	4.6			
Mount Sterling	15	4.4			
Morehead	14	4.1			
Pikeville	14	4.1			
Maysville	17	3.8			
Fort Wright	10	3.5			
Dayton	9	3.4			
Williamsburg	9	3.4			
Highland Heights	11	3.2			
Elsmere	13	3.1			
Paris	13	3.0			
Corbin	10	2.7			
Cold Spring	8	2.7			
Franklin	11	2.6			
Monticello	8	2.6			
Versailles	11	2.6			
Leitchfield	8	2.4			
London	9	2.3			
Lebanon	6	2.2			
Fort Mitchell	9	2.2			
La Grange	9	2.2			
Alexandria	9	2.1			
Central City	6	2.0			
Russellville	7	2.0			
Princeton	5	1.6			
Harrodsburg	6	1.4			
Mount Washington	3	0.7			
Edgewood	3	0.7			
Flatwoods	2	0.5			
Villa Hills	1	0.3			
Taylor Mill	1	0.3			

TABLE 43. BICYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Fulton	2	0.6	Woodford	8	0.6
Gallatin	2	0.5	Bourbon	6	0.6
Carlisle	1	0.4	Rowan	7	0.6
Owsley	1	0.4	Johnson	7	0.6
Cumberland	1	0.3	Union	4	0.5
Wolfe	1	0.3	Adair	5	0.5
Hancock	1	0.2	Mason	4	0.5
Trimble	1	0.2	Taylor	5	0.4
Crittenden	1	0.2	Garrard	3	0.4
Livingston	1	0.2	Wayne	4	0.4
Bracken	1	0.2	Ohio	3	0.3
Elliott	0	0.0	Mercer	3	0.3
Lyon	0	0.0	Simpson	3	0.3
Nicholas	0	0.0	Lawrence	2	0.3
McLean	0	0.0	Casey	2	0.3
Menifee	0	0.0	Harrison	3	0.3
Ballard	0	0.0	Clay	2	0.2
Hickman	0	0.0	Anderson	2	0.2
Lee	0	0.0	McCreary	2	0.2
Robertson	0	0.0	Marion	2	0.2
<b>POPULATION CATEGORY 10,000-14,999</b>			Allen	1	0.1
Caldwell	4	0.6	Hart	1	0.1
Carroll	2	0.4	Grant	1	0.1
Trigg	2	0.3	Rockcastle	1	0.1
Todd	2	0.3	Lincoln	0	0.0
Bath	1	0.2	Russell	0	0.0
Green	1	0.2	Knott	0	0.0
Butler	1	0.2	Spencer	0	0.0
Washington	1	0.2	Letcher	0	0.0
Larue	1	0.1	Henry	0	0.0
Webster	1	0.1	Breckinridge	0	0.0
Jackson	1	0.1	<b>POPULATION CATEGORY 25,000-50,000</b>		
Estill	1	0.1	Henderson	32	1.4
Pendleton	1	0.1	Calloway	23	1.2
Lewis	0	0.0	Bell	16	1.1
Powell	0	0.0	Boyd	22	0.9
Breathitt	0	0.0	Boyle	13	0.9
Edmonson	0	0.0	Shelby	14	0.7
Morgan	0	0.0	Hopkins	13	0.6
Fleming	0	0.0	Nelson	14	0.6
Leslie	0	0.0	Jessamine	11	0.5
Magoffin	0	0.0	Franklin	11	0.4
Monroe	0	0.0	Scott	9	0.4
Owen	0	0.0	Graves	8	0.4
Martin	0	0.0	Logan	6	0.4
Clinton	0	0.0	Marshall	6	0.4
Metcalfe	0	0.0	Clark	7	0.4
			Knox	6	0.4
			Whitley	6	0.3
			Harlan	4	0.3
			Muhlenberg	3	0.2
			Grayson	3	0.2
			Greenup	4	0.2
			Barren	4	0.2
			Montgomery	2	0.2
			Perry	1	0.1
			Floyd	2	0.1
			Carter	1	0.1
			Meade	0	0.0
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Fayette	299	2.0
			Jefferson	673	1.8
			Daviess	75	1.6
			McCracken	41	1.3
			Kenton	84	1.1
			Warren	64	1.1
			Campbell	51	1.1
			Christian	25	0.7
			Oldham	18	0.6
			Hardin	29	0.5
			Madison	22	0.5
			Boone	32	0.5
			Bullitt	15	0.4
			Pulaski	8	0.3
			Laurel	9	0.3
			Pike	6	0.2

TABLE 44. BICYCLE CRASH RATES BY CITY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	603	2.0	Paintsville	7	4.0
Lexington	299	2.0	Ludlow	5	2.3
POPULATION CATEGORY 20,000-60,000			Beaver Dam	3	1.8
Covington	58	2.9	Dawson Springs	2	1.4
Paducah	33	2.6	Benton	3	1.4
Owensboro	68	2.4	Columbia	3	1.3
Bowling Green	60	2.1	Vine Grove	3	1.3
Henderson	30	2.1	Morganfield	2	1.2
Ashland	21	1.9	Lancaster	2	1.2
Hopkinsville	22	1.4	Carrollton	2	1.0
Florence	17	1.1	Springfield	1	0.8
Jeffersonton	14	1.1	Calvert City	1	0.8
Richmond	16	1.0	Marion	1	0.7
Elizabethtown	13	0.9	Prestonsburg	1	0.6
Radcliff	9	0.8	Barbourville	1	0.6
Frankfort	9	0.7	Williamstown	1	0.5
Nicholasville	9	0.6	Grayson	1	0.5
Georgetown	9	0.6	Scottsville	1	0.5
Independence	5	0.4	Southgate	1	0.5
POPULATION CATEGORY 10,000-19,999					
Newport	30	3.9			
Shively	20	2.6			
Murray	21	2.4			
Bardstown	11	1.9			
Shelbyville	12	1.7			
Shepherdsville	9	1.6			
Danville	12	1.5			
Mayfield	7	1.4			
Madisonville	11	1.1			
Somerset	4	0.7			
Winchester	6	0.7			
Erlanger	5	0.6			
Glasgow	3	0.4			
Berea	2	0.3			
Lawrenceburg	1	0.2			
Fort Thomas	1	0.1			
POPULATION CATEGORY 5,000-9,999					
Alexandria	8	1.9			
London	5	1.3			
Bellevue	4	1.3			
Monticello	4	1.3			
Versailles	5	1.2			
Morehead	4	1.2			
Elsmere	5	1.2			
Williamsburg	3	1.1			
Russellville	4	1.1			
La Grange	4	1.0			
Pikeville	3	0.9			
Paris	4	0.9			
Princeton	3	0.9			
Highland Heights	3	0.9			
Cynthiana	3	0.9			
Corbin	3	0.8			
Lebanon	2	0.7			
Franklin	3	0.7			
Maysville	3	0.7			
Central City	2	0.7			
Leitchfield	2	0.6			
Edgewood	2	0.5			
Harrodsburg	2	0.5			
Campbellsville	2	0.4			
Taylor Mill	1	0.3			

TABLE 45. MOTORCYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Lyon	27	6.5	Rowan	57	4.9
Crittenden	26	5.6	Woodford	51	4.1
Owsley	13	5.5	Grant	51	4.1
Trimble	24	5.4	Bourbon	41	4.1
Gallatin	22	5.1	Taylor	48	3.9
Livingston	24	5.0	Mason	33	3.8
Bracken	21	4.9	Simpson	31	3.6
Menifee	14	4.4	Rockcastle	31	3.6
Cumberland	14	4.1	Marion	35	3.5
Carlisle	10	3.9	Union	26	3.5
Robertson	4	3.5	Spencer	29	3.4
McLean	16	3.4	Lawrence	27	3.4
Hancock	14	3.3	Clay	36	3.3
Hickman	7	2.9	Ohio	36	3.0
Ballard	12	2.9	Allen	29	2.9
Wolfe	10	2.7	Knott	24	2.9
Fulton	7	2.1	Mercer	30	2.8
Elliott	8	2.0	Henry	21	2.7
Nicholas	7	2.0	Harrison	25	2.7
Lee	1	0.3	Anderson	28	2.6
<b>POPULATION CATEGORY 10,000-14,999</b>			Russell	23	2.6
Trigg	44	6.1	Lincoln	30	2.4
Pendleton	38	5.1	Hart	21	2.3
Powell	32	5.1	Garrard	19	2.2
Caldwell	31	4.8	Breckinridge	20	2.0
Carroll	22	4.1	Letcher	22	1.8
Owen	19	3.5	Johnson	20	1.7
Todd	21	3.4	Wayne	18	1.7
Jackson	23	3.4	McCreary	15	1.6
Breathitt	23	3.3	Casey	10	1.3
Metcalfe	15	3.0	Adair	12	1.3
Butler	19	3.0	<b>POPULATION CATEGORY 25,000-50,000</b>		
Washington	14	2.4	Marshall	66	4.2
Webster	16	2.3	Whitley	73	4.1
Green	11	2.0	Grayson	50	3.9
Larue	14	2.0	Henderson	86	3.7
Clinton	10	1.9	Graves	65	3.5
Edmonson	11	1.8	Bell	49	3.4
Magoffin	12	1.8	Shelby	71	3.4
Bath	10	1.7	Scott	78	3.3
Fleming	11	1.5	Nelson	72	3.3
Estill	10	1.4	Clark	59	3.3
Morgan	8	1.1	Boyd	82	3.3
Leslie	5	0.9	Jessamine	80	3.3
Martin	6	0.9	Calloway	59	3.2
Lewis	6	0.9	Perry	44	3.1
Monroe	4	0.7	Barren	65	3.1
			Boyle	42	3.0
			Muhlenberg	46	2.9
			Knox	44	2.8
			Carter	39	2.8
			Hopkins	64	2.7
			Logan	35	2.6
			Franklin	64	2.6
			Floyd	49	2.5
			Harlan	37	2.5
			Montgomery	33	2.5
			Meade	34	2.4
			Greenup	34	1.8
			<b>POPULATION CATEGORY OVER 50,000</b>		
			McCracken	173	5.3
			Boone	250	4.2
			Hardin	221	4.2
			Daviess	195	4.0
			Bullitt	144	3.9
			Madison	157	3.8
			Jefferson	1,317	3.6
			Christian	133	3.6
			Warren	200	3.5
			Fayette	482	3.3
			Campbell	134	3.0
			Pike	97	3.0
			Kenton	224	2.8
			Pulaski	89	2.8
			Laurel	75	2.5
			Oldham	47	1.6

