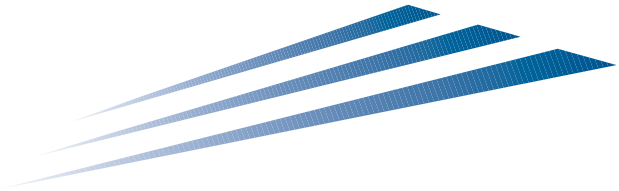
Research Report
KTC-04-25/KSP2-04-1F

KENTUCKY TRANSPORTATION CENTER

College of Engineering

ANALYSIS OF TRAFFIC CRASH DATA IN KENTUCKY (1999 - 2004)



UNIVERSITY OF KENTUCKY

UNIVERSITY OF KENTUCKY
College of Engineering
Kentucky Transportation Center

Our Mission

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

We Value...

Teamwork -- Listening and Communicating, Along with Courtesy and Respect for Others
Honesty and Ethical Behavior
Delivering the Highest Quality Products and Services
Continuous Improvement in All That We Do

For more information or a complete publication list, contact us

KENTUCKY TRANSPORTATION CENTER
176 Raymond Building
University of Kentucky
Lexington, Kentucky 40506-0281

(859) 257-4513
(859) 257-1815 (FAX)
1-800-432-0719
www.ktc.uky.edu
ktc@engr.uky.edu

Research Report
KTC-04-25/KSP2-04-1F

ANALYSIS OF TRAFFIC CRASH DATA IN KENTUCKY (1999 - 2003)

by

Eric R. Green
Transportation Research Engineer

Kenneth R. Agent
Transportation Research Engineer

Jerry G. Pigman
Transportation Research Engineer

and

Monica L. Barrett
Transportation Research Engineer

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

in cooperation with
Kentucky State Police
Commonwealth of Kentucky

September 2004

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF TABLES

LIST OF TABLES (continued)

LIST OF TABLES (continued)

LIST OF TABLES (continued)

LIST OF TABLES (continued)

LIST OF FIGURES

EXECUTIVE SUMMARY

This report documents an analysis of traffic crash data in Kentucky for the years of 1999 through 2003. A primary objective of this study was to determine average crash statistics for Kentucky highways. Average and critical numbers and rates of crashes were calculated for various types of highways in rural and urban areas. These 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 drug involvement, school bus crashes, and train crashes.

The police report was changed starting in January 2000. Some of the codes were changed from previous years, which may result in changes in some of the data. Also, the crash data are now contained in the Collision Report Analysis for Safer Highways (CRASH) data base. 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.

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 18th report providing a combination of those two report areas. Traffic crash data for the five-year period of 1999 through 2003 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 volume data bases 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) data base. 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 2000 through 2003 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 what is contained in the current CRASH data base. Summaries were prepared from an analysis of the crash data from a combination of the computer files from 1999 and CRASH data base for 2000 through 2003.

Volume data, along with other data describing highway characteristics such as number of lanes, were obtained from a computer file containing roadway characteristics data for all state-

maintained highways. This information is obtained from the Highway Performance Monitoring System (HPMS) file. Data for a five-year period of 1999 through 2003 were obtained from this file. The HPMS file was 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 data base and roadway characteristics information from the HPMS file 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).

Rates were calculated for: 1) state-maintained roads having known traffic volumes, route numbers, and mileposts and 2) all public streets and highways on and off the state-maintained system. 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 2000 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.

$$C_c = C_a + K(\text{sqrt}(C_a/M)) + 1/(2M) \qquad (1)$$

in which

C_c = critical crash rate
C_a = average crash rate
sqrt = square root
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.

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

in which

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 state-maintained 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 file results in over 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 state-maintained, in 2003 these roads accounted for approximately 90 percent of the vehicle miles traveled and 65 percent of the crashes on public roads. The crash rate on the state-maintained system is dramatically less than on the non-state maintained system. A major reason for the higher crash rate on roads not included in the analysis of the state-maintained system is the large number of crashes that occurred on state-maintained roadways but were not provided with the information necessary to be assigned to a specific location on a roadway. These crashes could not be included in the crash total assigned to the state-maintained category. There is a need to improve the procedure for placing route and milepoint information on the crash report and this need has been addressed as part of the CRASH process started in 2000 that included placing GPS data on the report.

A comparison of 1999 through 2003 crash statistics on streets and highways having known traffic volumes, route numbers, and mileposts is shown in Table 1. The number of crashes on the state-maintained road system was slightly lower in 2003 compared to the average of the previous four years. The small decrease in the number of crashes compared with the increase in vehicle-miles driven resulted in a 3.6 percent decrease in the crash rate in 2003 compared to the previous four-year average. The overall crash rate in 2003 was 196 crashes per

100 million vehicle-miles (C/100 MVM). The crash rates for the previous four years varied from 196 to 219 C/100 MVM.

The fatal crash rate showed a large increase (13.5 percent) in 2003 compared to the previous four-year average. The fatal crash rate ranged from 1.44 C/100MVM in 2000 to 1.70 C/100MVM in 2003. The injury crash rate decreased by 9.7 percent in 2003 compared to the previous four-year average. The injury crash rate of 51 C/100MVM in 2003 was the lowest during the five years. The injury crash rate has remained fairly stable for the five-year period with the range from 51 to 60 C/100MVM.

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 (1999 through 2003) 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 file. 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 rate (crashes per 100 million vehicle-miles), as well as injury and fatal crash rates, were calculated.

On rural highways, four-lane undivided highways have the highest rate for all crashes (Table 2) followed closely by two-lane highways. Two-lane highways have the highest injury crash rate. The fatal crash rate on two-lane highways is substantially higher than the other road types. Interstates and parkways have the lowest 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 non-interstate or parkway divided highway (which would not typically have access control) is about 50 percent less than for an undivided highway, although the average daily traffic was fairly similar.

On urban highways, the highest overall crash rates are on four-lane undivided and three-lane highways (Table 3). The same two highway types also have the highest injury and fatal rash rates. The lowest overall crash rate and injury crash rate are on interstates and parkways. Interstates have the lowest fatal crash rates which is substantially below that for parkways.

Tables 2 and 3 show that the overall total crash rate on urban highways is 43 percent higher than that on rural highways. Also, the injury rate on urban highways is 7 percent greater

than that for rural highways. However, the fatal crash rate on urban highways is only 38 percent of that for rural highways. This is due to the slower travel speeds resulting from 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. There was a larger decrease in the overall crash rate in urban areas (5.9 percent) compared to rural areas (1.7 percent). Only a small percentage (about 11 percent) of state-maintained 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 1999 through 2003. 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 state-maintained roads having known traffic volumes, route numbers, and mileposts. Not all highway types are shown on Figures 2 and 3 due to low mileages.

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 1999 through 2003 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. Then, the crash rates for those locations are 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 1999 through 2003. 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 (2001-2003) 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 1999 through 2003.

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 1999 through 2003 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 1999 through 2003.

4.0 COUNTY CRASH STATISTICS

Crash rates were calculated for each county considering 1) only the state-maintained system 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 file was 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 2000 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 39 for total crashes, 36 for injury-or-fatal crashes, and three for fatal crashes. There has been consistency over the past few years in the counties that have a critical rate. For example, 37 of the 39 counties determined to have a critical crash rate when total crashes were considered 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 state-maintained system. Those rates, grouped by population category, are presented in Table 11. The rankings of counties in Tables 10 and 11 are similar. In three of the five population categories, the same county had the highest rate considering all roads or state-maintained roads. These counties are Crittenden County (in the under 10,000 population category), Pendleton County (in the 10,000 to 14,999 population category), and Harrison County (in the 15,000 to 24,999 population category). In the 25,000 to 50,000 population category, Boyd County has the highest rate for all roads while Jessamine County has the highest rate for the state-maintained system. In the over 50,000 population category, Fayette County has the highest rate for all roads while McCracken County has the highest rate for the state-maintained system. When all roads are considered, Fayette and Daviess Counties have the highest rates in the state. When only state-maintained roads are considered, Jessamine and Harrison Counties have the highest rates in the state. Gallatin County, which is in the lowest population category, has the lowest rate in the state for all roads as well as state-maintained roads. Crash rates were higher when all roads were considered compared to rates for only the state-maintained 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 population categories are Crittenden, Leslie, Breathitt, Perry, and Pike. Breathitt County has the highest rate in the state while Lyon 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 Cumberland, Leslie, Breathitt, Meade, and Pulaski. The highest rates are generally for the smallest counties where there would be more driving on two-lane rural roads, which have been found to have the highest fatal crash rate (Table 2). Breathitt, Pulaski, and Pike Counties are the only counties 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 2003 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 1999 through 2003 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 2000 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 117 cities. Rates in terms of C/100 MVM are listed for the state-maintained 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 was available for the state-maintained system.

Additional statistics are listed in Table 16 for the 116 cities that had five years of crash data available for analysis. The city of Westwood did not have data available. 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 2000 census are summarized in APPENDIX F (Table F-1). A total of 414 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 and there was no data prior to 2000 for a few other cities. This resulted in data being available for 356 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 state-maintained system, were used to determine critical crash rates for cities. Crash rates on the state-maintained 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 file would not be listed in Table 17. Lexington, Richmond, Saint Matthews, Shepherdsville, Paintsville, and Dry Ridge have the highest crash rate on state-maintained 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 165 cities compared to the 116 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 population category between 10,000 and 19,999. The lowest overall rate is for the 1,000 to 2,499 population category. The large range in rates is related in part to the detail of reporting. For example, the higher rate in Lexington compared to Louisville resulted from the Louisville police not reporting the state route number in several cases and the non-reporting of many property damage only crashes.

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. Twenty-three cities were identified as having total crash rates above critical. Louisville, Florence, Somerset, London, and Hazard 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 Mount Vernon have the highest fatal crash rates in their respective population ranges with no city identified as having a critical fatal crash rate. Mount Vernon has the highest rate overall.

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 5,768 per year for the past five years. Alcohol-related fatalities have averaged 195 per year during the past five years (using Fatal Analysis Reporting System data). Using the number of fatalities and injuries in alcohol-related crashes, the estimated cost of alcohol-related crashes in Kentucky in 2003 varied from about $290 using economic cost data up to about $889 million 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. In 1999, there was a slight increase and a larger increase in 2000. In 2001, the decrease in alcohol-related crashes started again. The total decreased again in 2003 (to 5,578) and represents a 4.1 percent decrease compared to the previous four-year average. The number in 1998 was the lowest number since this trend analysis was started in 1978. Alcohol-related crashes represented 4.4 percent of all crashes during the latest five-year period. The number of alcohol-related fatalities in 2003 (178) decreased by 11.0 percent over the 1999 through 2002 average (200).

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 under 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, Spencer, Marion, Floyd, and Madison.

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 not typically the same as those identified when all drivers were considered. For 16 through 20 years of age drivers, the county in each population category

having the highest percentage of crashes involving alcohol are Elliott, Owen, Breathitt, Floyd, and Christian.

Table 21 is a summary of number and percentage of crashes involving alcohol for cities. For each population category, cities having the highest percentages of crashes involving alcohol are Lexington, Covington, Shelbyville, Dayton, and Vine Grove.

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 (1999 through 2003) 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, Edmonson, Mason, Oldham, and Jefferson. Counties having the lowest rates of alcohol convictions per alcohol-related crash are Robertson, Edmonson, Mason, Letcher, and Madison. 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 downward trend in the number of alcohol convictions during the five-year period from a high of about 28,500 in 1999 to a low of about 25,500 in 2003. The number of alcohol convictions in 2003 was 6.9 percent lower than 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 1999 through 2003 (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 63.1 percent. The percentages varied from a low of 53.9 percent in Leslie County to a high of 92.0 percent in Henderson 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. Four counties have a conviction percentage of 90 percent or more (Henderson, Fayette, Shelby, and Clark Counties. Two counties have a conviction rate under 60 percent (Leslie and Clay Counties).

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 78.7 to 82.0 percent. Counties having the highest conviction percentages in the various population categories are Trimble, Lewis, Henry, Henderson, and Fayette. Counties having the lowest conviction percentages for the various population categories are Gallatin, Leslie, Clay, Barren, and Bullitt.

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 1999 through 2003, the highest number of convictions at 6,020 was in 1999. There has been a decrease in the number of reckless driving convictions since that year. The number in 2003 was a 12.4 percent decrease from the average number in the previous four years. The highest rates (convictions per 1,000 licensed drivers) occurred in Lyon, Gallatin, and Cumberland Counties. The lowest rates are in Trimble, Green, Larue, and Oldham Counties.

Drugs continue to be listed as a contributing factor in a relatively small percentage of all crashes. The number of drug-related crashes decreased at 1,021 in 2003 compared to the highest number at 1,206 that occurred in 2001; however, when compared to the previous four-year average, drug crashes increased 1.0 percent. The number of drug-related fatal crashes increased by 17.1 percent in 2003 compared to the previous four-year average. There were 151 fatal drug-related crashes in 2003. The number of drug-related injury crashes increased by 10.9 percent in 2003 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: Crittenden, Martin, Johnson, Floyd, and Pike. The data in Table 27 show most of the counties with the highest percentages are in southeastern Kentucky. The highest percentages of this type of crash are in Martin, Johnson, Magoffin, Clay, Leslie, Pike, and Floyd counties.

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 Lexington, Ashland, Middlesboro, Pikeville, and Paintsville.

7.0 OCCUPANT PROTECTION

The percentages of drivers of passenger cars involved in traffic crashes that were reported as wearing safety belts are listed by county in Table 14. Those same percentages are listed in descending order by county population category in Table 29. Those percentages are for the five-year period of 1999 through 2003. The rates varied from a high of 96.2 percent in Fayette County to a low of 78.4 percent in Robertson County. Observational surveys have been conducted across the state for several years and have shown significantly lower rates than that reported in the crash data. The data in Table 29 can be used to rank counties but cannot be used for absolute percentages since they are substantially higher than observed levels. Considering the five-year study period, 58 counties had rates of 90 percent or better while only 2 counties had a rate under 80 percent.

It should be noted that a statewide safety belt law was passed with an effective date in July 1994. Prior to the statewide law, 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 have 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 sixteen counties were selected on the basis of their safety belt usage rate, 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 variances of safety belt usage rate reported by passenger car drivers involved in traffic crashes, by year, from 1999 through 2003 are presented in Table 30 along with the relationship between county population and safety belt usage rate. The reported percentage using safety belts has increased slightly from 1999 through 2003. The annual increase had been decreasing prior to 1994 when there was an increase of almost 14 percentage points from the previous year. This large increase corresponded with the enactment of the statewide safety belt law. It should be noted that the usage rate computed using crash data has been substantially higher than determined from observational surveys. For example, the statewide observational survey for 2003 resulted in a driver usage rate of 65 percent compared to the 93 percent reflected in the crash data. This table also shows the higher usage percentages for counties having over 50,000 population. Counties in the over 50,000 population category had a usage rate about 7 percent higher than for counties in the under 10,000 population category. This difference has been found to be higher in the observation survey.

Safety belts are recognized as an effective method of reducing the severity of injuries in traffic crashes. This is confirmed by 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 96 percent compared to not wearing a safety belt. Also, the chance of receiving an incapacitating injury is reduced by 83 percent and the chance of receiving a non-incapacitating injury is reduced by 70 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 43 percent (from 12.12 percent for drivers not wearing safety belts to 6.86 percent for drivers wearing safety belts). The chance of receiving either a fatal or incapacitating injury was reduced by 86 percent. These percentages are high when compared to national statistics concerning the effectiveness of safety belts in reducing fatal or serious injuries. The reason would probably be related to the over reporting of seat belt usage (as shown in Table 30). This would occur more often for drivers who were not injured so there was no physical evidence of whether they were wearing a seat belt.

The change in crash severity for drivers wearing and not wearing a safety belt is presented in Table 32 for the years 1999 through 2003. The reduction in severity from the use of safety belts has remained consistent.

Potential savings associated with increased safety belt usage were estimated and are shown in Table 33. This table lists the annual potential reduction in the number of fatalities, serious injuries (those listed as incapacitating on the crash report), and the associated crash cost savings resulting from that reduction. Those savings are given for driver usage rates from 70 to 90 percent. To obtain these results, safety belt usage statistics from 1999 through 2003 were used along with an estimate of the economic cost of traffic crashes provided by the National Safety Council (as shown in the footnote in Table 33). The actual number of fatalities and incapacitating injuries for 1999 through 2003 were used along with the average usage rate over this time period. Also used was the reduction associated with safety belt usage of 96 percent for fatalities and 83 percent for incapacitating injuries. Crash cost estimates were $1,120,000 for a fatality and $55,500 for an incapacitating injury. For example, if 70 percent of all drivers involved in crashes in Kentucky wore safety belts, there would be a potential annual reduction of about 97 fatalities and a potential annual reduction in the cost of fatalities and serious injuries of approximately $140 million.

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 34. Data are for 1999 through 2003. 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 26 fatalities (children age three and under) occurring during the study period (1999-2003), 14 involved use of a restraint. The use of a restraint in over one-half of the fatalities would be related to the very high usage rate and possibly to improper usage. Also, of the 317 incapacitating injuries, 243 involved use of a restraint. A better measure of effectiveness would be the percentage sustaining a specific injury. This analysis revealed the percentages of fatalities and incapacitating and non-incapacitating injuries were much lower for children who were in a child safety seat or safety belt compared to those using no restraint. Comparison of the "any restraint" and "none" categories revealed there was a 96-percent reduction in fatalities for children in restraints, an 87-percent reduction in incapacitating injuries, a 79-percent reduction in non-incapacitating injuries, and a 59-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 most recent usage rate using the crash data was 98 percent in 2003. This usage rate was calculated by dividing the “any restraint” total in 2003 by the sum of the "any restraint" and "none" categories in 2003 from Table 34. This compares to the usage rate of 95 percent found in the 2003 observational survey.

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 2001, the number of speed-related crashes was the lowest it has been since the inception of this report. In 2003, the number of speed-related crashes increased by 7.1 percent compared to the previous four-year average. For the five-year period (1999-2003), speed-related crashes represented 7.0 percent of all crashes, 10.3 percent of injury crashes, and 22.0 percent of fatal crashes. The number of speed-related fatal crashes decreased by 5.2 percent in 2003 compared to the previous four- year average. The number of speed-related fatal crashes ranged from a high of 201 in 1999 to a low of 154 in 2000 and 2001. The number of speed-related injury crashes decreased by 9.1 percent in 2003 compared to the previous four years. The number of speed-related injury crashes ranged from a high of 3,990 in 1999 to a low of 3,122 in 2001.

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 35. Starting in 2000, there were 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 Trimble, Owen, McCreary, Carter, and Pike. A similar summary of crashes involving unsafe speeds for cities was prepared and is presented in Table 36. Those cities having the highest percentages in each population category are Lexington, Hopkinsville, Erlanger, Villa Hills, and Park Hills.

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 37 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 84,961 in 2001 to a high of 103,126 in 1999.

To assist in identifying areas having the potential for increased enforcement, Table 38 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, Martin, Wayne, Harlan, and Pike. The same counties were identified as 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 section of Kentucky.

The percentage of vehicles exceeding the 55-mph speed limit was monitored and reported by the Kentucky Department of Highways on a quarterly basis from 1978 through 1994. This requirement was eliminated with federal legislation passed in 1995 that changed speed limit requirements. The speed monitoring program was then ended. As part of a 1997 study of Kentucky speed limits, moving speed data were taken on various highway types. Summary of that data for cars and trucks (single unit and combination tractor trailer) are given in Tables 39

and 40, respectively. The average and 85th percentile speeds are given along with the percent over the current speed limit. The data show the speeds for trucks are less than that for cars and a large percentile of drivers exceed the posted speed limit. The report recommended a slight increase in speed limits on some types of roads with the speed limit for cars 5 mph higher than for trucks on some roads. For example, the recommended speed limits on rural interstates and four-lane parkways were 70 mph for cars and 65 mph for trucks. Speed limits of 60 mph for cars and 55 mph for trucks were recommended on two-lane parkways and rural two-lane roads with a full width shoulder.

9.0 TEENAGE DRIVERS

A separate analysis was conducted to determine the frequency of crashes involving teenage drivers (16 to 19 years of age). A review of driver records show that teenage drivers account for approximately 5.9 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 2003 data, it was found that teenage drivers were involved in about 20 percent of all crashes, 21 percent of injury crashes, and 14 percent of fatal crashes. Teenage drivers (including drivers with a learner permit) are over represented by a factor of 3.4 in all crashes, 3.6 in injury crashes, and 2.4 in fatal crashes.

The involvement rate of teenage drivers compared to all drivers in total and fatal crashes was analyzed (using 2003 data). Considering all crashes, the rate was 76 crashes per 1,000 drivers for all drivers compared to 164 crashes per 1,000 drivers for teenage drivers. Considering fatal crashes, the rate was 45 fatal crashes per 100,000 drivers for all drivers compared to 71 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 41. The crashes in 2003 were compared to an average of the preceding four years (1999-2002). There was a decrease in total crashes (1.6 percent) when comparing 2003 to the previous four years. It should be noted that crashes in parking lots were not included in the analysis.

The highest number of crashes occurred in 2000 (135,079) with the lowest number occurring in 2003 (129,828). The number of fatal crashes and fatalities in 2003 increased compared to the previous four-year average. The number of fatal crashes increased by 11.8 percent while the number of fatalities increased by 9.0 percent. The number of fatalities ranged

from 819 in 1999 to 928 in 2003. The number of injury crashes and injuries in 2003 was lower than the previous four-year average. There was an 8.7 percent decrease in injury crashes and a 9.4 percent decrease in injuries. The number of injuries varied from 46,966 in 2003 to 54,951 in 1999.

Vehicle-miles traveled has generally remained constant over the five-year period ranging from 46.255 billion miles in 2001 to 47.816 billion miles in 1999. The vehicle miles traveled in 2003 has decreased slightly (0.2 percent) compared to the previous four-year average. There was a decrease in total crash rate in 2003 of 1.3 percent when compared to the previous four-year average. The total crash rate varied from a low of 277 C/100 MVM in 1999 and 2003 to 289 C/100 MVM in 2000.

There were increases in 2003 in the fatal crash rate (13.5 percent) and fatality crash rate (10.1 percent). The fatality crash rate in 1999 had the lowest rate in this five-year period with the highest in 2003. The fatality crash rates in the last two years (2002 and 2003) were higher than in previous years (1999 through 2001).

There was a total of 657,660 crashes in the five-year period, of which 3,869 (0.6 percent) were fatal crashes and 167,203 (25.4 percent) were injury crashes. Those crashes resulted in 4,330 fatalities and 254,294 injuries. There is a large range used when estimating crash costs. Considering economic costs, an estimate for 2003 is $2.1 billion for the cost of Kentucky traffic crashes or an average cost of $16,500 per crash using National Safety Council estimates of motor vehicle crash cost. Similarly the comprehensive costs result in an estimate of $6.0 billion for the cost of Kentucky traffic crashes or an average cost of $46,400 per crash.

Trends in the number of specific types of crashes also are presented in Table 41. 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 42. Numbers of crashes and average annual crashes per 10,000 population were included.

10.2 PEDESTRIAN CRASHES

The number of pedestrian crashes had a large decrease of 10.6 percent in 2003 compared to the period from 1999 through 2002. The number of crashes was very similar in 1999 and 2000 with a range of from 1,117 to 1,124. Since 2000, there has been a decrease in the number of pedestrian crashes with a range of 930 to 977. Pedestrian collisions are a severe type of crash. In 2003, pedestrian crashes accounted for only 0.7 percent of all crashes but 2.5 percent of injury crashes and 6.7 percent of fatal crashes. The number of injury crashes decreased by 11.2 percent in 2003 while the number of fatal crashes increased by 7.5 percent in 2003 compared to the 1999 through 2002 average. Injury crashes ranged from 786 in 2002 to 1,011 in 1999 while fatal crashes ranged from 52 in 2000 to 57 in 2003.

A summary of pedestrian crash statistics by county and population category is presented in Table 43. 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: Crittenden, Carroll, Grant, Henderson, and Jefferson. A similar analysis was performed for pedestrian crashes by city and population category. Results are summarized in Table 44 and the following cities have the highest rates in their respective population categories: Louisville, Covington, Newport, Cynthiana, and Williamstown. Newport and Covington had higher rates than any other city.

10.3 BICYCLE CRASHES

Numbers and rates of motor-vehicle crashes involving bicycles by county are listed in Table 45. Counties were grouped by population category. The counties having the highest crash rate in each category are Fulton, Carroll, Mason, Henderson, and Campbell. A similar summary was prepared for cities and the results are presented in Table 46. Cities having the highest rate of bicycle-related crashes in each population category are Louisville, Covington, Newport, Bellevue, and Ludlow.

The number of bicycle crashes decreased in 2003 (11.5 percent) compared to the average of 1999 through 2002. The number of bicycle crashes has ranged from 497 in 2002 to 606 in 1999. This is a severe type of crash. In 2003, while bicycle crashes accounted for 0.4 percent of all crashes, they accounted for 1.1 percent of injury crashes and 0.7 percent of fatal crashes. The number of injury crashes decreased by 16.2 percent in 2003 while the number of fatal crashes decreased by 25.0 percent compared to the 1999 through 2002 average. The range in injury crashes was from 349 in 2002 to 512 in 1999 while the number of fatal crashes ranged from 4 in 2000 to 10 in 1999.

10.4 MOTORCYCLE CRASHES

County and city statistics for crashes involving motorcycles are presented in Tables 47 and 48, respectively. For each population category, counties having the highest rates for motorcycle crashes per 10,000 population are Lyon, Leslie, Union, Boyd, and Pike and McCracken (Table 47). The highest rate is in Union County. From Table 48, those cities having the highest rates in each population category are Louisville, Paducah, Madisonville, Pikeville, and Fulton. The rate in Pikeville was substantially above any other city.

There was a significant increase in the number of motorcycle crashes in 2003 (21.7 percent) compared to the 1999 through 2002 average. The numbers over the five-year period ranged from a high of 1,438 in 2003 to a low of 1,033 in 1999. This is a severe type of crash. Data in 2003 show that motorcycle crashes accounted for 1.1 percent of all crashes but 3.2 percent of injury crashes and 6.6 percent of fatal crashes. The number of injury crashes increased by 17.2 percent while the number of fatal crashes increased by 24.4 percent in 2003 compared to the 1999 through 2002 average. The number of injury crashes ranged from 774 in 1999 to 997 in 2003 while the number of fatal crashes ranged from 36 in 2000 to 60 in 2001. It should be noted that 1999 was the first full year after repeal of the law requiring a motorcyclist to wear a helmet and this corresponded to the increase in the number of motorcycle-related crashes.

10.5 SCHOOL BUS CRASHES

School bus crash statistics were summarized for counties and cities and results are presented in Tables 49 and 50, respectively. Table 49 lists numbers and rates of school bus crashes by county and population category. Counties having the highest rates in each population category are Wolfe, Morgan, Anderson and Breathitt, Jessamine, and Jefferson. A similar summary was prepared for cities by population categories, as shown in Table 50. Those cities having the highest rates in each population category are Louisville, Hopkinsville, Nicholasville, London, and Prestonsburg. The highest rate was in Prestonsburg.

The trend analysis presented in Table 41 indicates there was an increase in this type of crash in 2003 (3.2 percent increase) compared to the 1999 through 2002 average. The annual number of this type of crash ranged from a high of 932 in 2000 to a low of 648 in 1999. There was a decrease in injury crashes of 15.9 percent in 2003 compared to 1999 through 2001. The number of injury crashes ranged from 149 in 2000 to 110 in 1999. There were two fatal crashes involving a school bus in 2003 and a total of 8 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 51. Counties having the highest rates in each population category are Gallatin, Carroll, Simpson, Scott, and Boone. All of 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 a slight increase in the number of truck crashes in 2003 (0.3 percent) compared to the previous four-year average. This change may be partially related to the "type of unit" coding started with the new collision report in 2000. The number of truck crashes ranged from a high of 10,276 in 2000 to a low of 7,642 in 1999. The increase in total crashes in 2000 through 2002 reversed the decreasing trend over the past several years. The number of injury crashes decreased by 6.3 percent while the number of fatal crashes increased by 22.1 percent in 2003 compared to the 1999 through 2002 average. The number of injury crashes ranged from 1,665 in 1999 to 2,181 in 2000 while the number of fatal crashes ranged from 82 in 1999 to 116 in 2002 and 2003. Considering the five-year period, truck crashes represent 6.8 percent of all crashes, 5.5 percent of injury crashes, and 12.8 percent of fatal crashes.

10.7 TRAIN CRASHES

A summary of motor vehicle-train crashes by county is presented in Table 52. Counties having the highest rates in each population category are Lee, Todd, Grant, Letcher, and Pike. The highest rate (1.00) is in Todd County with the highest number (63) in Jefferson County. There were no train crashes in 51 of the 120 counties in the five-year period of 1999 through 2003. Several of the counties with the highest rates in their population category were in counties with a large amount of coal production (frequently carried by train).

The trend analysis for motor vehicle-train crashes is given in Table 41. There was a range in train crashes from 72 in 2003 to 57 in 1999. The number of train crashes in 2003 was 16.1 percent more than the 1999 through 2002 average. The number of injury crashes increased by 31.6 percent in 2003 compared to the 1999 through 2002 average with a range of from 16 in 1999 to 25 in 2003. The number of fatal crashes ranged from two in 1999 and 2003 to five in 2001 for the five-year period.

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 53. 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 an overall low of 4.41 percent in 2003.

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 new collision 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. One recommendation involved an edit to the eCRASH system to compare the milepoint and GPS locations given on the crash report. This recommendation, which can significantly increase the accuracy of the crash location data, should be implemented in a timely manner.

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.

The statewide fatal crash rate has increased substantially the past few years. A detailed study of all fatal crashes should be conducted to determine potential countermeasures to reduce fatal crashes.

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. A large number of cities have taken advantage of this program, which was expanded to include counties. Funding for this program has not been provided in the past few years. Efforts should be made to renew funding of the program. The following cities have critical crash rates (as shown in Table 18) but have not been included in this signing program. It is recommended that, if funding again becomes available, they should be considered as candidates for participation in the program.

1. Shively
2. Crestview Hills
3. Prestonsburg
4. Mt. Vernon

11.3 ALCOHOL-RELATED CRASHES

The number of alcohol-related crashes decreased in 2003 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.

As part of the analysis, 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 were also required to have 100 or more alcohol-related crashes during the five-year analysis period to be considered as potential counties for the increased alcohol-related enforcement program. Following is a list of those counties by State Police Post (reference was made to the counties recommended in the past few years).

Post Number	County
1	Marshall
2	Muhlenburg
3	Barren
4	Grayson
5	Oldham
6	Kenton
7	Boyle
8	Montgomery
9	Pike
10	Knox
11	Pulaski
12	Shelby
13	Letcher
14	Boyd
15	Taylor
16	Daviess

2. An analysis was performed for cities similar to that for counties. However, alcohol conviction rates were not available for cities and consideration was given to conviction rates for counties within which a city was located. The number and percentage of crashes involving alcohol were considered (Table 21). The following are candidate cities for a program of increased alcohol enforcement.

- Covington
- Richmond
- Hopkinsville
- Shelbyville
- Nicholasville
- Erlanger

11.4 OCCUPANT PROTECTION

1. Even though a statewide safety belt law has been passed, efforts to increase safety belt usage must continue. The various types of 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" campaign conducted around the Memorial Day holiday in 2003 shows that these types of programs (which includes increased enforcement along with publicity) can be effective 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 (State Police Post). 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.

Post Number	County
1	Graves
2	Christian
3	Allen
4	Meade
5	Owen
6	Harrison
7	Jackson
8	Morgan
9	Pike
10	Knox
11	Pulaski
12	Shelby
13	Perry
14	Carter
15	Taylor
16	McLean

2. 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.

3. The current statewide law allows secondary type of enforcement. To obtain a substantial increase in usage, the current law should be modified to allow primary, rather than secondary, enforcement. As a minimum, primary enforcement should apply to drivers while they are in the permit and intermediate phase of the graduated license program.

11.5 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 35) and low average number of speeding convictions per speed-related crash (Table 38) 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 6.0 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).

Post Number	County
1	Marshall
2	Christian
3	Hart
4	Nelson
5	Owen
6	Boone
7	Jackson
8	Morgan
9	Floyd
10	Knox
11	Rockcastle
12	Franklin
13	Perry
14	Greenup
15	Adair
16	Union

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 five percent or more of total crashes (Table 36), the following cities were recommended for additional programs of speed enforcement:

- Lexington
- Hopkinsville
- Frankfort
- Richmond
- Bowling Green
- Elizabethtown
- Erlanger
- Independence
- Somerset
- Pikeville

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.

Federal legislation has changed allowing states to increase speed limits to above the 55 mph and 65 mph limits. Data show current speeds do not reflect speed limits on several types of highways. There is a need to review current speed limits and establish speed limits based on the 85^{th} percentile speed. Recommendations for speed limits on various types of roads in Kentucky have been developed.

11.6 TEENAGE DRIVERS

Graduated licensing legislation was passed in the 1996 Kentucky legislature as a method to restrict teenage drivers from being exposed to driving environments that surpass their driving experience. The evaluation of the graduated license program shows a reduction in crashes for 16-year-old drivers while they are in the permit phase but this reduction has not been found to continue once they are out of the permit phase. These results indicate the need for increasing restrictions on teenage drivers who have completed the permit stage. This would require an intermediate phase to be added to the process between the permit and fully-licensed stages.

The lack of driving experience would be related to the over representation of teenage drivers in traffic crashes. Experience is particularly important when it is necessary to take an evasive maneuver. The use of an advanced technology driving simulator should be considered as a method of allowing teenage drivers to gain experience of real world driving situations without the on-the-road risks.

11.7 GENERAL CRASH STATISTICS

Pedestrians

The crash rate analyses identified Newport and Covington as cities having higher pedestrian crash rates than any other city (Table 44). 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

Newport also had a high crash rate in their population category for this type of crash (Table 46) (as with pedestrian crashes). A study of this type of crash could be included with the previously mentioned study of pedestrian crashes.

Motorcycles

Pike County had one of the highest motorcycle-crash rates in the state (Table 47) and Pikeville (Table 48), which is in Pike County, had the highest motorcycle-crash rate for any city. An evaluation of this type of crash in this county and city could be warranted.

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 if this increase was related to the repeal of the helmet law. The combination of the lowering in usage rate and increase in injury and fatal crashes support the need to reenact the requirement for the use of motorcycle helmets.

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 53). 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 that 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.

TABLE 1. COMPARISON OF 1999 - 2003 CRASH RATES*

STATISTIC	1999	2000	2001	2002	1999-2002 Average	2003	Percent Change***
Crashes	79,893	89,480	81,556	84,816	83,936	82,253	-2.0
Fatal Crashes	591	591	633	666	620	714	15.1
Injury Crashes	23,418	24,555	22,459	22,999	23,358	21,606	-7.5
Mileage	28,081	27,941	28,499	28,449	28,243	28,449	0.7
Crashes Per Mile	2.85	3.20	2.86	2.98	2.97	2.89	-2.8
Vehicle Miles (Billion)	40.56	40.92	41.70	42.30	41.37	42.07	1.7
AADT	3,958	4,013	4,009	4,073	4,013	4,052	1.0
Crash Rate**	197	219	196	201	203	196	-3.6
Fatal Crash Rate**	1.46	1.44	1.52	1.57	1.50	1.70	13.5
Injury Crash Rate**	58	60	54	54	57	51	-9.7

* 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 from 1999 through 2002 average to 2003.

