Research Report
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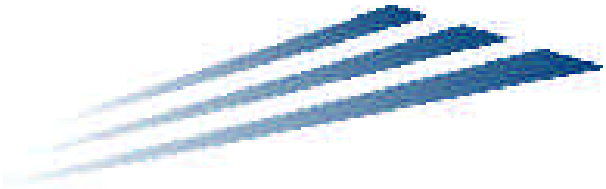
ANALYSIS OF TRAFFIC CRASH DATA IN KENTUCKY (1997-2001)



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ANALYSIS OF TRAFFIC CRASH DATA IN KENTUCKY (1997 - 2001)

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EXECUTIVE SUMMARY

This report documents an analysis of traffic crash data in Kentucky for the years of 1997 through 2001. 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, which 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) database. 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 16th report providing a combination of those two report areas. Traffic crash data for the five-year period of 1997 through 2001 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 databases were used to obtain traffic crash statistics. Traffic crash data have been maintained in a computer file containing all police-reported crashes. The crash report was changed in 2000 with the data now contained in the Collision Report Analysis for Safer Highways (CRASH) database. The computer files and database 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 database 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 from 2000 and 2001 so it would be consistent with other reports. All crashes included in the analysis occurred on a public highway. Summaries were prepared

from an analysis of the crash data from a combination of the computer files from 1997 through 1999 and CRASH data base for 2000 and 2001.

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 1997 through 2001 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:

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

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), and
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:

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

in which

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

There are highway safety problem areas (standards) identified by the National Highway Traffic Safety Administration. Problem areas, which 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 files results in approximately 28,000 miles being included in this category. This compares to over 80,000 miles of public roads in Kentucky. While only approximately 40 percent of the total miles are state-maintained, in 2001 these roads accounted for approximately 90 percent of the vehicle miles traveled and 63

percent of the crashes. 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 which 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.

A comparison of 1997 through 2001 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 lower in 2001 compared to the average of the previous four years. The decrease in the number of crashes compared with the increase in vehicle-miles driven resulted in a 7.7 percent decrease in the crash rate in 2001 compared to the previous four-year average. The overall crash rate in 2001 was 196 crashes per 100 million vehicle-miles (C/100 MVM). The crash rates for the previous four years varied from 197 to 230 C/100 MVM.

The fatal crash rate showed a decrease (1.5 percent) in 2001 compared to the previous four-year average. The fatal crash rate ranged from 1.44 C/100MVM in 2000 to 1.66 C/100MVM in 1997. The injury crash rate decreased by 12.9 percent in 2001 compared to the previous four-year average. The injury crash rate in 2001 was the lowest of the five years. The injury crash rate has remained fairly stable prior to 2001 with the range from 58 to 69 C/100 MVM between 1997 and 2000 compared to 54 C/100 MVM in 2001.

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 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 (1997 through 2001) 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 and three-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 have the lowest rates, followed closely by parkways. The advantage of median-separated highways is shown when comparing all and injury 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 crash rates. Urban parkways, four-lane undivided highways, and the small sample of three-lane highways have a slightly higher fatal crash rate than the other types. The lowest overall crash rate and injury crash rate are on interstates and parkways. Interstates have the lowest fatal crash rates.

Tables 2 and 3 show that the overall total crash rate on urban highways is about 48 percent higher than that on rural highways. Also, the injury rate on urban highways is 11 percent greater than that for rural highways. However, the fatal crash rate on urban highways is only 33 percent of that for rural highways.

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 (15.3 percent) compared to rural areas (0.5 percent). Only a small percentage (about 10 percent) of state-maintained mileage is classified as urban. The rates fluctuated significantly for the highway types which had only a small number of miles. The rates decreased in 2001 for most highway types.

Trends in overall crash rates representative of rural and urban areas are shown graphically in Figure 1 for the five-year period of 1997 through 2001. 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.