TABLE 46. MOTORCYCLE CRASH RATES BY CITY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	1,175	3.9	Hazard	21	9.4
Lexington	482	3.3	Calvert City	9	7.0
POPULATION CATEGORY 20,000-60,000			Prestonsburg	11	6.8
Paducah	84	6.7	Russell	11	6.5
Florence	84	5.6	Scottsville	11	5.2
Radcliff	59	5.4	Stanford	9	5.2
Elizabethtown	71	5.0	Benton	11	5.1
Owensboro	128	4.5	Marion	7	4.6
Bowling Green	128	4.4	Flemingsburg	6	4.5
Richmond	69	4.4	Stanton	6	4.4
Ashland	42	3.9	Lancaster	7	4.1
Hopkinsville	60	3.8	Paintsville	7	4.0
Henderson	52	3.6	Springfield	5	4.0
Nicholasville	44	3.1	Southgate	7	3.7
Covington	60	3.0	Barbourville	5	3.2
Frankfort	37	2.9	Greenville	7	3.2
Georgetown	39	2.7	Williamstown	6	3.1
Independence	27	2.2	Carrollton	6	3.0
Jeffersonton	25	1.9	Beaver Dam	4	2.3
POPULATION CATEGORY 10,000-19,999			Columbia	5	2.2
Shively	69	9.0	Lakeside Park	3	2.2
Shepherdsville	38	6.8	Hartford	3	2.2
Somerset	36	6.4	Hodgenville	3	1.9
Newport	31	4.1	Morganfield	3	1.8
Erlanger	36	4.0	Irvine	2	1.5
Bardstown	23	3.9	Grayson	3	1.4
Danville	27	3.3	Park Hills	2	1.3
Berea	20	2.9	Providence	2	1.3
Murray	24	2.7	Vine Grove	3	1.3
Winchester	24	2.6	Ludlow	2	0.9
Shelbyville	18	2.6			
Glasgow	18	2.6			
Mayfield	12	2.4			
Madisonville	21	2.1			
Fort Thomas	12	1.5			
Lawrenceburg	7	1.3			
POPULATION CATEGORY 5,000-9,999					
Pikeville	27	7.8			
Fort Wright	20	7.0			
London	25	6.3			
Campbellsville	26	5.7			
Leitchfield	18	5.4			
Princeton	15	4.7			
Corbin	17	4.7			
Morehead	16	4.7			
Mount Washington	19	4.2			
Franklin	17	4.0			
Lebanon	11	4.0			
Cold Spring	11	3.7			
Harrodsburg	14	3.4			
Paris	14	3.3			
Versailles	14	3.3			
Russellville	11	3.2			
Mount Sterling	11	3.2			
Maysville	14	3.1			
Central City	9	3.0			
Monticello	9	2.9			
Fort Mitchell	12	2.9			
Alexandria	12	2.8			
Cynthiana	9	2.8			
Williamsburg	7	2.7			
Taylor Mill	9	2.7			
Bellevue	8	2.7			
Highland Heights	7	2.0			
La Grange	6	1.5			
Edgewood	6	1.4			
Villa Hills	4	1.1			
Elsmere	3	0.7			
Dayton	2	0.7			
Flatwoods	2	0.5			

TABLE 47. SCHOOL BUS CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Lee	7	1.8	Woodford	24	1.9
Bracken	6	1.4	Clay	19	1.7
Livingston	6	1.3	Mason	12	1.4
Gallatin	5	1.2	Bourbon	13	1.3
McLean	5	1.0	Anderson	14	1.3
Trimble	4	0.9	Grant	15	1.2
Owsley	2	0.8	Knott	10	1.2
Hancock	3	0.7	Mercer	13	1.2
Ballard	3	0.7	Union	8	1.1
Nicholas	2	0.6	Harrison	10	1.1
Carlisle	1	0.4	Rowan	12	1.0
Fulton	1	0.3	Wayne	10	1.0
Wolfe	1	0.3	Simpson	9	1.0
Cumberland	1	0.3	Garrard	8	0.9
Crittenden	1	0.2	Spencer	8	0.9
Lyon	1	0.2	Letcher	10	0.8
Menifee	0	0.0	Russell	7	0.8
Hickman	0	0.0	Breckinridge	6	0.6
Elliott	0	0.0	Marion	6	0.6
Robertson	0	0.0	Lincoln	8	0.6
<b>POPULATION CATEGORY 10,000-14,999</b>			Henry	5	0.6
Owen	10	1.8	Lawrence	5	0.6
Bath	9	1.6	McCreary	5	0.5
Caldwell	10	1.5	Ohio	5	0.4
Green	8	1.4	Taylor	5	0.4
Fleming	9	1.3	Johnson	5	0.4
Magoffin	8	1.2	Allen	4	0.4
Edmonson	7	1.2	Hart	3	0.3
Lewis	8	1.2	Adair	2	0.2
Powell	7	1.1	Rockcastle	2	0.2
Pendleton	8	1.1	Casey	0	0.0
Morgan	8	1.1	<b>POPULATION CATEGORY 25,000-50,000</b>		
Breathitt	7	1.0	Floyd	56	2.8
Martin	6	0.9	Clark	47	2.6
Carroll	5	0.9	Montgomery	35	2.6
Washington	5	0.9	Jessamine	57	2.3
Butler	5	0.8	Perry	26	1.8
Webster	5	0.7	Shelby	38	1.8
Metcalfe	3	0.6	Bell	25	1.7
Monroe	2	0.4	Scott	38	1.6
Todd	2	0.3	Boyle	20	1.4
Trigg	2	0.3	Knox	22	1.4
Larue	2	0.3	Henderson	31	1.3
Estill	2	0.3	Franklin	32	1.3
Jackson	2	0.3	Harlan	19	1.3
Leslie	1	0.2	Whitley	21	1.2
Clinton	0	0.0	Boyd	26	1.0
			Grayson	10	0.8
			Calloway	14	0.8
			Greenup	13	0.7
			Graves	13	0.7
			Muhlenberg	9	0.6
			Hopkins	13	0.6
			Nelson	14	0.6
			Logan	8	0.6
			Marshall	8	0.5
			Carter	7	0.5
			Barren	10	0.5
			Meade	4	0.3
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Boone	245	4.1
			Jefferson	1,154	3.1
			Daviess	90	1.9
			Kenton	143	1.8
			Oldham	51	1.7
			Bullitt	54	1.5
			Hardin	76	1.4
			Madison	53	1.3
			McCracken	40	1.2
			Warren	64	1.1
			Fayette	160	1.1
			Pike	33	1.0
			Campbell	46	1.0
			Christian	34	0.9
			Pulaski	28	0.9
			Laurel	23	0.8

TABLE 48. SCHOOL BUS CRASH RATES BY CITY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES)(2012-2016)

CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)	CITY	NUMBER OF CRASHES (2012-2016)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000			POPULATION CATEGORY 2,500-4,999		
Louisville	1,023	3.4	Prestonsburg	12	7.4
Lexington	159	1.1	Flemingsburg	6	4.5
POPULATION CATEGORY 20,000-60,000			Vine Grove	7	3.1
Florence	62	4.1	Hazard	7	3.1
Nicholasville	42	3.0	Stanton	4	2.9
Independence	30	2.4	Barbourville	4	2.5
Owensboro	62	2.2	Springfield	3	2.4
Jeffersonton	26	2.0	Lakeside Park	3	2.2
Richmond	31	2.0	Hartford	3	2.2
Georgetown	28	1.9	Carrollton	4	2.0
Radcliff	20	1.8	Dawson Springs	2	1.4
Paducah	22	1.8	Providence	2	1.3
Frankfort	20	1.6	Park Hills	2	1.3
Covington	30	1.5	Morganfield	2	1.2
Henderson	22	1.5	Lancaster	2	1.2
Hopkinsville	20	1.3	Wilmore	2	1.1
Elizabethtown	17	1.2	Williamstown	2	1.0
Bowling Green	28	1.0	Grayson	2	0.9
Ashland	8	0.7	Paintsville	1	0.6
POPULATION CATEGORY 10,000-19,999			Stanford	1	0.6
Shively	53	6.9	Scottsville	1	0.5
Shepherdsville	20	3.6	Greenville	1	0.5
Winchester	28	3.0			
Somerset	15	2.7			
Shelbyville	18	2.6			
Danville	13	1.6			
Erlanger	14	1.5			
Bardstown	9	1.5			
Lawrenceburg	7	1.3			
Murray	11	1.2			
Berea	8	1.2			
Newport	7	0.9			
Glasgow	5	0.7			
Fort Thomas	5	0.6			
Madisonville	6	0.6			
Mayfield	2	0.4			
POPULATION CATEGORY 5,000-9,999					
Versailles	17	4.0			
Pikeville	12	3.5			
Edgewood	14	3.3			
Alexandria	14	3.3			
Mount Sterling	11	3.2			
Cynthiana	8	2.5			
Harrodsburg	10	2.4			
Villa Hills	9	2.4			
Paris	10	2.3			
Maysville	10	2.2			
Franklin	7	1.7			
Monticello	5	1.6			
Corbin	6	1.6			
La Grange	6	1.5			
London	6	1.5			
Mount Washington	7	1.5			
Williamsburg	4	1.5			
Fort Wright	4	1.4			
Russellville	3	0.9			
Campbellsville	4	0.9			
Princeton	3	0.9			
Leitchfield	3	0.9			
Taylor Mill	3	0.9			
Flatwoods	3	0.8			
Dayton	2	0.7			
Central City	2	0.7			
Morehead	2	0.6			
Highland Heights	2	0.6			
Lebanon	1	0.4			
Bellevue	1	0.3			
Fort Mitchell	1	0.2			
Elsmere	1	0.2			



TABLE 49. TRUCK CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (2012-2016)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999</b>		
Gallatin	304	70.8	Hart	529	58.1
Lyon	201	48.4	Henry	352	45.7
Ballard	111	26.9	Rockcastle	385	45.1
McLean	103	21.6	Simpson	383	44.2
Crittenden	86	18.5	Woodford	316	25.3
Bracken	78	18.4	Grant	290	23.5
Hancock	74	17.3	Bourbon	193	19.3
Carlisle	43	16.8	Ohio	224	18.8
Fulton	56	16.4	Rowan	214	18.3
Hickman	38	15.5	Mason	146	16.7
Livingston	73	15.3	Marion	149	15.0
Nicholas	40	11.2	Union	111	14.8
Wolfe	41	11.1	Allen	148	14.8
Cumberland	36	10.5	Anderson	136	12.7
Owsley	20	8.4	Garrard	105	12.4
Trimble	36	8.2	Russell	103	11.7
Lee	23	5.8	Harrison	109	11.6
Menifee	18	5.7	Taylor	140	11.4
Elliott	18	4.6	Mercer	113	10.6
Robertson	4	3.5	Letcher	126	10.3
<b>POPULATION CATEGORY 10,000-14,999</b>			Wayne	100	9.6
Carroll	286	52.9	Adair	87	9.3
Caldwell	179	27.6	Lawrence	74	9.3
Larue	146	20.6	Casey	74	9.3
Trigg	139	19.4	Knott	69	8.4
Washington	104	17.8	Clay	88	8.1
Webster	119	17.5	Lincoln	100	8.1
Metcalfe	88	17.4	Johnson	85	7.3
Butler	101	15.9	Breckinridge	70	7.0
Todd	91	14.6	Spencer	59	6.9
Powell	86	13.6	McCreary	49	5.4
Fleming	90	12.5	<b>POPULATION CATEGORY 25,000-50,000</b>		
Pendleton	79	10.6	Scott	628	26.6
Bath	60	10.4	Shelby	496	23.6
Green	56	9.9	Henderson	503	21.8
Owen	51	9.4	Marshall	317	20.2
Edmonson	56	9.2	Barren	424	20.1
Lewis	63	9.1	Whitley	352	19.8
Clinton	44	8.6	Montgomery	244	18.4
Breathitt	50	7.2	Muhlenberg	276	17.5
Jackson	47	7.0	Hopkins	400	17.1
Magoffin	43	6.5	Clark	303	17.0
Martin	36	5.6	Grayson	216	16.8
Morgan	36	5.2	Logan	215	16.0
Leslie	28	5.0	Nelson	343	15.8
Monroe	15	2.7	Franklin	388	15.7
Estill	19	2.6	Carter	215	15.5
			Jessamine	370	15.2
			Boyd	372	15.0
			Boyle	203	14.3
			Graves	241	13.0
			Calloway	228	12.3
			Perry	171	11.9
			Bell	167	11.6
			Floyd	199	10.1
			Knox	154	9.7
			Harlan	120	8.2
			Greenup	127	6.9
			Meade	90	6.3
			<b>POPULATION CATEGORY OVER 50,000</b>		
			Boone	2,056	34.6
			Bullitt	952	25.6
			Kenton	1,755	22.0
			Jefferson	8,060	21.8
			Laurel	620	21.1
			Hardin	1,049	19.9
			Madison	825	19.9
			Fayette	2,815	19.0
			McCracken	620	18.9
			Warren	1,001	17.6
			Christian	636	17.2
			Oldham	518	17.2
			Daviess	758	15.7
			Campbell	650	14.4
			Pulaski	418	13.3
			Pike	400	12.3

TABLE 50. MOTOR VEHICLE-TRAIN CRASH RATES BY COUNTY AND POPULATION CATEGORY  
(IN ORDER OF DECREASING PERCENTAGES) (2012 - 2016)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
<b>POPULATION CATEGORY UNDER 10,000</b>			<b>POPULATION CATEGORY 15,000-24,999 (cont.)</b>		
Carlisle	1	0.39	Rockcastle	1	0.12
Gallatin	1	0.23	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
Hancock	0	0.00	Wayne	0	0.00
Bracken	0	0.00	Breckinridge	0	0.00
Lyon	0	0.00	Bourbon	0	0.00
Ballard	0	0.00	Allen	0	0.00
Lee	0	0.00	Mason	0	0.00
Elliott	0	0.00	Adair	0	0.00
Wolfe	0	0.00	Russell	0	0.00
Nicholas	0	0.00	Spencer	0	0.00
Cumberland	0	0.00	Garrard	0	0.00
Fulton	0	0.00	Casey	0	0.00
Menifee	0	0.00	Union	0	0.00
Hickman	0	0.00	<b>POPULATION CATEGORY 25,000-49,999</b>		
Owsley	0	0.00	Hopkins	13	0.55
Robertson	0	0.00	Shelby	4	0.19
<b>POPULATION CATEGORY 10,000 - 14,999</b>			Henderson	4	0.17
Webster	3	0.44	Clark	3	0.17
Lewis	2	0.29	Boyd	4	0.16
Carroll	1	0.18	Floyd	3	0.15
Breathitt	1	0.14	Barren	3	0.14
Pendleton	0	0.00	Bell	2	0.14
Estill	0	0.00	Perry	2	0.14
Fleming	0	0.00	Harlan	2	0.14
Trigg	0	0.00	Knox	2	0.13
Larue	0	0.00	Meade	1	0.07
Morgan	0	0.00	McCracken	1	0.06
Jackson	0	0.00	Muhlenberg	1	0.06
Martin	0	0.00	Laurel	1	0.03
Caldwell	0	0.00	Franklin	0	0.00
McCreary	0	0.00	Jessamine	0	0.00
Butler	0	0.00	Scott	0	0.00
Powell	0	0.00	Nelson	0	0.00
Todd	0	0.00	Calloway	0	0.00
Edmonson	0	0.00	Graves	0	0.00
Washington	0	0.00	Greenup	0	0.00
Bath	0	0.00	Whitley	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	Montgomery	0	0.00
Clinton	0	0.00	<b>POPULATION CATEGORY 50,000 - OVER</b>		
<b>POPULATION CATEGORY 15,000 - 24,999</b>			Christian	12	0.32
Mercer	7	0.66	Daviess	15	0.31
Magoffin	5	0.55	Oldham	8	0.27
Grant	6	0.49	Warren	10	0.18
Hart	4	0.44	Pike	5	0.15
Grayson	5	0.39	Pulaski	4	0.13
Simpson	3	0.35	Jefferson	45	0.12
Henry	2	0.26	Hardin	5	0.09
Knott	2	0.24	Campbell	4	0.09
Lincoln	3	0.24	Kenton	7	0.09
McLean	2	0.23	Boone	5	0.08
Ohio	2	0.17	Bullitt	3	0.08
Letcher	2	0.16	Marshall	2	0.05
Woodford	2	0.16	Fayette	3	0.02
Lawrence	1	0.13	Madison	0	0.00

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

TIME PERIOD	NUMBER OF CRASHES INVOLVING VEHICLE DEFECTS	PERCENT OF ALL CRASHES INVOLVING 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	4.61
2006	6,656	4.36
2007	6,671	4.37
2008	6,106	4.21
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