TABLE 2. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1999-2003)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM)		
			ALL	INJURY	FATAL
One-Lane	63	870	173	55	1.0
Two-Lane	23,346	1,610	245	80	3.0
Three-Lane	33	5,250	168	42	1.6
Four-Lane Divided (Non-Interstate or Parkway)	543	11,320	124	38	1.3
Four-Lane Undivided	49	14,460	266	60	1.5
Interstate	526	31,720	51	13	0.7
Parkway	565	9,120	61	16	0.8
All	25,124	2,650	171	54	2.1

* Average for the five years.

TABLE 3. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1999-2003)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	2,125	6,590	282	69	0.9
Three-Lane	32	11,630	478	94	1.5
Four-Lane Divided (Non-Interstate or Parkway)	388	24,240	292	72	0.9
Four-Lane Undivided	280	19,500	479	111	1.2
Interstate	255	64,780	93	20	0.4
Parkway	52	11,990	108	23	1.0
All **	3,159	14,960	244	58	0.8

* Average for the five years.

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

TABLE 4. COMPARISON OF 1999 - 2003 CRASH RATES BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION

LOCATION	HIGHWAY TYPE	1999	2000	2001	2002	1999-2002 Average	2003	Percent Change*
Rural	One-Lane	53	285	324	259	230	228	-0.8
	Two-Lane	236	255	248	247	247	238	-3.6
	Three-Lane	198	142	142	193	169	163	-3.4
	Four-Lane Divided (Non-Interstate or Parkway)	120	124	130	128	125	119	-5.0
	Four-Lane Undivided	241	341	270	256	277	232	-16.4
	Interstate	50	51	48	50	50	56	12.2
	Parkway	50	61	64	63	60	70	17.7
	All	163	177	173	172	171	168	-1.7
Urban	Two-Lane	285	333	268	268	289	263	-8.8
	Three-Lane	430	547	449	475	475	476	0.2
	Four-Lane Divided	311	323	247	293	294	287	-2.2
	Four-Lane Undivided	485	546	434	486	488	447	-8.3
	Interstate	94	98	91	88	93	93	0.9
	Parkway	103	98	115	110	107	112	4.9
	All	247	278	226	240	248	233	-5.9

* Percent change from 1999 through 2002 to 2003.

TABLE 5. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (1999-2003)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	172	210	0.32	0.52
	Two-Lane	167,855	77,819	0.59	0.73
	Three-Lane	529	109	1.92	0.50
	Four-Lane Divided (Non-Interstate or Parkway)	13,914	1,809	4.13	0.37
	Four-Lane Undivided	3,428	163	5.28	0.80
	Interstate	15,536	1,755	11.58	0.15
	Parkway	5,777	1,883	3.33	0.18
	All Rural	207,211	83,748	0.97	0.51
Urban	Two-Lane	72,094	7,082	2.40	0.85
	Three-Lane	3,276	108	4.25	1.43
	Four-Lane Divided	50,115	1,294	8.85	0.88
	Four-Lane Undivided	47,729	932	7.12	1.44
	Interstate	27,951	850	23.65	0.28
	Parkway	1,215	172	4.38	0.32
	All Urban**	210,750	10,529	5.46	0.73

* 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 (1999-2003)

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	2.16	6	7.19	15
	Three-Lane	4.84	11	16.13	27
	Four-Lane Divided (Non-Interstate or Parkway)	7.69	15	25.63	39
	Four-Lane Undivided	21.07	33	70.25	92
	Interstate	8.85	17	29.51	44
	Parkway	3.07	8	10.23	19
	All Rural	2.47	7	8.25	16
Urban	Two-Lane	10.18	19	33.93	49
	Three-Lane	30.41	45	101.36	128
	Four-Lane Divided	38.74	55	129.12	159
	Four-Lane Undivided	51.20	70	170.67	205
	Interstate	32.89	48	109.63	137
	Parkway	7.06	14	23.53	37
	All Urban**	20.02	32	66.72	88

* 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 STATE-MAINTAINED SYSTEM AND ALL ROADS (1999-2003)

	STATE-MAINTAINED		ALL ROADS					
			TOTAL CRASHES		FATAL CRASHES		FATAL OR INJURY CRASHES	
COUNTY	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Adair	1,307	160	2,430	257	23	2.4	643	68
Allen	1,525	240	2,105	280	23	3.1	647	86
Anderson	1,839	200	2,500	236	9	0.8	667	63
Ballard	763	174	1,002	200	9	1.8	330	66
Barren	3,261	148	6,627	267	35	1.4	1,786	72
Bath	1,124	137	1,472	164	16	1.8	425	47
Bell	2,485	177	3,573	231	30	1.9	1,146	74
Boone	13,673	216	17,851	255	48	0.7	3,969	57
Bourbon	2,279	246	3,112	292	24	2.2	852	80
Boyd	5,952	269	9,764	383	37	1.5	2,453	96
Boyle	3,494	307	4,482	338	31	2.3	1,094	82
Bracken	990	210	1,241	234	15	2.8	366	69
Breathitt	2,006	275	2,136	263	42	5.2	996	122
Breckinridge	1,101	163	1,442	175	19	2.3	541	66
Bullitt	5,500	154	6,845	170	43	1.1	1,939	48
Butler	1,023	139	1,227	147	18	2.2	418	50
Caldwell	1,083	128	1,604	169	15	1.6	450	47
Calloway	3,649	305	5,109	361	34	2.4	1,129	80
Campbell	8,599	241	14,151	345	42	1.0	2,593	63
Carlisle	353	131	390	126	7	2.3	131	42
Carroll	1,959	169	2,199	177	23	1.9	564	45
Carter	2,310	126	3,349	165	45	2.2	1,022	50
Casey	1,022	177	1,234	182	20	2.9	417	61
Christian	7,420	208	9,519	243	67	1.7	2,546	65
Clark	3,036	143	5,883	248	39	1.6	1,315	55
Clay	1,924	177	2,436	201	40	3.3	1,045	86
Clinton	782	182	807	162	17	3.4	229	46
Crittenden	999	290	1,114	270	9	2.2	403	98
Cumberland	334	99	403	105	18	4.7	146	38
Daviess	6,180	186	16,975	426	50	1.3	3,858	97
Edmonson	932	179	1,212	201	15	2.5	385	64
Elliott	546	286	595	261	6	2.6	220	97
Estill	1,142	219	1,571	250	15	2.4	503	80
Fayette	26,643	220	64,933	473	124	0.9	13,771	100
Fleming	1,045	180	1,330	192	15	2.2	415	60
Floyd	4,338	183	5,155	195	58	2.2	2,346	89
Franklin	6,364	250	8,626	298	39	1.3	1,715	59
Fulton	533	164	974	264	10	2.7	275	75
Gallatin	862	76	1,049	88	10	0.8	365	31
Garrard	1,611	259	2,023	282	13	1.8	615	86
Grant	3,537	156	4,288	177	33	1.4	1,075	44
Graves	3,198	176	4,662	223	44	2.1	1,300	62
Grayson	2,601	196	3,205	212	34	2.2	1,022	68
Green	776	195	1,204	254	12	2.5	371	78
Greenup	2,333	167	3,721	226	25	1.5	1,074	65
Hancock	597	132	734	142	8	1.5	206	40
Hardin	10,874	191	13,898	219	89	1.4	3,215	51
Harlan	2,866	202	3,542	221	40	2.5	1,226	77
Harrison	1,861	332	2,730	399	16	2.3	712	104
Hart	1,790	100	2,249	119	35	1.8	681	36
Henderson	6,476	254	9,570	333	33	1.1	2,299	80
Henry	1,816	151	2,072	157	24	1.8	619	47
Hickman	391	125	487	140	8	2.3	182	52
Hopkins	5,959	219	8,002	262	43	1.4	1,915	63
Jackson	1,172	256	1,389	256	23	4.2	526	97
Jefferson	61,293	203	132,706	386	351	1.0	31,078	90
Jessamine	5,378	338	6,776	354	25	1.3	1,645	86
Johnson	2,727	251	2,867	231	26	2.1	1,003	81
Kenton	16,088	248	28,261	383	54	0.7	5,426	74
Knott	1,627	193	1,945	207	33	3.5	852	91

TABLE 7. CRASH RATES BY COUNTY FOR STATE-MAINTAINED SYSTEM AND ALL ROADS (1999-2003)(continued)

	STATE-MAINTAINED		ALL ROADS					
			TOTAL CRASHES		FATAL CRASHES		FATAL OR INJURY CRASHES	
COUNTY	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Knox	3,184	223	4,075	255	37	2.3	1,421	89
Larue	1,367	166	1,658	179	23	2.5	465	50
Laurel	7,144	198	8,472	213	62	1.6	2,288	58
Lawrence	1,070	117	1,416	140	18	1.8	519	51
Lee	363	137	489	157	10	3.2	178	57
Leslie	1,052	174	1,340	199	29	4.3	725	107
Letcher	2,232	198	2,742	213	40	3.1	1,167	91
Lewis	1,168	171	1,397	182	31	4.0	438	57
Lincoln	1,574	146	2,056	168	21	1.7	721	59
Livingston	1,063	165	1,177	164	12	1.7	355	50
Logan	2,589	199	3,342	224	22	1.5	954	64
Lyon	982	88	1,178	102	10	0.9	333	29
McCracken	8,591	252	13,344	345	73	1.9	3,736	97
McCreary	1,305	199	1,630	221	23	3.1	567	77
McLean	933	194	1,098	188	12	2.1	350	60
Madison	9,036	216	13,196	294	71	1.6	2,839	63
Magoffin	1,042	167	1,215	173	15	2.1	576	82
Marion	1,908	278	2,485	307	23	2.8	710	88
Marshall	3,490	166	4,235	169	39	1.6	1,186	47
Martin	1,172	193	1,180	169	15	2.1	526	75
Mason	2,630	254	3,595	320	33	2.9	816	73
Meade	2,123	202	2,620	214	40	3.3	829	68
Menifee	458	210	523	199	5	1.9	191	73
Mercer	1,971	209	2,901	265	16	1.5	798	73
Metcalfe	962	193	1,124	197	15	2.6	312	55
Monroe	416	104	901	187	13	2.7	277	58
Montgomery	2,989	242	3,901	274	40	2.8	1,093	77
Morgan	1,400	235	1,570	231	17	2.5	609	89
Muhlenberg	3,589	221	4,418	238	44	2.4	1,329	72
Nelson	4,835	244	6,118	271	40	1.8	1,423	63
Nicholas	506	154	859	228	11	2.9	265	70
Ohio	2,372	158	3,074	184	31	1.9	1,063	64
Oldham	3,899	181	4,636	188	26	1.1	1,127	46
Owen	962	254	1,145	253	12	2.7	403	89
Owsley	335	199	389	196	7	3.5	120	60
Pendleton	1,373	271	1,957	318	14	2.3	511	83
Perry	3,626	237	4,882	281	51	2.9	1,838	106
Pike	7,831	225	10,263	261	100	2.5	4,251	108
Powell	1,139	134	1,644	176	18	1.9	537	57
Pulaski	6,745	250	9,069	288	85	2.7	2,209	70
Robertson	109	159	132	154	2	2.3	50	58
Rockcastle	2,054	96	2,388	106	26	1.2	696	31
Rowan	3,493	251	4,553	298	23	1.5	1,219	80
Russell	1,073	144	1,340	155	15	1.7	413	48
Scott	4,727	152	6,514	195	37	1.1	1,640	49
Shelby	4,845	174	5,949	196	59	1.9	1,434	47
Simpson	2,358	152	2,680	161	25	1.5	690	41
Spencer	760	155	1,106	190	13	2.2	366	63
Taylor	2,605	285	3,753	347	19	1.8	820	76
Todd	853	162	1,117	185	13	2.1	327	54
Trigg	1,146	133	1,435	151	17	1.8	467	49
Trimble	809	243	979	252	13	3.3	292	75
Union	1,676	235	2,143	262	20	2.4	707	86
Warren	13,539	245	20,775	338	97	1.6	5,044	82
Washington	1,121	183	1,406	203	14	2.0	410	59
Wayne	1,646	214	1,998	222	28	3.1	601	67
Webster	1,520	173	1,802	184	16	1.6	574	59
Whitley	3,662	140	4,787	167	59	2.1	1,348	47
Wolfe	821	152	987	167	18	3.0	361	61
Woodford	2,407	183	3,744	253	27	1.8	757	51
STATEWIDE	417,998	201	657,660	281	3,854	1.6	169,428	72

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

Table 8. COUNTY POPULATIONS (2000 CENSUS) IN DESCENDING ORDER

COUNTY	POPULATION	COUNTY	POPULATION	COUNTY	POPULATION
Jefferson	693,604	Meade	26,349	Jackson	13,495
Fayette	260,512	Letcher	25,277	Larue	13,373
Kenton	151,464	Clay	24,556	Magoffin	13,332
Hardin	94,174	Grayson	24,053	Powell	13,237
Warren	92,522	Johnson	23,445	Caldwell	13,060
Daviess	91,545	Lincoln	23,361	Butler	13,010
Campbell	88,616	Woodford	23,208	Trigg	12,597
Boone	85,991	Taylor	22,927	Martin	12,578
Christian	72,265	Ohio	22,916	Leslie	12,401
Madison	70,872	Montgomery	22,554	Todd	11,971
Pike	68,736	Grant	22,384	Spencer	11,766
McCracken	65,514	Rowan	22,094	Monroe	11,756
Bullitt	61,236	Mercer	20,817	Edmonson	11,644
Pulaski	56,217	Wayne	19,923	Green	11,518
Laurel	52,715	Bourbon	19,360	Bath	11,085
Boyd	49,752	Anderson	19,111	Washington	10,916
Franklin	47,687	Breckinridge	18,648	Owen	10,547
Hopkins	46,519	Marion	18,212	Carroll	10,155
Oldham	46,178	Harrison	17,983	Metcalfe	10,037
Henderson	44,829	Allen	17,800	McLean	9,938
Floyd	42,441	Knott	17,649	Livingston	9,804
Jessamine	39,041	Hart	17,445	Clinton	9,634
Barren	38,033	Adair	17,244	Crittenden	9,384
Nelson	37,477	McCreary	17,080	Hancock	8,392
Graves	37,028	Mason	16,800	Ballard	8,286
Greenup	36,891	Rockcastle	16,582	Bracken	8,279
Whitley	35,865	Simpson	16,405	Trimble	8,125
Calloway	34,177	Russell	16,315	Lyon	8,080
Shelby	33,337	Breathitt	16,100	Lee	7,916
Harlan	33,202	Union	15,637	Gallatin	7,870
Clark	33,144	Lawrence	15,569	Fulton	7,752
Scott	33,061	Casey	15,447	Cumberland	7,147
Muhlenberg	31,839	Estill	15,307	Wolfe	7,065
Knox	31,795	Henry	15,060	Nicholas	6,813
Marshall	30,125	Garrard	14,792	Elliott	6,748
Bell	30,060	Pendleton	14,390	Menifee	6,556
Perry	29,390	Webster	14,120	Carlisle	5,351
Boyle	27,697	Lewis	14,092	Hickman	5,262
Carter	26,889	Morgan	13,948	Owsley	4,858
Logan	26,573	Fleming	13,792	Robertson	2,266

TOTAL 4,041,769

Table 9. AVERAGE AND CRITICAL CRASH RATES BY POPULATION CATEGORY
(1999-2003)

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY	TOTAL POPULATION	TOTAL MILEAGE DRIVEN 100 MVM
UNDER 10,000	21	155,526	99.66
10,000 - 14,999	25	313,612	182.63
15,000 - 24,999	32	611,992	376.76
25,000 - 50,000	27	954,656	581.08
OVER 50,000	15	2,005,983	1,104.33

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	16,607	167	201	6
10,000 - 14,999	35,657	195	225	6
15,000 - 24,999	81,979	218	243	14
25,000 - 50,000	143,159	246	266	9
OVER 50,000	380,258	344	357	4

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	217	2.18	6.61	0
10,000 - 14,999	425	2.33	5.92	0
15,000 - 24,999	804	2.13	4.80	1
25,000 - 50,000	1,052	1.81	3.60	0
OVER 50,000	1,356	1.23	2.01	2

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	5,348	53.7	73.6	4
10,000 - 14,999	11,692	64.0	81.4	7
15,000 - 24,999	24,465	64.9	78.7	11
25,000 - 50,000	39,161	67.4	77.7	9
OVER 50,000	88,762	80.4	86.4	5

TABLE 10. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1999-2003)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Crittenden	1,114	270	*
Fulton	974	264	*
Elliott	595	261	*
Trimble	979	252	*
Bracken	1,241	234	*
Nicholas	859	228	*
Ballard	1,002	200	
Menifee	523	199	
Owsley	389	196	
McLean	1,098	188	
Wolfe	987	167	
Livingston	1,177	164	
Clinton	807	162	
Lee	489	157	
Robertson	132	154	
Hancock	734	142	
Hickman	487	140	
Carlisle	390	126	
Cumberland	403	105	
Lyon	1,178	102	
Gallatin	1,049	88	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,957	318	*
Garrard	2,023	282	*
Jackson	1,389	256	*
Green	1,204	254	*
Owen	1,145	253	*
Morgan	1,570	231	*
Washington	1,406	203	
Edmonson	1,212	201	
Leslie	1,340	199	
Metcalfe	1,124	197	
Fleming	1,330	192	
Spencer	1,106	190	
Monroe	901	187	
Todd	1,117	185	
Webster	1,802	184	
Lewis	1,397	182	
Larue	1,658	179	
Carroll	2,199	177	
Powell	1,644	176	
Magoffin	1,215	173	
Martin	1,180	169	
Caldwell	1,604	169	
Bath	1,472	164	
Trigg	1,435	151	
Butler	1,227	147	
POPULATION CATEGORY 15,000-24,999			
Harrison	2,730	399	*
Taylor	3,753	347	*
Mason	3,595	320	*
Marion	2,485	307	*
Rowan	4,553	298	*
Bourbon	3,112	292	*
Allen	2,105	280	*
Montgomery	3,901	274	*
Mercer	2,901	265	*
Breathitt	2,136	263	*
Union	2,143	262	*
Adair	2,430	257	*
Woodford	3,744	253	*
Estill	1,571	250	*
Anderson	2,500	236	
Johnson	2,867	231	
Wayne	1,998	222	
McCreary	1,630	221	
Grayson	3,205	212	
Knott	1,945	207	
Clay	2,436	201	
Ohio	3,074	184	
Casey	1,234	182	
Grant	4,288	177	
Breckinridge	1,442	175	
Lincoln	2,056	168	
Simpson	2,680	161	
Henry	2,072	157	
Russell	1,340	155	
Lawrence	1,416	140	
Hart	2,249	119	
Rockcastle	2,388	106	
POPULATION CATEGORY 25,000-50,000			
Boyd	9,764	383	*
Calloway	5,109	361	*
Jessamine	6,776	354	*
Boyle	4,482	338	*
Henderson	9,570	333	*
Franklin	8,626	298	*
Perry	4,882	281	*
Nelson	6,118	271	*
Barren	6,627	267	*
Hopkins	8,002	262	
Knox	4,075	255	
Clark	5,883	248	
Muhlenberg	4,418	238	
Bell	3,573	231	
Greenup	3,721	226	
Logan	3,342	224	
Graves	4,662	223	
Harlan	3,542	221	
Meade	2,620	214	
Letcher	2,742	213	
Shelby	5,949	196	
Scott	6,514	195	
Floyd	5,155	195	
Oldham	4,636	188	
Marshall	4,235	169	
Whitley	4,787	167	
Carter	3,349	165	
POPULATION CATEGORY OVER 50,000			
Fayette	64,933	473	*
Daviess	16,975	426	*
Jefferson	132,706	386	*
Kenton	28,261	383	*
McCracken	13,344	345	
Campbell	14,151	345	
Warren	20,775	338	
Madison	13,196	294	
Pulaski	9,069	288	
Pike	10,263	261	
Boone	17,851	255	
Christian	9,519	243	
Hardin	13,898	219	
Laurel	8,472	213	
Bullitt	6,845	170	

* Critical crash rate

TABLE 11. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1999-2003)(STATE-MAINTAINED SYSTEM)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Crittenden	999	290	*
Elliott	546	286	*
Trimble	809	243	*
Menifee	458	210	*
Bracken	990	210	*
Owsley	335	199	*
McLean	933	194	*
Clinton	782	182	
Ballard	763	174	
Livingston	1,063	165	
Fulton	533	164	
Robertson	109	159	
Nicholas	506	154	
Wolfe	821	152	
Lee	363	137	
Hancock	597	132	
Carlisle	353	131	
Hickman	391	125	
Cumberland	334	99	
Lyon	982	88	
Gallatin	862	76	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,373	271	*
Garrard	1,611	259	*
Jackson	1,172	256	*
Owen	962	254	*
Morgan	1,400	235	*
Green	776	195	
Metcalfe	962	193	
Martin	1,172	193	
Washington	1,121	183	
Fleming	1,045	180	
Edmonson	932	179	
Leslie	1,052	174	
Webster	1,520	173	
Lewis	1,168	171	
Carroll	1,959	169	
Magoffin	1,042	167	
Larue	1,367	166	
Todd	853	162	
Spencer	760	155	
Butler	1,023	139	
Bath	1,124	137	
Powell	1,139	134	
Trigg	1,146	133	
Caldwell	1,083	128	
Monroe	416	104	
POPULATION CATEGORY 15,000-24,999			
Harrison	1,861	332	*
Taylor	2,605	285	*
Marion	1,908	278	*
Breathitt	2,006	275	*
Mason	2,630	254	*
Johnson	2,727	251	*
Rowan	3,493	251	*
Bourbon	2,279	246	*
Montgomery	2,989	242	*
Allen	1,525	240	*
Union	1,676	235	*
Estill	1,142	219	*
Wayne	1,646	214	*
Mercer	1,971	209	
Anderson	1,839	200	
McCreary	1,305	199	
Grayson	2,601	196	
Knott	1,627	193	
Woodford	2,407	183	
Clay	1,924	177	
Casey	1,022	177	
Breckinridge	1,101	163	
Adair	1,307	160	
Ohio	2,372	158	
Grant	3,537	156	
Simpson	2,358	152	
Henry	1,816	151	
Lincoln	1,574	146	
Russell	1,073	144	
Lawrence	1,070	117	
Hart	1,790	100	
Rockcastle	2,054	96	
POPULATION CATEGORY 25,000-50,000			
Jessamine	5,378	338	*
Boyle	3,494	307	*
Calloway	3,649	305	*
Boyd	5,952	269	*
Henderson	6,476	254	*
Franklin	6,364	250	*
Nelson	4,835	244	*
Perry	3,626	237	*
Knox	3,184	223	*
Muhlenberg	3,589	221	
Hopkins	5,959	219	
Meade	2,123	202	
Harlan	2,866	202	
Logan	2,589	199	
Letcher	2,232	198	
Floyd	4,338	183	
Oldham	3,899	181	
Bell	2,485	177	
Graves	3,198	176	
Shelby	4,845	174	
Greenup	2,333	167	
Marshall	3,490	166	
Scott	4,727	152	
Barren	3,261	148	
Clark	3,036	143	
Whitley	3,662	140	
Carter	2,310	126	
POPULATION CATEGORY OVER 50,000			
McCracken	8,591	252	*
Pulaski	6,745	250	*
Kenton	16,088	248	*
Warren	13,539	245	*
Campbell	8,599	241	*
Pike	7,831	225	*
Fayette	26,643	220	
Boone	13,673	216	
Madison	9,036	216	
Christian	7,420	208	
Jefferson	61,293	203	
Laurel	7,144	198	
Hardin	10,874	191	
Daviess	6,180	186	
Bullitt	5,500	154	

* Critical crash rate

TABLE 12. INJURY OR FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED) (1999-2003)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Crittenden	403	98	*
Elliott	220	97	*
Fulton	275	75	*
Trimble	292	75	*
Menifee	191	73	
Nicholas	265	70	
Bracken	366	69	
Ballard	330	66	
Wolfe	361	61	
Owsley	120	60	
McLean	350	60	
Robertson	50	58	
Lee	178	57	
Hickman	182	52	
Livingston	355	50	
Clinton	229	46	
Carlisle	131	42	
Hancock	206	40	
Cumberland	146	38	
Gallatin	365	31	
Lyon	333	29	
POPULATION CATEGORY 10,000-14,999			
Leslie	725	107	*
Jackson	526	97	*
Morgan	609	89	*
Owen	403	89	*
Garrard	615	86	*
Pendleton	511	83	*
Magoffin	576	82	*
Green	371	78	
Martin	526	75	
Edmonson	385	64	
Spencer	366	63	
Fleming	415	60	
Washington	410	59	
Webster	574	59	
Monroe	277	58	
Powell	537	57	
Lewis	438	57	
Metcalfe	312	55	
Todd	327	54	
Butler	418	50	
Larue	465	50	
Trigg	467	49	
Caldwell	450	47	
Bath	425	47	
Carroll	564	45	
POPULATION CATEGORY 15,000-24,999			
Breathitt	996	122	*
Harrison	712	104	*
Knott	852	91	*
Marion	710	88	*
Clay	1,045	86	*
Allen	647	86	*
Union	707	86	*
Johnson	1,003	81	*
Estill	503	80	*
Bourbon	852	80	*
Rowan	1,219	80	*
Montgomery	1,093	77	
McCreary	567	77	
Taylor	820	76	
Mason	816	73	
Mercer	798	73	
Grayson	1,022	68	
Adair	643	68	
Wayne	601	67	
Breckinridge	541	66	
Ohio	1,063	64	
Anderson	667	63	
Casey	417	61	
Lincoln	721	59	
Lawrence	519	51	
Woodford	757	51	
Russell	413	48	
Henry	619	47	
Grant	1,075	44	
Simpson	690	41	
Hart	681	36	
Rockcastle	696	31	
POPULATION CATEGORY 25,000-50,000			
Perry	1,838	106	*
Boyd	2,453	96	*
Letcher	1,167	91	*
Floyd	2,346	89	*
Knox	1,421	89	*
Jessamine	1,645	86	*
Boyle	1,094	82	*
Henderson	2,299	80	*
Calloway	1,129	80	*
Harlan	1,226	77	
Bell	1,146	74	
Barren	1,786	72	
Muhlenberg	1,329	72	
Meade	829	68	
Greenup	1,074	65	
Logan	954	64	
Hopkins	1,915	63	
Nelson	1,423	63	
Graves	1,300	62	
Franklin	1,715	59	
Clark	1,315	55	
Carter	1,022	50	
Scott	1,640	49	
Whitley	1,348	47	
Marshall	1,186	47	
Shelby	1,434	47	
Oldham	1,127	46	
POPULATION CATEGORY OVER 50,000			
Pike	4,251	108	*
Fayette	13,771	100	*
Daviess	3,858	97	*
McCracken	3,736	97	*
Jefferson	31,078	90	*
Warren	5,044	82	
Kenton	5,426	74	
Pulaski	2,209	70	
Christian	2,546	65	
Madison	2,839	63	
Campbell	2,593	63	
Laurel	2,288	58	
Boone	3,969	57	
Hardin	3,215	51	
Bullitt	1,939	48	

* Critical crash rate

TABLE 13. FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1999-2003)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)
POPULATION CATEGORY UNDER 10,000		
Cumberland	18	4.7
Owsley	7	3.5
Clinton	17	3.4
Trimble	13	3.3
Lee	10	3.2
Wolfe	18	3.0
Nicholas	11	2.9
Bracken	15	2.8
Fulton	10	2.7
Elliott	6	2.6
Carlisle	7	2.3
Hickman	8	2.3
Robertson	2	2.3
Crittenden	9	2.2
McLean	12	2.1
Menifee	5	1.9
Ballard	9	1.8
Livingston	12	1.7
Hancock	8	1.5
Lyon	10	0.9
Gallatin	10	0.8
POPULATION CATEGORY 10,000-14,999		
Leslie	29	4.3
Jackson	23	4.2
Lewis	31	4.0
Monroe	13	2.7
Owen	12	2.7
Metcalfe	15	2.6
Morgan	17	2.5
Larue	23	2.5
Green	12	2.5
Edmonson	15	2.5
Pendleton	14	2.3
Fleming	15	2.2
Butler	18	2.2
Spencer	13	2.2
Magoffin	15	2.1
Todd	13	2.1
Martin	15	2.1
Washington	14	2.0
Carroll	23	1.9
Powell	18	1.9
Bath	16	1.8
Garrard	13	1.8
Trigg	17	1.8
Caldwell	15	1.6
Webster	16	1.6
POPULATION CATEGORY 15,000-24,999		
Breathitt	42	5.2 *
Knott	33	3.5
Clay	40	3.3
McCreary	23	3.1
Allen	23	3.1
Wayne	28	3.1
Mason	33	2.9
Casey	20	2.9
Montgomery	40	2.8
Marion	23	2.8
Adair	23	2.4
Estill	15	2.4
Union	20	2.4
Harrison	16	2.3
Breckinridge	19	2.3
Bourbon	24	2.2
Grayson	34	2.2
Johnson	26	2.1
Ohio	31	1.9
Taylor	19	1.8
Hart	35	1.8
Woodford	27	1.8
Henry	24	1.8
Lawrence	18	1.8
Lincoln	21	1.7
Russell	15	1.7
Simpson	25	1.5
Rowan	23	1.5
Mercer	16	1.5
Grant	33	1.4
Rockcastle	26	1.2
Anderson	9	0.8
POPULATION CATEGORY 25,000-50,000		
Meade	40	3.3
Letcher	40	3.1
Perry	51	2.9
Harlan	40	2.5
Calloway	34	2.4
Muhlenberg	44	2.4
Knox	37	2.3
Boyle	31	2.3
Floyd	58	2.2
Carter	45	2.2
Graves	44	2.1
Whitley	59	2.1
Shelby	59	1.9
Bell	30	1.9
Nelson	40	1.8
Marshall	39	1.6
Clark	39	1.6
Greenup	25	1.5
Boyd	37	1.5
Logan	22	1.5
Barren	35	1.4
Hopkins	43	1.4
Jessamine	25	1.3
Franklin	39	1.3
Henderson	33	1.1
Scott	37	1.1
Oldham	26	1.1
POPULATION CATEGORY OVER 50,000		
Pulaski	85	2.7 *
Pike	100	2.5 *
McCracken	73	1.9
Christian	67	1.7
Warren	97	1.6
Laurel	62	1.6
Madison	71	1.6
Hardin	89	1.4
Daviess	50	1.3
Bullitt	43	1.1
Campbell	42	1.0
Jefferson	351	1.0
Fayette	124	0.9
Kenton	54	0.7
Boone	48	0.7

* Critical crash rate

TABLE 14. MISCELLANEOUS CRASH DATA FOR EACH COUNTY

COUNTY	NUMBER OF CRASHES BY YEAR 1999	2000	2001	2002	2003	1999-2002 AVERAGE	2003 PERCENT CHANGE*	PERCENT OF CRASHES INVOLVING ALCOHOL	PERCENT OF CRASHES INVOLVING DRUGS	PERCENT FATAL CRASHES	PERCENT INJURY OR FATAL CRASHES	PERCENT OF DRIVERS USING SAFETY BELTS	PERCENT OF CRASHES INVOLVING SPEEDING
Adair	466	556	471	501	436	499	-12.5	4.1	0.9	0.95	26.5	79.9	7.0
Allen	509	377	336	437	446	415	7.5	4.9	0.8	1.09	30.7	83.3	7.1
Anderson	515	484	462	489	550	488	12.8	4.7	0.3	0.36	26.7	90.3	6.9
Ballard	188	256	169	200	189	203	-7.0	6.9	0.5	0.90	32.9	90.3	6.1
Barren	1,297	1,275	1,283	1,378	1,394	1,308	6.6	3.0	0.4	0.53	27.0	88.9	7.0
Bath	289	324	305	259	295	294	0.3	6.7	1.0	1.09	28.9	88.0	9.0
Bell	612	697	717	772	775	700	10.8	4.3	2.9	0.84	32.1	89.7	7.0
Boone	3,507	3,691	3,333	3,475	3,845	3,502	9.8	3.3	0.3	0.27	22.2	95.3	7.3
Bourbon	684	625	564	566	673	610	10.4	4.9	0.9	0.77	27.4	87.7	8.3
Boyd	2,073	1,915	1,822	1,940	2,014	1,938	3.9	3.3	0.9	0.38	25.1	93.2	5.2
Boyle	941	949	847	807	938	886	5.9	3.3	0.4	0.69	24.4	92.7	5.1
Bracken	279	271	264	227	200	260	-23.2	5.2	0.4	1.21	29.5	87.5	7.2
Breathitt	450	442	457	406	381	439	-13.2	6.4	2.4	1.97	46.6	89.3	7.4
Breckinridge	281	300	323	215	323	280	15.5	5.7	0.3	1.32	37.5	91.1	3.7
Bullitt	1,325	1,324	1,279	1,473	1,444	1,350	6.9	4.4	0.2	0.63	28.3	92.7	4.7
Butler	220	231	271	275	230	249	-7.7	4.5	0.6	1.47	34.1	88.0	8.6
Caldwell	323	355	304	315	307	324	-5.3	4.6	1.1	0.94	28.1	91.5	7.6
Calloway	970	1,024	1,005	1,082	1,028	1,020	0.8	4.4	0.6	0.67	22.1	91.3	5.8
Campbell	3,027	2,746	2,614	2,752	3,012	2,785	8.2	4.4	0.5	0.30	18.3	93.9	6.3
Carlisle	35	69	68	106	112	70	61.2	4.4	1.0	1.79	33.6	92.6	10.0
Carroll	474	441	437	441	406	448	-9.4	5.8	0.4	1.05	25.6	90.1	6.7
Carter	721	659	666	618	685	666	2.9	5.3	1.5	1.34	30.5	88.1	12.8
Casey	257	264	275	267	171	266	-35.7	7.9	1.5	1.62	33.8	83.4	11.3
Christian	1,973	1,913	1,862	1,983	1,788	1,933	-7.5	4.9	0.5	0.70	26.7	92.3	9.3
Clark	1,260	1,195	1,110	1,167	1,151	1,183	-2.7	3.9	0.4	0.66	22.4	94.5	6.3
Clay	455	503	514	501	463	493	-6.1	5.2	3.9	1.64	42.9	86.3	10.0
Clinton	175	162	164	155	151	164	-7.9	4.2	1.0	2.11	28.4	85.6	5.0
Crittenden	222	220	250	216	206	227	-9.3	4.8	1.9	0.81	36.2	91.9	5.3
Cumberland	84	100	73	81	65	85	-23.1	5.2	1.5	4.47	36.2	85.8	6.5
Daviess	3,229	3,576	3,482	3,473	3,215	3,440	-6.5	4.3	0.5	0.29	22.7	93.2	4.9
Edmonson	247	230	267	235	233	245	-4.8	5.5	0.6	1.24	31.8	88.1	12.4
Elliott	60	159	144	118	114	120	-5.2	9.7	1.5	1.01	37.0	88.6	8.7
Estill	399	306	288	292	286	321	-11.0	5.8	1.3	0.95	32.0	89.2	12.8
Fayette	12,324	13,040	13,007	13,294	13,268	12,916	2.7	4.3	0.4	0.19	21.2	96.2	5.7
Fleming	293	246	254	270	267	266	0.5	5.6	0.8	1.13	31.2	85.6	7.1
Floyd	1,048	1,004	1,073	1,023	1,007	1,037	-2.9	6.6	3.2	1.13	45.5	90.0	9.2
Franklin	1,567	1,731	1,815	1,773	1,740	1,722	1.1	3.9	0.4	0.45	19.9	92.7	9.9
Fulton	158	237	182	198	199	194	2.7	6.1	0.8	1.03	28.2	90.6	5.6
Gallatin	226	202	203	215	203	212	-4.0	7.5	0.7	0.95	34.8	88.3	11.5
Garrard	420	398	374	415	416	402	3.5	4.8	0.6	0.64	30.4	90.1	13.3
Grant	902	915	865	825	781	877	-10.9	3.5	0.4	0.77	25.1	93.5	9.2
Graves	988	895	902	956	921	935	-1.5	4.9	0.7	0.94	27.9	91.9	6.9
Grayson	290	747	762	692	714	623	14.7	4.8	0.6	1.06	31.9	90.5	8.3
Green	245	231	265	253	210	249	-15.5	3.8	0.2	1.00	30.8	83.2	3.5
Greenup	738	791	834	680	678	761	-10.9	4.8	1.6	0.67	28.9	92.5	10.9
Hancock	179	137	140	147	131	151	-13.1	5.2	0.3	1.09	28.1	90.3	5.6
Hardin	2,611	2,773	2,744	2,852	2,918	2,745	6.3	3.4	0.5	0.64	23.1	94.9	6.9
Harlan	709	735	692	751	655	722	-9.2	4.7	2.1	1.13	34.6	90.6	9.9
Harrison	520	584	556	535	535	549	-2.5	4.7	0.5	0.59	26.1	88.9	6.1
Hart	524	417	413	416	479	443	8.2	4.3	0.6	1.56	30.3	91.8	9.7
Henderson	1,865	2,028	1,834	1,973	1,870	1,925	-2.9	3.7	0.7	0.34	24.0	95.5	6.3
Henry	373	439	434	432	394	420	-6.1	6.3	0.4	1.16	29.9	87.5	12.7
Hickman	119	100	84	79	105	96	9.9	6.4	1.2	1.64	37.4	84.3	9.4
Hopkins	1,611	1,565	1,520	1,699	1,607	1,599	0.5	2.8	0.6	0.54	23.9	94.7	8.3
Jackson	327	261	300	230	271	280	-3.0	5.1	1.3	1.66	37.9	84.1	14.2
Jefferson	28,013	29,214	26,674	24,606	24,199	27,127	-10.8	3.8	0.2	0.26	23.4	94.6	4.0
Jessamine	1,188	1,344	1,372	1,402	1,470	1,327	10.8	4.9	0.6	0.37	24.3	92.5	8.6
Johnson	552	600	590	588	537	583	-7.8	4.1	4.7	0.91	35.0	90.7	5.4
Kenton	6,011	5,666	5,387	5,491	5,706	5,639	1.2	4.5	0.5	0.19	19.2	94.6	7.6
Knott	373	347	402	413	410	384	6.8	5.2	1.6	1.70	43.8	87.5	7.5
Knox	787	849	841	838	760	829	-8.3	4.9	2.9	0.91	34.9	90.0	11.8