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 1997 through 2001 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 1997 through 2001. 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, seven 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 (1999-2001) with the results shown in APPENDIX B. Data for 0.1 mile “spots” are also given.

Critical numbers of crashes for various section lengths were determined for each highway type using Equation 2 on page 3. Results are presented in tables 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 1997 through 2001.

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 1997 through 2001 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.

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 1997 through 2001.

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. 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 of the total in the state. 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 40 for total crashes, 36 for injury-or-fatal crashes, and two 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 40 counties determined to have a critical crash rate when total crashes were considered were also identified in the most recent report.

Table 10 contains the numbers 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 also were calculated by county 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 two of the five population categories, the same county had the highest rate considering all roads or state-maintained roads. These counties are Pendleton County (in the 10,000 to 14,999 population category) and Harrison County (in the 15,000 to 24,999 population category). In the under 10,000 population category, Trimble County has the highest rate for all roads while Crittenden County has the highest rate for the state-maintained system. In the 25,000 to 50,000 population category, Boyd County has the highest rate for all roads while Boyle 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 Kenton County has the highest rate for the state-maintained system. When all roads are considered, Fayette County, followed by Daviess, Jefferson, and Harrison Counties, have the highest rates in the state. When only state-maintained roads are considered, Harrison County has the highest rate followed by Boyle, Jessamine, and Pendleton Counties. Carlisle County, which is in the lowest population category, has the lowest rate in the state for all 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, Jackson, 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 rates for their population categories are Cumberland, Lewis, Breathitt, Meade, and Pike. 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). Pike and Pulaski 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 county by year for the last five years; percent change in the 2001 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 1997 through 2001 crash data. The primary group of cities included in the analysis were those having a population over 2,500 which 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 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. There were 10 cities for which no data could be obtained for the state-maintained system. 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 a few cities where no data was available for the state-maintained system. There were also some cities for which only 2000 and 2001 data were available.

Additional statistics are listed in Table 16 for the 116 cities which had five years of crash data available for analysis. Rates for fatal crashes, pedestrian-motor vehicle crashes, bicycle-related 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 359 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 code for the city was not available for several small cities and there was no data prior to 2000 in a few other cities. This resulted in data being available for 351 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 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, Erlanger, Cynthiana, Lancaster, 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. This table provides data for 165 cities. The average crash rate for all cities in a category is also listed. The overall rates are highest for cities in the population categories between 10,000 and 55,000. 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 many cases.

Total crash rates for cities by population category are listed in Table 18. They are tabulated in order of descending crash rates 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 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. 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 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 5,743 per year for the past five years. Alcohol-related fatalities have averaged 206 per year during the past five years (using Fatal Analysis Reporting System data). If the cost of an average motor-vehicle crash is used, the estimated annual cost of alcohol-related crashes in Kentucky is in the range of $83 to $231 million depending on the source of the crash cost estimates (economic cost or comprehensive cost 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. In 1984, there were 9,007 alcohol-related crashes (6.6 percent of all crashes). This number decreased to the relatively constant level of from approximately 7,700 to 8,100 from 1985 through 1990. There was then a gradual reduction in alcohol-related crashes 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 decreased to 6,150 in 1996, 6,070 in 1997, and 5,222 in 1998 with a slight increase to 5,441 in 1999 and a larger increase in 2000 to 6,127. The 2001 total of 5,853 is a 2.4 percent increase 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 2001 (172) decreased by 19.7 percent over the 1996 through 1999 average (214). The number in 2001 was the lowest in the five-year period and continued the decreasing trend over the past several years.

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, Magoffin, Marion, Meade, and Pike.

The information provided in Table 20 also may be used to determine the counties that have the highest percentages of crashes involving alcohol for young drivers by county population category. The counties identified as having the highest percentages of alcohol-related crashes, considering only young drivers, were 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 Menifee, Magoffin, Breathitt, Floyd, and Madison.

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, Richmond, Newport, Dayton, and Park Hills.