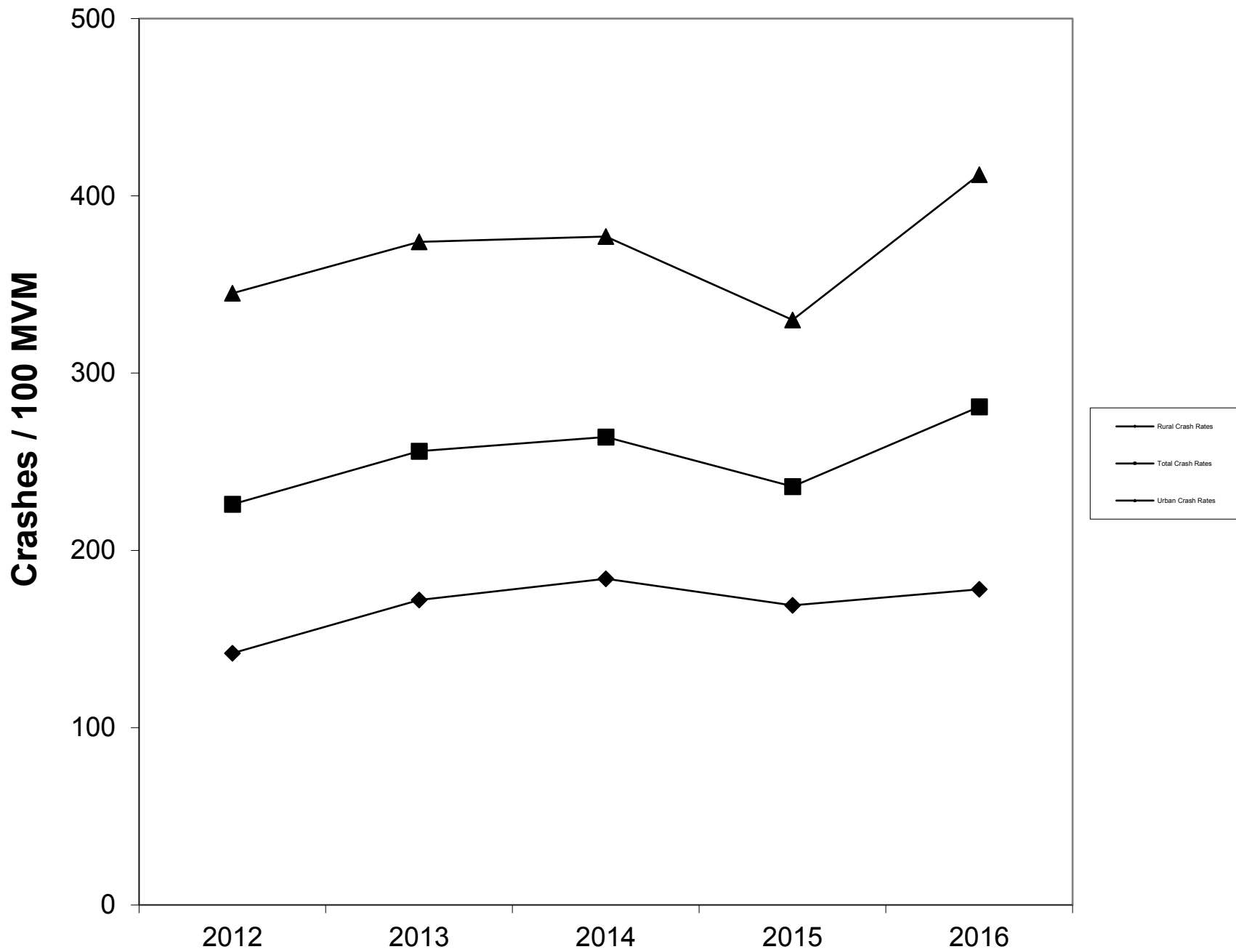


Figure 1. Trends in Crash Rates  
(Identified Roads)

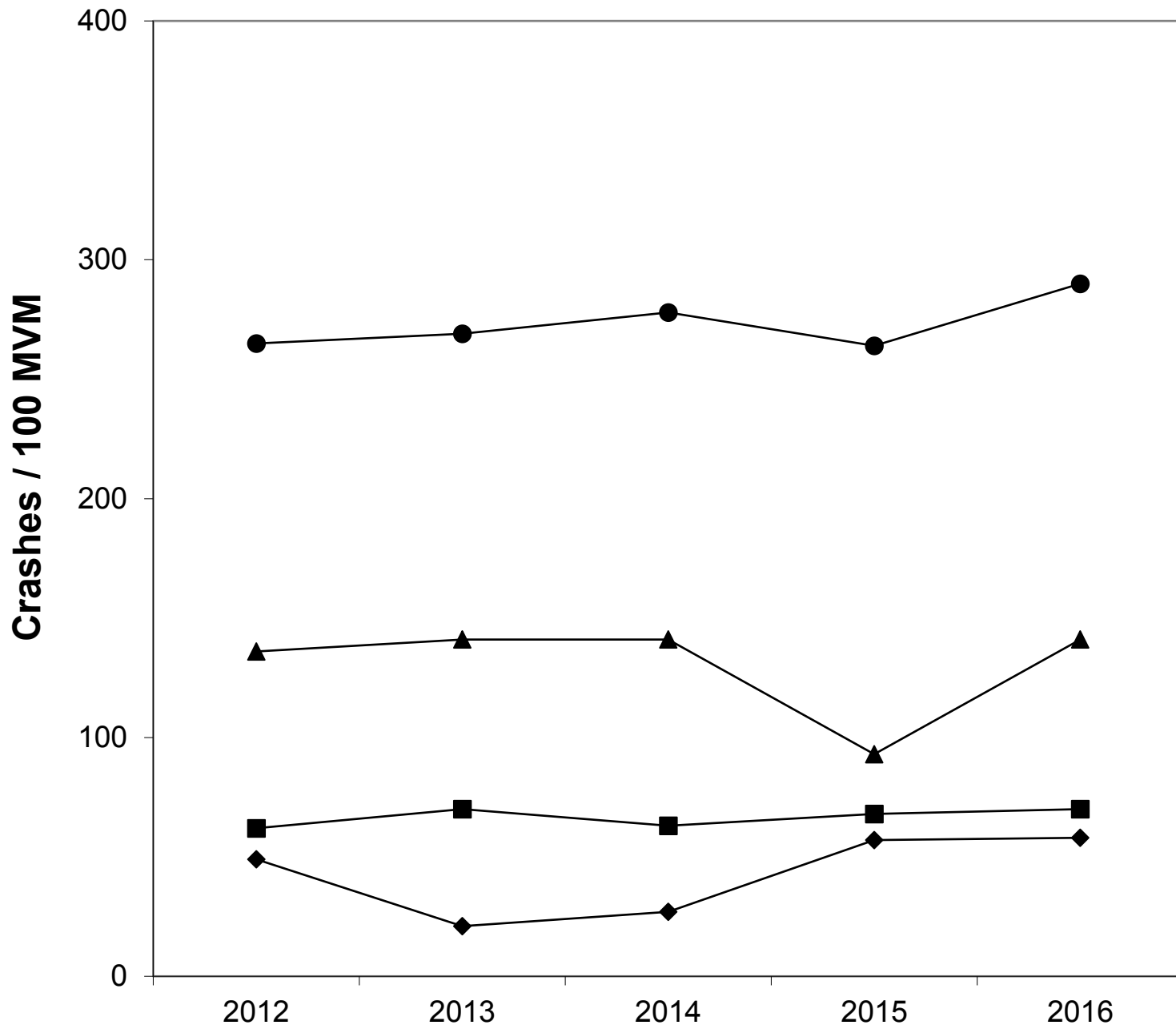


Figure 2. Trends in Rural Crash Rates  
(Identified Roads)