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

COUNTY	NUMBER OF CRASHES BY YEAR 1999	2000	2001	2002	2003	1999-2002 AVERAGE	2003 PERCENT CHANGE*	PERCENT OF CRASHES INVOLVING ALCOHOL	PERCENT OF CRASHES INVOLVING DRUGS	PERCENT FATAL CRASHES	PERCENT INJURY OR FATAL CRASHES	PERCENT OF DRIVERS USING SAFETY BELTS	PERCENT OF CRASHES INVOLVING SPEEDING
Larue	335	355	327	301	340	330	3.2	4.3	0.4	1.39	28.0	90.4	7.1
Laurel	1,648	1,703	1,793	1,641	1,687	1,696	-0.5	3.2	1.5	0.73	27.0	93.3	6.4
Lawrence	329	293	297	285	212	301	-29.6	4.7	2.9	1.27	36.7	89.5	6.6
Lee	138	104	75	84	88	100	-12.2	7.6	1.6	2.04	36.4	86.9	10.8
Leslie	308	248	276	264	244	274	-10.9	7.3	3.8	2.16	54.1	82.8	11.0
Letcher	649	557	520	565	451	573	-21.3	5.9	2.0	1.46	42.6	87.3	8.9
Lewis	335	269	247	271	275	281	-2.0	7.5	1.0	2.22	31.4	87.2	10.5
Lincoln	389	506	374	313	474	396	19.8	6.0	0.9	1.02	35.1	87.4	12.6
Livingston	222	240	215	244	256	230	11.2	5.3	1.2	1.02	30.2	92.3	7.4
Logan	714	646	668	683	631	678	-6.9	4.5	0.8	0.66	28.5	87.2	5.1
Lyon	245	239	201	243	250	232	7.8	4.4	0.9	0.85	28.3	91.2	12.1
McCracken	2,904	2,562	2,565	2,670	2,643	2,675	-1.2	4.4	0.5	0.55	28.0	94.5	4.9
McCreary	319	330	345	343	293	334	-12.3	6.3	1.5	1.41	34.8	87.8	12.9
McLean	226	228	233	212	199	225	-11.5	5.1	0.4	1.09	31.9	86.7	8.7
Madison	2,541	2,615	2,628	2,655	2,757	2,610	5.6	5.0	0.5	0.54	21.5	91.7	11.1
Magoffin	225	245	241	259	245	243	1.0	7.1	4.1	1.23	47.4	87.3	9.0
Marion	499	524	498	496	468	504	-7.2	10.0	0.3	0.93	28.6	84.7	8.2
Marshall	710	795	890	903	937	825	13.6	4.0	0.9	0.92	28.0	91.3	10.4
Martin	253	285	265	220	157	256	-38.6	5.8	5.5	1.27	44.6	87.5	9.7
Mason	824	730	630	684	727	717	1.4	5.0	0.7	0.92	22.7	87.7	5.9
Meade	544	520	480	501	575	511	12.5	6.1	0.6	1.53	31.6	89.5	5.7
Menifee	134	91	109	76	113	103	10.2	9.6	0.4	0.96	36.5	86.1	10.5
Mercer	531	599	581	622	568	583	-2.6	4.9	0.5	0.55	27.5	88.6	8.0
Metcalfe	163	248	247	228	238	222	7.4	4.3	0.4	1.33	27.8	82.3	4.8
Monroe	250	195	175	155	126	194	-35.0	4.9	0.6	1.44	30.7	84.9	5.0
Montgomery	720	826	809	780	766	784	-2.3	5.7	0.5	1.03	28.0	89.9	6.4
Morgan	305	309	344	311	301	317	-5.1	4.6	0.4	1.08	38.8	87.7	15.8
Muhlenberg	901	956	893	885	783	909	-13.8	4.2	0.8	1.00	30.1	89.9	7.7
Nelson	1,220	1,206	1,201	1,255	1,236	1,221	1.3	4.8	0.5	0.65	23.3	92.6	8.5
Nicholas	185	168	170	168	168	173	-2.7	8.7	1.4	1.28	30.8	81.0	7.6
Ohio	474	608	626	664	702	593	18.4	4.5	0.9	1.01	34.6	91.9	9.4
Oldham	986	867	807	979	997	910	9.6	3.5	0.4	0.56	24.3	95.8	10.5
Owen	223	269	210	235	208	234	-11.2	7.4	0.1	1.05	35.2	85.7	16.2
Owsley	129	87	50	25	98	73	34.7	9.0	1.8	1.80	30.8	87.9	9.5
Pendleton	378	381	392	404	402	389	3.4	6.1	0.8	0.72	26.1	91.9	6.7
Perry	993	1,048	1,005	958	878	1,001	-12.3	4.4	1.7	1.04	37.6	90.1	6.4
Pike	2,007	2,056	2,085	2,089	2,026	2,059	-1.6	5.0	3.6	0.97	41.4	90.5	11.8
Powell	370	323	316	336	299	336	-11.1	4.9	1.0	1.09	32.7	88.4	7.0
Pulaski	1,737	1,677	1,869	1,838	1,948	1,780	9.4	3.5	0.8	0.94	24.4	91.9	7.3
Robertson	15	46	34	19	18	29	-36.8	10.6	0.0	1.52	37.9	78.4	8.3
Rockcastle	505	443	437	485	518	468	10.8	3.3	1.3	1.09	29.1	89.6	10.4
Rowan	912	905	912	922	902	913	-1.2	4.1	0.4	0.51	26.8	91.4	7.3
Russell	339	366	221	206	208	283	-26.5	6.0	1.3	1.12	30.8	84.7	10.0
Scott	1,283	1,345	1,233	1,310	1,343	1,293	3.9	3.8	0.4	0.57	25.2	92.5	8.7
Shelby	1,060	1,229	1,194	1,278	1,188	1,190	-0.2	5.6	0.5	0.99	24.1	92.5	6.4
Simpson	564	520	560	514	522	540	-3.2	4.3	0.6	0.93	25.7	89.2	6.3
Spencer	197	235	186	248	240	217	10.9	7.9	1.0	1.18	33.1	88.4	9.4
Taylor	748	688	719	816	782	743	5.3	4.4	0.7	0.51	21.8	84.8	5.8
Todd	235	225	214	221	222	224	-0.8	4.1	0.4	1.16	29.3	86.8	11.0
Trigg	322	264	324	259	266	292	-9.0	4.4	0.6	1.18	32.5	89.8	5.9
Trimble	206	208	197	183	185	199	-6.8	5.4	0.3	1.33	29.8	90.4	12.2
Union	457	469	406	413	398	436	-8.8	5.5	0.5	0.93	33.0	89.6	11.2
Warren	3,893	4,003	4,200	4,440	4,239	4,134	2.5	3.9	0.6	0.47	24.3	93.3	7.6
Washington	269	268	276	320	273	283	-3.6	6.4	0.2	1.00	29.2	84.4	11.2
Wayne	491	492	343	315	357	410	-13.0	3.8	0.8	1.40	30.1	84.7	8.5
Webster	346	400	340	366	350	363	-3.6	4.8	0.7	0.89	31.9	93.0	9.0
Whitley	959	1,013	944	882	989	950	4.2	4.1	1.4	1.23	28.2	93.1	9.5
Wolfe	205	205	156	208	213	194	10.1	6.9	1.3	1.82	36.6	87.1	8.9
Woodford	639	712	692	829	872	718	21.4	6.1	0.4	0.72	20.2	92.7	8.1
STATEWIDE	132,216	135,079	130,190	130,347	129,828	131,958	-1.6	4.4	0.7	0.59	25.8	92.8	6.9

* Percent change in the 2003 crash total from the previous four-year total

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500
(FOR STATE-MAINTAINED SYSTEM AND ALL ROADS FOR 1999-2003)

		STATE-MAINTAINED SYSTEM		ALL ROADS	
CITY	POPULATION	TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
Lexington	260,512	10,664	565	64,684	50
Louisville	256,231	28,502	238	81,903	64
Owensboro	54,067	2,098	289	12,771	47
Bowling Green	49,296	8,100	514	15,880	64
Covington	43,370	3,655	265	10,757	50
Hopkinsville	30,089	3,880	361	6,041	40
Frankfort	27,741	3,692	397	6,078	44
Henderson	27,373	3,061	389	7,008	51
Richmond	27,152	1,421	672	6,862	51
Jeffersontown	26,633	1,831	469	4,795	36
Paducah	26,307	2,915	389	8,813	67
Florence	23,551	5,635	246	9,184	78
Elizabethtown	22,542	4,615	309	6,465	57
Ashland	21,981	2,517	499	5,892	54
Radcliff	21,961	1,673	372	2,890	26
Nicholasville	19,680	2,136	512	3,913	40
Madisonville	19,307	2,550	557	4,462	46
Georgetown	18,080	1,142	457	3,395	38
Newport	17,048	2,014	1,058	4,685	55
Winchester	16,724	1,027	299	3,954	47
Erlanger	16,676	1,713	937	4,012	48
Fort Thomas	16,495	392	398	1,250	15
Saint Matthews	15,852	277	1,593	791	10
Danville	15,477	1,035	694	3,488	45
Shively	15,157	683	675	4,376	58
Independence	14,982	2,176	392	2,105	28
Murray	14,950	1,728	563	3,328	45
Glasgow	13,019	947	261	3,328	51
Somerset	11,352	2,073	490	4,402	78
Campbellsville	10,498	1,109	537	2,532	48
Middlesboro	10,384	1,003	321	1,885	36
Bardstown	10,374	1,589	512	3,046	59
Mayfield	10,349	383	359	2,107	41
Shelbyville	10,085	1,090	581	2,679	53
Berea	9,851	908	494	2,022	41
Edgewood	9,400	208	672	881	19
Lyndon	9,369	***	***	88	2
Paris	9,183	1,046	457	1,813	40
Lawrenceburg	9,014	485	622	1,024	23
Maysville	8,993	1,094	273	2,402	53
Mount Washington	8,485	397	312	958	23
Shepherdsville	8,334	841	818	2,326	56
Alexandria	8,286	684	308	1,334	32
Elsmere	8,139	399	434	729	18
Fort Mitchell	8,089	521	587	1,349	33
Harrodsburg	8,014	618	561	1,631	41
Franklin	7,996	601	448	1,304	33
Villa Hills	7,948	85	350	418	11
Corbin	7,742	954	447	1,827	47
Flatwoods	7,605	120	105	678	18
Versailles	7,511	563	338	1,765	47
Russellville	7,149	480	186	1,649	46
Oak Grove	7,064	***	***	1,333	38
Taylor Mill	6,913	257	381	1,326	38
Highland Heights	6,554	543	131	1,019	31
Princeton	6,536	350	186	921	28
Bellevue	6,480	178	327	1,119	35
Pikeville	6,295	1,012	232	2,341	74
Cynthiana	6,258	577	697	1,377	44
Leitchfield	6,139	735	706	1,479	48
Monticello	5,981	569	253	1,252	42
Dayton	5,966	9	123	369	12
Morehead	5,914	1,036	463	2,299	78
Wilmore	5,905	139	474	264	9

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500
(FOR STATE-MAINTAINED SYSTEM AND ALL ROADS FOR 1999-2003)(continued)

CITY	POPULATION	STATE-MAINTAINED SYSTEM TOTAL CRASHES	STATE-MAINTAINED SYSTEM CRASH RATE*	ALL ROADS TOTAL CRASHES	ALL ROADS CRASH RATE**
Central City	5,893	483	254	917	31
Mount Sterling	5,876	639	711	1,835	63
Middletown	5,744	***	***	88	3
Lebanon	5,718	815	546	1,299	45
London	5,692	1,912	295	3,368	118
Fort Wright	5,681	844	427	2,235	79
La Grange	5,676	199	276	1,037	37
Williamsburg	5,143	464	171	976	38
Westwood	4,888	***	***	***	***
Hazard	4,806	638	191	2,263	94
Ludlow	4,409	129	402	272	12
Greenville	4,398	428	549	906	41
Scottsville	4,327	463	436	879	41
Benton	4,197	482	658	993	47
Vine Grove	4,169	243	290	348	17
Paintsville	4,132	826	696	1,307	63
Columbia	4,014	113	118	1,144	57
Crescent Springs	3,931	***	***	842	43
Grayson	3,877	133	167	1,016	52
Carrollton	3,846	308	602	958	50
Cold Spring	3,806	734	375	1,133	60
Lancaster	3,734	224	649	720	39
Russell	3,645	363	232	773	42
Prestonsburg	3,612	563	314	1,331	74
Providence	3,611	153	242	237	13
Barbourville	3,589	434	168	816	46
Morganfield	3,494	304	560	681	39
Southgate	3,472	206	372	478	28
Stanford	3,430	107	102	526	31
West Liberty	3,277	233	371	467	29
Williamstown	3,227	***	***	713	44
Marion	3,196	172	694	480	30
Beaver Dam	3,033	63	140	624	41
Stanton	3,029	156	134	542	36
Flemingsburg	3,010	41	100	450	30
Dawson Springs	2,980	174	373	282	19
Park Hills	2,977	217	606	202	14
Union	2,893	***	***	555	38
Crestview Hills	2,889	***	***	1,200	83
Indian Hills	2,882	***	***	144	10
Hodgenville	2,874	259	570	631	44
Lakeside Park	2,869	272	471	361	25
Irvine	2,843	203	348	523	37
Fulton	2,775	103	101	485	35
Calvert City	2,701	118	117	355	26
Tompkinsville	2,660	60	71	570	43
Springfield	2,634	324	646	587	45
Wilder	2,624	***	***	742	57
Cumberland	2,611	54	131	230	18
Mount Vernon	2,592	205	389	769	59
Hartford	2,571	93	344	321	25
Hickman	2,560	51	200	151	12
Morgantown	2,544	120	617	547	43

* 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 (1999-2003) (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*		
Lexington	260,512	123	0.94	556	4.30	316	2.40	409	3.1	5.6	4.3
Louisville	256,231	174	1.36	1,228	9.60	650	5.10	691	5.4	3.7	3.5
Owensboro	54,067	14	0.52	80	3.00	116	4.30	90	3.3	3.1	3.7
Bowling Green	49,296	24	0.97	89	3.60	70	2.80	114	4.6	5.6	3.3
Covington	43,370	14	0.65	218	10.10	105	4.80	60	2.8	4.8	4.4
Hopkinsville	30,089	26	1.73	66	4.40	35	2.30	47	3.1	8.3	3.8
Frankfort	27,741	17	1.23	41	3.00	18	1.30	35	2.5	6.9	3.0
Henderson	27,373	10	0.73	70	5.10	48	3.50	58	4.2	4.3	2.9
Richmond	27,152	13	0.96	53	3.90	23	1.70	47	3.5	6.4	4.3
Jeffersontown	26,633	8	0.60	30	2.30	20	1.50	20	1.5	4.5	2.5
Paducah	26,307	26	1.98	49	3.70	54	4.10	92	7.0	4.1	3.2
Florence	23,551	10	0.85	45	3.80	29	2.50	50	4.2	4.4	2.3
Elizabethtown	22,542	21	1.86	27	2.40	14	1.20	56	5.0	5.1	1.9
Ashland	21,981	13	1.18	47	4.30	21	1.90	51	4.6	3.8	2.6
Radcliff	21,961	8	0.73	17	1.50	11	1.00	35	3.2	3.1	3.1
Nicholasville	19,680	7	0.71	42	4.30	24	2.40	28	2.8	4.8	4.2
Madisonville	19,307	6	0.62	22	2.30	27	2.80	52	5.4	4.2	1.7
Georgetown	18,080	13	1.44	22	2.40	17	1.90	33	3.7	4.5	3.2
Newport	17,048	4	0.47	104	12.20	81	9.50	43	5.0	3.5	4.5
Winchester	16,724	5	0.60	29	3.50	16	1.90	23	2.8	2.9	3.0
Erlanger	16,676	10	1.20	22	2.60	18	2.20	34	4.1	11.5	4.1
Fort Thomas	16,495	7	0.85	18	2.20	8	1.00	8	1.0	8.3	4.3
Saint Matthews	15,852	1	0.13	7	0.90	5	0.60	1	0.1	1.4	2.3
Danville	15,477	12	1.55	25	3.20	11	1.40	23	3.0	3.3	2.3
Shively	15,157	4	0.53	74	9.80	22	2.90	38	5.0	2.9	3.7
Independence	14,982	5	0.67	15	2.00	6	0.80	18	2.4	7.3	5.2
Murray	14,950	6	0.80	14	1.90	12	1.60	27	3.6	2.9	2.2
Glasgow	13,019	3	0.46	16	2.50	8	1.20	25	3.8	4.1	1.6
Somerset	11,352	17	3.00	29	5.10	10	1.80	28	4.9	5.1	1.8
Campbellsville	10,498	6	1.14	13	2.50	14	2.70	19	3.6	4.3	3.0
Middlesboro	10,384	4	0.77	17	3.30	11	2.10	8	1.5	3.2	4.5
Bardstown	10,374	9	1.74	27	5.20	22	4.20	23	4.4	3.5	2.7
Mayfield	10,349	6	1.16	14	2.70	9	1.70	16	3.1	2.4	2.2
Shelbyville	10,085	15	2.97	19	3.80	12	2.40	12	2.4	3.1	5.4
Berea	9,851	6	1.22	10	2.00	9	1.80	11	2.2	6.5	2.4
Edgewood	9,400	0	0.00	6	1.30	3	0.60	6	1.3	8.6	2.3
Lyndon	9,369	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Paris	9,183	4	0.87	16	3.50	6	1.30	17	3.7	3.3	2.9
Lawrenceburg	9,014	1	0.22	8	1.80	4	0.90	6	1.3	2.8	3.5
Maysville	8,993	15	3.34	14	3.10	11	2.40	11	2.4	5.0	4.2
Mount Washington	8,485	6	1.41	12	2.80	2	0.50	9	2.1	2.6	3.0
Shepherdsville	8,334	9	2.16	12	2.90	5	1.20	21	5.0	2.2	3.4
Alexandria	8,286	6	1.45	4	1.00	6	1.40	9	2.2	8.1	2.2
Elsmere	8,139	0	0.00	16	3.90	10	2.50	6	1.5	5.8	5.9
Fort Mitchell	8,089	3	0.74	8	2.00	2	0.50	9	2.2	8.0	5.5
Harrodsburg	8,014	4	1.00	20	5.00	2	0.50	15	3.7	4.5	3.1
Franklin	7,996	6	1.50	12	3.00	11	2.80	6	1.5	2.5	3.7
Villa Hills	7,948	2	0.50	4	1.00	2	0.50	5	1.3	17.7	5.7
Corbin	7,742	7	1.81	13	3.40	11	2.80	11	2.8	5.1	1.4
Flatwoods	7,605	2	0.53	3	0.80	8	2.10	5	1.3	7.7	2.9
Versailles	7,511	1	0.27	19	5.10	6	1.60	10	2.7	4.7	4.0
Russellville	7,149	2	0.56	17	4.80	16	4.50	13	3.6	4.2	2.9
Oak Grove	7,064	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Taylor Mill	6,913	3	0.87	4	1.20	2	0.60	5	1.4	9.7	3.8
Highland Heights	6,554	2	0.61	1	0.30	6	1.80	7	2.1	8.7	3.0
Princeton	6,536	3	0.92	4	1.20	5	1.50	7	2.1	5.5	3.9
Bellevue	6,480	1	0.31	14	4.30	17	5.20	2	0.6	3.1	3.8
Pikeville	6,295	14	4.45	14	4.40	1	0.30	34	10.8	6.5	3.7
Cynthiana	6,258	2	0.64	20	6.40	9	2.90	13	4.2	2.5	3.3
Leitchfield	6,139	4	1.30	13	4.20	4	1.30	8	2.6	2.9	2.4
Monticello	5,981	10	3.34	8	2.70	4	1.30	2	0.7	7.3	3.0
Dayton	5,966	0	0.00	11	3.70	6	2.00	5	1.7	3.3	6.5

TABLE 16. MISCELLANEOUS CRASH DATA FOR CITIES HAVING POPULATION OVER 2,500 (1999-2003) (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*		
Morehead	5,914	4	1.35	12	4.10	10	3.40	19	6.4	2.7	2.3
Wilmore	5,905	0	0.00	4	1.40	0	0.00	0	0.0	8.7	1.9
Central City	5,893	8	2.72	3	1.00	5	1.70	18	6.1	5.2	2.7
Mount Sterling	5,876	9	3.06	13	4.40	1	0.30	16	5.4	3.1	3.8
Middletown	5,744	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Lebanon	5,718	2	0.70	17	5.90	7	2.40	10	3.5	3.2	4.6
London	5,692	9	3.16	11	3.90	6	2.10	14	4.9	4.0	2.1
Fort Wright	5,681	0	0.00	4	1.40	2	0.70	9	3.2	6.5	3.2
La Grange	5,676	7	2.47	5	1.80	0	0.00	6	2.1	3.7	1.9
Williamsburg	5,143	4	1.56	10	3.90	2	0.80	9	3.5	4.2	3.0
Hazard	4,806	8	3.33	11	4.60	0	0.00	13	5.4	2.4	2.3
Ludlow	4,409	0	0.00	7	3.20	7	3.20	2	0.9	5.5	5.9
Greenville	4,398	4	1.82	4	1.80	4	1.80	7	3.2	4.6	3.4
Scottsville	4,327	2	0.92	1	0.50	3	1.40	9	4.2	4.2	3.3
Benton	4,197	3	1.43	5	2.40	2	1.00	9	4.3	5.8	1.4
Vine Grove	4,169	2	0.96	0	0.00	2	1.00	3	1.4	6.9	7.5
Paintsville	4,132	11	5.32	9	4.40	2	1.00	10	4.8	2.5	1.3
Columbia	4,014	2	1.00	8	4.00	3	1.50	12	6.0	4.3	2.4
Crescent Springs	3,931	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Grayson	3,877	1	0.52	9	4.60	2	1.00	8	4.1	5.2	2.6
Carrollton	3,846	4	2.08	8	4.20	6	3.10	9	4.7	3.3	4.0
Cold Spring	3,806	2	1.05	5	2.60	4	2.10	9	4.7	6.5	3.3
Lancaster	3,734	1	0.54	11	5.90	5	2.70	6	3.2	6.1	2.8
Russell	3,645	2	1.10	2	1.10	3	1.60	8	4.4	4.7	3.9
Prestonsburg	3,612	6	3.32	9	5.00	1	0.60	11	6.1	3.7	4.4
Providence	3,611	2	1.11	1	0.60	4	2.20	7	3.9	5.5	3.8
Barbourville	3,589	4	2.23	11	6.10	1	0.60	5	2.8	4.5	3.1
Morganfield	3,494	4	2.29	10	5.70	5	2.90	8	4.6	5.4	2.8
Southgate	3,472	1	0.58	4	2.30	1	0.60	2	1.2	4.4	3.3
Stanford	3,430	5	2.92	4	2.30	3	1.70	4	2.3	7.0	2.9
West Liberty	3,277	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Williamstown	3,227	2	1.24	12	7.40	2	1.20	7	4.3	10.0	3.5
Marion	3,196	1	0.63	7	4.40	1	0.60	6	3.8	2.9	1.5
Beaver Dam	3,033	4	2.64	0	0.00	2	1.30	5	3.3	4.3	2.6
Stanton	3,029	1	0.66	2	1.30	1	0.70	5	3.3	3.1	2.8
Flemingsburg	3,010	1	0.66	2	1.30	0	0.00	4	2.7	5.1	2.4
Dawson Springs	2,980	0	0.00	4	2.70	1	0.70	4	2.7	3.2	2.1
Park Hills	2,977	0	0.00	0	0.00	1	0.70	0	0.0	13.9	6.9
Union	2,893	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Crestview Hills	2,889	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Indian Hills	2,882	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Hodgenville	2,874	5	3.48	5	3.50	3	2.10	4	2.8	6.2	2.4
Lakeside Park	2,869	1	0.70	5	3.50	1	0.70	3	2.1	5.3	4.4
Irvine	2,843	0	0.00	6	4.20	2	1.40	4	2.8	4.4	4.0
Fulton	2,775	4	2.88	3	2.20	4	2.90	12	8.6	4.1	3.5
Calvert City	2,701	4	2.96	0	0.00	2	1.50	7	5.2	8.2	5.1
Tompkinsville	2,660	2	1.50	3	2.30	3	2.30	2	1.5	2.3	2.6
Springfield	2,634	2	1.52	6	4.60	0	0.00	4	3.0	4.9	3.1
Wilder	2,624	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Cumberland	2,611	0	0.00	2	1.50	1	0.80	4	3.1	4.3	3.9
Mount Vernon	2,592	8	6.17	2	1.50	2	1.50	8	6.2	5.6	2.5
Hartford	2,571	2	1.56	2	1.60	1	0.80	2	1.6	4.7	3.1
Hickman	2,560	0	0.00	1	0.80	2	1.60	2	1.6	3.3	7.3
Morgantown	2,544	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
STATEWIDE	1,619,469	898	1.11	3,688	4.6	2,151	2.66	2,893	3.6	4.6	3.4

* Crashes per 10,000 population

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1999-2003)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (1999-2003)	AVERAGE RATE (C/100 MVM)*
OVER 200,000	2	283	Lexington	10,664	565
			Louisville	28,502	238
20,000-55,000	13	359	Richmond	1,421	672
			Bowling Green	8,100	514
			Ashland	2,517	499
			Jeffersontown	1,831	469
			Frankfort	3,692	397
			Paducah	2,915	389
			Henderson	3,061	389
			Radcliff	1,673	372
			Hopkinsville	3,880	361
			Elizabethtown	4,615	309
			Owensboro	2,098	289
			Covington	3,655	265
			Florence	5,635	246
10,000-19,999	19	503	Saint Matthews	277	1,593
			Newport	2,014	1,058
			Erlanger	1,713	937
			Danville	1,035	694
			Shively	683	675
			Shelbyville	1,090	581
			Murray	1,728	563
			Madisonville	2,550	557
			Campbellsville	1,109	537
			Nicholasville	2,136	512
			Bardstown	1,589	512
			Somerset	2,073	490
			Georgetown	1,142	457
			Fort Thomas	392	398
			Independence	2,176	392
			Mayfield	383	359
			Middlesboro	1,003	321
			Winchester	1,027	299
			Glasgow	947	261
5,000-9,999	35	344	Shepherdsville	841	818
			Mount Sterling	639	711
			Leitchfield	735	706
			Cynthiana	577	697
			Edgewood	208	672
			Lawrenceburg	485	622
			Fort Mitchell	521	587
			Harrodsburg	618	561
			Lebanon	815	546
			Berea	908	494
			Wilmore	139	474
			Morehead	1,036	463
			Paris	1,046	457
			Franklin	601	448
			Corbin	954	447
			Elsmere	399	434
			Fort Wright	844	427
			Taylor Mill	257	381
			Villa Hills	85	350
			Versailles	563	338
			Bellevue	178	327
			Mount Washington	397	312
			Alexandria	684	308
			London	1,912	295
			La Grange	199	276
			Maysville	1,094	273

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1999-2003)(continued)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (1999-2003)	AVERAGE RATE (C/100 MVM)*
5,000-9,999 (cont.)	35	344	Central City	483	254
			Monticello	569	253
			Pikeville	1,012	232
			Russellville	480	186
			Princeton	350	186
			Williamsburg	464	171
			Highland Heights	543	131
			Dayton	9	123
			Flatwoods	120	105
2,500-4,999	38	306	Paintsville	826	696
			Marion	172	694
			Benton	482	658
			Lancaster	224	649
			Springfield	324	646
			Morgantown	120	617
			Park Hills	217	606
			Carrollton	308	602
			Hodgenville	259	570
			Morganfield	304	560
			Greenville	428	549
			Lakeside Park	272	471
			Scottsville	463	436
			Ludlow	129	402
			Mount Vernon	205	389
			Cold Spring	734	375
			Dawson Springs	174	373
			Southgate	206	372
			West Liberty	233	371
			Irvine	203	348
			Hartford	93	344
			Prestonsburg	563	314
			Vine Grove	243	290
			Providence	153	242
			Russell	363	232
			Hickman	51	200
			Hazard	638	191
			Barbourville	434	168
			Grayson	133	167
			Beaver Dam	63	140
			Stanton	156	134
			Cumberland	54	131
			Columbia	113	118
			Calvert City	118	117
			Stanford	107	102
			Fulton	103	101
			Flemingsburg	41	100
			Tompkinsville	60	71
1,000-2,499	58	264	Dry Ridge	274	770
			Jackson	445	681
			Uniontown	22	678
			Albany	230	503
			Walton	320	494
			Horse Cave	235	491
			Falmouth	41	491
			Vanceburg	58	476
			Munfordville	127	417
			Lacenter	36	411
			Eminence	131	405
			Liberty	195	391
			Livermore	74	380

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1999-2003)(continued)

POPULATION CATEGORY	NUMBER OF CITIES	AVERAGE RATE (C/100 MVM)*	CITY	NUMBER OF CRASHES (1999-2003)	AVERAGE RATE (C/100 MVM)*
1,000-2,499 (cont.)	58	264	Edmonton	254	356
			Owingsville	152	356
			Louisa	177	343
			Manchester	282	329
			Jenkins	71	327
			Sebree	94	325
			Nortonville	59	313
			Salyersville	162	310
			Clay City	65	298
			Harlan	423	291
			Elkhorn City	35	283
			Augusta	808	263
			Sturgis	66	260
			Catlettsburg	274	259
			Burkesville	78	258
			Muldraugh	145	254
			Warsaw	9	250
			Beattyville	53	228
			Earlington	92	226
			Junction City	24	225
			Lewisport	11	221
			Anchorage	45	218
			Clay	19	208
			Cadiz	198	186
			Brandenburg	178	173
			Elkton	45	173
			Hardinsburg	54	170
			Owenton	43	165
			Whitesburg	261	163
			Raceland	58	157
			Evarts	13	156
			Cave City	100	150
			Lebanon Junction	16	135
			Eddyville	150	135
			Pineville	69	129
			Worthington	11	129
			Jamestown	122	127
			Russell Springs	96	119
			South Shore	37	119
			Olive Hill	32	118
			Carlisle	17	110
			Auburn	5	86
			Greensburg	39	80
			Clinton	12	69
			Cloverport	12	69

* Crashes per 100 million vehicle-miles

TABLE 18. TOTAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER) (1999-2003)(ALL ROADS)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 1000 POPULATION)	
POPULATION CATEGORY OVER 200,000			
Louisville	81,903	63.9	*
Lexington	64,684	49.7	
POPULATION CATEGORY 20,000-55,000			
Florence	9,184	78.0	*
Paducah	8,813	67.0	*
Bowling Green	15,880	64.4	*
Elizabethtown	6,465	57.4	
Ashland	5,892	53.6	
Henderson	7,008	51.2	
Richmond	6,862	50.5	
Covington	10,757	49.6	
Owensboro	12,771	47.2	
Frankfort	6,078	43.8	
Hopkinsville	6,041	40.2	
Jeffersontown	4,795	36.0	
Radcliff	2,890	26.3	
POPULATION CATEGORY 10,000-19,999			
Somerset	4,402	77.6	*
Bardstown	3,046	58.7	*
Shively	4,376	57.7	*
Newport	4,685	55.0	*
Shelbyville	2,679	53.1	
Glasgow	3,328	51.1	
Campbellsville	2,532	48.2	
Erlanger	4,012	48.1	
Winchester	3,954	47.3	
Madisonville	4,462	46.2	
Danville	3,488	45.1	
Murray	3,328	44.5	
Mayfield	2,107	40.7	
Nicholasville	3,913	39.8	
Georgetown	3,395	37.6	
Middlesboro	1,885	36.3	
Independence	2,105	28.1	
Fort Thomas	1,250	15.2	
Saint Matthews	791	10.0	
POPULATION CATEGORY 5,000-9,999			
London	3,368	118.3	*
Fort Wright	2,235	78.7	*
Morehead	2,299	77.7	*
Pikeville	2,341	74.4	*
Mount Sterling	1,835	62.5	*
Shepherdsville	2,326	55.8	*
Maysville	2,402	53.4	*
Leitchfield	1,479	48.2	
Corbin	1,827	47.2	
Versailles	1,765	47.0	
Russellville	1,649	46.1	
Lebanon	1,299	45.4	
Cynthiana	1,377	44.0	
Monticello	1,252	41.9	
Berea	2,022	41.1	
Harrodsburg	1,631	40.7	
Paris	1,813	39.5	
Taylor Mill	1,326	38.4	
Williamsburg	976	38.0	
Oak Grove	1,333	37.7	
La Grange	1,037	36.5	
Bellevue	1,119	34.5	
Fort Mitchell	1,349	33.4	
Franklin	1,304	32.6	
Alexandria	1,334	32.2	
Highland Heights	1,019	31.1	
Central City	917	31.1	
Princeton	921	28.2	
Lawrenceburg	1,024	22.7	
Mount Washington	958	22.6	
Edgewood	881	18.7	
Elsmere	729	17.9	
Flatwoods	678	17.8	
Dayton	369	12.4	
Villa Hills	418	10.5	
Wilmore	264	8.9	
Middletown	88	3.1	
Lyndon	88	1.9	
POPULATION CATEGORY 2,500-4,999			
Hazard	2,263	94.2	*
Crestview Hills	1,200	83.1	*
Prestonsburg	1,331	73.7	*
Paintsville	1,307	63.3	*
Cold Spring	1,133	59.5	*
Mount Vernon	769	59.3	*
Columbia	1,144	57.0	*
Wilder	742	56.6	*
Grayson	1,016	52.4	
Carrollton	958	49.8	
Benton	993	47.3	
Barbourville	816	45.5	
Springfield	587	44.6	
Williamstown	713	44.2	
Hodgenville	631	43.9	
Morgantown	547	43.0	
Tompkinsville	570	42.9	
Crescent Springs	842	42.8	
Russell	773	42.4	
Greenville	906	41.2	
Beaver Dam	624	41.1	
Scottsville	879	40.6	
Morganfield	681	39.0	
Lancaster	720	38.6	
Union	555	38.4	
Irvine	523	36.8	
Stanton	542	35.8	
Fulton	485	35.0	
Stanford	526	30.7	
Marion	480	30.0	
Flemingsburg	450	29.9	
West Liberty	467	28.5	
Southgate	478	27.5	
Calvert City	355	26.3	
Lakeside Park	361	25.2	
Hartford	321	25.0	
Dawson Springs	282	18.9	
Cumberland	230	17.6	
Vine Grove	348	16.7	
Park Hills	202	13.6	
Providence	237	13.1	
Ludlow	272	12.3	
Hickman	151	11.8	
Indian Hills	144	10.0	