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 (1997 through 2001) were used in the analysis. The conviction data were obtained from driving records maintained by the Division of Drivers Licensing in the Transportation Cabinet. 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, Lincoln, Oldham, and Jefferson. Counties having the lowest rates of alcohol convictions per alcohol-related crash are Nicholas, Owen, Marion, Letcher, and Jefferson. Counties having low rates for either convictions per 1,000 licensed drivers or convictions per alcohol-

related crash may be candidates for increased enforcement or other special programs (especially if they have a high percentage of alcohol-related crashes). Data in Table 22 (which do not include data for DUI convictions where the county was not specified) show that, statewide, the number of alcohol convictions has remained fairly constant from a low of slightly over 30,000 in 1996 to a high of almost 33,000 in 1998. The number of alcohol convictions in 2001 was slightly lower (4.0 percent) than the average of the previous four years.

A comparison was also made between the total alcohol arrests and total alcohol convictions, by county, for the five years of 1997 through 2001 (Table 24) . The arrest data for "driving under the influence" was obtained from the Administrative Office of the Courts (AOC). The statewide percentage of alcohol convictions per arrest over these five years was 69.5 percent. The percentages varied from a low of 48.1 percent in Clay County to a high of 86.4 percent in Grant County. The percentages would be affected by the overlapping effects of arrests being made and convictions being prosecuted in different calendar years. Eleven counties have a conviction percentage of 80 percent or more. The highest rates, in descending order, were found in Grant, Mercer, Fleming, Clark, Livingston, Rowan, Hopkins, Fayette, Henderson, Lewis, and Union counties. Eight counties have a conviction rate under 60 percent. The lowest rates, in descending order, were found in Carter, Pulaski, Pike, Gallatin, Whitley, Leslie, Owsley, and Clay counties.

The counties are grouped by population category and are placed in decreasing order of conviction percentage in Table 25. The average conviction percentage did not vary substantially by population category with a range of from 69.4 to 71.5 percent. Counties having the highest conviction percentages in the various population categories are Livingston, Fleming, Grant, Clark, and Fayette. Counties having the lowest conviction percentages for the various population categories are Owsley, Leslie, Clay, Whitley, and Pike.

A drunk-driving offense may be reduced to a charge of reckless driving. This could occur when a person is arrested for drunk driving because of erratic driving behavior, and then field sobriety or BAC tests fail to confirm the drunk-driving charge. In addition, the severity of the penalty for drunk driving could result in a reduction of the drunk-driving charge to reckless driving. For those reasons, it was determined that a summary of reckless driving convictions would be beneficial. Numbers of reckless driving convictions and the rate of convictions per 1,000 licensed drivers for each county are presented in Table 26. In the time period of 1997 through 2001, the highest number of convictions was in 1997. There has been a decrease in the number of reckless driving convictions. The number in 2001 was a 23.0 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 Clinton Counties. The lowest rates are in Spencer, Oldham, and Trimble Counties.

Drugs continue to be listed as a contributing factor in a relatively small percentage of all crashes. However, the number of drug-related crashes increased dramatically in 2001 (38.1 percent) compared to the 1999 and 2000 average. The 1999, 2000, and 2001 data were the only available data that included follow-up studies of drivers from FARS. Only about 500 drug-related crashes had been reported prior to 1999 with the number increasing to 990 in 2000 and 977 in 2001. The number of drug-related injury crashes increased by 68.1 percent in 2001 compared to the previous four-year average. The number of drug-related fatal crashes increased by 3.7 percent in 2001 compared to the two-year average of 1999 and 2000. There were 127 fatal drug-related crashes in 2001 compared to no more than 15 in previous years when the FARS data were not included in the analysis.

Percentages of crashes involving drugs (as noted by the investigating officer) by county and population category are presented in Table 27. Counties having the highest percentages of drug-related crashes by population category are Nicholas, Martin, Johnson, Knox, 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, Leslie, Magoffin, and Clay 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, Owensboro and Bowling Green and Paducah and Richmond, Middlesboro, Williamsburg, and Barbourville.