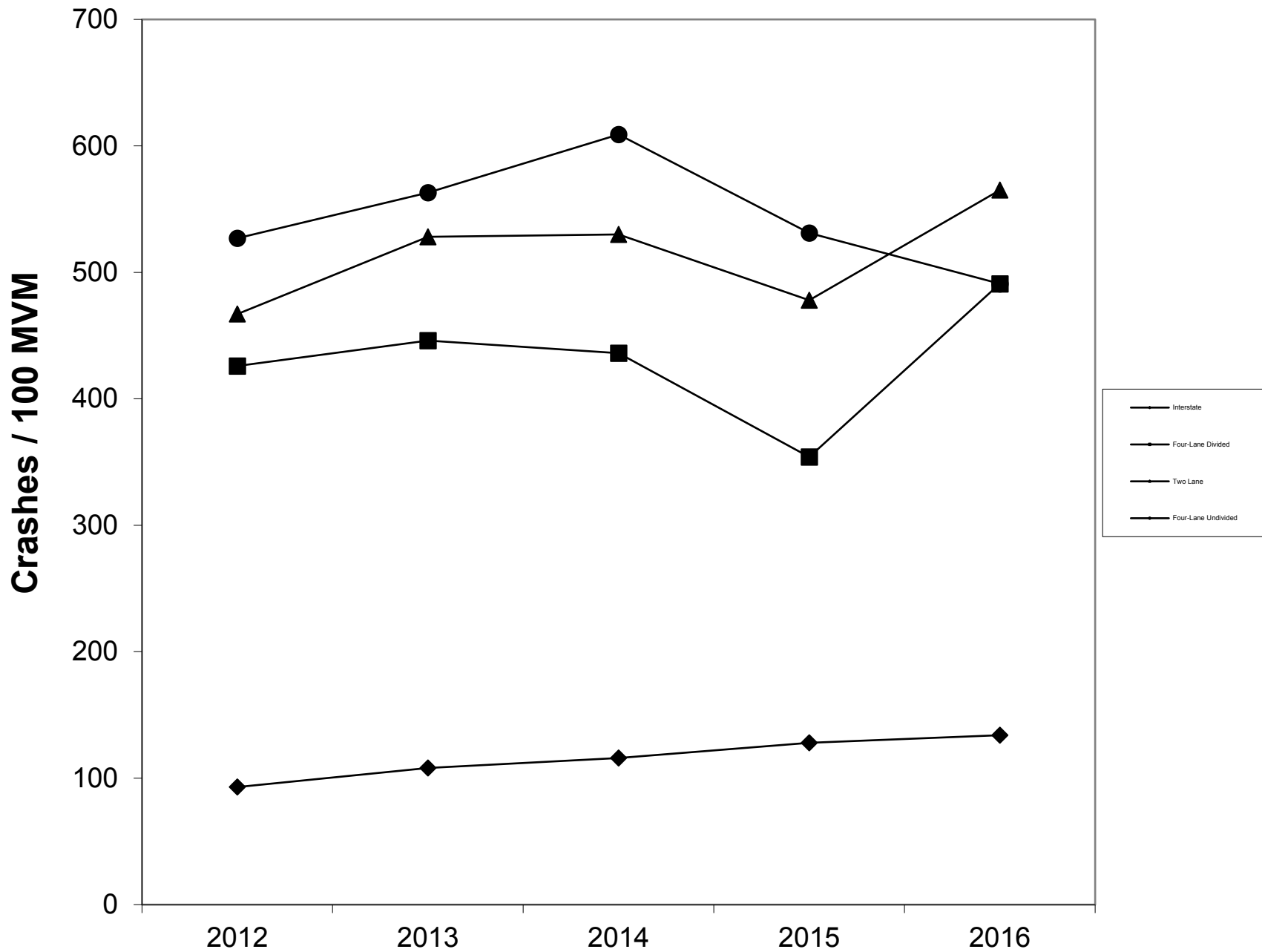


Figure 3. Trends in Urban Crash Rates  
(Identified Roads)



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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 15 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 (5.3 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 10.2 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.

TABLE A-1. STATEWIDE CRASH RATES BY FUNCTIONAL CLASSIFICATION (2012 - 2016)

LOCATION	FUNCTIONAL CLASSIFICATION	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)		
				ALL	INJURY	FATAL
Rural	Principal Arterial, Interstate	604	33,415	55	10	0.5
	Principal Arterial, Other Freeway	1,774	8,292	110	22	1.2
	Minor Arterial	2,366	4,090	221	45	2.1
	Major Collector	5,853	1,881	294	64	3.3
	Minor Collector	9,363	639	307	74	3.4
	Local System	4,836	336	287	68	3.4
Urban	Principal Arterial, Interstate	208	75,445	117	18	0.4
	Principal Arterial, Other Freeway	72	30,402	138	22	0.5
	Other Principal Arterial	588	19,686	508	87	1.4
	Minor Arterial	1,278	10,685	524	87	1.2
	Collector	1,049	4,291	515	75	1.1
	Local System	172	1,448	559	74	1.8

TABLE A-2. STATEWIDE CRASH RATES BY ADMINISTRATIVE CLASSIFICATION (2012 - 2016)

ADMINISTRATIVE CLASSIFICATION	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)	
				ALL	INJURY
Primary	0	0	#DIV/0!	0	0
Secondary	0	0	#DIV/0!	0	0
Rural Secondary	0	0	#DIV/0!	0	0
Unclassified	0	0	#DIV/0!	0	0

TABLE A-3. STATEWIDE CRASH RATES BY MEDIAN TYPE  
(RURAL ROADS WITH FOUR OR MORE LANES (2012 - 2016))

MEDIAN TYPE	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Undivided	21,740	1,083	14,147	78
Divided, Median Less Than 30 Feet, No Barrier	444	25	10,165	95
Divided, Median Greater Than 30 Feet, No Barrier	19,325	639	25,298	66

TABLE A-4. STATEWIDE CRASH RATES BY ACCESS CONTROL (2012 - 2016)

ACCESS CONTROL	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Full Control	65,634	1,389	31,062	83
Partial Control	48,330	1,048	10,015	252
No Control	398,162	25,790	2,228	380

TABLE A-5. STATEWIDE CRASH RATES FOR RURAL HIGHWAYS BY FEDERAL-AID  
SYSTEM AND TERRAIN (2012 - 2016)

FEDERAL-AID SYSTEM	CRASH RATES BY TERRAIN CLASSIFICATION (CRASHES/100MVM)		
	FLAT	ROLLING	MOUNTAINOUS
Interstate	96	70	75
Federal-Aid Primary	152	144	132
Federal-Aid Secondary	253	291	245
Non Federal-Aid	245	337	265
All	211	183	170

TABLE A-6. STATEWIDE CRASH RATES BY RURAL-URBAN DESIGNATION (2012 - 2016)

AREA TYPE	TOTAL CRASHES	AVERAGE		CRASH RATES (CRASHES PER 100 MVM)
		TOTAL MILEAGE	AVERAGE AADT	
Rural	191,351	24,872	2,547	166
Small Urban Area	321,981	3,399	14,100	368
Urbanized Area	0	0	#DIV/0!	0

TABLE A-7. RELATIONSHIP BETWEEN CRASH RATE AND TRAFFIC VOLUME (2012 - 2016)

VOLUME RANGE (AADT)	CRASH RATES (CRASHES PER 100 MVM)			
	FEDERAL-AID PRIMARY	FEDERAL-AID URBAN	FEDERAL-AID SECONDARY	NON-FEDERAL AID
0-999	410	1,067	331	324
1,000-2,499	301	627	296	480
2,500-4,999	184	532	286	292
5,000-9,999	183	543	260	308
10,000-19,999	190	538	329	348
20,000-29,999	360	592	473	*
30,000-39,999	462	638	*	*
40,000 or more	234	564	293	309

\* No data in this volume range.

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

LOCATION	HIGHWAY TYPE	PERCENT OF ALL CRASHES		
		WET	SNOW OR ICE	DARKNESS
Rural	One-Lane	13	4.6	17
	Two-Lane	22	4.6	30
	Three-Lane	16	2.6	31
	Four-Lane Divided (Non-Interstate or Parkway)	17	3.7	30
	Four-Lane Undivided	21	3.8	31
	Interstate	26	10.2	36
	Parkway	20	9.3	44
	All Rural	22	5.3	31
	Urban	Two-Lane	16	3.0
Three-Lane		14	2.2	22
Four-Lane Divided (Non-Interstate or Parkway)		14	1.9	21
Four-Lane Undivided		18	1.9	21
Interstate		16	4.7	29
Parkway		20	6.2	32
All Urban		15	2.7	23



APPENDIX B

CRASH DATA FOR THREE-YEAR PERIOD (2014-2016)





TABLE B-1. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2014-2016)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM)		
			ALL	INJURY	FATAL
One-Lane	33	490	511	62	0.0
Two-Lane	22,815	1,310	277	57	2.9
Three-Lane	28	6,360	283	47	1.0
Four-Lane Divided (Non-Interstate or Parkway)	608	9,480	125	25	1.0
Four-Lane Undivided	18	13,860	127	29	1.4
Interstate	615	34,080	57	10	0.5
Parkway	519	10,200	67	13	0.9
All	24,636	2,530	171	34	1.8

\* Average for the three years.

TABLE B-2. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2014-2016)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM)		
			ALL	INJURY	FATAL
Two-Lane	2,229	5,690	524	81	1.4
Three-Lane	45	10,330	674	98	0.6
Four-Lane Divided (Non-Interstate or Parkway)	813	18,250	427	72	1.4
Four-Lane Undivided	143	21,190	601	93	1.0
Interstate	217	74,970	126	19	0.4
Parkway	37	15,050	108	19	1.1
All **	3,544	13,970	373	59	1.0

\* Average for the three years.