* Critical crash rate

TABLE 19. FATAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1999-2003)(ALL ROADS)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	174	1.36
Lexington	123	0.94
POPULATION CATEGORY 20,000-55,000		
Paducah	26	1.98
Elizabethtown	21	1.86
Hopkinsville	26	1.73
Frankfort	17	1.23
Ashland	13	1.18
Bowling Green	24	0.97
Richmond	13	0.96
Florence	10	0.85
Henderson	10	0.73
Radcliff	8	0.73
Covington	14	0.65
Jeffersontown	8	0.60
Owensboro	14	0.52
POPULATION CATEGORY 10,000-19,999		
Somerset	17	3.00
Shelbyville	15	2.97
Bardstown	9	1.74
Danville	12	1.55
Georgetown	13	1.44
Erlanger	10	1.20
Mayfield	6	1.16
Campbellsville	6	1.14
Fort Thomas	7	0.85
Murray	6	0.80
Middlesboro	4	0.77
Nicholasville	7	0.71
Independence	5	0.67
Madisonville	6	0.62
Winchester	5	0.60
Shively	4	0.53
Newport	4	0.47
Glasgow	3	0.46
Saint Matthews	1	0.13
POPULATION CATEGORY 5,000-9,999		
Pikeville	14	4.45
Monticello	10	3.34
Maysville	15	3.34
London	9	3.16
Mount Sterling	9	3.06
Central City	8	2.72
La Grange	7	2.47
Shepherdsville	9	2.16
Corbin	7	1.81
Williamsburg	4	1.56
Franklin	6	1.50
Alexandria	6	1.45
Mount Washington	6	1.41
Morehead	4	1.35
Leitchfield	4	1.30
Berea	6	1.22
Harrodsburg	4	1.00
Princeton	3	0.92
Paris	4	0.87
Taylor Mill	3	0.87
Fort Mitchell	3	0.74
Lebanon	2	0.70
Cynthiana	2	0.64
Highland Heights	2	0.61
Russellville	2	0.56
Flatwoods	2	0.53
Villa Hills	2	0.50
Bellevue	1	0.31
Versailles	1	0.27
Lawrenceburg	1	0.22
POPULATION CATEGORY 2,500-4,999		
Mount Vernon	8	6.17
Paintsville	11	5.32
Hodgenville	5	3.48
Hazard	8	3.33
Prestonsburg	6	3.32
Calvert City	4	2.96
Stanford	5	2.92
Fulton	4	2.88
Beaver Dam	4	2.64
Morganfield	4	2.29
Barbourville	4	2.23
Carrollton	4	2.08
Greenville	4	1.82
Hartford	2	1.56
Springfield	2	1.52
Tompkinsville	2	1.50
Benton	3	1.43
Williamstown	2	1.24
Providence	2	1.11
Russell	2	1.10
Cold Spring	2	1.05
Columbia	2	1.00
Vine Grove	2	0.96
Scottsville	2	0.92
Lakeside Park	1	0.70
Flemingsburg	1	0.66
Stanton	1	0.66
Marion	1	0.63
Southgate	1	0.58
Lancaster	1	0.54

* Critical crash rate

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (1999 - 2003) ALL	NUMBER OF ALCOHOL-RELATED CRASHES (1999 - 2003) AGE 16-20	PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL ALL	PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL AGE 16-20
POPULATION CATEGORY UNDER 10,000				
Robertson	14	2	10.6	4.7
Elliott	58	12	9.7	7.1
Menifee	50	11	9.6	6.4
Owsley	35	4	9.0	4.0
Nicholas	75	15	8.7	5.1
Lee	37	3	7.6	2.2
Gallatin	79	12	7.5	4.0
Wolfe	68	10	6.9	3.4
Ballard	69	8	6.9	2.6
Hickman	31	6	6.4	4.4
Fulton	59	2	6.1	0.7
Trimble	53	10	5.4	3.0
Livingston	62	3	5.3	0.7
Bracken	65	6	5.2	1.6
Cumberland	21	3	5.2	1.8
Hancock	38	2	5.2	0.9
McLean	56	9	5.1	2.3
Crittenden	54	6	4.8	1.5
Lyon	52	9	4.4	3.1
Carlisle	17	1	4.4	0.7
Clinton	34	2	4.2	0.6
POPULATION CATEGORY 10,000 - 14,999				
Spencer	87	11	7.9	3.1
Lewis	105	13	7.5	3.2
Owen	85	13	7.4	3.5
Leslie	98	10	7.3	2.7
Magoffin	86	9	7.1	2.5
Bath	99	11	6.7	2.6
Washington	90	15	6.4	3.1
Pendleton	120	12	6.1	1.7
Carroll	127	14	5.8	2.0
Martin	68	10	5.8	2.6
Fleming	74	11	5.6	2.4
Edmonson	67	2	5.5	0.5
Jackson	71	8	5.1	1.8
Powell	81	11	4.9	2.1
Monroe	44	4	4.9	1.2
Webster	87	14	4.8	2.5
Garrard	97	10	4.8	1.6
Morgan	73	6	4.6	1.3
Caldwell	73	9	4.6	1.7
Butler	55	12	4.5	2.1
Trigg	63	8	4.4	1.8
Larue	72	10	4.3	1.7
Metcalfe	48	5	4.3	1.5
Todd	46	7	4.1	1.9
Green	46	7	3.8	1.7
POPULATION CATEGORY 15,000 - 24,999				
Marion	248	33	10.0	3.6
Casey	97	14	7.9	2.8
Breathitt	136	30	6.4	5.1
Henry	130	12	6.3	2.0
McCreary	102	12	6.3	2.2
Woodford	227	31	6.1	2.7
Lincoln	124	19	6.0	3.0
Russell	80	10	6.0	2.3
Estill	91	12	5.8	2.3
Montgomery	222	31	5.7	2.4
Breckinridge	82	10	5.7	1.6
Union	118	15	5.3	2.1
Clay	127	5	5.2	0.8

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (1999 - 2003) ALL	NUMBER OF ALCOHOL-RELATED CRASHES (1999 - 2003) AGE 16-20	PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL ALL	PERCENT OF TOTAL CRASHES INVOLVING ALCOHOL AGE 16-20
POPULATION CATEGORY 15,000 - 24,999 (continued)				
Knott	101	15	5.2	2.4
Mason	181	22	5.0	2.1
Mercer	142	18	4.9	1.9
Allen	103	20	4.9	2.7
Bourbon	152	12	4.9	1.4
Grayson	155	13	4.8	1.1
Harrison	129	19	4.7	1.9
Anderson	118	14	4.7	1.7
Lawrence	66	13	4.7	3.2
Ohio	138	13	4.5	1.3
Taylor	167	36	4.4	2.3
Hart	97	3	4.3	0.5
Simpson	115	15	4.3	1.8
Johnson	118	14	4.1	1.4
Rowan	186	32	4.1	1.8
Adair	99	25	4.1	2.5
Wayne	75	12	3.8	1.6
Grant	152	18	3.5	1.3
Rockcastle	79	4	3.3	0.6
POPULATION CATEGORY 25,000 - 49,999				
Floyd	339	51	6.6	3.6
Meade	160	23	6.1	2.4
Letcher	162	20	5.9	2.6
Shelby	336	30	5.6	1.8
Carter	177	22	5.3	2.2
Jessamine	333	44	4.9	1.9
Knox	199	15	4.9	1.2
Graves	227	39	4.9	2.4
Greenup	180	30	4.8	2.4
Nelson	293	38	4.8	1.6
Harlan	167	20	4.7	1.9
Logan	151	14	4.5	1.2
Calloway	227	50	4.4	2.2
Perry	213	27	4.4	1.9
Bell	153	20	4.3	1.8
Muhlenberg	186	28	4.2	2.0
Whitley	195	23	4.1	1.5
Marshall	168	21	4.0	1.4
Clark	231	26	3.9	1.4
Franklin	338	42	3.9	1.7
Scott	248	29	3.8	1.7
Henderson	351	50	3.7	1.5
Barren	198	15	3.5	0.7
Oldham	161	32	3.5	1.9
Boyd	327	49	3.3	1.6
Boyle	150	20	3.3	1.4
Hopkins	221	25	2.8	1.1
POPULATION CATEGORY 50,000 - OVER				
Madison	657	83	5.0	1.8
Pike	510	56	5.0	1.9
Christian	469	56	4.9	2.0
Kenton	1280	121	4.5	1.5
Bullitt	300	35	4.4	1.4
McCracken	582	69	4.4	1.6
Campbell	617	55	4.4	1.2
Fayette	2821	297	4.3	1.6
Daviess	730	122	4.3	1.7
Warren	816	110	3.9	1.4
Jefferson	5067	403	3.8	1.2
Pulaski	321	37	3.5	1.2
Hardin	478	72	3.4	1.6
Boone	596	84	3.3	1.4
Laurel	274	31	3.2	1.2

TABLE 21. CRASHES INVOLVING ALCOHOL BY CITY AND POPULATION CATEGORY(IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF ALCOHOL-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING ALCOHOL
POPULATION CATEGORY OVER 200,000		
Lexington	2,805	4.3
Louisville	2,856	3.5
POPULATION CATEGORY 20,000-55,000		
Covington	470	4.4
Richmond	297	4.3
Hopkinsville	230	3.8
Owensboro	473	3.7
Bowling Green	519	3.3
Paducah	286	3.2
Radcliff	89	3.1
Frankfort	182	3.0
Henderson	206	2.9
Ashland	155	2.6
Jeffersontown	118	2.5
Florence	212	2.3
Elizabethtown	124	1.9
POPULATION CATEGORY 10,000-19,999		
Shelbyville	145	5.4
Independence	109	5.2
Middlesboro	85	4.5
Newport	210	4.5
Fort Thomas	54	4.3
Nicholasville	165	4.2
Erlanger	164	4.1
Shively	164	3.7
Georgetown	107	3.2
Winchester	118	3.0
Campbellsville	75	3.0
Bardstown	82	2.7
Saint Matthews	18	2.3
Danville	81	2.3
Mayfield	47	2.2
Murray	72	2.2
Somerset	81	1.8
Madisonville	76	1.7
Glasgow	54	1.6
POPULATION CATEGORY 5,000-9,999		
Dayton	24	6.5
Elsmere	43	5.9
Villa Hills	24	5.7
Fort Mitchell	74	5.5
Lebanon	60	4.6
Maysville	100	4.2
Versailles	70	4.0
Princeton	36	3.9
Mount Sterling	70	3.8
Taylor Mill	50	3.8
Bellevue	43	3.8
Franklin	48	3.7
Pikeville	87	3.7
Lawrenceburg	36	3.5
Shepherdsville	78	3.4
Cynthiana	46	3.3
Fort Wright	71	3.2
Harrodsburg	50	3.1
Mount Washington	29	3.0
Highland Heights	31	3.0
Williamsburg	29	3.0
Monticello	38	3.0
Russellville	48	2.9
Flatwoods	20	2.9
Paris	53	2.9
Central City	25	2.7
Leitchfield	36	2.4
Berea	49	2.4
Morehead	53	2.3
Edgewood	20	2.3
Alexandria	30	2.2
London	72	2.1
La Grange	20	1.9
Wilmore	5	1.9
Corbin	26	1.4
POPULATION CATEGORY 2,500-4,999		
Vine Grove	26	7.5
Hickman	11	7.3
Park Hills	14	6.9
Ludlow	16	5.9
Calvert City	18	5.1
Prestonsburg	59	4.4
Lakeside Park	16	4.4
Irvine	21	4.0
Carrollton	38	4.0
Russell	30	3.9
Cumberland	9	3.9
Providence	9	3.8
Williamstown	25	3.5
Fulton	17	3.5
Greenville	31	3.4
Southgate	16	3.3
Southgate	16	3.3
Cold Spring	37	3.3
Barbourville	25	3.1
Springfield	18	3.1
Hartford	10	3.1
Stanford	15	2.9
Morganfield	19	2.8
Stanton	15	2.8
Lancaster	20	2.8
Beaver Dam	16	2.6
Tompkinsville	15	2.6
Grayson	26	2.6
Mount Vernon	19	2.5
Hodgenville	15	2.4
Flemingsburg	11	2.4
Columbia	28	2.4
Hazard	53	2.3
Dawson Springs	6	2.1
Marion	7	1.5
Benton	14	1.4
Paintsville	17	1.3

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1999 - 2003)

COUNTY	1999	2000	2001	2002	2003	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
Adair	117	128	134	170	120	669	11.6	6.8
Allen	78	81	81	90	90	420	6.9	4.1
Anderson	200	109	157	145	131	742	10.4	6.3
Ballard	87	77	113	72	73	422	13.7	6.1
Barren	194	186	217	202	158	957	7.0	4.8
Bath	63	45	87	61	44	300	7.5	3.0
Bell	349	296	340	204	205	1,394	16.2	9.1
Boone	510	669	568	569	605	2,921	8.5	4.9
Bourbon	147	202	166	130	152	797	11.5	5.2
Boyd	290	267	249	295	337	1,438	8.4	4.4
Boyle	139	119	132	105	131	626	6.6	4.2
Bracken	39	27	41	48	37	192	6.4	3.0
Breathitt	114	90	93	65	89	451	9.4	3.3
Breckinridge	83	80	85	94	65	407	6.0	5.0
Bullitt	413	465	319	213	246	1,656	6.9	5.5
Butler	103	88	44	68	66	369	8.2	6.7
Caldwell	104	79	93	90	86	452	9.5	6.2
Calloway	154	169	172	196	222	913	7.9	4.0
Campbell	863	855	651	951	800	4,120	13.7	6.7
Carlisle	25	21	31	11	15	103	5.1	6.1
Carroll	131	178	109	138	149	705	19.7	5.6
Carter	113	190	191	174	125	793	8.6	4.5
Casey	142	103	85	120	175	625	12.2	6.4
Christian	791	661	682	461	530	3,125	17.3	6.7
Clark	320	360	298	275	355	1,608	13.5	7.0
Clay	286	267	188	137	126	1,004	15.2	7.9
Clinton	120	78	62	93	80	433	12.9	12.7
Crittenden	66	65	69	63	36	299	9.2	5.5
Cumberland	95	55	69	104	81	404	16.4	19.2
Daviess	611	586	763	689	780	3,429	10.4	4.7
Edmonson	25	37	19	31	32	144	3.4	2.1
Elliott	19	35	26	38	31	149	6.6	2.6
Estill	113	76	100	120	98	507	9.9	5.6
Fayette	2,042	2,021	1,857	1,976	2,084	9,980	11.3	3.5
Fleming	64	71	55	70	65	325	6.5	4.4
Floyd	332	382	329	370	341	1,754	12.7	5.2
Franklin	332	420	359	332	333	1,776	10.3	5.3
Fulton	113	137	97	86	79	512	21.8	8.7
Gallatin	110	95	106	92	62	465	16.2	5.9
Garrard	163	127	98	71	88	547	10.2	5.6
Grant	196	156	121	189	235	897	10.7	5.9
Graves	228	252	312	297	206	1,295	10.0	5.7
Grayson	140	129	105	137	139	650	7.4	4.2
Green	31	37	43	33	46	190	4.8	4.1
Greenup	308	344	378	400	295	1,725	12.9	9.6
Hancock	51	47	33	35	40	206	6.6	5.4
Hardin	636	628	439	511	582	2,796	8.8	5.8
Harlan	449	310	378	354	345	1,836	17.9	11.0
Harrison	93	103	80	73	77	426	6.6	3.3
Hart	105	103	77	75	72	432	7.4	4.5
Henderson	417	426	467	525	427	2,262	13.9	6.4
Henry	109	110	100	90	101	510	9.4	3.9
Hickman	32	27	30	42	30	161	8.8	5.2
Hopkins	403	356	428	423	289	1,899	11.5	8.6
Jackson	102	79	57	80	70	388	8.7	5.5
Jefferson	3,019	3,152	2,322	2,922	2,499	13,914	5.8	2.7
Jessamine	316	397	405	467	305	1,890	13.3	5.7
Johnson	159	134	196	125	106	720	8.9	6.1
Kenton	1,201	1,118	1,067	810	693	4,889	9.5	3.8
Knott	139	79	129	113	84	544	10.0	5.4
Knox	280	185	207	251	291	1,214	12.0	6.1
Larue	63	69	53	50	41	276	5.6	3.8
Laurel	614	594	535	365	405	2,513	13.5	9.2

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1999 - 2003) (continued)

COUNTY	1999	2000	2001	2002	2003	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
Lawrence	98	115	161	89	112	575	10.7	8.7
Lee	47	48	39	42	27	203	8.3	5.5
Leslie	93	110	97	35	48	383	9.4	3.9
Letcher	132	99	82	148	108	569	6.7	3.5
Lewis	103	97	97	79	72	448	9.5	4.3
Lincoln	94	102	102	74	107	479	5.9	3.9
Livingston	69	75	68	54	77	343	9.4	5.5
Logan	193	208	173	180	187	941	10.2	6.2
Lyon	53	92	85	100	110	440	15.8	8.5
McCracken	690	630	688	523	537	3,068	12.6	5.3
McCreary	153	138	128	77	94	590	11.0	5.8
McLean	174	173	138	45	74	604	16.6	10.8
Madison	198	175	159	733	537	1,802	7.4	2.7
Magoffin	109	124	121	71	125	550	12.7	6.4
Marion	128	158	141	251	191	869	14.2	3.5
Marshall	583	527	506	135	146	1,897	16.2	11.3
Martin	180	173	79	133	89	654	16.5	9.6
Mason	43	39	63	110	83	338	5.7	1.9
Meade	201	194	166	155	165	881	10.0	5.5
Menifee	32	20	22	26	51	151	6.7	3.0
Mercer	94	74	101	109	127	505	6.5	3.6
Metcalfe	52	55	26	30	31	194	5.6	4.0
Monroe	80	52	51	70	52	305	7.5	6.9
Montgomery	114	121	79	176	151	641	7.6	2.9
Morgan	66	50	80	96	66	358	8.6	4.9
Muhlenberg	175	169	191	226	182	943	8.5	5.1
Nelson	204	217	276	312	287	1,296	9.1	4.4
Nicholas	55	66	40	40	30	231	8.7	3.1
Ohio	104	110	125	143	121	603	7.4	4.4
Oldham	165	160	167	210	166	868	4.9	5.4
Owen	39	32	27	46	42	186	5.0	2.2
Owsley	26	63	54	35	33	211	12.5	6.0
Pendleton	53	68	75	108	69	373	7.0	3.1
Perry	341	268	323	293	155	1,380	13.8	6.5
Pike	382	355	541	410	439	2,127	9.5	4.2
Powell	135	113	118	143	102	611	13.3	7.5
Pulaski	388	404	297	334	298	1,721	8.3	5.4
Robertson	7	2	13	9	3	34	4.2	2.4
Rockcastle	202	203	196	112	119	832	14.9	10.5
Rowan	227	219	240	298	171	1,155	16.7	6.2
Russell	116	114	115	126	143	614	10.2	7.7
Scott	218	192	231	207	162	1,010	7.8	4.1
Shelby	354	327	235	240	343	1,499	12.5	4.5
Simpson	148	125	138	80	97	588	10.0	5.1
Spencer	62	84	79	68	52	345	6.9	4.0
Taylor	138	161	121	180	218	818	10.0	4.9
Todd	70	69	91	61	76	367	9.4	8.0
Trigg	97	89	135	116	70	507	10.7	8.0
Trimble	41	20	20	25	45	151	4.8	2.8
Union	142	186	159	149	128	764	14.1	6.5
Warren	842	902	784	911	1,143	4,582	14.6	5.6
Washington	46	48	57	71	69	291	7.4	3.2
Wayne	112	92	110	67	53	434	6.6	5.8
Webster	60	96	60	63	67	346	7.0	4.0
Whitley	312	286	188	165	206	1,157	10.1	5.9
Wolfe	73	79	69	57	92	370	14.9	5.4
Woodford	222	260	186	256	227	1,151	13.2	5.1
TOTAL *	28,486	28,060	26,210	26,688	25,475	134,919	9.6	4.7

* Convictions in cases filed in the same calander year.

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES)
(1999 - 2003)

POPULATION	COUNTY	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
UNDER 10,000	Fulton	21.8	Cumberland	19.2
	McLean	16.6	Clinton	12.7
	Cumberland	16.4	McLean	10.8
	Gallatin	16.2	Fulton	8.7
	Lyon	15.8	Lyon	8.5
	Wolfe	14.9	Ballard	6.1
	Ballard	13.7	Carlisle	6.1
	Clinton	12.9	Owsley	6.0
	Owsley	12.5	Gallatin	5.9
	Livingston	9.4	Crittenden	5.5
	Crittenden	9.2	Livingston	5.5
	Hickman	8.8	Lee	5.5
	Nicholas	8.7	Wolfe	5.4
	Lee	8.3	Hancock	5.4
	Menifee	6.7	Hickman	5.2
	Elliott	6.6	Nicholas	3.1
	Hancock	6.6	Menifee	3.0
	Bracken	6.4	Bracken	3.0
	Carlisle	5.1	Trimble	2.8
	Trimble	4.8	Elliott	2.6
	Robertson	4.2	Robertson	2.4
10,000-14,999	Carroll	19.7	Martin	9.6
	Martin	16.5	Trigg	8.0
	Powell	13.3	Todd	8.0
	Magoffin	12.7	Powell	7.5
	Trigg	10.7	Monroe	6.9
	Garrard	10.2	Butler	6.7
	Lewis	9.5	Magoffin	6.4
	Caldwell	9.5	Caldwell	6.2
	Todd	9.4	Garrard	5.6
	Leslie	9.4	Carroll	5.6
	Jackson	8.7	Jackson	5.5
	Morgan	8.6	Morgan	4.9
	Butler	8.2	Fleming	4.4
	Monroe	7.5	Lewis	4.3
	Bath	7.5	Green	4.1
	Washington	7.4	Metcalfe	4.0
	Pendleton	7.0	Webster	4.0
	Webster	7.0	Spencer	4.0
	Spencer	6.9	Leslie	3.9
	Fleming	6.5	Larue	3.8
	Larue	5.6	Washington	3.2
	Metcalfe	5.6	Pendleton	3.1
	Owen	5.0	Bath	3.0
	Green	4.8	Owen	2.2
	Edmonson	3.4	Edmonson	2.1
15,000-24,999	Rowan	16.7	Rockcastle	10.5
	Clay	15.2	Lawrence	8.7
	Rockcastle	14.9	Clay	7.9
	Marion	14.2	Russell	7.7
	Union	14.1	Adair	6.8
	Woodford	13.2	Union	6.5
	Casey	12.2	Casey	6.4
	Adair	11.6	Anderson	6.3
	Bourbon	11.5	Rowan	6.2
	McCreary	11.0	Johnson	6.1
	Grant	10.7	Grant	5.9
	Lawrence	10.7	Wayne	5.8
	Anderson	10.4	McCreary	5.8
	Russell	10.2	Estill	5.6
	Simpson	10.0	Knott	5.4
	Taylor	10.0	Bourbon	5.2
	Knott	10.0	Simpson	5.1
	Estill	9.9	Woodford	5.1

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1999 - 2003) (continued)

POPULATION	COUNTY	PER 1,000 LICENSED DRIVERS ANNUAL AVERAGE ALCOHOL CONVICTIONS	COUNTY	RELATED PER ALCOHOL-CONVICTIONS ALCOHOL CRASH
15,000-24,999	Henry	9.4	Breckinridge	5.0
(cont'd)	Breathitt	9.4	Taylor	4.9
	Johnson	8.9	Hart	4.5
	Montgomery	7.6	Ohio	4.4
	Grayson	7.4	Grayson	4.2
	Ohio	7.4	Allen	4.1
	Hart	7.4	Henry	3.9
	Allen	6.9	Lincoln	3.9
	Wayne	6.6	Mercer	3.6
	Harrison	6.6	Marion	3.5
	Mercer	6.5	Breathitt	3.3
	Breckinridge	6.0	Harrison	3.3
	Lincoln	5.9	Montgomery	2.9
	Mason	5.7	Mason	1.9
25,000 - 49,999	Harlan	17.9	Marshall	11.3
	Marshall	16.2	Harlan	11.0
	Bell	16.2	Greenup	9.6
	Henderson	13.9	Bell	9.1
	Perry	13.8	Hopkins	8.6
	Clark	13.5	Clark	7.0
	Jessamine	13.3	Perry	6.5
	Greenup	12.9	Henderson	6.4
	Floyd	12.7	Logan	6.2
	Shelby	12.5	Knox	6.1
	Knox	12.0	Whitley	5.9
	Hopkins	11.5	Graves	5.7
	Franklin	10.3	Jessamine	5.7
	Logan	10.2	Meade	5.5
	Whitley	10.1	Oldham	5.4
	Graves	10.0	Franklin	5.3
	Meade	10.0	Floyd	5.2
	Nelson	9.1	Muhlenberg	5.1
	Carter	8.6	Barren	4.8
	Muhlenberg	8.5	Carter	4.5
	Boyd	8.4	Shelby	4.5
	Calloway	7.9	Nelson	4.4
	Scott	7.8	Boyd	4.4
	Barren	7.0	Boyle	4.2
	Letcher	6.7	Scott	4.1
	Boyle	6.6	Calloway	4.0
	Oldham	4.9	Letcher	3.5
50,000 - OVER	Christian	17.3	Laurel	9.2
	Warren	14.6	Campbell	6.7
	Campbell	13.7	Christian	6.7
	Laurel	13.5	Hardin	5.8
	McCracken	12.6	Warren	5.6
	Fayette	11.3	Bullitt	5.5
	Daviess	10.4	Pulaski	5.4
	Pike	9.5	McCracken	5.3
	Kenton	9.5	Boone	4.9
	Hardin	8.8	Daviess	4.7
	Boone	8.5	Pike	4.2
	Pulaski	8.3	Kenton	3.8
	Madison	7.4	Fayette	3.5
	Bullitt	6.9	Jefferson	2.7
	Jefferson	5.8	Madison	2.7

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI FILINGS (BY COUNTY) (1999 - 2003)*

COUNTY	TOTAL DUI FILED	TOTAL DUI CONVICTED	TOTAL DUI NON-CONVICTED	CONVICTION PERCENTAGE**
Adair	1,047	669	129	83.8
Allen	744	420	71	85.5
Anderson	1,126	742	99	88.2
Ballard	607	422	67	86.3
Barren	1,799	957	386	71.3
Bath	497	300	74	80.2
Bell	2,456	1,394	486	74.1
Boone	4,269	2,921	680	81.1
Bourbon	1,362	797	124	86.5
Boyd	2,122	1,438	267	84.3
Boyle	932	626	135	82.3
Bracken	344	192	45	81.0
Breathitt	903	451	237	65.6
Breckinridge	563	407	82	83.2
Bullitt	3,378	1,656	794	67.6
Butler	656	369	109	77.2
Caldwell	616	452	90	83.4
Calloway	1,468	913	204	81.7
Campbell	5,330	4,120	738	84.8
Carlisle	148	103	28	78.6
Carroll	1,214	705	206	77.4
Carter	2,031	793	305	72.2
Casey	897	625	131	82.7
Christian	4,684	3,125	711	81.5
Clark	1,995	1,608	179	90.0
Clay	2,269	1,004	759	56.9
Clinton	733	433	81	84.2
Crittenden	493	299	52	85.2
Cumberland	572	404	63	86.5
Daviess	4,757	3,429	486	87.6
Edmonson	236	144	43	77.0
Elliott	299	149	25	85.6
Estill	925	507	211	70.6
Fayette	12,263	9,980	1,061	90.4
Fleming	494	325	46	87.6
Floyd	2,880	1,754	430	80.3
Franklin	3,064	1,776	528	77.1
Fulton	723	512	111	82.2
Gallatin	931	465	256	64.5
Garrard	945	547	208	72.5
Grant	1,261	897	150	85.7
Graves	2,103	1,295	281	82.2
Grayson	937	650	114	85.1
Green	287	190	40	82.6
Greenup	2,540	1,725	311	84.7
Hancock	336	206	54	79.2
Hardin	4,400	2,796	607	82.2
Harlan	2,680	1,836	296	86.1
Harrison	682	426	83	83.7
Hart	652	432	125	77.6
Henderson	3,106	2,262	197	92.0
Henry	815	510	57	89.9
Hickman	234	161	40	80.1
Hopkins	2,284	1,899	216	89.8
Jackson	724	388	149	72.3
Jefferson	27,406	13,914	6,012	69.8
Jessamine	2,929	1,890	343	84.6
Johnson	1,370	720	215	77.0
Kenton	7,042	4,889	1,147	81.0
Knott	723	544	91	85.7
Knox	2,066	1,214	388	75.8
Larue	396	276	63	81.4

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI FILINGS (BY COUNTY) (1999 - 2003) (continued)

COUNTY	TOTAL DUI ARRESTS*	TOTAL DUI CONVICTIONS**	TOTAL DUI NON-CONVICTED	CONVICTION PERCENTAGE
Laurel	3,757	2,513	555	81.9
Lawrence	996	575	103	84.8
Lee	349	203	54	79.0
Leslie	996	383	327	53.9
Letcher	930	569	190	75.0
Lewis	622	448	61	88.0
Lincoln	737	479	130	78.7
Livingston	509	343	83	80.5
Logan	1,405	941	261	78.3
Lyon	613	440	91	82.9
McCracken	3,699	3,068	623	83.1
McCreary	880	590	104	85.0
McLean	346	604	178	77.2
Madison	4,836	1,802	359	83.4
Magoffin	920	550	88	86.2
Marion	1,458	869	142	86.0
Marshall	1,200	1,897	273	87.4
Martin	944	654	144	82.0
Mason	876	338	40	89.4
Meade	1,277	881	206	81.0
Menifee	299	151	45	77.0
Mercer	733	505	92	84.6
Metcalfe	369	194	81	70.5
Monroe	462	305	78	79.6
Montgomery	1,125	641	157	80.3
Morgan	547	358	69	83.8
Muhlenberg	1,256	943	164	85.2
Nelson	2,103	1,296	351	78.7
Nicholas	409	231	48	82.8
Ohio	932	603	156	79.4
Oldham	1,456	868	212	80.4
Owen	347	186	69	72.9
Owsley	445	211	84	71.5
Pendleton	702	373	165	69.3
Perry	2,392	1,380	395	77.7
Pike	4,697	2,127	802	72.6
Powell	1,073	611	224	73.2
Pulaski	3,099	1,721	687	71.5
Robertson	64	34	18	65.4
Rockcastle	1,396	832	161	83.8
Rowan	1,730	1,155	174	86.9
Russell	1,080	614	176	77.7
Scott	1,563	1,010	174	85.3
Shelby	2,170	1,499	161	90.3
Simpson	1,008	588	68	89.6
Spencer	551	345	64	84.4
Taylor	1,122	818	154	84.2
Todd	506	367	68	84.4
Trigg	683	507	74	87.3
Trimble	244	151	19	88.8
Union	1,075	764	120	86.4
Warren	6,840	4,582	820	84.8
Washington	442	291	83	77.8
Wayne	737	434	141	75.5
Webster	575	346	79	81.4
Whitley	2,336	1,157	459	71.6
Wolfe	655	370	121	75.4
Woodford	1,617	1,151	217	84.1
TOTAL	213,935	134,919	32,958	63.1

* Obtained from Administrative Office of the Courts.

** Conviction percentage is equal to the number of DUI convicted divided by the sum of DUI convicted and non-convicted.

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY
(IN DESCENDING ORDER) (1999 - 2003)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL DUI ARRESTS	TOTAL DUI CONVICTIONS	CONVICTION PERCENTAGE*
UNDER 10,000	79.7	Trimble	244	151	88.8
		Cumberland	572	404	86.5
		Ballard	607	422	86.3
		Elliott	299	149	85.6
		Crittenden	493	299	85.2
		Clinton	733	433	84.2
		Lyon	613	440	82.9
		Nicholas	409	231	82.8
		Fulton	723	512	82.2
		Bracken	344	192	81.0
		Livingston	509	343	80.5
		Hickman	234	161	80.1
		Hancock	336	206	79.2
		Lee	349	203	79.0
		Carlisle	148	103	78.6
		McLean	346	604	77.2
		Menifee	299	151	77.0
		Wolfe	655	370	75.4
		Owsley	445	211	71.5
		Robertson	64	34	65.4
		Gallatin	931	465	64.5
10,000-14,999	78.7	Lewis	622	448	88.0
		Fleming	494	325	87.6
		Trigg	683	507	87.3
		Magoffin	920	550	86.2
		Todd	506	367	84.4
		Spencer	551	345	84.4
		Morgan	547	358	83.8
		Caldwell	616	452	83.4
		Green	287	190	82.6
		Martin	944	654	82.0
		Larue	396	276	81.4
		Webster	575	346	81.4
		Bath	497	300	80.2
		Monroe	462	305	79.6
		Washington	442	291	77.8
		Carroll	1,214	705	77.4
		Butler	656	369	77.2
		Edmonson	236	144	77.0
		Powell	1,073	611	73.2
		Owen	347	186	72.9
		Garrard	945	547	72.5
		Jackson	724	388	72.3
		Metcalfe	369	194	70.5
		Pendleton	702	373	69.3
		Leslie	996	383	53.9
15,000-24,999	82.0	Henry	815	510	89.9
		Simpson	1,008	588	89.6
		Mason	876	338	89.4
		Anderson	1,126	742	88.2
		Rowan	1,730	1,155	86.9
		Bourbon	1,362	797	86.5
		Union	1,075	764	86.4
		Marion	1,458	869	86.0
		Grant	1,261	897	85.7
		Knott	723	544	85.7
		Allen	744	420	85.5
		Grayson	937	650	85.1
		McCreary	880	590	85.0
		Lawrence	996	575	84.8
		Mercer	733	505	84.6

TABLE 25. DUI CONVICTION RATES BY COUNTY AND POPULATION CATEGORY
(IN DESCENDING ORDER) (1999 - 2003) (continued)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL DUI ARRESTS	TOTAL DUI CONVICTIONS	CONVICTION PERCENTAGE*
15,000-24,999 (continued)		Taylor	1,122	818	84.2
		Woodford	1,617	1,151	84.1
		Adair	1,047	669	83.8
		Rockcastle	1,396	832	83.8
		Harrison	682	426	83.7
		Breckinridge	563	407	83.2
		Casey	897	625	82.7
		Montgomery	1,125	641	80.3
		Ohio	932	603	79.4
		Lincoln	737	479	78.7
		Russell	1,080	614	77.7
		Hart	652	432	77.6
		Johnson	1,370	720	77.0
		Wayne	737	434	75.5
		Estill	925	507	70.6
		Breathitt	903	451	65.6
		Clay	2,269	1,004	56.9
25,000-49,999	81.5	Henderson	3,106	2,262	92.0
		Shelby	2,170	1,499	90.3
		Clark	1,995	1,608	90.0
		Hopkins	2,284	1,899	89.8
		Marshall	1,200	1,897	87.4
		Harlan	2,680	1,836	86.1
		Scott	1,563	1,010	85.3
		Muhlenberg	1,256	943	85.2
		Greenup	2,540	1,725	84.7
		Jessamine	2,929	1,890	84.6
		Boyd	2,122	1,438	84.3
		Boyle	932	626	82.3
		Graves	2,103	1,295	82.2
		Calloway	1,468	913	81.7
		Meade	1,277	881	81.0
		Oldham	1,456	868	80.4
		Floyd	2,880	1,754	80.3
		Nelson	2,103	1,296	78.7
		Logan	1,405	941	78.3
		Perry	2,392	1,380	77.7
		Franklin	3,064	1,776	77.1
		Knox	2,066	1,214	75.8
		Letcher	930	569	75.0
		Bell	2,456	1,394	74.1
		Carter	2,031	793	72.2
		Whitley	2,336	1,157	71.6
		Barren	1,799	957	71.3
50,000 - OVER	80.2	Fayette	12,263	9,980	90.4
		Daviess	4,757	3,429	87.6
		Warren	6,840	4,582	84.8
		Campbell	5,330	4,120	84.8
		Madison	4,836	1,802	83.4
		McCracken	3,699	3,068	83.1
		Hardin	4,400	2,796	82.2
		Laurel	3,757	2,513	81.9
		Christian	4,684	3,125	81.5
		Boone	4,269	2,921	81.1
		Kenton	7,042	4,889	81.0
		Pike	4,697	2,127	72.6
		Pulaski	3,099	1,721	71.5
		Jefferson	27,406	13,914	69.8
		Bullitt	3,378	1,656	67.6

* Refer to Table 24 for conviction rate calculation.

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1999 - 2003)

COUNTY	1999	2000	2001	2002	2003	TOTAL RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Adair	25	15	18	18	13	89	1.5
Allen	12	7	8	5	10	42	0.7
Anderson	38	24	19	26	24	131	1.8
Ballard	8	3	9	15	6	41	1.3
Barren	98	81	81	67	70	397	2.9
Bath	16	9	6	12	15	58	1.5
Bell	24	29	35	23	16	127	1.5
Boone	128	137	90	120	118	593	1.7
Bourbon	20	28	42	44	25	159	2.3
Boyd	78	56	71	55	49	309	1.8
Boyle	28	24	21	25	24	122	1.3
Bracken	14	18	12	9	17	70	2.3
Breathitt	27	17	17	8	4	73	1.5
Breckinridge	21	19	14	16	28	98	1.4
Bullitt	130	140	133	74	96	573	2.4
Butler	14	6	12	10	18	60	1.3
Caldwell	27	16	19	20	14	96	2.0
Calloway	18	28	26	36	17	125	1.1
Campbell	208	142	99	119	89	657	2.2
Carlisle	5	3	2	2	7	19	0.9
Carroll	18	16	18	19	20	91	2.5
Carter	45	80	98	59	39	321	3.5
Casey	15	11	10	12	8	56	1.1
Christian	90	80	90	86	101	447	2.5
Clark	22	28	36	54	54	194	1.6
Clay	42	33	23	18	15	131	2.0
Clinton	53	28	17	24	10	132	3.9
Crittenden	21	19	13	12	12	77	2.4
Cumberland	33	7	21	17	32	110	4.5
Daviess	103	67	59	79	78	386	1.2
Edmonson	5	6	2	9	4	26	0.6
Elliott	4	8	5	7	3	27	1.2
Estill	33	18	10	28	16	105	2.0
Fayette	414	445	294	331	331	1,815	2.1
Fleming	17	12	16	13	15	73	1.5
Floyd	45	47	38	38	47	215	1.6
Franklin	128	150	115	133	111	637	3.7
Fulton	16	12	8	3	9	48	2.0
Gallatin	27	33	29	34	27	150	5.2
Garrard	47	54	18	13	13	145	2.7
Grant	28	34	22	27	51	162	1.9
Graves	40	52	38	46	36	212	1.6
Grayson	33	40	38	49	46	206	2.4
Green	7	5	1	0	4	17	0.4
Greenup	75	47	71	87	56	336	2.5
Hancock	5	9	6	3	1	24	0.8
Hardin	172	117	118	146	126	679	2.1
Harlan	58	54	41	49	53	255	2.5
Harrison	22	20	12	13	12	79	1.2
Hart	7	9	9	10	15	50	0.9
Henderson	59	67	45	56	65	292	1.8
Henry	9	9	7	14	11	50	0.9
Hickman	9	8	6	12	6	41	2.2
Hopkins	42	47	43	50	39	221	1.3
Jackson	5	13	6	4	19	47	1.1
Jefferson	1,090	735	568	494	438	3,325	1.4
Jessamine	47	60	65	78	65	315	2.2
Johnson	25	42	33	32	46	178	2.2
Kenton	441	282	215	222	208	1,368	2.7
Knott	13	8	18	10	12	61	1.1
Knox	49	45	36	39	71	240	2.4
Larue	10	4	5	0	1	20	0.4
Laurel	44	50	50	57	53	254	1.4

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1999 - 2003) (continued)

COUNTY	1999	2000	2001	2002	2003	RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Lawrence	15	20	22	19	22	98	1.8
Lee	8	4	2	2	0	16	0.7
Leslie	20	16	4	7	8	55	1.3
Letcher	27	14	20	30	20	111	1.3
Lewis	27	12	15	15	15	84	1.8
Lincoln	28	20	20	22	21	111	1.4
Livingston	13	12	28	9	8	70	1.9
Logan	39	45	36	35	30	185	2.0
Lyon	30	28	38	53	41	190	6.8
McCracken	77	83	59	86	68	373	1.5
McCreary	29	9	9	6	8	61	1.1
McLean	6	15	13	13	9	56	1.5
Madison	65	85	80	83	88	401	1.6
Magoffin	6	10	7	6	16	45	1.0
Marion	53	30	27	24	22	156	2.6
Marshall	22	31	14	28	26	121	1.0
Martin	10	15	20	16	7	68	1.7
Mason	33	23	51	24	14	145	2.4
Meade	48	27	28	39	28	170	1.9
Menifee	13	6	13	8	12	52	2.3
Mercer	14	12	12	29	25	92	1.2
Metcalfe	21	27	22	18	30	118	3.4
Monroe	29	23	11	14	9	86	2.1
Montgomery	49	28	22	41	33	173	2.1
Morgan	7	8	6	9	9	39	0.9
Muhlenberg	16	20	44	37	28	145	1.3
Nelson	62	78	70	54	61	325	2.3
Nicholas	20	19	16	10	6	71	2.7
Ohio	15	14	15	19	21	84	1.0
Oldham	14	6	17	12	28	77	0.4
Owen	6	10	23	20	17	76	2.0
Owsley	17	14	8	3	4	46	2.7
Pendleton	14	16	20	30	18	98	1.8
Perry	27	18	13	16	19	93	0.9
Pike	61	50	66	67	82	326	1.5
Powell	12	10	9	18	10	59	1.3
Pulaski	88	106	92	98	80	464	2.2
Robertson	3	6	2	1	3	15	1.9
Rockcastle	36	28	28	24	37	153	2.7
Rowan	51	42	28	32	26	179	2.6
Russell	11	10	19	11	11	62	1.0
Scott	46	48	42	35	37	208	1.6
Shelby	47	49	33	56	50	235	2.0
Simpson	19	16	15	6	11	67	1.1
Spencer	4	9	6	6	3	28	0.6
Taylor	17	28	29	30	37	141	1.7
Todd	12	12	9	19	21	73	1.9
Trigg	19	20	12	24	15	90	1.9
Trimble	0	0	2	2	0	4	0.1
Union	19	29	14	27	11	100	1.8
Warren	119	124	107	117	123	590	1.9
Washington	11	10	13	10	10	54	1.4
Wayne	20	20	12	22	24	98	1.5
Webster	16	22	6	9	15	68	1.4
Whitley	56	82	55	46	57	296	2.6
Wolfe	23	19	17	10	18	87	3.5
Woodford	43	43	40	41	23	190	2.2
TOTAL	6,020	5,294	4,568	4,739	4,514	25,135	1.8

TABLE 27. PERCENTAGE OF CRASHES INVOLVING DRUGS BY COUNTY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES) (1999-2003)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY UNDER 10,000		
Crittenden	21	1.9
Owsley	7	1.8
Lee	8	1.6
Cumberland	6	1.5
Elliott	9	1.5
Nicholas	12	1.4
Wolfe	13	1.3
Livingston	14	1.2
Hickman	6	1.2
Carlisle	4	1.0
Clinton	8	1.0
Lyon	11	0.9
Fulton	8	0.8
Gallatin	7	0.7
Ballard	5	0.5
Bracken	5	0.4
Menifee	2	0.4
McLean	4	0.4
Trimble	3	0.3
Hancock	2	0.3
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Martin	65	5.5
Magoffin	50	4.1
Leslie	51	3.8
Jackson	18	1.3
Caldwell	17	1.1
Bath	15	1.0
Lewis	14	1.0
Spencer	11	1.0
Powell	17	1.0
Fleming	10	0.8
Pendleton	15	0.8
Webster	12	0.7
Butler	7	0.6
Garrard	13	0.6
Trigg	8	0.6
Monroe	5	0.6
Edmonson	7	0.6
Todd	5	0.4
Larue	6	0.4
Metcalfe	5	0.4
Morgan	6	0.4
Carroll	9	0.4
Washington	3	0.2
Green	3	0.2
Owen	1	0.1
POPULATION CATEGORY 15,000-24,999		
Johnson	135	4.7
Clay	94	3.9
Lawrence	41	2.9
Breathitt	51	2.4
Knott	31	1.6
McCreary	24	1.5
Casey	18	1.5
Estill	21	1.3
Rockcastle	30	1.3
Russell	18	1.3
Lincoln	19	0.9
Adair	22	0.9
Bourbon	27	0.9
Ohio	29	0.9
Wayne	15	0.8
Allen	17	0.8
Taylor	26	0.7
Mason	25	0.7
Simpson	17	0.6
Hart	14	0.6
Grayson	19	0.6
Mercer	14	0.5
Montgomery	18	0.5
Harrison	13	0.5
Union	11	0.5
Woodford	15	0.4
Rowan	20	0.4
Grant	17	0.4
Henry	8	0.4
Breckinridge	5	0.3
Anderson	7	0.3
Marion	7	0.3
POPULATION CATEGORY 25,000-50,000		
Floyd	163	3.2
Knox	117	2.9
Bell	104	2.9
Harlan	76	2.1
Letcher	54	2.0
Perry	83	1.7
Greenup	61	1.6
Carter	51	1.5
Whitley	67	1.4
Boyd	86	0.9
Marshall	37	0.9
Logan	27	0.8
Muhlenberg	35	0.8
Graves	31	0.7
Henderson	65	0.7
Calloway	29	0.6
Hopkins	50	0.6
Jessamine	42	0.6
Meade	16	0.6
Shelby	29	0.5
Nelson	33	0.5
Barren	27	0.4
Scott	26	0.4
Boyle	16	0.4
Franklin	36	0.4
Clark	25	0.4
Oldham	20	0.4
POPULATION CATEGORY OVER 50,000		
Pike	370	3.6
Laurel	123	1.5
Pulaski	77	0.8
Warren	125	0.6
Kenton	154	0.5
Hardin	64	0.5
Campbell	73	0.5
Daviess	91	0.5
Christian	49	0.5
Madison	63	0.5
McCracken	64	0.5
Fayette	251	0.4
Boone	48	0.3
Bullitt	17	0.2
Jefferson	291	0.2

TABLE 28. PERCENTAGE OF CRASHES INVOLVING DRUGS BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF DRUG-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING DRUGS
POPULATION CATEGORY OVER 200,000		
Lexington	251	0.4
Louisville	184	0.2
POPULATION CATEGORY 20,000-55,000		
Ashland	45	0.8
Covington	75	0.7
Henderson	50	0.7
Richmond	32	0.5
Bowling Green	72	0.5
Paducah	41	0.5
Frankfort	25	0.4
Hopkinsville	26	0.4
Owensboro	54	0.4
Elizabethtown	19	0.3
Florence	19	0.2
Radcliff	6	0.2
Jeffersontown	4	0.1
POPULATION CATEGORY 10,000-19,999		
Middlesboro	41	2.2
Somerset	40	0.9
Fort Thomas	11	0.9
Nicholasville	25	0.6
Shelbyville	15	0.6
Campbellsville	15	0.6
Winchester	18	0.5
Independence	11	0.5
Erlanger	15	0.4
Newport	20	0.4
Murray	13	0.4
Madisonville	16	0.4
Mayfield	6	0.3
Georgetown	11	0.3
Danville	9	0.3
Bardstown	9	0.3
Glasgow	8	0.2
Shively	5	0.1
POPULATION CATEGORY 5,000-9,999		
Pikeville	62	2.6
Corbin	25	1.4
London	43	1.3
Williamsburg	12	1.2
Princeton	10	1.1
Maysville	21	0.9
Monticello	11	0.9
Franklin	11	0.8
Dayton	3	0.8
Bellevue	8	0.7
Flatwoods	5	0.7
Villa Hills	3	0.7
La Grange	5	0.5
Highland Heights	5	0.5
Fort Wright	12	0.5
Lawrenceburg	4	0.4
Harrodsburg	6	0.4
Russellville	7	0.4
Paris	8	0.4
Berea	9	0.4
Mount Sterling	8	0.4
Cynthiana	6	0.4
Central City	4	0.4
Wilmore	1	0.4
Fort Mitchell	4	0.3
Taylor Mill	4	0.3
Edgewood	3	0.3
Lebanon	2	0.2
Morehead	4	0.2
Versailles	4	0.2
Shepherdsville	4	0.2
Leitchfield	2	0.1
Mount Washington	1	0.1
Elsmere	1	0.1
Alexandria	2	0.1
POPULATION CATEGORY 2,500-4,999		
Paintsville	35	2.7
Barbourville	20	2.5
Hartford	7	2.2
Prestonsburg	28	2.1
Irvine	10	1.9
Calvert City	6	1.7
Russell	12	1.6
Stanton	7	1.3
Hickman	2	1.3
Marion	6	1.3
Providence	3	1.3
Ludlow	3	1.1
Beaver Dam	7	1.1
Hazard	23	1.0
Grayson	10	1.0
Mount Vernon	8	1.0
Mount Vernon	8	1.0
Cumberland	2	0.9
Southgate	4	0.8
Williamstown	6	0.8
Lakeside Park	3	0.8
Greenville	6	0.7
Flemingsburg	3	0.7
Vine Grove	2	0.6
Lancaster	4	0.6
Stanford	3	0.6
Cold Spring	7	0.6
Tompkinsville	3	0.5
Benton	5	0.5
Carrollton	5	0.5
Dawson Springs	1	0.4
Morganfield	3	0.4
Scottsville	3	0.3
Columbia	3	0.3
Springfield	1	0.2
Hodgenville	1	0.2

TABLE 29. SAFETY BELT USAGE (DRIVERS OF PASSENGER CARS INVOLVED IN CRASHES BY COUNTY AND POPULATION CATEGORY) (IN DESCENDING ORDER)(1999-2003)

COUNTY	PERCENT SEAT BELT USAGE	
POPULATION CATEGORY UNDER 10,000		
Carlisle	92.6	
Livingston	92.3	
Crittenden	91.9	
Lyon	91.2	
Fulton	90.6	
Trimble	90.4	
Hancock	90.3	
Ballard	90.3	
Elliott	88.6	
Gallatin	88.3	
Owsley	87.9	
Bracken	87.5	
Wolfe	87.1	
Lee	86.9	
McLean	86.7	
Menifee	86.1	
Cumberland	85.8	
Clinton	85.6	
Hickman	84.3	
Nicholas	81.0	
Robertson	78.4	
POPULATION CATEGORY 10,000-14,999		
Webster	93.0	
Pendleton	91.9	
Caldwell	91.5	
Larue	90.4	
Garrard	90.1	
Carroll	90.1	
Trigg	89.8	
Powell	88.4	
Spencer	88.4	
Edmonson	88.1	
Bath	88.0	
Butler	88.0	
Morgan	87.7	*
Martin	87.5	
Magoffin	87.3	
Lewis	87.2	
Todd	86.8	
Owen	85.7	*
Fleming	85.6	
Monroe	84.9	
Washington	84.4	
Jackson	84.1	*
Green	83.2	
Leslie	82.8	
Metcalfe	82.3	
POPULATION CATEGORY 15,000-24,999		
Grant	93.5	
Woodford	92.7	
Ohio	91.9	
Hart	91.8	
Rowan	91.4	
Breckinridge	91.1	
Johnson	90.7	
Grayson	90.5	
Anderson	90.3	
Montgomery	89.9	
Rockcastle	89.6	
Union	89.6	*
Lawrence	89.5	
Breathitt	89.3	
Estill	89.2	
Simpson	89.2	
Harrison	88.9	*
Mercer	88.6	
McCreary	87.8	
Bourbon	87.7	
Mason	87.7	
Knott	87.5	
Henry	87.5	
Lincoln	87.4	
Clay	86.3	
Taylor	84.8	*
Russell	84.7	
Marion	84.7	
Wayne	84.7	
Casey	83.4	
Allen	83.3	*
Adair	79.9	
POPULATION CATEGORY 25,000-50,000		
Oldham	95.8	
Henderson	95.5	
Hopkins	94.7	
Clark	94.5	
Boyd	93.2	
Whitley	93.1	
Franklin	92.7	
Boyle	92.7	
Nelson	92.6	
Jessamine	92.5	
Shelby	92.5	*
Greenup	92.5	
Scott	92.5	
Graves	91.9	*
Calloway	91.3	
Marshall	91.3	
Harlan	90.6	
Perry	90.1	*
Knox	90.0	*
Floyd	90.0	
Muhlenberg	89.9	
Bell	89.7	
Meade	89.5	*
Barren	88.9	
Carter	88.1	*
Letcher	87.3	
Logan	87.2	
POPULATION CATEGORY OVER 50,000		
Fayette	96.2	
Boone	95.3	
Hardin	94.9	
Kenton	94.6	
Jefferson	94.6	
McCracken	94.5	
Campbell	93.9	
Laurel	93.3	
Warren	93.3	
Daviess	93.2	
Bullitt	92.7	
Christian	92.3	*
Pulaski	91.9	*
Madison	91.7	
Pike	90.5	*

* 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.

TABLE 30. CHANGE IN SAFETY BELT USAGE FOR 1999-2003 (PASSENGER CAR DRIVERS INVOLVED IN CRASHES) BY POPULATION CATEGORY

	PERCENT USAGE					
	POPULATION CATEGORY					
YEAR	UNDER 10,000-	10,000- 14,999-	15,000- 24,999-	25,000- 50,000-	OVER 50,000-	ALL
1999	84.2	84.9	86.6	90.2	93.4	91.3
2000	89.2	87.4	88.4	91.4	93.7	92.3
2001	89.0	88.4	88.6	92.1	94.5	92.9
2002	88.9	89.1	89.4	92.8	94.8	93.3
2003	91.2	89.7	90.3	93.4	95.7	94.2
All	87.5	86.8	87.8	91.4	94.0	92.5

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

	NOT WEARING SAFETY BELT		WEARING SAFETY BELT		
TYPE OF INJURY	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT REDUCTION
Fatal	1,703	2.13	864	0.09	96
Incapacitating	7,502	9.39	15,068	1.57	83
Non-Incapacitating	12,866	16.11	45,781	4.78	70
Possible Injury	9,679	12.12	65,646	6.86	43
Fatal or Incapacitating	9,205	11.53	15,932	1.66	86

* Based on 1999 through 2003 crash data. Total sample size for not wearing a safety belt was 79,858 compared to 956,931 for wearing a safety belt. Excluding not applicable fatalities (motorcycle, etc.)

TABLE 32. CHANGE IN SEVERITY OF INJURIES BY YEAR (1999-2003)

Type of Injury	PERCENTAGE OF DRIVERS SUSTAINING A GIVEN INJURY				
	1999	2000	2001	2002	2003
	NOT WEARING SAFETY BELT				
Fatal	1.77	2.18	2.39	2.72	3.10
Incapacitating	8.95	7.61	9.89	10.32	9.53
Non-Incapacitating	14.26	13.63	17.13	18.13	17.22
Possible Injury	11.77	9.04	12.40	13.12	12.89
	WEARING SAFETY BELT				
Fatal	0.08	0.09	0.08	0.10	0.09
Incapacitating	1.64	1.33	1.50	1.51	1.34
Non-Incapacitating	4.64	3.90	4.93	4.93	4.63
Possible Injury	7.31	5.22	6.66	6.64	6.25

TABLE 33. POTENTIAL REDUCTION IN TRAFFIC CRASH FATALITIES AND CRASH SAVINGS FROM INCREASE IN DRIVER BELT USAGE*

DRIVER USAGE RATE (PERCENT)	POTENTIAL ANNUAL REDUCTION IN NUMBER OF		ANNUAL CRASH SAVINGS (MILLION $) FROM REDUCTION IN		
	FATALITIES	SERIOUS INJURIES**	FATALITIES	SERIOUS INJURIES	TOTAL
70	97	618	105.3	34.3	139.6
80	219	1,387	245.3	77.0	322.3
90	341	2,159	381.9	119.8	501.7

* Based on increase from the 62 percent usage rate determined from the 1999-2003 observational surveys, the percent reductions in Table 31, and the economic costs provided by the National Safety Council. These costs are $ 1,120,000 for a fatality and $55,500 for an incapacitating injury. The actual number of fatalities and incapacitation injuries for 1999 - 2003 was used along with the average usage rate over this time period. Not applicable fatalities (motorcycle, etc.) were excluded. The usage rate reached 66 percent in 2003.

** Serious injuries were defined as those listed as incapacitating on the crash report.

TABLE 34. USAGE AND EFFECTIVENESS OF CHILD SAFETY SEATS

(CHILDREN AGE THREE AND UNDER) (1999 - 2003)

			RESTRAINT USED		
VARIABLE	CATEGORY	NONE	SAFETY BELT	CHILD SEAT	ANY RESTRAINT
Number With Given Injury	Fatal	12	3	11	14
	Incapacitating	74	119	124	243
	Non-Incapacitating	186	293	735	1,028
	Possible Injury	193	693	1,387	2,080
	None Detected	614	7,331	17,557	24,888
Percent With Given Injury	Fatal	1.11	0.04	0.06	0.05
	Incapacitating	6.86	1.41	0.63	0.86
	Non-Incapacitating	17.24	3.47	3.71	3.64
	Possible Injury	17.89	8.21	7.00	7.36
	None Detected	56.90	86.87	88.61	88.09
Percent Usage By Seat Position	Front	8.61	51.04	40.34	91.39
	Rear	2.20	23.61	74.18	97.80
	All Positions	3.66	29.83	66.51	96.34
Percent With Given Injury By Seat Position					
(Front)	Fatal	1.01	0.02	0.12	0.07
	Incapacitating	6.48	1.63	0.68	1.21
	Non-Incapacitating	14.84	4.55	2.71	3.74
	Possible Injury	17.44	8.61	5.88	7.40
	None Detected	46.69	71.13	65.29	68.55
(Rear)	Fatal	0.83	0.03	0.03	0.03
	Incapacitating	4.79	0.80	0.50	0.57
	Non-Incapacitating	13.70	1.63	3.17	2.80
	Possible Injury	11.88	5.22	5.87	5.71
	None Detected	47.85	67.88	75.70	73.81
YEAR	1999	546	3,664	5,288	8,952
	2000	189	1,366	3,214	4,580
	2001	123	1,278	3,652	4,930
	2002	246	2,227	5,761	7,988
	2003	196	2,068	5,725	7,793

TABLE 35. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY UNDER 10,000		
Trimble	119	12.2
Lyon	142	12.1
Gallatin	121	11.5
Lee	53	10.8
Menifee	55	10.5
Carlisle	39	10.0
Owsley	37	9.5
Hickman	46	9.4
Wolfe	88	8.9
McLean	95	8.7
Elliott	52	8.7
Robertson	11	8.3
Nicholas	65	7.6
Livingston	87	7.4
Bracken	89	7.2
Cumberland	26	6.5
Ballard	61	6.1
Fulton	55	5.6
Hancock	41	5.6
Crittenden	59	5.3
Clinton	40	5.0
POPULATION CATEGORY 10,000-14,999		
Owen	186	16.2
Morgan	248	15.8
Jackson	197	14.2
Garrard	270	13.3
Edmonson	150	12.4
Washington	158	11.2
Leslie	147	11.0
Todd	123	11.0
Lewis	146	10.5
Martin	115	9.7
Spencer	104	9.4
Webster	163	9.0
Magoffin	109	9.0
Bath	132	9.0
Butler	105	8.6
Caldwell	122	7.6
Fleming	95	7.1
Larue	117	7.1
Powell	115	7.0
Pendleton	131	6.7
Carroll	147	6.7
Trigg	85	5.9
Monroe	45	5.0
Metcalfe	54	4.8
Green	42	3.5
POPULATION CATEGORY 15,000-24,999		
McCreary	211	12.9
Estill	201	12.8
Henry	264	12.7
Lincoln	259	12.6
Casey	140	11.3
Union	239	11.2
Rockcastle	249	10.4
Clay	244	10.0
Russell	134	10.0
Hart	219	9.7
Ohio	289	9.4
Grant	395	9.2
Wayne	169	8.5
Bourbon	257	8.3
Grayson	266	8.3
Marion	205	8.2
Woodford	302	8.1
Mercer	233	8.0
Knott	146	7.5
Breathitt	159	7.4
Rowan	334	7.3
Allen	149	7.1
Adair	169	7.0
Anderson	173	6.9
Lawrence	94	6.6
Montgomery	249	6.4
Simpson	169	6.3
Harrison	167	6.1
Mason	212	5.9
Taylor	216	5.8
Johnson	156	5.4
Breckinridge	54	3.7
POPULATION CATEGORY 25,000-50,000		
Carter	428	12.8
Knox	480	11.8
Greenup	404	10.9
Oldham	489	10.5
Marshall	439	10.4
Franklin	852	9.9
Harlan	352	9.9
Whitley	453	9.5
Floyd	473	9.2
Letcher	244	8.9
Scott	569	8.7
Jessamine	582	8.6
Nelson	518	8.5
Hopkins	663	8.3
Muhlenberg	338	7.7
Bell	249	7.0
Barren	464	7.0
Graves	323	6.9
Shelby	381	6.4
Perry	312	6.4
Clark	370	6.3
Henderson	607	6.3
Calloway	298	5.8
Meade	150	5.7
Boyd	503	5.2
Logan	170	5.1
Boyle	229	5.1
POPULATION CATEGORY OVER 50,000		
Pike	1,210	11.8
Madison	1,464	11.1
Christian	883	9.3
Kenton	2,139	7.6
Warren	1,586	7.6
Pulaski	661	7.3
Boone	1,305	7.3
Hardin	965	6.9
Laurel	538	6.4
Campbell	898	6.3
Fayette	3,669	5.7
Daviess	834	4.9
McCracken	656	4.9
Bullitt	319	4.7
Jefferson	5,305	4.0

TABLE 36. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF CRASHES (1999-2003)	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY OVER 200,000		
Lexington	3,652	5.6
Louisville	3,013	3.7
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	499	8.3
Frankfort	419	6.9
Richmond	439	6.4
Bowling Green	887	5.6
Elizabethtown	331	5.1
Covington	512	4.8
Jeffersontown	216	4.5
Florence	404	4.4
Henderson	300	4.3
Paducah	362	4.1
Ashland	221	3.8
Owensboro	397	3.1
Radcliff	91	3.1
POPULATION CATEGORY 10,000-19,999		
Erlanger	462	11.5
Fort Thomas	104	8.3
Independence	154	7.3
Somerset	226	5.1
Nicholasville	186	4.8
Georgetown	154	4.5
Campbellsville	109	4.3
Madisonville	188	4.2
Glasgow	138	4.1
Newport	163	3.5
Bardstown	106	3.5
Danville	115	3.3
Middlesboro	61	3.2
Shelbyville	82	3.1
Murray	96	2.9
Winchester	114	2.9
Shively	126	2.9
Mayfield	50	2.4
Saint Matthews	11	1.4
POPULATION CATEGORY 5,000-9,999		
Villa Hills	74	17.7
Taylor Mill	128	9.7
Wilmore	23	8.7
Highland Heights	89	8.7
Edgewood	76	8.6
Alexandria	108	8.1
Fort Mitchell	108	8.0
Flatwoods	52	7.7
Monticello	92	7.3
Berea	131	6.5
Pikeville	152	6.5
Fort Wright	145	6.5
Elsmere	42	5.8
Princeton	51	5.5
Central City	48	5.2
Corbin	93	5.1
Maysville	121	5.0
Versailles	83	4.7
Harrodsburg	74	4.5
Williamsburg	41	4.2
Russellville	70	4.2
London	136	4.0
La Grange	38	3.7
Paris	59	3.3
Dayton	12	3.3
Lebanon	42	3.2
Bellevue	35	3.1
Mount Sterling	56	3.1
Leitchfield	43	2.9
Lawrenceburg	29	2.8
Morehead	62	2.7
Mount Washington	25	2.6
Franklin	32	2.5
Cynthiana	35	2.5
Shepherdsville	52	2.2
POPULATION CATEGORY 2,500-4,999		
Park Hills	28	13.9
Williamstown	71	10.0
Calvert City	29	8.2
Stanford	37	7.0
Vine Grove	24	6.9
Cold Spring	74	6.5
Hodgenville	39	6.2
Lancaster	44	6.1
Benton	58	5.8
Mount Vernon	43	5.6
Ludlow	15	5.5
Providence	13	5.5
Morganfield	37	5.4
Lakeside Park	19	5.3
Grayson	53	5.2
Flemingsburg	23	5.1
Springfield	29	4.9
Russell	36	4.7
Hartford	15	4.7
Greenville	42	4.6
Barbourville	37	4.5
Southgate	21	4.4
Irvine	23	4.4
Columbia	49	4.3
Beaver Dam	27	4.3
Cumberland	10	4.3
Scottsville	37	4.2
Fulton	20	4.1
Prestonsburg	49	3.7
Carrollton	32	3.3
Hickman	5	3.3
Dawson Springs	9	3.2
Stanton	17	3.1
Marion	14	2.9
Paintsville	33	2.5
Hazard	55	2.4

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1999 - 2003)

COUNTY	1999	2000	2001	2002	2003	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
Adair	372	361	211	310	307	1,561	27.2	9.2
Allen	240	174	175	117	171	877	14.4	5.9
Anderson	1,409	1,382	1,210	1,400	1,040	6,441	90.1	37.2
Ballard	147	166	206	153	98	770	25.0	12.6
Barren	882	1,222	1,415	1,062	957	5,538	40.6	11.9
Bath	266	527	316	331	265	1,705	42.8	12.9
Bell	111	231	873	602	598	2,415	28.0	9.7
Boone	2,106	2,231	1,603	1,897	2,965	10,802	31.4	8.3
Bourbon	730	637	910	890	655	3,822	55.4	14.9
Boyd	1,573	1,344	1,661	1,087	939	6,604	38.4	13.1
Boyle	881	547	577	734	815	3,554	37.3	15.5
Bracken	260	174	261	237	260	1,192	39.6	13.4
Breathitt	81	106	192	68	69	516	10.8	3.2
Breckinridge	188	156	162	215	240	961	14.2	17.8
Bullitt	1,404	1,465	1,085	1,013	1,371	6,338	26.3	19.9
Butler	627	411	335	260	159	1,792	40.0	17.1
Caldwell	418	293	405	353	454	1,923	40.3	15.8
Calloway	518	628	636	489	323	2,594	22.4	8.7
Campbell	2,274	2,683	3,155	3,200	2,787	14,099	46.9	15.7
Carlisle	154	167	243	137	86	787	38.8	20.2
Carroll	570	614	587	822	681	3,274	91.4	22.3
Carter	960	1,361	801	888	717	4,727	51.4	11.0
Casey	143	142	127	145	100	657	12.8	4.7
Christian	754	965	987	1,053	1,364	5,123	28.4	5.8
Clark	554	647	867	939	1,877	4,884	40.9	13.2
Clay	660	200	410	238	563	2,071	31.3	8.5
Clinton	129	128	121	139	85	602	17.9	15.1
Crittenden	52	64	51	96	26	289	8.9	4.9
Cumberland	149	120	153	141	93	656	26.6	25.2
Daviess	2,800	2,391	1,964	2,737	3,779	13,671	41.6	16.4
Edmonson	38	70	84	158	177	527	12.5	3.5
Elliott	5	10	12	17	18	62	2.8	1.2
Estill	203	195	179	221	146	944	18.4	4.7
Fayette	9,516	7,807	6,599	5,787	6,683	36,392	41.1	9.9
Fleming	295	210	149	189	261	1,104	22.2	11.6
Floyd	334	153	182	252	230	1,151	8.4	2.4
Franklin	2,354	2,035	1,673	2,241	2,562	10,865	63.1	12.8
Fulton	197	166	148	172	123	806	34.3	14.7
Gallatin	654	494	528	477	378	2,531	88.1	20.9
Garrard	171	359	262	230	220	1,242	23.2	4.6
Grant	974	768	1,037	691	972	4,442	52.9	11.2
Graves	823	800	872	833	823	4,151	32.1	12.9
Grayson	576	349	554	806	722	3,007	34.3	11.3
Green	90	180	27	11	46	354	8.9	8.4
Greenup	597	259	544	634	627	2,661	20.0	6.6
Hancock	241	127	125	134	124	751	24.0	18.3
Hardin	4,805	4,008	4,312	4,992	4,514	22,631	71.4	23.5
Harlan	167	90	144	96	69	566	5.5	1.6
Harrison	408	407	302	307	138	1,562	24.3	9.4
Hart	343	231	215	195	312	1,296	22.2	5.9
Henderson	1,523	1,300	1,724	1,791	1,290	7,628	46.8	12.6
Henry	765	747	624	747	647	3,530	65.1	13.4
Hickman	167	184	148	206	126	831	45.5	18.1
Hopkins	1,633	1,632	1,623	1,735	1,193	7,816	47.2	11.8
Jackson	34	125	32	24	35	250	5.6	1.3
Jefferson	15,152	9,743	6,600	6,068	8,560	46,123	19.3	10.7
Jessamine	2,200	1,983	1,174	911	932	7,200	50.5	12.4
Johnson	234	139	101	156	188	818	10.1	5.2
Kenton	4,442	4,422	5,608	5,630	3,923	24,025	46.7	11.2
Knott	149	48	29	27	25	278	5.1	1.9
Knox	902	736	676	555	354	3,223	31.7	6.7
Larue	244	202	309	138	303	1,196	24.2	10.2
Laurel	1,402	2,129	926	1,334	751	6,542	35.1	12.2
Lawrence	400	439	318	235	226	1,618	30.0	17.2

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1999 - 2003) (continued)