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

TABLE B-3. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2014-2016)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	91	111	0.18	1.53
	Two-Lane	90,794	76,051	0.48	0.83
	Three-Lane	551	93	2.32	0.85
	Four-Lane Divided (Non-Interstate or Parkway)	7,895	2,027	3.46	0.38
	Four-Lane Undivided	354	61	5.06	0.38
	Interstate	13,133	2,049	12.44	0.17
	Parkway	3,862	1,729	3.72	0.20
	All Rural	116,680	82,120	0.92	0.51
	Urban	Two-Lane	72,785	7,429	2.08
Three-Lane		3,398	149	3.77	2.02
Four-Lane Divided		69,401	2,710	6.66	1.28
Four-Lane Undivided		19,903	476	7.73	1.80
Interstate		22,541	724	27.36	0.38
Parkway		664	124	5.49	0.32
All Urban**		202,428	11,815	5.10	1.12

\* 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 (2014-2016)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.82	4	2.73	7
	Two-Lane	1.19	5	3.98	10
	Three-Lane	5.90	13	19.68	32
	Four-Lane Divided (Non-Interstate or Parkway)	3.90	9	12.99	23
	Four-Lane Undivided	5.79	12	19.31	31
	Interstate	6.41	13	21.37	34
	Parkway	2.23	7	7.45	15
	All Rural	1.42	5	4.74	11
	Urban	Two-Lane	9.80	18	32.66
Three-Lane		22.85	36	76.15	99
Four-Lane Divided		25.61	39	85.36	110
Four-Lane Undivided		41.85	59	139.50	170
Interstate		31.13	46	103.76	131
Parkway		5.34	12	17.81	29
All Urban**		17.13	28	57.11	77

\* 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-5. STATEWIDE CRASH RATES FOR 0.1 MILE "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (2014-2016)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	91	333	0.18	0.51
	Two-Lane	90,794	228,153	0.48	0.28
	Three-Lane	551	280	2.32	0.28
	Four-Lane Divided (Non-Interstate or Parkway)	7,895	6,080	3.46	0.13
	Four-Lane Undivided	354	183	5.06	0.13
	Interstate	13,133	6,147	12.44	0.06
	Parkway	3,862	5,187	3.72	0.07
	All Rural	116,680	246,360	0.92	0.17
	Urban	Two-Lane	72,785	22,286	2.08
Three-Lane		3,398	446	3.77	0.67
Four-Lane Divided		69,401	8,131	6.66	0.43
Four-Lane Undivided		19,903	1,427	7.73	0.60
Interstate		22,541	2,172	27.36	0.13
Parkway		664	373	5.49	0.11
All Urban**		202,428	35,445	5.10	0.37

\* 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 (2014-2016)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.27	2	2.73	7
	Two-Lane	0.40	3	3.98	10
	Three-Lane	1.97	6	19.68	32
	Four-Lane Divided (Non-Interstate or Parkway)	1.30	5	12.99	23
	Four-Lane Undivided	1.93	6	19.31	31
	Interstate	2.14	6	21.37	34
	Parkway	0.74	3	7.45	15
	All Rural	0.47	3	4.74	11
	Urban	Two-Lane	3.27	8	32.66
Three-Lane		7.62	15	76.15	99
Four-Lane Divided		8.54	17	85.36	110
Four-Lane Undivided		13.95	24	139.50	170
Interstate		10.38	19	103.76	131
Parkway		1.78	6	17.81	29
All Urban**		5.71	12	57.11	77

\* 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-7. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(2014-2016)

AADT	CRITICAL CRASH RATE (C/MV)		
	BY HIGHWAY TYPE		
	ONE-LANE	TWO-LANE	THREE-LANE
100	10.64	8.97	8.97
500	3.91	3.04	3.04
1,000	2.72	2.04	2.04
2,500	1.80	1.29	1.29
5,000	1.39	0.95	0.95
7,500	1.21	0.82	0.82
10,000	1.11	0.74	0.74
15,000	0.99	0.65	0.65
20,000	0.93	0.59	0.59

TABLE B-8. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2014-2016)

AADT	CRITICAL CRASH RATE (C/MV)			
	BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.30	2.30	1.83	1.90
1,000	1.47	1.47	1.12	1.18
2,500	0.87	0.87	0.62	0.66
5,000	0.62	0.62	0.42	0.45
10,000	0.46	0.46	0.30	0.32
15,000	0.39	0.39	0.25	0.27
20,000	0.35	0.35	0.22	0.24
30,000	0.31	0.31	0.19	0.20
40,000	0.28	0.28	0.17	0.18
50,000	0.26	0.26	0.15	0.17

TABLE B-9. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN  
TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(2014-2016)

AADT	CRITICAL CRASH RATE (C/MV)	
	BY HIGHWAY TYPE	
	TWO-LANE	THREE-LANE
500	3.94	4.43
1,000	2.75	3.14
2,500	1.83	2.13
5,000	1.41	1.66
7,500	1.23	1.47
10,000	1.13	1.35
15,000	1.01	1.22
20,000	0.94	1.14
30,000	0.86	1.05
40,000	0.81	1.00

TABLE B-10. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN FOUR-LANE HIGHWAYS,  
INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2014-2016)

AADT	CRITICAL CRASH RATE (C/MV)			
	BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	2.50	2.96	1.47	1.38
5,000	1.24	1.54	0.62	0.57
10,000	0.99	1.25	0.46	0.41
15,000	0.88	1.12	0.39	0.35
20,000	0.81	1.05	0.35	0.32
30,000	0.74	0.96	0.31	0.27
40,000	0.70	0.91	0.28	0.25
50,000	0.67	0.88	0.26	0.23
60,000	0.65	0.85	0.25	0.22
70,000	0.63	0.83	0.24	0.21
80,000	0.62	0.82	0.23	0.21
90,000	0.61	0.81	0.23	0.20
100,000	0.60	0.80	0.22	0.20



APPENDIX C

CRITICAL "NUMBERS OF CRASHES" TABLES





TABLE C-1. CRITICAL NUMBERS OF CRASH RATES ON RURAL HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (2012-2016)

HIGHWAY TYPE	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)						
	0.4	1	2	5	10	15	20
One-Lane	5	8	14	27	48	68	87
Two-Lane	7	14	23	49	89	127	165
Three-Lane	24	52	94	213	406	595	782
Four-Lane Divided (Non-Interstate and Parkway)	18	36	65	146	274	400	525
Four-Lane Undivided	25	54	98	223	425	623	820
Interstate	23	49	89	202	384	562	739
Parkway	11	22	37	81	150	216	282

TABLE C-2. CRITICAL NUMBERS OF CRASH RATES ON URBAN HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (2012-2016)

HIGHWAY TYPE	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)					
	0.4	1	2	5	8	10
Two-Lane	34	74	136	314	488	603
Three-Lane (Non-Interstate and Parkway)	71	161	304	720	1,129	1,401
Four-Lane Divided	78	177	335	798	1,253	1,554
Four-Lane Undivided	115	265	507	1,217	1,918	2,383
Interstate	85	194	368	876	1,377	1,708
Parkway	21	43	77	173	267	328



APPENDIX D  
CRITICAL CRASH RATE TABLES  
FOR HIGHWAY SECTIONS



TABLE D-1. CRITICAL CRASH RATES FOR RURAL ONE-LANE SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
100	2,862	2,048	1,529	1,107	909
200	2,048	1,529	1,190	909	774
300	1,717	1,313	1,047	824	716
400	1,529	1,190	964	774	682
500	1,404	1,107	909	741	659
700	1,245	1,001	837	697	628
1,000	1,107	909	774	659	602
1,500	982	824	716	623	577
2,000	909	774	682	602	562
2,500	860	741	659	587	552
3,000	824	716	642	577	545

TABLE D-2. CRITICAL CRASH RATES FOR RURAL TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
	0.5	1	2	5	10	20
100	2,230	1,543	1,114	773	615	509
300	1,269	939	725	548	464	406
500	1,013	773	615	483	419	375
1,000	773	615	509	419	375	345
1,500	673	548	464	392	356	331
2,000	615	509	437	375	345	323
3,000	548	464	406	356	331	314
4,000	509	437	388	345	323	309
5,000	483	419	375	337	318	305
7,000	449	396	359	327	311	300
8,000	437	388	353	323	309	298
9,000	428	381	349	321	306	297
10,000	419	375	345	318	305	295

TABLE D-3. CRITICAL CRASH RATES FOR RURAL THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	3	5
100	2,313	1,609	1,168	988	816
300	1,327	988	766	673	583
500	1,063	816	652	583	515
1,000	816	652	543	495	449
1,500	712	583	495	458	420
2,000	652	543	468	435	403
3,000	583	495	435	409	383
4,000	543	468	416	394	371
5,000	515	449	403	383	363
6,000	495	435	394	376	357
7,000	480	425	386	370	353
8,000	468	416	380	365	349
9,000	458	409	376	361	346
10,000	449	403	371	357	344

TABLE D-4. CRITICAL CRASH RATES FOR RURAL FOUR-LANE DIVIDED SECTIONS  
(NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
500	677	495	377	280	234
1,000	495	377	299	234	203
2,500	348	280	234	195	176
5,000	280	234	203	176	163
7,500	251	215	189	168	157
10,000	234	203	181	163	153
15,000	215	189	172	157	149
20,000	203	181	166	153	147
30,000	189	172	160	149	144
40,000	181	166	156	147	142
50,000	176	163	153	145	141

TABLE D-5. CRITICAL CRASH RATES FOR RURAL FOUR-LANE UNDIVIDED  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
500	737	544	418	315	265
1,000	544	418	335	265	232
2,500	388	315	265	223	203
5,000	315	265	232	203	188
7,500	284	244	217	193	182
10,000	265	232	208	188	178
20,000	232	208	192	178	171
30,000	217	198	185	174	168
40,000	208	192	181	171	166
50,000	203	188	178	169	165

TABLE D-6. CRITICAL CRASH RATES FOR RURAL INTERSTATE  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
	0.5	1	2	5	10	20
500	448	310	224	156	124	103
1,000	310	224	169	124	103	88
2,500	204	156	124	97	84	76
5,000	156	124	103	84	76	70
7,500	135	110	93	79	72	67
10,000	124	103	88	76	70	65
20,000	103	88	78	70	65	62
30,000	93	82	74	67	63	61
40,000	88	78	71	65	62	60
50,000	84	76	70	64	61	60