COUNTY	1999	2000	2001	2002	2003	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
Lee	36	29	66	39	21	191	7.8	3.6
Leslie	367	276	336	181	128	1,288	31.5	8.8
Letcher	106	98	82	210	70	566	6.7	2.3
Lewis	308	254	178	182	292	1,214	25.8	8.3
Lincoln	609	428	243	416	359	2,055	25.4	7.9
Livingston	515	424	348	375	398	2,060	56.2	23.7
Logan	542	569	396	387	473	2,367	25.6	13.9
Lyon	428	420	380	423	370	2,021	72.7	14.2
McCracken	1,624	1,699	1,467	1,472	1,337	7,599	31.3	11.6
McCreary	178	192	128	134	78	710	13.2	3.4
McLean	85	143	331	296	184	1,039	28.5	10.9
Madison	2,012	1,322	1,199	1,150	1,360	7,043	28.9	4.8
Magoffin	20	8	13	240	117	398	9.2	3.7
Marion	340	287	162	221	108	1,118	18.3	5.5
Marshall	894	779	733	636	1,240	4,282	36.6	9.8
Martin	29	10	12	12	10	73	1.8	0.6
Mason	576	346	433	296	188	1,839	30.9	8.7
Meade	412	364	447	443	409	2,075	23.6	13.8
Menifee	22	34	45	46	30	177	7.9	3.2
Mercer	537	271	220	350	544	1,922	24.7	8.2
Metcalfe	275	310	251	287	210	1,333	38.2	24.7
Monroe	32	29	22	69	65	217	5.4	4.8
Montgomery	453	559	298	332	184	1,826	21.8	7.3
Morgan	202	229	258	303	202	1,194	28.6	4.8
Muhlenberg	466	442	400	599	352	2,259	20.2	6.7
Nelson	1,020	1,124	773	743	893	4,553	31.9	8.8
Nicholas	226	187	150	226	142	931	35.1	14.3
Ohio	460	356	856	1,396	1,065	4,133	50.8	14.3
Oldham	834	1,050	1,647	1,152	1,145	5,828	33.0	11.9
Owen	118	107	174	323	310	1,032	27.8	5.5
Owsley	25	23	1	3	2	54	3.2	1.5
Pendleton	267	177	265	256	172	1,137	21.3	8.7
Perry	266	126	173	134	97	796	8.0	2.6
Pike	292	253	164	294	217	1,220	5.5	1.0
Powell	446	333	483	671	495	2,428	52.9	21.1
Pulaski	942	747	691	953	563	3,896	18.7	5.9
Robertson	10	7	9	7	4	37	4.6	3.4
Rockcastle	578	538	367	457	488	2,428	43.5	9.8
Rowan	604	944	683	604	586	3,421	49.4	10.2
Russell	73	104	77	109	120	483	8.0	3.6
Scott	1,505	1,471	1,344	1,274	903	6,497	50.4	11.4
Shelby	1,570	1,290	1,086	1,045	1,095	6,086	50.7	16.0
Simpson	231	143	177	155	199	905	15.4	5.4
Spencer	311	179	201	221	196	1,108	22.1	10.7
Taylor	414	449	392	416	332	2,003	24.5	9.3
Todd	152	191	206	204	188	941	24.1	7.7
Trigg	271	250	232	295	103	1,151	24.2	13.5
Trimble	17	48	62	59	77	263	8.4	2.2
Union	162	193	181	266	141	943	17.4	3.9
Warren	2,165	1,888	2,404	2,718	2,256	11,431	36.5	7.2
Washington	467	401	300	325	234	1,727	43.7	10.9
Wayne	83	40	42	41	84	290	4.4	1.7
Webster	273	249	194	238	144	1,098	22.2	6.7
Whitley	677	675	309	380	260	2,301	20.1	5.1
Wolfe	1,621	1,045	1,785	1,482	1,586	7,519	303.0	85.4
Woodford	2,528	2,075	1,546	1,882	1,650	9,681	111.4	32.1
TOTAL*	103,126	90,269	84,961	87,181	86,018	451,555	32.2	10.2

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

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1999 - 2003)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
UNDER 10,000	Wolfe	303.0	Wolfe	85.4
	Gallatin	88.1	Cumberland	25.2
	Lyon	72.7	Livingston	23.7
	Livingston	56.2	Gallatin	20.9
	Hickman	45.5	Carlisle	20.2
	Bracken	39.6	Hancock	18.3
	Carlisle	38.8	Hickman	18.1
	Nicholas	35.1	Clinton	15.1
	Fulton	34.3	Fulton	14.7
	McLean	28.5	Nicholas	14.3
	Cumberland	26.6	Lyon	14.2
	Ballard	25.0	Bracken	13.4
	Hancock	24.0	Ballard	12.6
	Clinton	17.9	McLean	10.9
	Crittenden	8.9	Crittenden	4.9
	Trimble	8.4	Lee	3.6
	Menifee	7.9	Robertson	3.4
	Lee	7.8	Menifee	3.2
	Robertson	4.6	Trimble	2.2
	Owsley	3.2	Owsley	1.5
	Elliott	2.8	Elliott	1.2
10,000-14,999	Carroll	91.4	Metcalfe	24.7
	Powell	52.9	Carroll	22.3
	Washington	43.7	Powell	21.1
	Bath	42.8	Butler	17.1
	Caldwell	40.3	Caldwell	15.8
	Butler	40.0	Trigg	13.5
	Metcalfe	38.2	Bath	12.9
	Leslie	31.5	Fleming	11.6
	Morgan	28.6	Washington	10.9
	Owen	27.8	Spencer	10.7
	Lewis	25.8	Larue	10.2
	Larue	24.2	Leslie	8.8
	Trigg	24.2	Pendleton	8.7
	Todd	24.1	Green	8.4
	Garrard	23.2	Lewis	8.3
	Webster	22.2	Todd	7.7
	Fleming	22.2	Webster	6.7
	Spencer	22.1	Owen	5.5
	Pendleton	21.3	Monroe	4.8
	Edmonson	12.5	Morgan	4.8
	Magoffin	9.2	Garrard	4.6
	Green	8.9	Magoffin	3.7
	Jackson	5.6	Edmonson	3.5
	Monroe	5.4	Jackson	1.3
	Martin	1.8	Martin	0.6
15,000 - 24,999	Woodford	111.4	Anderson	37.2
	Anderson	90.1	Woodford	32.1
	Henry	65.1	Breckinridge	17.8
	Bourbon	55.4	Lawrence	17.2
	Grant	52.9	Bourbon	14.9
	Ohio	50.8	Ohio	14.3
	Rowan	49.4	Henry	13.4
	Rockcastle	43.5	Grayson	11.3
	Grayson	34.3	Grant	11.2
	Clay	31.3	Rowan	10.2
	Mason	30.9	Rockcastle	9.8
	Lawrence	30.0	Harrison	9.4
	Adair	27.2	Taylor	9.3

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1999 - 2003) (continued)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
15,000 - 24,999	Lincoln	25.4	Adair	9.2
(cont'd)	Mercer	24.7	Mason	8.7
	Taylor	24.5	Clay	8.5
	Harrison	24.3	Mercer	8.2
	Hart	22.2	Lincoln	7.9
	Montgomery	21.8	Montgomery	7.3
	Estill	18.4	Hart	5.9
	Marion	18.3	Allen	5.9
	Union	17.4	Marion	5.5
	Simpson	15.4	Simpson	5.4
	Allen	14.4	Johnson	5.2
	Breckinridge	14.2	Estill	4.7
	McCreary	13.2	Casey	4.7
	Casey	12.8	Union	3.9
	Breathitt	10.8	Russell	3.6
	Johnson	10.1	McCreary	3.4
	Russell	8.0	Breathitt	3.2
	Knott	5.1	Knott	1.9
	Wayne	4.4	Wayne	1.7
25,000 - 49,999	Franklin	63.1	Shelby	16.0
	Carter	51.4	Boyle	15.5
	Shelby	50.7	Logan	13.9
	Jessamine	50.5	Meade	13.8
	Scott	50.4	Clark	13.2
	Hopkins	47.2	Boyd	13.1
	Henderson	46.8	Graves	12.9
	Clark	40.9	Franklin	12.8
	Barren	40.6	Henderson	12.6
	Boyd	38.4	Jessamine	12.4
	Boyle	37.3	Barren	11.9
	Marshall	36.6	Oldham	11.9
	Oldham	33.0	Hopkins	11.8
	Graves	32.1	Scott	11.4
	Nelson	31.9	Carter	11.0
	Knox	31.7	Marshall	9.8
	Bell	28.0	Bell	9.7
	Logan	25.6	Nelson	8.8
	Meade	23.6	Calloway	8.7
	Calloway	22.4	Knox	6.7
	Muhlenberg	20.2	Muhlenberg	6.7
	Whitley	20.1	Greenup	6.6
	Greenup	20.0	Whitley	5.1
	Floyd	8.4	Perry	2.6
	Perry	8.0	Floyd	2.4
	Letcher	6.7	Letcher	2.3
	Harlan	5.5	Harlan	1.6
50,000 - OVER	Hardin	71.4	Hardin	23.5
	Campbell	46.9	Bullitt	19.9
	Kenton	46.7	Daviess	16.4
	Daviess	41.6	Campbell	15.7
	Fayette	41.1	Laurel	12.2
	Warren	36.5	McCracken	11.6
	Laurel	35.1	Kenton	11.2
	Boone	31.4	Jefferson	10.7
	McCracken	31.3	Fayette	9.9
	Madison	28.9	Boone	8.3
	Christian	28.4	Warren	7.2
	Bullitt	26.3	Pulaski	5.9
	Jefferson	19.3	Christian	5.8
	Pulaski	18.7	Madison	4.8
	Pike	5.5	Pike	1.0

TABLE 39. MOVING SPEED DATA FOR VARIOUS HIGHWAY TYPES (CARS)

HIGHWAY TYPE AND SPEED LIMIT	SAMPLE SIZE	SPEED (MPH) AVERAGE	SPEED (MPH) 85TH PERCENTILE	PERCENT OVER SPEED LIMIT
Interstate 65 mph	11,780	68.0	72.9	70.1
Interstate 55 mph	3,885	61.4	66.7	86.0
Interstate 50 mph	163	55.8	60.8	84.0
Parkway Four Lane 65 mph	10,642	68.4	73.6	70.5
Parkway Two Lane 55 mph	1,589	62.8	68.5	90.5
Four Lane Non-Interstate or Parkway 55 mph	11,052	59.3	64.5	76.8
Two Lane Full Width Shoulder 55 mph	4,081	58.7	64.2	71.3
Two Lane Without Full Width Shoulder 55 mph	5,385	55.9	61.6	54.2

TABLE 40. MOVING SPEED DATA FOR VARIOUS HIGHWAY TYPES (TRUCKS)

HIGHWAY TYPE AND SPEED LIMIT	SAMPLE SIZE	SPEED (MPH) AVERAGE	SPEED (MPH) 85TH PERCENTILE	PERCENT OVER SPEED LIMIT
Interstate 65 mph	5,029	64.2	68.7	37.3
Interstate 55 mph	1,533	59.4	64.6	75.4
Interstate 50 mph	99	55.4	59.8	87.9
Parkway Four Lane 65 mph	3,067	64.9	69.7	45.4
Parkway Two Lane 55 mph	213	58.3	64.1	70.9
Four Lane Non-Interstate or Parkway 55 mph	1,918	56.7	61.9	60.8
Two Lane Full Width Shoulder 55 mph	595	56.5	62.1	58.5
Two Lane Without Full Width Shoulder 55 mph	673	53.6	59.7	41.2

TABLE 41. CRASH TREND ANALYSIS (1999 - 2003)

Crash Statistic	Number in Given Year 1999	2000	2001	2002	4-Year Average 1999 - 2002	2003	2003 Percent Change*
Total Crashes	132,216	135,079	130,190	130,347	131,958	129,828	-1.6
Fatal Crashes	729	724	759	812	756	845	11.8
Fatalities	819	823	843	917	851	928	9.0
Injury Crashes	36,125	34,732	32,878	32,393	34,032	31,075	-8.7
Injuries	54,951	53,129	49,919	49,329	51,832	46,966	-9.4
Fatal and Injury Crashes	36,854	35,456	33,637	33,205	34,788	31,920	-8.2
Licensed Drivers (Millions)	2.67	2.75	2.80	2.84	2.77	2.86	3.2
Registered Vehicles (Millions)	3.15	3.29	3.30	3.42	3.29	3.49	6.0
Total Vehicle Miles (Billions)	47.816	46.680	46.255	46.868	46.905	46.828	-0.2
Total Crash/100 MVM	277	289	281	278	281	277	-1.3
Fatal Crash/100 MVM	1.52	1.55	1.57	1.73	1.59	1.80	13.5
Fatalities/100 MVM	1.71	1.76	1.78	1.96	1.80	1.98	10.1
Injuries/100 MVM	115	114	108	105	110	100	-8.8
Speed Related Crashes	9,112	9,633	8,310	9,013	9,017	9,658	7.1
Speed Related Injury Crashes	3,990	3,682	3,122	3,276	3,518	3,197	-9.1
Speed Related Fatal Crashes	201	154	154	179	172	163	-5.2
Speed Convictions	103,696	90,863	85,565	88,017	92,035	86,852	-5.6
Alcohol Related Crashes	5,441	6,127	5,853	5,839	5,815	5,578	-4.1
Alcohol Related Injury Crashes	2,592	2,903	2,633	2,600	2,682	2,383	-11.1
Alcohol Related Fatal Crashes	196	181	156	184	179	160	-10.6
Alcohol Related Fatalities	222	196	172	209	200	178	-11.0
DUI Filings	44,641	44,118	43,051	41,689	43,375	40,436	-6.8
DUI Convictions	28,486	28,060	26,210	26,688	27,361	25,475	-6.9
DUI Conviction Rate (Percent)**	77.7	78.6	80.2	82.7	79.8	83.3	4.4
Number DUI Filings/Alcohol Related Fatality	201	225	250	199	219	227	3.7
Drug Related Crashes	756	990	1,206	1,091	1,011	1,021	1.0
Drug Related Injury Crashes	355	461	576	522	479	531	10.9
Drug Related Fatal Crashes	112	133	127	143	129	151	17.1
Pedestrian Related Crashes	1,117	1,124	977	940	1,040	930	-10.6
Pedestrian Related Injury Crashes	1,011	907	842	786	887	788	-11.2
Pedestrian Related Fatal Crashes	55	52	53	53	53	57	7.5
Bicycle/Motor Vehicle Related Crashes	606	582	507	497	548	485	-11.5
Bicycle Related Injury Crashes	512	448	389	349	425	356	-16.2
Bicycle Related Fatal Crashes	10	4	8	9	8	6	-25.0
Motorcycle Related Crashes	1,033	1,110	1,283	1,300	1,182	1,438	21.7
Motorcycle Related Injury Crashes	774	797	910	924	851	997	17.2
Motorcycle Related Fatal Crashes	42	36	60	42	45	56	24.4
School Bus Crashes	648	932	906	862	837	864	3.2
School Bus Injury Crashes	110	149	141	127	132	111	-15.9
School Bus Fatal Crashes	0	1	2	3	2	2	0.0
Truck Crashes	7,642	10,276	9,134	8,805	8,964	8,988	0.3
Truck Injury Crashes	1,665	2,181	1,856	1,803	1,876	1,757	-6.3
Truck Fatal Crashes	82	88	95	116	95	116	22.1
Train Crashes	57	59	64	67	62	72	16.1
Train Injury Crashes	16	18	18	22	19	25	31.6
Train Fatal Crashes	2	4	5	4	4	2	-50.0

* Percent change from 1999-2002 average to 2003.

** Conviction rate excludes pending cases.

*** Data were not available.

TABLE 42. 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	12	1.4	5	0.6	31	3.6	13	1.5	167	19.4
Allen	3	0.3	4	0.4	23	2.6	8	0.9	144	16.2
Anderson	14	1.5	6	0.6	27	2.8	30	3.1	150	15.7
Ballard	5	1.2	3	0.7	7	1.7	4	1.0	155	37.4
Barren	29	1.5	17	0.9	46	2.4	26	1.4	544	28.6
Bath	4	0.7	2	0.4	14	2.5	7	1.3	148	26.7
Bell	37	2.5	15	1.0	23	1.5	30	2.0	287	19.1
Boone	76	1.8	59	1.4	124	2.9	83	1.9	1957	45.5
Bourbon	23	2.4	7	0.7	22	2.3	25	2.6	256	26.4
Boyd	50	2.0	28	1.1	108	4.3	45	1.8	683	27.5
Boyle	20	1.4	12	0.9	32	2.3	16	1.2	264	19.1
Bracken	8	1.9	3	0.7	15	3.6	8	1.9	73	17.6
Breathitt	17	2.1	6	0.7	41	5.1	28	3.5	156	19.4
Breckinridge	6	0.6	4	0.4	10	1.1	7	0.8	95	10.2
Bullitt	42	1.4	11	0.4	64	2.1	71	2.3	665	21.7
Butler	9	1.4	0	0.0	9	1.4	8	1.2	85	13.1
Caldwell	7	1.1	6	0.9	16	2.5	4	0.6	158	24.2
Calloway	23	1.3	13	0.8	50	2.9	30	1.8	284	16.6
Campbell	194	4.4	136	3.1	110	2.5	70	1.6	966	21.8
Carlisle	0	0.0	1	0.4	6	2.2	2	0.7	37	13.8
Carroll	12	2.4	10	2.0	19	3.7	12	2.4	263	51.8
Carter	14	1.0	3	0.2	49	3.6	29	2.2	324	24.1
Casey	13	1.7	2	0.3	19	2.5	5	0.6	105	13.6
Christian	82	2.3	51	1.4	79	2.2	90	2.5	775	21.4
Clark	34	2.1	18	1.1	50	3.0	45	2.7	453	27.3
Clay	11	0.9	7	0.6	26	2.1	44	3.6	159	12.9
Clinton	4	0.8	1	0.2	4	0.8	4	0.8	60	12.5
Crittenden	11	2.3	0	0.0	13	2.8	10	2.1	91	19.4
Cumberland	4	1.1	0	0.0	3	0.8	3	0.8	43	12.0
Daviess	102	2.2	137	3.0	147	3.2	70	1.5	953	20.8
Edmonson	8	1.4	0	0.0	16	2.7	9	1.5	56	9.6
Elliott	5	1.5	0	0.0	17	5.0	4	1.2	43	12.7
Estill	11	1.4	3	0.4	20	2.6	15	2.0	65	8.5
Fayette	598	4.6	331	2.5	354	2.7	267	2.0	3696	28.4
Fleming	5	0.7	0	0.0	11	1.6	13	1.9	105	15.2
Floyd	50	2.4	12	0.6	84	4.0	82	3.9	421	19.8
Franklin	40	1.7	23	1.0	62	2.6	61	2.6	461	19.3
Fulton	5	1.3	7	1.8	15	3.9	6	1.5	102	26.3
Gallatin	8	2.0	4	1.0	15	3.8	6	1.5	161	40.9
Garrard	14	1.9	5	0.7	18	2.4	17	2.3	116	15.7
Grant	33	2.9	9	0.8	44	3.9	35	3.1	448	40.0
Graves	24	1.3	13	0.7	51	2.8	29	1.6	361	19.5
Grayson	22	1.8	5	0.4	23	1.9	27	2.2	244	20.3
Green	3	0.5	1	0.2	13	2.3	8	1.4	75	13.0
Greenup	14	0.8	14	0.8	41	2.2	24	1.3	210	11.4
Hancock	1	0.2	1	0.2	10	2.4	8	1.9	84	20.0
Hardin	51	1.1	41	0.9	123	2.6	76	1.6	1124	23.9
Harlan	44	2.7	12	0.7	46	2.8	27	1.6	335	20.2
Harrison	22	2.4	12	1.3	22	2.4	15	1.7	141	15.7
Hart	12	1.4	2	0.2	16	1.8	13	1.5	341	39.1
Henderson	85	3.8	64	2.9	83	3.7	46	2.1	655	29.2
Henry	13	1.7	5	0.7	13	1.7	11	1.5	289	38.4
Hickman	4	1.5	1	0.4	5	1.9	1	0.4	38	14.4
Hopkins	38	1.6	35	1.5	95	4.1	33	1.4	554	23.8
Jackson	5	0.7	0	0.0	13	1.9	13	1.9	60	8.9
Jefferson	1724	5.0	883	2.5	963	2.8	927	2.7	8872	25.6
Jessamine	51	2.6	31	1.6	56	2.9	96	4.9	422	21.6
Johnson	9	0.8	4	0.3	38	3.2	23	2.0	153	13.1
Kenton	366	4.8	161	2.1	168	2.2	154	2.0	2205	29.1
Knott	10	1.1	7	0.8	33	3.7	23	2.6	183	20.7

TABLE 42. 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	27	1.7	15	0.9	44	2.8	36	2.3	241	15.2
Larue	7	1.0	1	0.1	10	1.5	9	1.3	145	21.7
Laurel	28	1.1	13	0.5	56	2.1	64	2.4	840	31.9
Lawrence	6	0.8	4	0.5	20	2.6	11	1.4	188	24.2
Lee	7	1.8	1	0.3	2	0.5	4	1.0	29	7.3
Leslie	10	1.6	3	0.5	22	3.5	15	2.4	153	24.7
Letcher	18	1.4	4	0.3	38	3.0	37	2.9	373	29.5
Lewis	14	2.0	3	0.4	6	0.9	13	1.8	143	20.3
Lincoln	10	0.9	4	0.3	20	1.7	8	0.7	140	12.0
Livingston	3	0.6	6	1.2	11	2.2	6	1.2	99	20.2
Logan	24	1.8	18	1.4	31	2.3	21	1.6	330	24.8
Lyon	2	0.5	1	0.2	18	4.5	1	0.2	147	36.4
McCracken	66	2.0	62	1.9	141	4.3	62	1.9	862	26.3
McCreary	8	0.9	5	0.6	17	2.0	15	1.8	88	10.3
McLean	3	0.6	4	0.8	15	3.0	10	2.0	109	21.9
Madison	70	2.0	39	1.1	102	2.9	77	2.2	998	28.2
Magoffin	11	1.7	1	0.2	14	2.1	11	1.7	76	11.4
Marion	25	2.7	12	1.3	27	3.0	13	1.4	139	15.3
Marshall	8	0.5	7	0.5	45	3.0	14	0.9	342	22.7
Martin	10	1.6	0	0.0	9	1.4	11	1.7	109	17.3
Mason	20	2.4	13	1.5	31	3.7	18	2.1	314	37.4
Meade	6	0.5	5	0.4	19	1.4	11	0.8	113	8.6
Menifee	4	1.2	1	0.3	8	2.4	4	1.2	21	6.4
Mercer	24	2.3	7	0.7	37	3.6	11	1.1	172	16.5
Metcalfe	6	1.2	0	0.0	10	2.0	13	2.6	112	22.3
Monroe	4	0.7	4	0.7	5	0.9	3	0.5	71	12.1
Montgomery	22	2.0	5	0.4	37	3.3	28	2.5	234	20.8
Morgan	6	0.9	3	0.4	20	2.9	18	2.6	82	11.8
Muhlenberg	20	1.3	10	0.6	62	3.9	25	1.6	381	23.9
Nelson	36	1.9	27	1.4	55	2.9	41	2.2	331	17.7
Nicholas	2	0.6	0	0.0	6	1.8	1	0.3	37	10.9
Ohio	7	0.6	5	0.4	30	2.6	11	1.0	232	20.2
Oldham	21	0.9	6	0.3	44	1.9	49	2.1	439	19.0
Owen	5	0.9	0	0.0	15	2.8	6	1.1	76	14.4
Owsley	3	1.2	1	0.4	4	1.6	5	2.1	26	10.7
Pendleton	7	1.0	2	0.3	30	4.2	13	1.8	173	24.0
Perry	38	2.6	9	0.6	36	2.4	57	3.9	452	30.8
Pike	72	2.1	10	0.3	178	5.2	73	2.1	1246	36.3
Powell	9	1.4	5	0.8	15	2.3	10	1.5	118	17.8
Pulaski	42	1.5	19	0.7	86	3.1	45	1.6	562	20.0
Robertson	2	1.8	0	0.0	3	2.6	0	0.0	6	5.3
Rockcastle	5	0.6	3	0.4	21	2.5	20	2.4	370	44.6
Rowan	15	1.4	13	1.2	44	4.0	23	2.1	268	24.3
Russell	7	0.9	0	0.0	16	2.0	4	0.5	104	12.7
Scott	25	1.5	22	1.3	48	2.9	34	2.1	641	38.8
Shelby	34	2.0	15	0.9	46	2.8	40	2.4	524	31.4
Simpson	19	2.3	10	1.2	13	1.6	3	0.4	417	50.8
Spencer	6	1.0	3	0.5	24	4.1	12	2.0	66	11.2
Taylor	11	1.0	14	1.2	28	2.4	13	1.1	177	15.4
Todd	12	2.0	2	0.3	17	2.8	10	1.7	111	18.5
Trigg	4	0.6	1	0.2	23	3.7	4	0.6	119	18.9
Trimble	2	0.5	1	0.2	18	4.4	7	1.7	85	20.9
Union	18	2.3	6	0.8	38	4.9	14	1.8	167	21.4
Warren	112	2.4	78	1.7	155	3.4	90	1.9	1369	29.6
Washington	9	1.6	1	0.2	20	3.7	13	2.4	106	19.4
Wayne	12	1.2	4	0.4	11	1.1	14	1.4	88	8.8
Webster	5	0.7	5	0.7	15	2.1	12	1.7	212	30.0
Whitley	30	1.7	15	0.8	49	2.7	30	1.7	429	23.9
Wolfe	6	1.7	3	0.8	8	2.3	7	2.0	67	19.0
Woodford	21	1.8	5	0.4	26	2.2	28	2.4	315	27.1

* Five-Year (1999-2003) Total.

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

TABLE 43. PEDESTRIAN CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Crittenden	10	2.1
Robertson	2	1.8
Gallatin	6	1.5
Wolfe	5	1.4
Ballard	6	1.4
Fulton	5	1.3
Lee	5	1.3
Nicholas	4	1.2
Bracken	5	1.2
Owsley	3	1.2
Menifee	3	0.9
Livingston	4	0.8
Cumberland	3	0.8
Hickman	2	0.8
Lyon	3	0.7
Trimble	3	0.7
Elliott	2	0.6
Clinton	3	0.6
McLean	3	0.6
Hancock	2	0.5
Carlisle	1	0.4
POPULATION CATEGORY 10,000-14,999		
Carroll	13	2.6
Garrard	16	2.2
Lewis	15	2.1
Magoffin	13	2.0
Butler	11	1.7
Powell	11	1.7
Leslie	9	1.5
Washington	8	1.5
Todd	9	1.5
Martin	9	1.4
Morgan	7	1.0
Larue	7	1.0
Metcalfe	5	1.0
Spencer	6	1.0
Bath	5	0.9
Owen	4	0.8
Edmonson	4	0.7
Fleming	5	0.7
Jackson	4	0.6
Caldwell	4	0.6
Webster	4	0.6
Pendleton	4	0.6
Monroe	3	0.5
Trigg	3	0.5
Green	0	0.0
POPULATION CATEGORY 15,000-24,999		
Grant	28	2.5
Marion	22	2.4
Harrison	22	2.4
Union	18	2.3
Woodford	26	2.2
Simpson	18	2.2
Grayson	25	2.1
Mercer	22	2.1
Bourbon	20	2.1
Mason	17	2.0
Breathitt	16	2.0
Henry	14	1.9
Casey	15	1.9
Rowan	18	1.6
Adair	14	1.6
Montgomery	17	1.5
Knott	13	1.5
Anderson	12	1.3
Estill	10	1.3
Hart	11	1.3
McCreary	11	1.3
Taylor	15	1.3
Johnson	14	1.2
Wayne	12	1.2
Clay	12	1.0
Lincoln	10	0.9
Breckinridge	7	0.8
Ohio	9	0.8
Rockcastle	5	0.6
Russell	3	0.4
Lawrence	3	0.4
Allen	2	0.2
POPULATION CATEGORY 25,000-50,000		
Henderson	81	3.6
Jessamine	56	2.9
Boyd	61	2.5
Floyd	48	2.3
Harlan	39	2.3
Bell	31	2.1
Clark	35	2.1
Boyle	28	2.0
Franklin	47	2.0
Perry	30	2.0
Knox	30	1.9
Nelson	35	1.9
Shelby	30	1.8
Scott	29	1.8
Logan	22	1.7
Hopkins	37	1.6
Barren	31	1.6
Letcher	19	1.5
Whitley	27	1.5
Muhlenberg	19	1.2
Calloway	21	1.2
Graves	18	1.0
Carter	13	1.0
Meade	10	0.8
Greenup	13	0.7
Oldham	14	0.6
Marshall	7	0.5
POPULATION CATEGORY OVER 50,000		
Jefferson	1,729	5.0
Fayette	564	4.3
Kenton	320	4.2
Campbell	173	3.9
Warren	113	2.4
Madison	77	2.2
Christian	81	2.2
Daviess	95	2.1
McCracken	68	2.1
Boone	79	1.8
Pike	59	1.7
Bullitt	42	1.4
Pulaski	40	1.4
Hardin	58	1.2
Laurel	27	1.0

TABLE 44. PEDESTRIAN CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	1,228	9.6
Lexington	556	4.3
POPULATION CATEGORY 20,000-55,000		
Covington	218	10.1
Henderson	70	5.1
Hopkinsville	66	4.4
Ashland	47	4.3
Richmond	53	3.9
Florence	45	3.8
Paducah	49	3.7
Bowling Green	89	3.6
Frankfort	41	3.0
Owensboro	80	3.0
Elizabethtown	27	2.4
Jeffersontown	30	2.3
Radcliff	17	1.5
POPULATION CATEGORY 10,000-19,999		
Newport	104	12.2
Shively	74	9.8
Bardstown	27	5.2
Somerset	29	5.1
Nicholasville	42	4.3
Shelbyville	19	3.8
Winchester	29	3.5
Middlesboro	17	3.3
Danville	25	3.2
Mayfield	14	2.7
Erlanger	22	2.6
Campbellsville	13	2.5
Glasgow	16	2.5
Georgetown	22	2.4
Madisonville	22	2.3
Fort Thomas	18	2.2
Independence	15	2.0
Murray	14	1.9
Saint Matthews	7	0.9
POPULATION CATEGORY 5,000-9,999		
Cynthiana	20	6.4
Lebanon	17	5.9
Versailles	19	5.1
Harrodsburg	20	5.0
Russellville	17	4.8
Pikeville	14	4.4
Mount Sterling	13	4.4
Bellevue	14	4.3
Leitchfield	13	4.2
Morehead	12	4.1
Williamsburg	10	3.9
Elsmere	16	3.9
London	11	3.9
Dayton	11	3.7
Paris	16	3.5
Corbin	13	3.4
Maysville	14	3.1
Franklin	12	3.0
Shepherdsville	12	2.9
Mount Washington	12	2.8
Monticello	8	2.7
Fort Mitchell	8	2.0
Berea	10	2.0
La Grange	5	1.8
Lawrenceburg	8	1.8
Fort Wright	4	1.4
Wilmore	4	1.4
Edgewood	6	1.3
Princeton	4	1.2
Taylor Mill	4	1.2
Alexandria	4	1.0
Villa Hills	4	1.0
Central City	3	1.0
Flatwoods	3	0.8
Highland Heights	1	0.3
POPULATION CATEGORY 2,500-4,999		
Williamstown	12	7.4
Barbourville	11	6.1
Lancaster	11	5.9
Morganfield	10	5.7
Prestonsburg	9	5.0
Springfield	6	4.6
Grayson	9	4.6
Hazard	11	4.6
Paintsville	9	4.4
Marion	7	4.4
Carrollton	8	4.2
Irvine	6	4.2
Columbia	8	4.0
Lakeside Park	5	3.5
Hodgenville	5	3.5
Ludlow	7	3.2
Dawson Springs	4	2.7
Cold Spring	5	2.6
Benton	5	2.4
Stanford	4	2.3
Tompkinsville	3	2.3
Southgate	4	2.3
Fulton	3	2.2
Greenville	4	1.8
Hartford	2	1.6
Mount Vernon	2	1.5
Cumberland	2	1.5
Flemingsburg	2	1.3
Stanton	2	1.3
Russell	2	1.1
Hickman	1	0.8
Providence	1	0.6

TABLE 45. BICYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Fulton	7	1.8
Livingston	6	1.2
Ballard	4	1.0
Gallatin	3	0.8
Bracken	3	0.7
Menifee	2	0.6
Wolfe	2	0.6
Cumberland	2	0.6
Lyon	2	0.5
Owsley	1	0.4
Hickman	1	0.4
Carlisle	1	0.4
Lee	1	0.3
Clinton	1	0.2
Crittenden	1	0.2
Trimble	1	0.2
McLean	1	0.2
Elliott	0	0.0
Nicholas	0	0.0
Hancock	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Carroll	10	2.0
Garrard	6	0.8
Caldwell	5	0.8
Powell	5	0.8
Webster	4	0.6
Lewis	4	0.6
Monroe	3	0.5
Todd	3	0.5
Larue	3	0.4
Bath	2	0.4
Jackson	3	0.4
Morgan	2	0.3
Pendleton	2	0.3
Leslie	2	0.3
Magoffin	2	0.3
Spencer	2	0.3
Martin	1	0.2
Trigg	1	0.2
Green	1	0.2
Washington	1	0.2
Edmonson	0	0.0
Butler	0	0.0
Owen	0	0.0
Fleming	0	0.0
Metcalfe	0	0.0
POPULATION CATEGORY 15,000-24,999		
Mason	14	1.7
Simpson	11	1.3
Rowan	14	1.3
Taylor	15	1.3
Marion	10	1.1
Harrison	9	1.0
Breathitt	8	1.0
Union	6	0.8
McCreary	7	0.8
Bourbon	8	0.8
Knott	6	0.7
Grant	7	0.6
Adair	5	0.6
Lawrence	5	0.6
Wayne	5	0.5
Woodford	6	0.5
Grayson	6	0.5
Montgomery	6	0.5
Lincoln	5	0.4
Ohio	5	0.4
Anderson	4	0.4
Henry	3	0.4
Rockcastle	3	0.4
Clay	5	0.4
Allen	3	0.3
Breckinridge	3	0.3
Mercer	3	0.3
Johnson	4	0.3
Estill	2	0.3
Hart	2	0.2
Casey	1	0.1
Russell	0	0.0
POPULATION CATEGORY 25,000-50,000		
Henderson	53	2.4
Nelson	29	1.5
Logan	18	1.4
Hopkins	33	1.4
Jessamine	26	1.3
Scott	21	1.3
Boyd	27	1.1
Clark	18	1.1
Boyle	14	1.0
Shelby	15	0.9
Greenup	16	0.9
Knox	14	0.9
Calloway	15	0.9
Bell	14	0.9
Franklin	20	0.8
Harlan	11	0.7
Whitley	13	0.7
Muhlenberg	10	0.6
Floyd	12	0.6
Barren	11	0.6
Graves	12	0.6
Marshall	8	0.5
Perry	7	0.5
Meade	4	0.3
Letcher	4	0.3
Oldham	5	0.2
Carter	3	0.2
POPULATION CATEGORY OVER 50,000		
Campbell	135	3.0
Daviess	130	2.8
Jefferson	862	2.5
Fayette	316	2.4
Kenton	166	2.2
McCracken	62	1.9
Warren	79	1.7
Christian	43	1.2
Madison	40	1.1
Boone	42	1.0
Hardin	34	0.7
Pulaski	17	0.6
Bullitt	11	0.4
Laurel	10	0.4
Pike	10	0.3

TABLE 46. BICYCLE CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	650	5.1
Lexington	316	2.4
POPULATION CATEGORY 20,000-55,000		
Covington	105	4.8
Owensboro	116	4.3
Paducah	54	4.1
Henderson	48	3.5
Bowling Green	70	2.8
Florence	29	2.5
Hopkinsville	35	2.3
Ashland	21	1.9
Richmond	23	1.7
Jeffersontown	20	1.5
Frankfort	18	1.3
Elizabethtown	14	1.2
Radcliff	11	1.0
POPULATION CATEGORY 10,000-19,999		
Newport	81	9.5
Bardstown	22	4.2
Shively	22	2.9
Madisonville	27	2.8
Campbellsville	14	2.7
Nicholasville	24	2.4
Shelbyville	12	2.4
Erlanger	18	2.2
Middlesboro	11	2.1
Georgetown	17	1.9
Winchester	16	1.9
Somerset	10	1.8
Mayfield	9	1.7
Murray	12	1.6
Danville	11	1.4
Glasgow	8	1.2
Fort Thomas	8	1.0
Independence	6	0.8
Saint Matthews	5	0.6
POPULATION CATEGORY 5,000-9,999		
Bellevue	17	5.2
Russellville	16	4.5
Morehead	10	3.4
Cynthiana	9	2.9
Corbin	11	2.8
Franklin	11	2.8
Elsmere	10	2.5
Lebanon	7	2.4
Maysville	11	2.4
London	6	2.1
Flatwoods	8	2.1
Dayton	6	2.0
Berea	9	1.8
Highland Heights	6	1.8
Central City	5	1.7
Versailles	6	1.6
Princeton	5	1.5
Alexandria	6	1.4
Monticello	4	1.3
Paris	6	1.3
Leitchfield	4	1.3
Shepherdsville	5	1.2
Lawrenceburg	4	0.9
Williamsburg	2	0.8
Fort Wright	2	0.7
Taylor Mill	2	0.6
Edgewood	3	0.6
Mount Washington	2	0.5
Harrodsburg	2	0.5
Fort Mitchell	2	0.5
Villa Hills	2	0.5
Mount Sterling	1	0.3
Pikeville	1	0.3
POPULATION CATEGORY 2,500-4,999		
Ludlow	7	3.2
Carrollton	6	3.1
Fulton	4	2.9
Morganfield	5	2.9
Lancaster	5	2.7
Tompkinsville	3	2.3
Providence	4	2.2
Hodgenville	3	2.1
Cold Spring	4	2.1
Greenville	4	1.8
Stanford	3	1.7
Russell	3	1.6
Hickman	2	1.6
Mount Vernon	2	1.5
Calvert City	2	1.5
Columbia	3	1.5
Irvine	2	1.4
Scottsville	3	1.4
Beaver Dam	2	1.3
Williamstown	2	1.2
Paintsville	2	1.0
Benton	2	1.0
Grayson	2	1.0
Vine Grove	2	1.0
Cumberland	1	0.8
Hartford	1	0.8
Stanton	1	0.7
Lakeside Park	1	0.7
Park Hills	1	0.7
Dawson Springs	1	0.7
Marion	1	0.6
Barbourville	1	0.6
Prestonsburg	1	0.6

TABLE 47. MOTORCYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Lyon	20	5.0
Fulton	19	4.9
Elliott	16	4.7
Gallatin	18	4.6
Trimble	18	4.4
Bracken	18	4.3
Crittenden	18	3.8
Livingston	18	3.7
Robertson	4	3.5
Menifee	11	3.4
Carlisle	8	3.0
Ballard	12	2.9
Hancock	12	2.9
McLean	14	2.8
Wolfe	8	2.3
Nicholas	7	2.1
Owsley	5	2.1
Hickman	5	1.9
Cumberland	5	1.4
Lee	4	1.0
Clinton	4	0.8
POPULATION CATEGORY 10,000-14,999		
Leslie	31	5.0
Carroll	24	4.7
Pendleton	33	4.6
Spencer	24	4.1
Washington	22	4.0
Trigg	23	3.7
Powell	23	3.5
Morgan	23	3.3
Bath	18	3.2
Webster	21	3.0
Owen	16	3.0
Todd	16	2.7
Edmonson	15	2.6
Caldwell	16	2.5
Jackson	17	2.5
Fleming	17	2.5
Garrard	17	2.3
Green	13	2.3
Butler	14	2.2
Metcalfe	10	2.0
Magoffin	13	2.0
Larue	11	1.6
Martin	10	1.6
Lewis	7	1.0
Monroe	4	0.7
POPULATION CATEGORY 15,000-24,999		
Union	44	5.6
Breathitt	37	4.6
Rowan	47	4.3
Adair	33	3.8
Grant	42	3.8
Montgomery	42	3.7
Marion	33	3.6
Mason	30	3.6
Mercer	36	3.5
Johnson	41	3.5
Knott	30	3.4
Ohio	37	3.2
Anderson	30	3.1
Rockcastle	26	3.1
Allen	28	3.1
Taylor	34	3.0
Lawrence	22	2.8
Woodford	33	2.8
Harrison	25	2.8
Hart	23	2.6
Bourbon	25	2.6
Clay	31	2.5
Casey	19	2.5
Estill	18	2.4
Henry	17	2.3
McCreary	19	2.2
Russell	17	2.1
Lincoln	22	1.9
Grayson	22	1.8
Simpson	15	1.8
Breckinridge	15	1.6
Wayne	8	0.8
POPULATION CATEGORY 25,000-50,000		
Boyd	109	4.4
Henderson	92	4.1
Hopkins	95	4.1
Muhlenberg	66	4.1
Carter	52	3.9
Marshall	56	3.7
Floyd	74	3.5
Jessamine	69	3.5
Nelson	66	3.5
Shelby	58	3.5
Whitley	59	3.3
Calloway	57	3.3
Graves	62	3.3
Letcher	40	3.2
Harlan	53	3.2
Clark	53	3.2
Scott	53	3.2
Franklin	68	2.9
Barren	54	2.8
Perry	40	2.7
Knox	43	2.7
Boyle	36	2.6
Logan	30	2.3
Greenup	40	2.2
Meade	26	2.0
Bell	27	1.8
Oldham	40	1.7
POPULATION CATEGORY OVER 50,000		
Pike	162	4.7
McCracken	155	4.7
Warren	168	3.6
Madison	124	3.5
Pulaski	96	3.4
Boone	146	3.4
Daviess	146	3.2
Fayette	411	3.2
Hardin	146	3.1
Jefferson	1,085	3.1
Christian	104	2.9
Campbell	126	2.8
Bullitt	76	2.5
Laurel	66	2.5
Kenton	184	2.4

TABLE 48. MOTORCYCLE CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	691	5.4
Lexington	409	3.1
POPULATION CATEGORY 20,000-55,000		
Paducah	92	7.0
Elizabethtown	56	5.0
Bowling Green	114	4.6
Ashland	51	4.6
Florence	50	4.2
Henderson	58	4.2
Richmond	47	3.5
Owensboro	90	3.3
Radcliff	35	3.2
Hopkinsville	47	3.1
Covington	60	2.8
Frankfort	35	2.5
Jeffersontown	20	1.5
POPULATION CATEGORY 10,000-19,999		
Madisonville	52	5.4
Shively	38	5.0
Newport	43	5.0
Somerset	28	4.9
Bardstown	23	4.4
Erlanger	34	4.1
Glasgow	25	3.8
Georgetown	33	3.7
Campbellsville	19	3.6
Murray	27	3.6
Mayfield	16	3.1
Danville	23	3.0
Winchester	23	2.8
Nicholasville	28	2.8
Independence	18	2.4
Shelbyville	12	2.4
Middlesboro	8	1.5
Fort Thomas	8	1.0
Saint Matthews	1	0.1
POPULATION CATEGORY 5,000-9,999		
Pikeville	34	10.8
Morehead	19	6.4
Central City	18	6.1
Mount Sterling	16	5.4
Shepherdsville	21	5.0
London	14	4.9
Cynthiana	13	4.2
Paris	17	3.7
Harrodsburg	15	3.7
Russellville	13	3.6
Williamsburg	9	3.5
Lebanon	10	3.5
Fort Wright	9	3.2
Corbin	11	2.8
Versailles	10	2.7
Leitchfield	8	2.6
Maysville	11	2.4
Fort Mitchell	9	2.2
Alexandria	9	2.2
Berea	11	2.2
Mount Washington	9	2.1
Princeton	7	2.1
Highland Heights	7	2.1
La Grange	6	2.1
Dayton	5	1.7
Elsmere	6	1.5
Franklin	6	1.5
Taylor Mill	5	1.4
Lawrenceburg	6	1.3
Flatwoods	5	1.3
Edgewood	6	1.3
Villa Hills	5	1.3
Monticello	2	0.7
Bellevue	2	0.6
POPULATION CATEGORY 2,500-4,999		
Fulton	12	8.6
Mount Vernon	8	6.2
Prestonsburg	11	6.1
Columbia	12	6.0
Hazard	13	5.4
Calvert City	7	5.2
Paintsville	10	4.8
Cold Spring	9	4.7
Carrollton	9	4.7
Morganfield	8	4.6
Russell	8	4.4
Williamstown	7	4.3
Benton	9	4.3
Scottsville	9	4.2
Grayson	8	4.1
Providence	7	3.9
Marion	6	3.8
Stanton	5	3.3
Beaver Dam	5	3.3
Lancaster	6	3.2
Greenville	7	3.2
Cumberland	4	3.1
Springfield	4	3.0
Hodgenville	4	2.8
Irvine	4	2.8
Barbourville	5	2.8
Flemingsburg	4	2.7
Dawson Springs	4	2.7
Stanford	4	2.3
Lakeside Park	3	2.1
Hickman	2	1.6
Hartford	2	1.6
Tompkinsville	2	1.5
Vine Grove	3	1.4
Southgate	2	1.2

TABLE 49. SCHOOL BUS CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Wolfe	10	2.8
Hancock	10	2.4
McLean	10	2.0
Trimble	8	2.0
Crittenden	8	1.7
Owsley	4	1.6
Gallatin	6	1.5
Fulton	5	1.3
Livingston	6	1.2
Elliott	4	1.2
Ballard	5	1.2
Menifee	4	1.2
Carlisle	3	1.1
Bracken	4	1.0
Lee	3	0.8
Cumberland	3	0.8
Clinton	4	0.8
Nicholas	2	0.6
Lyon	1	0.2
Hickman	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Morgan	21	3.0
Washington	14	2.6
Metcalfe	12	2.4
Leslie	14	2.3
Spencer	13	2.2
Garrard	15	2.0
Todd	12	2.0
Fleming	13	1.9
Carroll	9	1.8
Magoffin	12	1.8
Powell	12	1.8
Webster	12	1.7
Martin	11	1.7
Lewis	12	1.7
Jackson	11	1.6
Bath	9	1.6
Pendleton	11	1.5
Butler	8	1.2
Edmonson	6	1.0
Green	6	1.0
Trigg	6	1.0
Monroe	5	0.9
Larue	6	0.9
Caldwell	5	0.8
Owen	4	0.8
POPULATION CATEGORY 15,000-24,999		
Anderson	35	3.7
Breathitt	30	3.7
Clay	42	3.4
Grant	33	2.9
Knott	26	2.9
Woodford	28	2.4
Rowan	26	2.4
Rockcastle	20	2.4
Bourbon	22	2.3
Grayson	27	2.2
Montgomery	25	2.2
Estill	14	1.8
Mason	15	1.8
Wayne	17	1.7
Johnson	20	1.7
Harrison	15	1.7
Hart	14	1.6
Henry	11	1.5
Marion	14	1.5
Lawrence	12	1.5
Union	11	1.4
Adair	12	1.4
McCreary	11	1.3
Taylor	15	1.3
Mercer	13	1.2
Lincoln	10	0.9
Breckinridge	8	0.9
Allen	7	0.8
Casey	6	0.8
Ohio	8	0.7
Russell	2	0.2
Simpson	2	0.2
POPULATION CATEGORY 25,000-50,000		
Jessamine	101	5.2
Floyd	86	4.1
Perry	58	3.9
Letcher	35	2.8
Franklin	60	2.5
Shelby	41	2.5
Clark	42	2.5
Bell	35	2.3
Carter	29	2.2
Nelson	40	2.1
Henderson	48	2.1
Oldham	49	2.1
Knox	33	2.1
Scott	32	1.9
Calloway	33	1.9
Harlan	28	1.7
Boyd	40	1.6
Muhlenberg	26	1.6
Hopkins	34	1.5
Graves	25	1.4
Logan	19	1.4
Whitley	26	1.4
Boyle	18	1.3
Barren	25	1.3
Greenup	23	1.2
Marshall	14	0.9
Meade	11	0.8
POPULATION CATEGORY OVER 50,000		
Jefferson	1,041	3.0
Christian	90	2.5
Kenton	164	2.2
Fayette	269	2.1
Bullitt	64	2.1
Warren	98	2.1
Madison	74	2.1
Laurel	54	2.0
Campbell	86	1.9
Boone	81	1.9
Pike	62	1.8
McCracken	59	1.8
Pulaski	50	1.8
Daviess	69	1.5
Hardin	67	1.4

TABLE 50. SCHOOL BUS CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1999-2003)

CITY	NUMBER OF CRASHES (1999-2003)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	635	5.0
Lexington	269	2.1
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	72	4.8
Frankfort	43	3.1
Covington	62	2.9
Paducah	37	2.8
Bowling Green	66	2.7
Florence	31	2.6
Richmond	35	2.6
Ashland	27	2.5
Henderson	27	2.0
Jeffersontown	25	1.9
Elizabethtown	19	1.7
Owensboro	44	1.6
Radcliff	16	1.5
POPULATION CATEGORY 10,000-19,999		
Nicholasville	58	5.9
Shively	34	4.5
Bardstown	21	4.0
Shelbyville	19	3.8
Winchester	28	3.3
Murray	25	3.3
Somerset	18	3.2
Newport	23	2.7
Independence	20	2.7
Campbellsville	13	2.5
Middlesboro	12	2.3
Georgetown	20	2.2
Danville	12	1.6
Madisonville	15	1.6
Mayfield	7	1.4
Erlanger	11	1.3
Glasgow	7	1.1
Fort Thomas	4	0.5
Saint Matthews	2	0.3
POPULATION CATEGORY 5,000-9,999		
London	15	5.3
Versailles	18	4.8
Morehead	13	4.4
Monticello	13	4.3
Lawrenceburg	19	4.2
Alexandria	17	4.1
Pikeville	12	3.8
Shepherdsville	15	3.6
La Grange	10	3.5
Lebanon	10	3.5
Taylor Mill	11	3.2
Villa Hills	11	2.8
Mount Sterling	8	2.7
Paris	12	2.6
Cynthiana	8	2.6
Maysville	11	2.4
Leitchfield	7	2.3
Wilmore	6	2.0
Williamsburg	5	1.9
Berea	9	1.8
Central City	5	1.7
Edgewood	8	1.7
Corbin	6	1.5
Russellville	5	1.4
Fort Wright	4	1.4
Dayton	4	1.3
Bellevue	4	1.2
Mount Washington	3	0.7
Fort Mitchell	3	0.7
Elsmere	3	0.7
Princeton	2	0.6
Highland Heights	2	0.6
Harrodsburg	2	0.5
Flatwoods	2	0.5
Franklin	2	0.5
POPULATION CATEGORY 2,500-4,999		
Prestonsburg	11	6.1
Hazard	14	5.8
Barbourville	9	5.0
Williamstown	6	3.7
Irvine	5	3.5
Columbia	7	3.5
Morganfield	6	3.4
Flemingsburg	5	3.3
Lancaster	6	3.2
Paintsville	6	2.9
Scottsville	6	2.8
Carrollton	5	2.6
Vine Grove	5	2.4
Benton	5	2.4
Springfield	3	2.3
Stanton	3	2.0
Lakeside Park	2	1.4
Marion	2	1.3
Beaver Dam	2	1.3
Grayson	2	1.0
Greenville	2	0.9
Hartford	1	0.8
Cumberland	1	0.8
Tompkinsville	1	0.8
Park Hills	1	0.7
Dawson Springs	1	0.7
Fulton	1	0.7
Southgate	1	0.6
Providence	1	0.6
Stanford	1	0.6
Russell	1	0.5

TABLE 51. TRUCK CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1999-2003)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Gallatin	163	41.4
Lyon	161	39.9
Ballard	164	39.6
Fulton	112	28.9
Trimble	95	23.4
Wolfe	79	22.4
Crittenden	103	22.0
Bracken	91	22.0
Livingston	105	21.4
McLean	104	20.9
Hickman	52	19.8
Hancock	76	18.1
Cumberland	53	14.8
Owsley	36	14.8
Carlisle	38	14.2
Clinton	67	13.9
Elliott	43	12.7
Nicholas	42	12.3
Lee	31	7.8
Menifee	20	6.1
Robertson	6	5.3
POPULATION CATEGORY 10,000-14,999		
Carroll	295	58.1
Webster	203	28.8
Bath	153	27.6
Leslie	166	26.8
Pendleton	187	26.0
Larue	161	24.1
Metcalfe	119	23.7
Caldwell	154	23.6
Lewis	164	23.3
Washington	117	21.4
Trigg	127	20.2
Todd	118	19.7
Martin	109	17.3
Powell	114	17.2
Garrard	121	16.4
Fleming	110	16.0
Owen	84	15.9
Green	90	15.6
Magoffin	92	13.8
Monroe	80	13.6
Morgan	93	13.3
Butler	86	13.2
Spencer	71	12.1
Edmonson	66	11.3
Jackson	63	9.3
POPULATION CATEGORY 15,000-24,999		
Simpson	439	53.5
Rockcastle	423	51.0
Henry	322	42.8
Grant	479	42.8
Hart	367	42.1
Mason	330	39.3
Woodford	358	30.9
Rowan	310	28.1
Bourbon	265	27.4
Lawrence	189	24.3
Knott	207	23.5
Grayson	271	22.5
Ohio	256	22.3
Union	170	21.7
Adair	185	21.5
Montgomery	239	21.2
Breathitt	166	20.6
Anderson	168	17.6
Marion	157	17.2
Taylor	196	17.1
Allen	146	16.4
Harrison	143	15.9
Mercer	164	15.8
Russell	113	13.9
Johnson	159	13.6
Lincoln	156	13.4
Casey	103	13.3
Clay	157	12.8
McCreary	108	12.6
Breckinridge	109	11.7
Wayne	109	10.9
Estill	77	10.1
POPULATION CATEGORY 25,000-50,000		
Scott	687	41.6
Shelby	591	35.5
Perry	479	32.6
Henderson	715	31.9
Barren	579	30.4
Clark	478	28.8
Letcher	363	28.7
Boyd	699	28.1
Hopkins	598	25.7
Carter	344	25.6
Whitley	457	25.5
Marshall	379	25.2
Logan	325	24.5
Muhlenberg	389	24.4
Jessamine	461	23.6
Franklin	514	21.6
Harlan	358	21.6
Floyd	449	21.2
Bell	314	20.9
Oldham	466	20.2
Graves	365	19.7
Nelson	367	19.6
Calloway	334	19.5
Boyle	259	18.7
Knox	266	16.7
Greenup	215	11.7
Meade	130	9.9
POPULATION CATEGORY OVER 50,000		
Boone	2,038	47.4
Pike	1,272	37.0
Laurel	915	34.7
Warren	1,460	31.6
Kenton	2,302	30.4
Fayette	3,872	29.7
Madison	997	28.1
McCracken	903	27.6
Jefferson	9,325	26.9
Hardin	1,220	25.9
Bullitt	747	24.4
Christian	833	23.1
Pulaski	635	22.6
Campbell	988	22.3
Daviess	981	21.4

TABLE 52. MOTOR VEHICLE-TRAIN CRASH RATES BY COUNTY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES) (1999 - 2003)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Lee	2	0.51
Bracken	2	0.48
Hickman	1	0.38
Carlisle	1	0.37
Fulton	1	0.26
Gallatin	1	0.25
Hancock	1	0.24
Robertson	0	0.00
Owsley	0	0.00
Menifee	0	0.00
Elliott	0	0.00
Nicholas	0	0.00
Wolfe	0	0.00
Cumberland	0	0.00
Lyon	0	0.00
Trimble	0	0.00
Ballard	0	0.00
Crittenden	0	0.00
Clinton	0	0.00
Livingston	0	0.00
McLean	0	0.00
POPULATION CATEGORY 10,000 - 14,999		
Todd	6	1.00
Magoffin	4	0.60
Carroll	3	0.59
Lewis	4	0.57
Edmonson	1	0.17
Webster	1	0.14
Metcalfe	0	0.00
Owen	0	0.00
Washington	0	0.00
Bath	0	0.00
Green	0	0.00
Monroe	0	0.00
Spencer	0	0.00
Leslie	0	0.00
Martin	0	0.00
Trigg	0	0.00
Butler	0	0.00
Caldwell	0	0.00
Powell	0	0.00
Larue	0	0.00
Jackson	0	0.00
Fleming	0	0.00
Morgan	0	0.00
Pendleton	0	0.00
Garrard	0	0.00
POPULATION CATEGORY 15,000 - 24,999		
Grant	9	0.80
Lincoln	8	0.68
Simpson	5	0.61
Henry	4	0.53
Knott	4	0.45
Mercer	4	0.38
Hart	3	0.34
Grayson	4	0.33
Anderson	3	0.31
Rockcastle	2	0.24
Harrison	2	0.22
Ohio	2	0.17
Woodford	2	0.17
Estill	1	0.13
POPULATION CATEGORY 15,000-24,999 (cont.)		
Lawrence	1	0.13
Breathitt	1	0.12
McCreary	1	0.12
Breckinridge	1	0.11
Bourbon	1	0.10
Johnson	1	0.09
Casey	0	0.00
Union	0	0.00
Russell	0	0.00
Mason	0	0.00
Adair	0	0.00
Allen	0	0.00
Marion	0	0.00
Wayne	0	0.00
Rowan	0	0.00
Montgomery	0	0.00
Taylor	0	0.00
Clay	0	0.00
POPULATION CATEGORY 25,000-49,999		
Letcher	7	0.55
Bell	8	0.53
Oldham	10	0.43
Floyd	9	0.42
Hopkins	9	0.39
Henderson	8	0.36
Perry	5	0.34
Shelby	5	0.30
Nelson	5	0.27
Muhlenberg	4	0.25
Boyd	6	0.24
Harlan	3	0.18
Barren	3	0.16
Marshall	2	0.13
Knox	2	0.13
Scott	2	0.12
Clark	2	0.12
Whitley	2	0.11
Logan	1	0.08
Calloway	1	0.06
Greenup	1	0.05
Jessamine	1	0.05
Meade	0	0.00
Carter	0	0.00
Boyle	0	0.00
Graves	0	0.00
Franklin	0	0.00
POPULATION CATEGORY 50,000 - OVER		
Pike	13	0.38
Pulaski	10	0.36
Madison	7	0.20
Christian	7	0.19
Jefferson	61	0.18
Daviess	8	0.17
Hardin	7	0.15
Boone	6	0.14
Kenton	8	0.11
Bullitt	3	0.10
Laurel	2	0.08
Fayette	8	0.06
Campbell	1	0.02
Warren	1	0.02
McCracken	0	0.00

TABLE 53. 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	4.90
2001	7,325	4.67
2002	7,338	4.67
2003	6,882	4.41

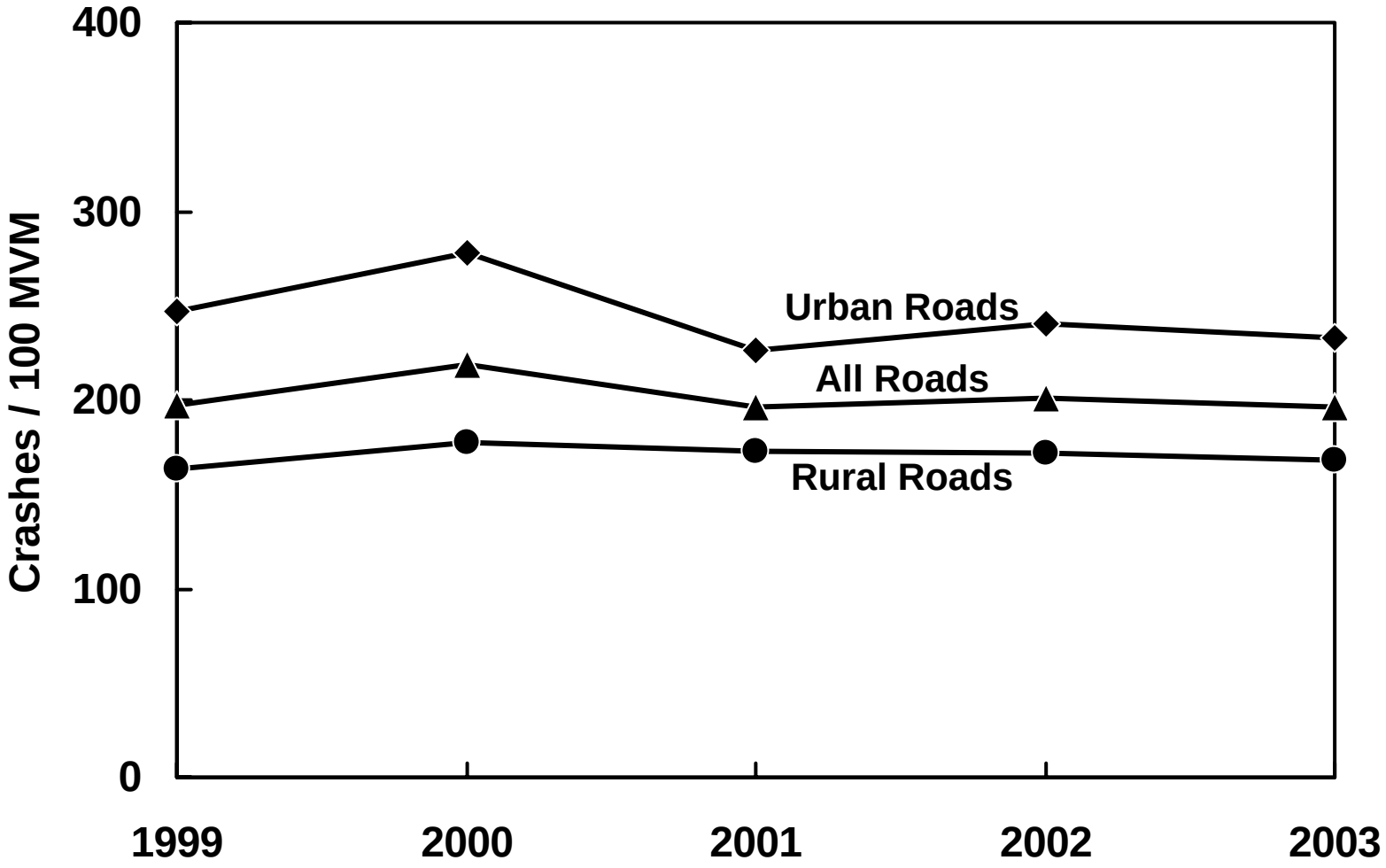


Figure 1. Trends in Crash Rates
(State-Maintained Roads)

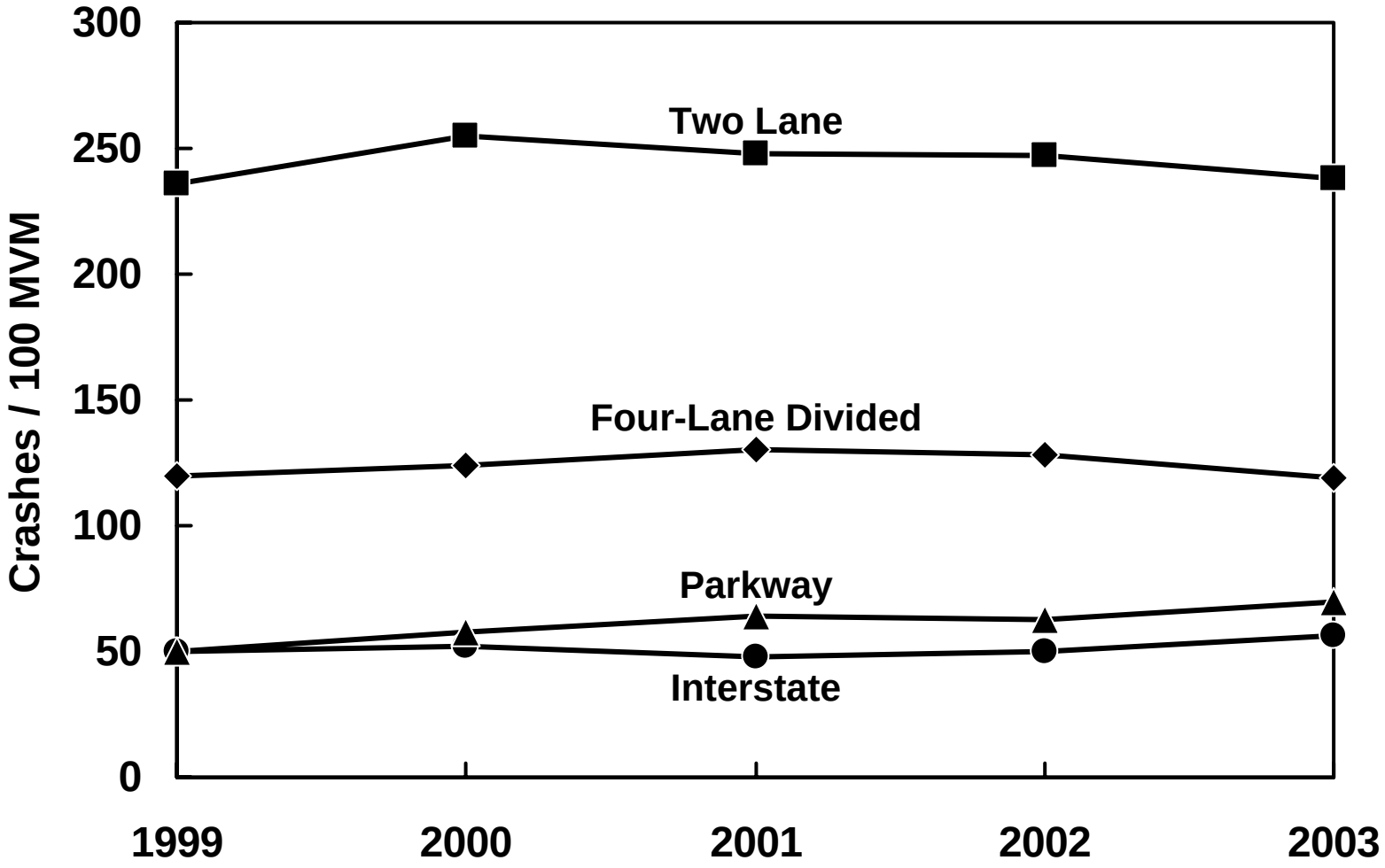


Figure 2. Trends in Rural Crash Rates
(State-Maintained Roads)

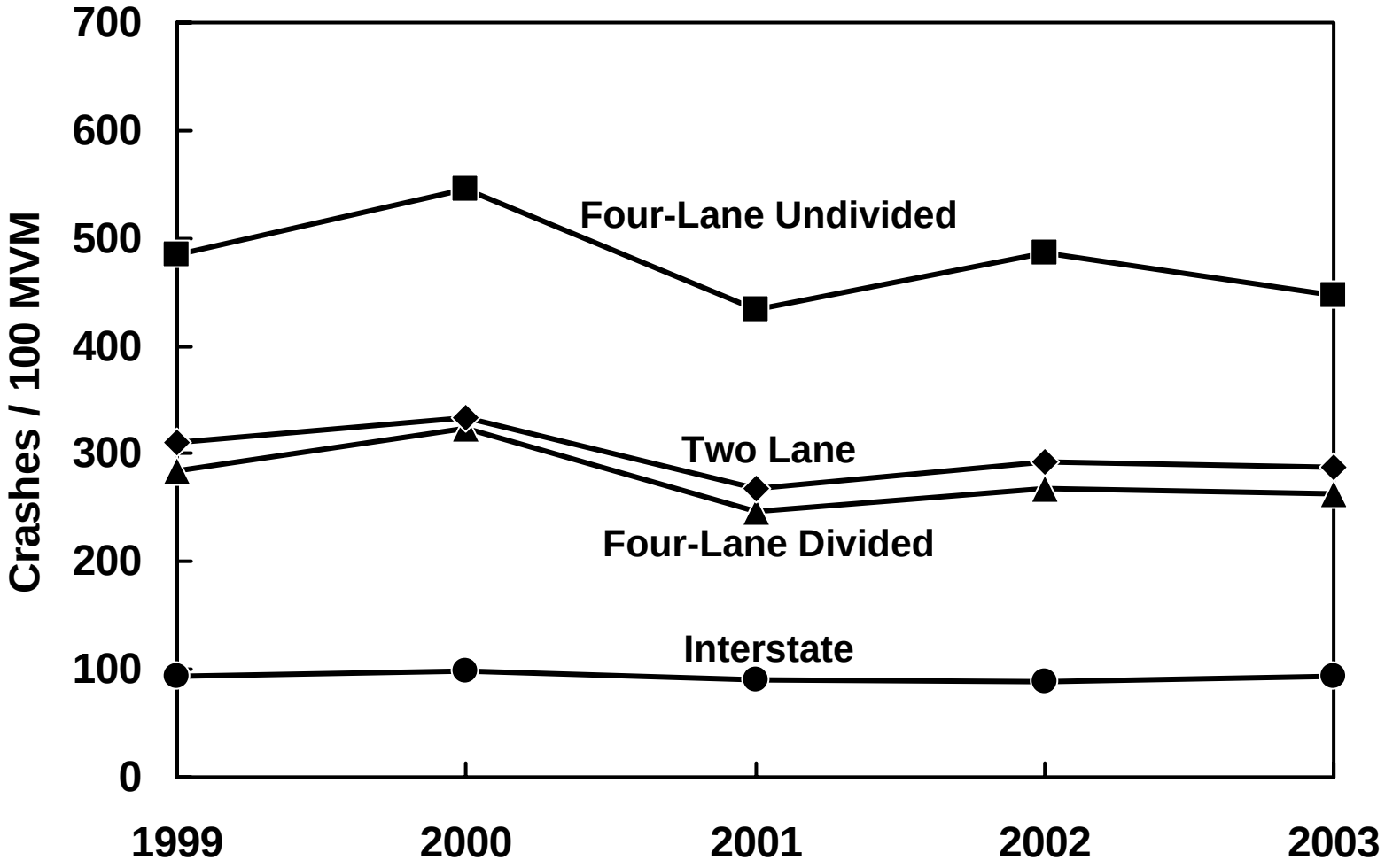


Figure 3. Trends in Urban Crash Rates
(State-Maintained Roads)

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 principal arterials (non-interstate or freeway) followed by urban minor arterials. The lowest overall rates are for rural principal arterials (interstate) followed by 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, rural local roadways, and minor arterials. Urban principal arterials (interstate and other freeway) have the lowest fatal crash rate with several other urban classifications, as well as rural interstates, also having a relatively low fatal crash rate.

Statewide crash rates by federal-aid system are shown in Table A-2. The highest rate is for the federal-aid urban system and the lowest rate is for the interstate system. The federal-aid urban, federal-aid secondary (rural), and non-federal-aid systems have relatively similar rates.

Statewide crash rates by administrative classification are listed in Table A-3. The rate for the primary system is lowest and the rate for the secondary system is the highest. Rates for the rural secondary and unclassified systems are between those two levels.

The benefits of providing a median and increasing the median width are shown in Table A-4. 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 significantly 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-5. 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-6. 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-7. The lowest rate is for rural areas and the highest rate is for small urban areas.

The summary of crash rates by route signing identifier reveals that US-signed routes have a rate similar to that for state-marked routes, with interstates having a much lower rate (Table A-8). Although the geometric features on the US-signed routes would be expected to be superior than state-marked routes, the US-signed routes have a higher average volume which may partially account for the similar crash rate.