TABLE D-7. CRITICAL CRASH RATES FOR RURAL PARKWAY  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
	0.5	1	2	5	10	20
400	551	381	275	190	151	125
700	408	291	217	157	129	110
1,000	341	249	190	141	118	103
1,500	283	212	165	127	108	96
2,000	249	190	151	118	103	92
3,000	212	165	134	108	96	87
4,000	190	151	125	103	92	84
5,000	176	141	118	99	89	82
7,000	157	129	110	94	85	80
10,000	141	118	103	89	82	78
20,000	118	103	92	82	78	74
40,000	103	92	84	78	74	72

TABLE D-8. CRITICAL CRASH RATES FOR URBAN TWO-LANE  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
500	1,488	1,180	973	798	712
1,000	1,180	973	833	712	653
2,500	922	798	712	638	601
5,000	798	712	653	601	575
7,500	744	675	627	585	564
10,000	712	653	612	575	557
15,000	675	627	594	564	549
20,000	653	612	583	557	544
30,000	627	594	570	549	539
40,000	612	583	562	544	535
50,000	601	575	557	541	533

TABLE D-9. CRITICAL CRASH RATES FOR URBAN THREE-LANE  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
500	1,823	1,472	1,236	1,033	934
1,000	1,472	1,236	1,074	934	865
2,500	1,177	1,033	934	848	805
5,000	1,033	934	865	805	775
7,500	971	891	835	786	762
10,000	934	865	817	775	754
15,000	891	835	796	762	744
20,000	865	817	783	754	739
30,000	835	796	768	744	732
40,000	817	783	760	739	728
50,000	805	775	754	735	725



TABLE D-10. CRITICAL CRASH RATES FOR URBAN FOUR-LANE DIVIDED SECTIONS  
(NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
1,000	1,045	854	724	613	558
2,500	806	692	613	545	511
5,000	692	613	558	511	487
10,000	613	558	520	487	470
15,000	579	535	504	477	463
20,000	558	520	494	470	459
25,000	545	511	487	466	456
30,000	535	504	482	463	453
40,000	520	494	475	459	450
50,000	511	487	470	456	448
60,000	504	482	467	453	447

TABLE D-11. CRITICAL CRASH RATES FOR URBAN FOUR-LANE UNDIVIDED  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
1,000	1,282	1,065	917	789	727
2,500	1,011	880	789	711	672
5,000	880	789	727	672	644
10,000	789	727	683	644	625
15,000	750	699	663	632	616
20,000	727	683	652	625	611
25,000	711	672	644	620	608
30,000	699	663	639	616	605
40,000	683	652	630	611	602
50,000	672	644	625	608	599
60,000	663	639	621	605	598

TABLE D-12. CRITICAL CRASH RATES FOR URBAN INTERSTATE  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
	0.5	1	2	5	10
1,000	463	350	276	214	185
5,000	258	214	185	159	146
10,000	214	185	164	146	138
20,000	185	164	150	138	131
30,000	172	155	144	134	129
40,000	164	150	140	131	127
50,000	159	146	138	130	126
60,000	155	144	136	129	125
70,000	152	142	134	128	125
80,000	150	140	133	127	124
90,000	148	139	132	127	124
100,000	146	138	131	126	123

TABLE D-13. CRITICAL CRASH RATES FOR URBAN PARKWAY  
SECTIONS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
	0.5	1	2	5	10	20
500	605	436	328	239	198	169
1,000	436	328	257	198	169	150
2,500	302	239	198	162	145	133
5,000	239	198	169	145	133	125
7,500	213	180	157	138	128	121
10,000	198	169	150	133	125	119
15,000	180	157	142	128	121	116
20,000	169	150	136	125	119	115
30,000	157	142	131	121	116	113
40,000	150	136	127	119	115	112
90,000	135	126	120	114	111	110
50,000	145	133	125	117	114	111



APPENDIX E

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



TABLE E-1. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/MV)		
	BY HIGHWAY TYPE		
	ONE-LANE	TWO-LANE	THREE-LANE
100	11.31	9.02	9.32
500	5.16	3.81	3.98
1,000	3.95	2.82	2.96
2,500	2.95	2.02	2.14
5,000	2.48	1.65	1.75
7,500	2.27	1.49	1.58
10,000	2.15	1.39	1.49
15,000	2.01	1.28	1.37
20,000	1.93	1.22	1.31

TABLE E-2. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/MV)			
	BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.62	2.84	1.83	1.95
1,000	1.85	2.03	1.23	1.33
2,500	1.25	1.39	0.78	0.85
5,000	0.98	1.09	0.58	0.64
10,000	0.79	0.90	0.45	0.50
15,000	0.72	0.81	0.39	0.44
20,000	0.67	0.76	0.36	0.40
30,000	0.62	0.71	0.32	0.36
40,000	0.59	0.67	0.30	0.34
50,000	0.56	0.65	0.29	0.33

TABLE E-3. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN  
TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/MV)	
	BY HIGHWAY TYPE	
	TWO-LANE	THREE-LANE
500	5.43	6.58
1,000	4.18	5.15
2,500	3.15	3.97
5,000	2.65	3.40
7,500	2.44	3.16
10,000	2.32	3.01
15,000	2.17	2.84
20,000	2.08	2.74
30,000	1.98	2.62
40,000	1.92	2.55

TABLE E-4. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES,  
AND PARKWAYS (FIVE-YEAR PERIOD)(2012-2016)

AADT	CRITICAL CRASH RATE (C/MV)			
	BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	3.73	4.53	1.75	1.65
5,000	2.31	2.92	0.91	0.84
10,000	2.00	2.56	0.73	0.67
15,000	1.87	2.41	0.66	0.60
20,000	1.79	2.32	0.62	0.56
30,000	1.69	2.21	0.57	0.51
40,000	1.64	2.14	0.54	0.48
50,000	1.60	2.10	0.52	0.47
60,000	1.57	2.07	0.50	0.45
70,000	1.55	2.04	0.49	0.44
80,000	1.54	2.02	0.48	0.43
90,000	1.52	2.01	0.47	0.42
100,000	1.51	1.99	0.47	0.42

APPENDIX F

TOTAL CRASH RATES FOR CITIES  
INCLUDED IN 2000 CENSUS





TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2010 CENSUS (2012-2016)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Adairville	852	46	11	Campbellsburg	813	145	36
Albany	2,033	292	29	Campbellsville	9,108	2,273	50
Alexandria	8,477	1,319	31	Campton	441	165	75
Allen	193	127	132	Caneyville	608	74	24
Anchorage	2,348	124	11	Carlisle	2,010	234	23
Arlington	324	23	14	Carrollton	3,938	615	31
Ashland	21,684	4,422	41	Carrsville	50	*	*
Auburn	1,340	126	19	Catlettsburg	1,856	764	82
Audubon Park	1,473	18	2	Cave City	2,240	517	46
Augusta	1,190	141	24	Centertown	423	20	10
Bancroft	494	3	1	Central City	5,978	1,028	34
Barbourmeade	1,218	22	4	Clarkson	875	150	34
Barbourville	3,165	683	43	Clay	1,181	50	9
Bardstown	11,700	3,185	54	Clay City	1,077	*	*
Bardwell	723	32	9	Clinton	1,388	*	*
Barlow	675	39	12	Cloverport	1,152	53	9
Beattyville	1,307	173	27	Cold Spring	5,912	1,299	44
Beaver Dam	3,409	543	32	Columbia	4,452	723	33
Bedford	599	136	45	Columbus	170	*	*
Beechwood Village	1,324	37	6	Concord	35	*	*
Bellefonte	888	44	10	Corbin	7,304	1,958	54
Bellemeade	865	*	*	Corinth	232	107	92
Bellevue	5,955	839	28	Corydon	720	57	16
Bellewood	321	1	1	Covington	40,640	8,638	43
Benham	500	9	4	Crab Orchard	841	45	11
Benton	4,349	916	42	Crescent Springs	3,801	1,071	56
Berea	13,561	2,292	34	Crestview	475	8	3
Berry	264	6	5	Crestview Hills	3,148	1,893	120
Blaine	47	12	51	Crestwood	4,531	922	41
Bloomfield	838	77	18	Crittenden	3,815	409	21
Blue Ridge Manor	767	157	41	Crofton	749	76	20
Bonnieville	255	101	79	Crossgate	225	*	*
Booneville	81	71	175	Cumberland	2,237	201	18
Bowling Green	58,067	16,057	55	Cynthiana	6,402	1,181	37
Bradfordsville	294	10	7	Danville	16,218	3,300	41
Brandenburg	2,643	583	44	Dawson Springs	2,764	245	18
Bremen	197	74	75	Dayton	5,338	441	17
Briarwood	435	4	2	Dixon	786	104	27
Brodhead	1,211	69	11	Dover	252	24	19
Bromley	763	54	14	Drakesboro	515	93	36
Brooksville	642	91	28	Druid Hills	308	*	*
Brownsboro Farm	648	*	*	Dry Ridge	2,191	787	72
Brownsville	836	177	42	Earlington	1,413	163	23
Burgin	965	41	9	Eddyville	2,554	399	31
Burkesville	1,521	160	21	Edgewood	8,575	962	22
Burnside	611	486	159	Edmonton	1,595	304	38
Butler	612	73	24	Ekron	135	69	102
Cadiz	2,558	585	46	Elizabethtown	28,531	6,716	47
Calhoun	763	99	26	Elkhorn City	982	151	31
Calvert City	2,566	454	35	Elkton	2,062	206	20
Camargo	1,081	110	20	Elsmere	8,451	639	15
Cambridge	175	*	*	Eminence	2,498	207	17

\* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2010 CENSUS (2012-2016)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Erlanger	18,082	4,131	46	Hodgenville	3,206	475	30
Eubank	319	43	27	Hollyvilla	537	*	*
Evarts	962	100	21	Hopkinsville	31,577	5,332	34
Ewing	264	35	27	Horse Cave	2,311	107	9
Fairfield	113	11	20	Houston Acres	507	2	1
Fairview	286	11	8	Hurstbourne Acres	1,811	*	*
Falmouth	2,169	303	28	Hustonville	405	28	14
Ferguson	924	147	32	Hyden	365	47	26
Flatwoods	7,423	540	15	Independence	24,757	2,203	18
Flemingsburg	2,658	430	32	Indian Hills	2,868	193	14
Florence	29,951	10,604	71	Inez	717	142	40
Fordsville	524	79	30	Irvine	2,715	123	9
Forest Hills	444	108	49	Irvington	1,181	89	15
Fort Mitchell	8,207	1,532	37	Island	458	43	19
Fort Thomas	16,325	1,452	18	Jackson	2,231	724	65
Fort Wright	5,723	2,710	95	Jamestown	1,794	163	18
Fountain Run	217	7	7	Jeffersonton	26,595	4,940	37
Frankfort	25,527	5,287	41	Jeffersonville	1,506	331	44
Franklin	8,408	1,838	44	Jenkins	2,203	*	*
Fredonia	401	73	36	Junction City	2,241	98	9
Frenchburg	486	121	50	Kenton Vale	110	*	*
Fulton	2,445	311	25	Kevil	376	76	40
Gamaliel	376	9	5	Kingsley	381	3	2
Georgetown	29,098	4,520	31	Kuttawa	649	187	58
Germantown	154	31	40	La Grange	8,082	1,337	33
Ghent	323	61	38	Lafayette	165	7	9
Glasgow	14,028	2,922	42	Lakeside Park	2,668	284	21
Glencoe	360	59	33	Lancaster	3,442	518	30
Glenview Manor	191	*	*	Lawrenceburg	10,505	1,067	20
Goose Creek	294	*	*	Lebanon	5,539	1,067	39
Grand Rivers	382	69	36	Lebanon Junction	1,813	245	27
Gratz	78	11	28	Leitchfield	6,699	1,409	42
Grayson	4,217	801	38	Lewisburg	810	52	13
Greensburg	2,163	310	29	Lewisport	1,670	72	9
Greenup	1,188	255	43	Lexington	295,803	65,188	44
Greenville	4,312	830	39	Liberty	2,168	202	19
Guthrie	1,419	106	15	Lincolnshire	148	*	*
Hanson	742	107	29	Livermore	1,365	115	17
Hardin	615	95	31	Livingston	226	13	12
Hardinsburg	2,343	251	21	London	7,993	3,386	85
Harlan	1,745	804	92	Loretto	713	80	22
Harrodsburg	8,340	1,269	30	Louisa	2,467	532	43
Hartford	2,672	305	23	Louisville	597,337	131,929	44
Hawesville	945	135	29	Loyall	1,461	76	10
Hazard	4,456	2,134	96	Ludlow	4,407	447	20
Hazel	410	51	25	Lynch	747	8	2
Henderson	28,757	5,628	39	Lyndon	11,002	1,019	19
Hickman	2,395	25	2	Lynnview	914	15	3
Hickory Hill	114	*	*	Mackville	222	8	7
Highland Heights	6,923	1,260	36	Madisonville	19,591	3,790	39
Hindman	777	284	73	Manchester	1,255	468	75
Hiseville	240	11	9	Marion	3,039	294	19

\* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2010 CENSUS (2012-2016)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Martin	634	262	83	Pippa Passes	533	45	17
Mayfield	10,024	1,817	36	Plantation	832	76	18
Maysville	9,011	1,863	41	Pleasureville	834	34	8
Mchenry	388	39	20	Plum Springs	453	*	*
Mckee	800	150	38	Powderly	745	171	46
Mcroberts	784	18	5	Prestonsburg	3,255	1,610	99
Melbourne	401	30	15	Prestonville	161	33	41
Mentor	193	5	5	Princeton	6,329	1,013	32
Middletown	7,218	2,223	62	Providence	3,193	218	14
Midway	1,641	222	27	Raceland	2,424	153	13
Millersburg	792	71	18	Radcliff	21,688	3,120	29
Milton	574	132	46	Ravenna	605	22	7
Monterey	138	8	12	Richmond	31,364	6,878	44
Monticello	6,188	1,094	35	Riverwood	446	764	343
Moorland	431	10	5	Rochester	152	2	3
Morehead	6,845	2,184	64	Rockport	266	18	14
Morganfield	3,285	461	28	Rolling Fields	646	*	*
Morgantown	2,394	384	32	Rolling Hills	959	141	29
Mortons Gap	863	95	22	Russell	3,380	982	58
Mount Olivet	299	25	17	Russell Springs	2,441	857	70
Mount Sterling	6,895	1,795	52	Russellville	6,960	1,250	36
Mount Vernon	2,477	674	54	Sacramento	468	61	26
Mount Washington	9,117	1,565	34	Sadieville	303	38	25
Muldraugh	947	194	41	Salem	752	35	9
Munfordville	1,615	427	53	Salt Lick	303	47	31
Murray	17,741	3,363	38	Salyersville	1,883	360	38
Nebo	236	20	17	Sanders	238	9	8
New Castle	912	69	15	Sandy Hook	675	61	18
New Haven	855	46	11	Sardis	103	8	16
Newport	15,273	4,703	62	Science Hill	693	104	30
Nicholasville	28,015	4,870	35	Scottsville	4,226	816	39
Norbourne Estates	441	1	1	Sebree	1,603	107	13
Northfield	1,020	531	104	Seneca Gardens	696	2	1
Nortonville	1,204	119	20	Sharpsburg	323	19	12
Oak Grove	7,489	1,337	36	Shelbyville	14,045	2,629	37
Oakland	225	22	20	Shepherdsville	11,222	3,662	65
Olive Hill	1,599	177	22	Shively	15,264	4,814	63
Owensboro	57,265	13,311	47	Silver Grove	1,102	107	19
Owenton	1,327	192	29	Simpsonville	2,484	377	30
Owingsville	1,530	334	44	Slaughters	216	9	8
Paducah	25,024	7,531	60	Smithfield	106	31	59
Paintsville	3,459	1,116	65	Smithland	301	50	33
Paris	8,553	1,629	38	Smiths Grove	714	129	36
Park City	537	97	36	Somerset	11,196	4,747	85
Park Hills	2,970	137	9	Sonora	513	120	47
Parkway Village	650	*	*	South Carrollton	184	56	61
Pembroke	869	69	16	South Shore	1,122	*	*
Perryville	751	24	6	Southgate	3,803	778	41
Pewee Valley	1,456	279	38	Sparta	231	49	42
Phelps	893	144	32	Springfield	2,519	443	35
Pikeville	6,903	2,859	83	Stamping Ground	643	46	14
Pineville	1,732	439	51	Stanford	3,487	614	35

\* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2010 CENSUS (2012-2016)(continued)

CITY	POPULATION	ANNUAL		CITY	POPULATION	NUMBER OF	CRASHES
		NUMBER OF	PER 1000				
		CRASHES	POPULATION				POPULATION
Stanton	2,733	433	32	West Point	797	180	45
Strathmoor Manor	337	*	*	Westwood	4,746	*	*
Sturgis	1,898	100	11	Wheatcroft	160	15	19
Taylor Mill	6,604	1,091	33	Wheelwright	780	24	6
Taylorsville	763	282	74	White Plains	884	36	8
Tompkinsville	2,402	181	15	Whitesburg	2,139	363	34
Trenton	384	22	12	Whitesville	552	104	38
Union	5,379	766	29	Whitley City	1,170	308	53
Uniontown	1,002	70	14	Wickliffe	688	117	34
Upton	683	44	13	Wilder	3,035	1,123	74
Vanceburg	1,518	154	20	Wildwood	261	3	2
Versailles	8,568	1,578	37	Williamsburg	5,245	932	36
Vicco	334	74	44	Williamstown	3,925	618	32
Villa Hills	7,489	253	7	Willisburg	282	24	17
Vine Grove	4,520	392	17	Wilmore	3,686	257	14
Wallins Creek	156	*	*	Winchester	18,368	3,474	38
Walton	3,635	926	51	Windy Hills	2,385	10	1
Warfield	269	39	29	Wingo	632	62	20
Warsaw	1,615	167	21	Woodburn	355	27	15
Water Valley	279	16	12	Woodland Hills	696	8	2
Waverly	308	32	21	Woodlawn	229	3	3
Wayland	426	39	18	Woodlawn Park	942	76	16
Wellington	565	13	5	Worthington	1,609	36	5
West Buechel	1,230	*	*	Worthville	185	14	15
West Liberty	3,435	240	14	Wurtland	995	117	24

\* Data Not Available