The relationship between crash rate and traffic volume (average annual daily traffic) for various federal-aid highway classifications is illustrated in Table A-9. For interstates that have high design criteria, the crash rate is fairly constant up until the volume range of over 40,000 vehicles per day where an increase occurred. For each of the other highway classifications, the rate for the lowest volume category (AADT under 1,000) tends to be high. One reason for a high rate at low-volume locations is the fact that a few crashes may increase the rate substantially. Lower volume roads also are constructed to less stringent design guidelines, which could contribute to a higher crash rate. The rate on low volume roads can fluctuate substantially with a slight change in crashes due to the low traffic 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-10. The overall percentage of crashes occurring during wet pavement conditions is 22 percent on rural roadways and 17 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 (5.6 percent) is substantially higher than that on urban roads (3.2 percent). The highest percentages of ice or snow crashes are on interstates and parkways with the highest being 10.5 percent on rural parkways. There are also large variations in the percentage of crashes occurring during darkness. The overall percentage is higher on rural roads (30 percent) than urban roads (23 percent). The highest percentage is on rural parkways, followed closely by urban and rural interstates.

TABLE A-1. STATEWIDE CRASH RATES BY FUNCTIONAL CLASSIFICATION (1999 - 2003)

LOCATION	FUNCTIONAL CLASSIFICATION	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Rural	Principal Arterial, Interstate	526	31,754	40	10	0.5
	Principal Arterial, Other Freeway	2,052	8,462	99	30	1.2
	Minor Arterial	1,620	4,465	189	56	1.9
	Major Collector	6,957	2,297	213	69	2.4
	Minor Collector	9,460	735	221	79	2.9
	Local System	4,507	497	183	60	2.1
Urban	Principal Arterial, Interstate	228	71,760	74	17	0.3
	Principal Arterial, Other Freeway	90	25,179	84	20	0.4
	Other Principal Arterial	655	19,613	332	80	0.9
	Minor Arterial	1,118	10,142	272	66	0.7
	Collector	952	4,365	120	30	0.5
	Local System	117	2,201	189	51	1.1

TABLE A-2. STATEWIDE CRASH RATES BY FEDERAL-AID SYSTEM (1999 - 2003)

FEDERAL-AID SYSTEM	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Interstate	25,743	754	43,863	43
Federal-Aid Primary (other than Interstate)	78,989	3,985	8,656	125
Federal-Aid Urban	69,831	2,248	8,599	198
Federal-Aid Secondary (Rural Only)	49,654	7,110	2,410	159
Non-Federal Aid	21,584	9,560	746	166

TABLE A-3. STATEWIDE CRASH RATES BY ADMINISTRATIVE CLASSIFICATION (1999 - 2003)

ADMINISTRATIVE CLASSIFICATION	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Primary	172,801	4,677	14,610	139
Secondary	136,943	8,361	3,482	258
Rural Secondary	41,053	12,142	806	230
Unclassified	6,149	2,256	726	206

TABLE A-4. STATEWIDE CRASH RATES BY MEDIAN TYPE
(RURAL ROADS WITH FOUR OR MORE LANES (1999 - 2003))

MEDIAN TYPE	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Undivided	4,117	81	15,277	183
Divided, Median Less Than 30 Feet, No Barrier	6,899	253	14,313	104
Divided, Median Greater Than 30 Feet, No Barrier	23,298	1,306	18,391	53

TABLE A-5. STATEWIDE CRASH RATES BY ACCESS CONTROL (1999 - 2003)

ACCESS CONTROL	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Full Control	53,691	1,441	28,201	72
Partial Control	20,048	474	10,234	226
No Control	343,995	25,745	2,535	289

TABLE A-6. STATEWIDE CRASH RATES FOR RURAL HIGHWAYS BY FEDERAL-AID SYSTEM AND TERRAIN (1999 - 2003)

FEDERAL-AID SYSTEM	CRASH RATES BY TERRAIN CLASSIFICATION (CRASHES/100MVM)		
	FLAT	ROLLING	MOUNTAINOUS
Interstate	53	57	51
Federal-Aid Primary	175	152	141
Federal-Aid Secondary	220	269	265
Non Federal-Aid	245	285	269
All	208	183	185

TABLE A-7. STATEWIDE CRASH RATES BY RURAL-URBAN DESIGNATION (1999 - 2003)

AREA TYPE	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Rural	207,248	25,125	2,646	171
Small Urban Area	76,147	1,317	10,113	313
Urbanized Area	134,603	1,294	22,593	252

TABLE A-8. STATEWIDE CRASH RATES BY ROUTE SIGNING IDENTIFIER (1999 - 2003)

ROUTE SIGNING IDENTIFIER	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Interstate	43,402	754	43,852	72
US	159,561	3,561	8,218	299
State	214,491	23,089	2,005	254

TABLE A-9. RELATIONSHIP BETWEEN CRASH RATE AND TRAFFIC VOLUME (1999 - 2003)

VOLUME RANGE (AADT)	CRASH RATES (CRASHES PER 100 MVM)				
	INTERSTATE	FEDERAL-AID PRIMARY	FEDERAL-AID URBAN	FEDERAL-AID SECONDARY	NON-FEDERAL AID
0-999	*	325	421	316	279
1,000-2,499	*	214	264	229	392
2,500-4,999	*	226	278	281	324
5,000-9,999	*	155	240	243	236
10,000-19,999	52	171	314	309	273
20,000-29,999	45	330	449	360	311
30,000-39,999	57	372	340	98	*
40,000 or more	77	214	326	265	275

* No data in this volume range.

TABLE A-10. PERCENTAGE OF CRASHES OCCURING DURING WET OR SNOW OR ICE PAVEMENT CONDITIONS OR DURING DARKNESS BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION (1999 - 2003)

LOCATION	HIGHWAY TYPE	PERCENT OF ALL CRASHES		
		WET	SNOW OR ICE	DARKNESS
Rural	One-Lane	21	3.5	27
	Two-Lane	22	5.3	29
	Three-Lane	16	2.3	26
	Four-Lane Divided (Non-Interstate or Parkway)	19	3.8	26
	Four-Lane Undivided	18	2.6	21
	Interstate	22	10.2	40
	Parkway	23	10.5	43
	All Rural	22	5.6	30
Urban	Two-Lane	17	3.2	22
	Three-Lane	18	2.5	24
	Four-Lane Divided (Non-Interstate or Parkway)	17	2.4	21
	Four-Lane Undivided	17	1.8	18
	Interstate	22	8.6	41
	Parkway	15	10.0	34
	All Urban	17	3.2	23

APPENDIX B

CRASH DATA FOR THREE-YEAR PERIOD (1999-2001)

TABLE B-1. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2001-2003)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
One-Lane	43	860	271	79	0.0
Two-Lane	23,329	1,620	244	78	3.1
Three-Lane	33	5,170	166	36	2.2
Four-Lane Divided (Non-Interstate or Parkway)	553	11,280	126	38	1.4
Four-Lane Undivided	50	13,870	252	54	1.6
Interstate	526	31,900	51	13	0.7
Parkway	564	8,860	66	17	0.9
All	25,098	2,660	171	53	2.2

* Average for the three years.

TABLE B-2. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (2001-2003)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	2,311	6,370	266	64	0.9
Three-Lane	32	11,040	466	90	1.8
Four-Lane Divided (Non-Interstate or Parkway)	393	24,240	276	67	1.0
Four-Lane Undivided	282	19,650	456	102	1.3
Interstate	269	62,380	91	19	0.4
Parkway	52	11,820	112	25	0.9
All **	3,367	14,380	233	54	0.8

* 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 (2001-2003)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	109	143	0.31	0.81
	Two-Lane	101,109	77,762	0.59	0.73
	Three-Lane	307	109	1.89	0.50
	Four-Lane Divided (Non-Interstate or Parkway)	8,584	1,844	4.12	0.38
	Four-Lane Undivided	1,928	168	5.06	0.76
	Interstate	9,432	1,754	11.64	0.15
	Parkway	3,600	1,881	3.24	0.20
	All Rural	125,069	83,661	0.97	0.51
Urban	Two-Lane	42,978	7,703	2.33	0.80
	Three-Lane	1,825	108	4.03	1.40
	Four-Lane Divided	28,744	1,309	8.85	0.83
	Four-Lane Undivided	27,625	939	7.17	1.37
	Interstate	16,711	898	22.77	0.27
	Parkway	755	173	4.31	0.34
	All Urban**	123,529	11,222	5.25	0.70

* 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 (2001-2003)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.76	4	2.53	7
	Two-Lane	1.30	5	4.33	10
	Three-Lane	2.82	8	9.40	18
	Four-Lane Divided (Non-Interstate or Parkway)	4.65	11	15.51	26
	Four-Lane Undivided	11.49	21	38.30	55
	Interstate	5.38	12	17.92	29
	Parkway	1.91	6	6.38	13
	All Rural	1.49	5	4.98	11
Urban	Two-Lane	5.58	12	18.60	30
	Three-Lane	16.91	28	56.36	76
	Four-Lane Divided	21.96	35	73.20	96
	Four-Lane Undivided	29.41	44	98.04	124
	Interstate	18.61	30	62.05	83
	Parkway	4.36	10	14.55	25
	All Urban**	11.01	20	36.69	53

* 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 (2001-2003)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	109	430	0.31	0.27
	Two-Lane	101,109	233,287	0.59	0.24
	Three-Lane	307	327	1.89	0.17
	Four-Lane Divided (Non-Interstate or Parkway)	8,584	5,533	4.12	0.13
	Four-Lane Undivided	1,928	503	5.06	0.25
	Interstate	9,432	5,263	11.64	0.05
	Parkway	3,600	5,643	3.24	0.07
	All Rural	125,069	250,983	0.97	0.17
Urban	Two-Lane	42,978	23,108	2.33	0.27
	Three-Lane	1,825	324	4.03	0.47
	Four-Lane Divided	28,744	3,927	8.85	0.28
	Four-Lane Undivided	27,625	2,818	7.17	0.46
	Interstate	16,711	2,693	22.77	0.09
	Parkway	755	519	4.31	0.11
	All Urban**	123,529	33,667	5.25	0.23

* 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 (2001-2003)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.25	2	2.53	7
	Two-Lane	0.43	3	4.33	10
	Three-Lane	0.94	4	9.40	18
	Four-Lane Divided (Non-Interstate or Parkway)	1.55	5	15.51	26
	Four-Lane Undivided	3.83	9	38.30	55
	Interstate	1.79	6	17.92	29
	Parkway	0.64	3	6.38	13
	All Rural	0.50	3	4.98	11
Urban	Two-Lane	1.86	6	18.60	30
	Three-Lane	5.64	12	56.36	76
	Four-Lane Divided	7.32	15	73.20	96
	Four-Lane Undivided	9.80	18	98.04	124
	Interstate	6.20	13	62.05	83
	Parkway	1.45	5	14.55	25
	All Urban**	3.67	9	36.69	53

* 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)(2001-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE		
AADT	ONE-LANE	TWO-LANE	THREE-LANE
100	8.88	8.62	7.95
500	2.99	2.86	2.52
1,000	2.01	1.90	1.64
2,500	1.26	1.19	0.99
5,000	0.93	0.87	0.72
7,500	0.80	0.74	0.60
10,000	0.72	0.67	0.54
15,000	0.63	0.58	0.46
20,000	0.58	0.53	0.42

TABLE B-8. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2001-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.30	2.90	1.74	1.90
1,000	1.47	1.94	1.06	1.18
2,500	0.87	1.21	0.58	0.66
5,000	0.62	0.89	0.39	0.45
10,000	0.46	0.68	0.27	0.32
15,000	0.39	0.60	0.22	0.27
20,000	0.35	0.55	0.20	0.24
30,000	0.31	0.49	0.17	0.20
40,000	0.28	0.46	0.15	0.18
50,000	0.26	0.43	0.14	0.17

TABLE B-9. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(2001-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE	
AADT	TWO-LANE	THREE-LANE
500	2.99	3.77
1,000	2.01	2.61
2,500	1.26	1.72
5,000	0.93	1.32
7,500	0.80	1.15
10,000	0.72	1.05
15,000	0.63	0.94
20,000	0.58	0.87
30,000	0.52	0.79
40,000	0.48	0.75

TABLE B-10. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(2001-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	2.04	2.59	1.29	1.38
5,000	0.95	1.30	0.51	0.57
10,000	0.74	1.03	0.37	0.41
15,000	0.65	0.92	0.31	0.35
20,000	0.59	0.86	0.28	0.32
30,000	0.53	0.78	0.24	0.27
40,000	0.50	0.74	0.22	0.25
50,000	0.47	0.71	0.20	0.23
60,000	0.46	0.68	0.19	0.22
70,000	0.44	0.67	0.18	0.21
80,000	0.43	0.65	0.18	0.21
90,000	0.42	0.64	0.17	0.20
100,000	0.41	0.63	0.17	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 (1999-2003)

	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)						
HIGHWAY TYPE	0.4	1	2	5	10	15	20
One-Lane	4	7	12	24	41	58	74
Two-Lane	8	15	25	52	94	135	175
Three-Lane	13	27	47	104	194	282	369
Four-Lane Divided (Non-Interstate and Parkway)	19	39	70	158	298	436	572
Four-Lane Undivided	42	92	172	400	771	1,138	1,502
Interstate	21	44	79	179	340	497	653
Parkway	10	19	33	70	129	186	242

TABLE C-2. CRITICAL NUMBERS OF CRASH RATES ON URBAN HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (1999-2003)

	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)					
HIGHWAY TYPE	0.4	1	2	5	8	10
Two-Lane	24	49	90	204	314	387
Three-Lane (Non-Interstate and Parkway)	57	128	240	565	885	1,096
Four-Lane Divided	71	159	300	712	1,116	1,384
Four-Lane Undivided	90	205	389	929	1,461	1,814
Interstate	61	137	258	609	954	1,182
Parkway	18	37	65	146	224	275

APPENDIX D

CRITICAL CRASH RATE TABLES FOR HIGHWAY SECTIONS

TABLE D-1. CRITICAL CRASH RATES FOR RURAL ONE-LANE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
100	1,841	1,239	870	582	450
200	1,239	870	637	450	363
300	1,002	721	542	395	326
400	870	637	487	363	305
500	783	582	450	342	290
700	674	511	404	314	271
1,000	582	450	363	290	255
1,500	498	395	326	268	239
2,000	450	363	305	255	230
2,500	419	342	290	246	224
3,000	395	326	279	239	219

TABLE D-2. CRITICAL CRASH RATES FOR RURAL TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
100	2,127	1,462	1,049	722	571	470
300	1,198	881	676	507	426	371
500	951	722	571	445	384	342
1,000	722	571	470	384	342	313
1,500	626	507	426	358	324	300
2,000	571	470	401	342	313	293
3,000	507	426	371	324	300	284
4,000	470	401	354	313	293	279
5,000	445	384	342	306	288	275
7,000	412	362	327	296	281	270
8,000	401	354	321	293	279	269
9,000	392	347	317	290	277	267
10,000	384	342	313	288	275	266

TABLE D-3. CRITICAL CRASH RATES FOR RURAL THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	3	5
100	1,822	1,224	858	711	573
300	990	711	533	459	389
500	773	573	443	389	336
1,000	573	443	357	320	284
1,500	490	389	320	291	262
2,000	443	357	299	274	249
3,000	389	320	274	254	234
4,000	357	299	259	242	225
5,000	336	284	249	234	219
6,000	320	274	242	228	214
7,000	308	266	236	224	211
8,000	299	259	232	220	208
9,000	291	254	228	217	206
10,000	284	249	225	214	204

TABLE D-4. CRITICAL CRASH RATES FOR RURAL FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	659	479	364	269	225
1,000	479	364	288	225	194
2,500	336	269	225	186	168
5,000	269	225	194	168	155
7,500	241	205	181	160	149
10,000	225	194	173	155	146
15,000	205	181	164	149	142
20,000	194	173	158	146	139
30,000	181	164	152	142	136
40,000	173	158	148	139	135
50,000	168	155	146	138	134

TABLE D-5. CRITICAL CRASH RATES FOR RURAL FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	998	761	605	474	411
1,000	761	605	500	411	367
2,500	566	474	411	356	329
5,000	474	411	367	329	311
7,500	434	383	348	318	302
10,000	411	367	337	311	297
20,000	367	337	316	297	288
30,000	348	324	307	292	284
40,000	337	316	301	288	282
50,000	329	311	297	286	280

TABLE D-6. CRITICAL CRASH RATES FOR RURAL INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	433	298	215	148	117	97
1,000	298	215	161	117	97	83
2,500	195	148	117	92	79	71
5,000	148	117	97	79	71	65
7,500	129	104	88	74	67	62
10,000	117	97	83	71	65	61
20,000	97	83	73	65	61	58
30,000	88	77	69	62	59	57
40,000	83	73	67	61	58	56
50,000	79	71	65	60	57	55

TABLE D-7. CRITICAL CRASH RATES FOR RURAL PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
400	533	366	263	181	143	118
700	392	279	207	149	122	103
1,000	328	238	181	134	111	96
1,500	271	202	157	120	102	90
2,000	238	181	143	111	96	86
3,000	202	157	127	102	90	81
4,000	181	143	118	96	86	79
5,000	167	134	111	92	83	77
7,000	149	122	103	88	80	74
10,000	134	111	96	83	77	72
20,000	111	96	86	77	72	69
40,000	96	86	79	72	69	67

TABLE D-8. CRITICAL CRASH RATES FOR URBAN TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,032	790	630	496	431
1,000	790	630	522	431	386
2,500	591	496	431	375	347
5,000	496	431	386	347	328
7,500	455	403	367	335	320
10,000	431	386	355	328	314
15,000	403	367	342	320	309
20,000	386	355	334	314	305
30,000	367	342	324	309	301
40,000	355	334	318	305	298
50,000	347	328	314	303	297

TABLE D-9. CRITICAL CRASH RATES FOR URBAN THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,420	1,122	922	752	669
1,000	1,122	922	786	669	612
2,500	872	752	669	598	562
5,000	752	669	612	562	537
7,500	700	633	587	546	526
10,000	669	612	572	537	519
15,000	633	587	554	526	512
20,000	612	572	544	519	507
30,000	587	554	532	512	502
40,000	572	544	524	507	498
50,000	562	537	519	504	496

TABLE D-10. CRITICAL CRASH RATES FOR URBAN FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	807	645	536	443	398
2,500	605	509	443	386	358
5,000	509	443	398	358	339
10,000	443	398	366	339	325
15,000	415	378	352	330	319
20,000	398	366	344	325	315
25,000	386	358	339	321	313
30,000	378	352	334	319	311
40,000	366	344	329	315	308
50,000	358	339	325	313	307
60,000	352	334	322	311	305

TABLE D-11. CRITICAL CRASH RATES FOR URBAN FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	1,125	924	788	672	614
2,500	875	754	672	600	564
5,000	754	672	614	564	539
10,000	672	614	574	539	521
15,000	636	589	557	528	514
20,000	614	574	546	521	509
25,000	600	564	539	517	506
30,000	589	557	534	514	504
40,000	574	546	526	509	500
50,000	564	539	521	506	498
60,000	557	534	518	504	497

TABLE D-12. CRITICAL CRASH RATES FOR URBAN INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	407	304	236	180	154
5,000	220	180	154	131	119
10,000	180	154	135	119	111
20,000	154	135	122	111	106
30,000	142	127	117	108	103
40,000	135	122	114	106	102
50,000	131	119	111	104	101
60,000	127	117	110	103	100
70,000	125	115	108	103	100
80,000	122	114	107	102	99
90,000	121	112	107	101	99
100,000	119	111	106	101	99

TABLE D-13. CRITICAL CRASH RATES FOR URBAN PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	613	442	333	244	201	173
1,000	442	333	261	201	173	153
2,500	306	244	201	166	148	136
5,000	244	201	173	148	136	128
7,500	217	183	160	141	131	124
10,000	201	173	153	136	128	122
15,000	183	160	145	131	124	119
20,000	173	153	140	128	122	118
30,000	160	145	134	124	119	116
40,000	153	140	130	122	118	115
90,000	138	129	122	117	114	112
50,000	148	136	128	120	116	114

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)(1999-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE		
AADT	ONE-LANE	TWO-LANE	THREE-LANE
100	7.61	8.62	7.50
500	3.01	3.58	2.95
1,000	2.17	2.63	2.12
2,500	1.50	1.87	1.46
5,000	1.19	1.51	1.16
7,500	1.06	1.36	1.03
10,000	0.98	1.27	0.95
15,000	0.89	1.17	0.87
20,000	0.84	1.11	0.82

TABLE E-2. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1999-2003)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.56	3.76	1.74	1.87
1,000	1.80	2.78	1.16	1.26
2,500	1.21	1.99	0.73	0.80
5,000	0.94	1.62	0.54	0.60
10,000	0.76	1.37	0.41	0.46
15,000	0.69	1.26	0.36	0.41
20,000	0.64	1.20	0.33	0.37
30,000	0.59	1.12	0.29	0.34
40,000	0.56	1.08	0.27	0.31
50,000	0.54	1.05	0.26	0.30

TABLE E-3. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(1999-2003)

AADT	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE	
	TWO-LANE	THREE-LANE
500	3.88	5.20
1,000	2.88	3.98
2,500	2.07	2.98
5,000	1.69	2.50
7,500	1.53	2.30
10,000	1.43	2.18
15,000	1.32	2.04
20,000	1.26	1.95
30,000	1.18	1.86
40,000	1.13	1.80

TABLE E-4. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1999-2003)

AADT	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	2.94	4.00	1.56	1.67
5,000	1.73	2.52	0.79	0.86
10,000	1.47	2.19	0.63	0.69
15,000	1.36	2.05	0.56	0.62
20,000	1.29	1.97	0.52	0.57
30,000	1.22	1.87	0.47	0.53
40,000	1.17	1.81	0.45	0.50
50,000	1.14	1.77	0.43	0.48
60,000	1.12	1.74	0.41	0.46
70,000	1.10	1.72	0.40	0.45
80,000	1.08	1.70	0.40	0.44
90,000	1.07	1.68	0.39	0.44
100,000	1.06	1.67	0.38	0.43

APPENDIX F

TOTAL CRASH RATES FOR CITIES INCLUDED IN 2000 CENSUS

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1999-2003)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Adairville	920	63	14	Calhoun	836	148	35
Albany	2,220	613	55	California	130	*	*
Alexandria	8,286	1,334	32	Calvert City	2,701	355	26
Allen	150	155	207	Camargo	923	70	15
Anchorage	2,264	117	10	Campbellsburg	705	107	30
Annville	470	*	*	Campbellsville	10,498	2,532	48
Arlington	395	20	10	Campton	424	280	132
Ashland	21,981	5,892	54	Caneyville	627	81	26
Auburn	1,444	144	20	Carlisle	1,917	341	36
Audubon Park	1,545	66	9	Carrollton	3,846	958	50
Augusta	1,204	135	22	Catlettsburg	1,960	617	63
Bancroft	536	*	*	Cave City	1,880	557	59
Barbourmeade	1,260	1	0	Centertown	416	34	16
Barbourville	3,589	816	46	Central City	5,893	917	31
Bardstown	10,374	3,046	59	Cherrywood Village	327	1	1
Bardwell	799	72	18	Clarkson	794	170	43
Barlow	715	52	15	Clay	1,179	81	14
Beattyville	1,193	236	40	Clay City	1,303	*	*
Beaver Dam	3,033	624	41	Clinton	1,415	*	*
Bedford	677	196	58	Cloverport	1,256	66	11
Beechwood Village	1,173	6	1	Coal Run	577	436	151
Bellefonte	837	110	26	Cold Spring	3,806	1,133	60
Bellevue	6,480	1,119	35	Coldstream	862	*	*
Bellewood	300	3	2	Columbia	4,014	1,144	57
Benham	599	27	9	Concord	28	5	36
Benton	4,197	993	47	Corbin	7,742	1,827	47
Berea	9,851	2,022	41	Corinth	181	156	172
Berry	310	15	10	Corydon	744	132	36
Blaine	245	18	15	Covington	43,370	10,757	50
Blandville	95	*	*	Crab Orchard	842	93	22
Bloomfield	855	126	30	Creekside	323	*	*
Blue Ridge Manor	623	1	0	Crescent Springs	3,931	842	43
Bonnieville	354	75	42	Crestview	471	7	3
Booneville	111	200	360	Crestview Hills	2,889	1,200	83
Bowling Green	49,296	15,880	64	Crestwood	1,999	607	61
Bradfordsville	304	19	13	Crittenden	2,401	523	44
Brandenburg	2,049	418	41	Crofton	838	102	24
Bremen	365	75	41	Cumberland	2,611	230	18
Briarwood	554	1	0	Cynthiana	6,258	1,377	44
Broadfields	250	*	*	Danville	15,477	3,488	45
Brodhead	1,193	39	7	Dawson Springs	2,980	282	19
Broeck Point	325	*	*	Dayton	5,966	369	12
Bromley	838	45	11	Dixon	632	179	57
Brooksville	589	175	59	Douglass Hills	5,549	*	*
Brownsville	921	334	73	Dover	316	35	22
Burgin	874	58	13	Drakesboro	627	105	34
Burkesville	1,756	199	23	Dry Ridge	1,995	1,023	103
Burnside	637	176	55	Earlington	1,649	206	25
Butler	613	81	26	Eddyville	2,350	284	24
Cadiz	2,373	671	57	Edgewood	9,400	881	19
Calhoun	836	148	35	Edmonton	1,586	373	47
California	130	*	*	Ekron	170	34	40

* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1999-2003)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Elizabethtown	22,542	6,465	57	Harlan	2,081	868	83
Elkhorn City	1,060	189	36	Harrodsburg	8,014	1,631	41
Elkton	1,984	281	28	Hartford	2,571	321	25
Elsmere	8,139	729	18	Hawesville	971	162	33
Eminence	2,231	257	23	Hazard	4,806	2,263	94
Erlanger	16,676	4,012	48	Hazel	440	55	25
Eubank	358	56	31	Hebron Estates	930	*	*
Evarts	1,101	138	25	Henderson	27,373	7,008	51
Ewing	278	18	13	Hickman	2,560	151	12
Fairfield	72	18	50	Highland Heights	6,554	1,019	31
Fairview	156	22	28	Hills And Dales	154	*	*
Falmouth	2,058	373	36	Hillview	6,119	*	*
Ferguson	881	30	7	Hindman	787	338	86
Fincastle	838	*	*	Hiseville	224	23	21
Flatwoods	7,605	678	18	Hodgenville	2,874	631	44
Fleming-neon	759	*	*	Hollow Creek	991	*	*
Flemingsburg	3,010	450	30	Hopkinsville	30,089	6,041	40
Florence	23,551	9,184	78	Horse Cave	2,252	266	24
Fordsville	531	73	28	Houston Acres	491	2	1
Forest Hills	494	2	1	Hunters Hollow	286	*	*
Fort Mitchell	8,089	1,349	33	Hurstbourne	4,420	*	*
Fort Thomas	16,495	1,250	15	Hustonville	347	55	32
Fort Wright	5,681	2,235	79	Hyden	204	219	215
Foster	65	*	*	Independence	14,982	2,105	28
Fountain Run	236	16	14	Indian Hills	2,882	144	10
Fox Chase	528	*	*	Indian Hills Ch. Sec.	1,005	*	*
Frankfort	27,741	6,078	44	Inez	466	192	82
Franklin	7,996	1,304	33	Irvine	2,843	523	37
Fredonia	420	72	34	Irvington	1,257	93	15
Frenchburg	551	165	60	Island	435	56	26
Fulton	2,775	485	35	Jackson	2,490	973	78
Gamaliel	439	14	6	Jamestown	1,624	209	26
Georgetown	18,080	3,395	38	Jeffersontown	26,633	4,795	36
Germantown	190	48	51	Jeffersonville	1,804	317	35
Ghent	371	65	35	Jenkins	2,401	75	6
Glasgow	13,019	3,328	51	Junction City	2,184	252	23
Glencoe	251	48	38	Keeneland	383	1	1
Glenview	653	*	*	Kevil	574	67	23
Glenview Hills	353	*	*	Kingsley	428	1	1
Grand Rivers	343	47	27	Kuttawa	596	115	39
Gratz	89	19	43	La Grange	5,676	1,037	37
Grayson	3,877	1,016	52	Lacenter	1,038	30	6
Green Spring	768	*	*	Lafayette	193	5	5
Greensburg	2,396	499	42	Lakeside Park	2,869	361	25
Greenup	1,198	174	29	Lakeview Heights	252	*	*
Greenville	4,398	906	41	Lancaster	3,734	720	39
Guthrie	1,469	129	18	Langdon Place	874	*	*
Hanson	625	92	29	Latonia Lakes	325	29	18
Hardin	564	97	34	Lawrenceburg	9,014	1,024	23
Hardinsburg	2,345	294	25	Lebanon	5,718	1,299	45
Harlan	2,081	868	83	Lebanon Junction	1,801	238	26
Harrodsburg	8,014	1,631	41	Leitchfield	6,139	1,479	48

* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1999-2003)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Lewisburg	903	96	21	Muldraugh	1,298	329	51
Lewisport	1,639	112	14	Munfordville	1,563	441	56
Lexington	260,512	64,684	50	Murray	14,950	3,328	45
Liberty	1,850	419	45	Murray Hill	619	*	*
Livermore	1,482	175	24	Nebo	220	58	53
Livingston	228	22	19	New Castle	919	145	32
London	5,692	3,368	118	New Haven	849	85	20
Lone Oak	454	650	286	Newport	17,048	4,685	55
Loretto	623	87	28	Nicholasville	19,680	3,913	40
Louisa	2,018	628	62	Norbourne Estates	461	1	0
Louisville	256,231	81,903	64	North Middleton	562	14	5
Loyall	766	62	16	Northfield	970	64	13
Ludlow	4,409	272	12	Nortonville	1,264	176	28
Lynch	900	20	4	Norwood	372	*	*
Lyndon	9,369	88	2	Oak Grove	7,064	1,333	38
Lynnview	965	37	8	Oakland	260	25	19
Mackville	206	17	17	Old Brownboro Place	348	*	*
Madisonville	19,307	4,462	46	Olive Hill	1,813	327	36
Manchester	1,738	864	99	Orcharh Grass Hills	1,058	*	*
Manor Creek	179	*	*	Owensboro	54,067	12,771	47
Marion	3,196	480	30	Owenton	1,387	308	44
Martin	633	148	47	Owingsville	1,488	323	43
Maryhill Estates	177	*	*	Paducah	26,307	8,813	67
Mayfield	10,349	2,107	41	Paintsville	4,132	1,307	63
Maysville	8,993	2,402	53	Paris	9,183	1,813	40
Mchenry	417	50	24	Park City	517	99	38
Mckee	878	245	56	Park Hills	2,977	202	14
Mcroberts	921	38	8	Park Lake	263	*	*
Meadowbrook Farm	163	*	*	Pembroke	797	43	11
Meadowvale	765	15	4	Perryville	763	41	11
Meadowview Estates	422	4	2	Pewee Valley	1,436	240	33
Melbourne	457	38	17	Phelps	1,053	276	52
Mentor	181	18	20	Pikeville	6,295	2,341	74
Middlesboro	10,384	1,885	36	Pineville	2,093	486	46
Middletown	5,744	88	3	Pioneer Village	1,130	*	*
Midway	1,620	145	18	Pippa Passes	297	89	60
Millersburg	842	72	17	Plantation	902	671	149
Milton	525	195	74	Pleasureville	869	45	10
Minor Lane Heights	1,435	43	6	Plymouth Village	201	1	1
Monterey	167	29	35	Poplar Hills	377	*	*
Monticello	5,981	1,252	42	Powderly	846	88	21
Moorland	464	3	1	Prestonsburg	3,612	1,331	74
Morehead	5,914	2,299	78	Prestonville	164	32	39
Morganfield	3,494	681	39	Princeton	6,536	921	28
Morgantown	2,544	547	43	Prospect	2,788	*	*
Mortons Gap	952	113	24	Providence	3,611	237	13
Mount Olivet	289	33	23	Raceland	2,355	212	18
Mount Sterling	5,876	1,835	63	Radcliff	21,961	2,890	26
Mount Vernon	2,592	769	59	Ravenna	693	69	20
Mount Washington	8,485	958	23	Raywick	157	*	*
Muldraugh	1,298	329	51	Richlawn	435	*	*
Munfordville	1,563	441	56	Richmond	27,152	6,862	51

* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1999-2003)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION
River Bluff	452	*	*
Rochester	186	2	2
Rockport	334	12	7
Rolling Hills	907	1	0
Russell	3,645	773	42
Russell Springs	2,399	416	35
Russellville	7,149	1,649	46
Ryland Heights	279	*	*
Sacramento	517	59	23
Sadieville	263	52	40
Saint Charles	309	5	3
Saint Matthews	15,852	791	10
Saint Regis Park	1,520	280	37
Salem	769	56	15
Salt Lick	342	60	35
Salyersville	1,604	466	58
Sanders	246	21	17
Sandy Hook	678	152	45
Sardis	149	28	38
Science Hill	634	61	19
Scottsville	4,327	879	41
Sebree	1,558	176	23
Seneca Gardens	699	3	1
Sharpsburg	295	48	33
Shelbyville	10,085	2,679	53
Shepherdsville	8,334	2,326	56
Shively	15,157	4,376	58
Silver Grove	1,215	191	31
Simpsonville	1,281	210	33
Slaughters	238	28	24
Smithfield	102	26	51
Smithland	401	106	53
Smiths Grove	784	162	41
Somerset	11,352	4,402	78
Sonora	350	112	64
South Carrollton	184	87	95
South Shore	1,226	27	4
Southgate	3,472	478	28
Sparta	230	55	48
Spring Mill	342	*	*
Spring Valley	400	*	*
Springfield	2,634	587	45
Stamping Ground	566	57	20
Stanford	3,430	526	31
Stanton	3,029	542	36
Strathmoor Village	625	1	0
Sturgis	2,030	209	21
Sycamore	70	*	*
Taylor Mill	6,913	1,326	38
Taylorsville	1,009	269	53
Ten Broeck	128	*	*
Thornhill	146	*	*
Ten Broeck	128	*	*
Thornhill	146	*	*
Tompkinsville	2,660	570	43
Trenton	419	33	16
Union	2,893	555	38
Uniontown	1,064	116	22
Upton	391	71	36
Vanceburg	1,731	280	32
Versailles	7,511	1,765	47
Vicco	318	100	63
Villa Hills	7,948	418	11
Vine Grove	4,169	348	17
Wallins Creek	257	57	44
Walton	2,450	621	51
Warfield	284	87	61
Warsaw	1,811	195	22
Water Valley	316	19	12
Waterson Park	1,542	*	*
Waverly	297	57	38
Wayland	298	43	29
Wellington	561	*	*
West Liberty	3,277	467	29
West Point	1,100	256	47
Westwood	4,888	*	*
Westwood	612	*	*
Wheatcroft	173	15	17
Wheelwright	1,042	53	10
Whipps Millgate	415	*	*
White Plains	800	57	14
Whitesburg	1,600	481	60
Whitesville	632	73	23
Whitley City	1,111	415	75
Wickliffe	794	179	45
Wilder	2,624	742	57
Wildwood	247	1	1
Williamsburg	5,143	976	38
Williamstown	3,227	713	44
Willisburg	304	33	22
Wilmore	5,905	264	9
Winchester	16,724	3,954	47
Winding Falls	657	*	*
Wingo	581	49	17
Woodburg	117	*	*
Woodburn	323	36	22
Woodland Hills	657	3	1
Woodlawn Park	1,033	4	1
Worthington	1,673	41	5
Worthington Hills	973	*	*
Worthville	215	25	23
Wurtland	1,049	128	24

* Data Not Available