7.0 OCCUPANT PROTECTION

The percentages of drivers of passenger cars involved in traffic crashes who were reported as wearing safety belts were listed by county in Table 14. Those percentages are listed in descending order by county population category in Table 29. Those percentages are for the five-year period of 1997 through 2001. The rates varied from a high of 95.3 percent in Fayette County to a low of 77.0 percent in Metcalfe 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, 35 counties had rates over 90 percent while only 10 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 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 potential for intensive promotional campaigns are identified by an asterisk in Table 29. Those 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 1997 through 2001 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 1997 through 2001. 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 2001 resulted in a driver usage rate of 62 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 8 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 an crash, the chance of being fatally injured is reduced by about 95 percent compared to not wearing a safety belt. Also, the chance of receiving an incapacitating injury is reduced by 80 percent and the chance of receiving a non-incapacitating injury is reduced by 68 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 37 percent (from 11.32 percent for drivers not wearing safety belts to 7.18 percent for drivers wearing safety belts). The chance of receiving either a fatal or incapacitating injury was reduced by 83 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 1997 through 2001. 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 1997 through 2001 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 1997 through 2001 were used along with the average usage rate over this time period. Also used was the reduction associated with safety belt usage of 95 percent for fatalities and 80 percent for incapacitating injuries. Crash cost estimates were $1,000,000 for a fatality and $47,900 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 123 fatalities and a potential annual reduction in the cost of fatalities and serious injuries of approximately 166 million dollars.

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 1997 through 2001. 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 43 fatalities (children age three and under) occurring during the study period, 23 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 499 incapacitating injuries, 365 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 93-percent reduction in fatalities for children in restraints, an 84-percent reduction in incapacitating injuries, a 77-percent reduction in non-incapacitating injuries, and a 56-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 a steady increase in the usage rate. The most recent usage rate using the crash data was 96 percent in 2001. This compares to the usage rate of 89 percent found in the 2001 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 at slightly over 10,000 from 1995 through 1997 before decreasing to slightly over 9,000 in 1998 and 1999. The number of speed-related crashes in 2001 is the lowest it has been in the 5-year period and has decreased by 13.2 percent in 2001 compared to the previous four-year average. For the five-year period, speed-related crashes represented 7.1 percent of all crashes, 11.1 percent of injury crashes, and 24.6 percent of fatal crashes. The number of speed-related fatal crashes decreased by 20.5 percent in 2001 compared to the previous four- year average. The number of speed-related fatal crashes ranged from a high of 230 in 1997 to a low of 154 in 2000 and 2001. The number of speed-related injury crashes decreased by 22.9 percent in 2001 compared to the previous four years. The number of speed-related injury crashes ranged from a high of 4,488 in 1997 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. When arranged in order of decreasing percentages of speed-related crashes, those counties having the highest percentages in each population category are Menifee, Owen, Lincoln, Knox, and Pike. There were several counties having a high percentage of speed-related crashes in the southeastern section of the state. 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. The number of speeding convictions for the entire state ranged from 84,961 in 2001 to 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, Letcher, and Pike. The counties identified as having the lowest rates of speeding convictions per speed-related crash are Elliott, Martin, Wayne, Harlan, and Pike. 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 which 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 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 slight increases 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. A review of driver records show that teenage drivers account for approximately 6.1 percent of licensed drivers in Kentucky. However, crash data show that teenage drivers are involved in a much higher percentage of traffic crashes. Using 2001 data, it was found that teenage drivers were involved in

about 21 percent of all crashes, 23 percent of injury crashes, and 18 percent of fatal crashes. Teenage drivers (including drivers with a learner permit) are over represented by a factor of 3.4 in all crashes, 3.8 in injury crashes, and 3.0 in fatal crashes.

The involvement rate of teenage drivers compared to all drivers in total and fatal crashes was analyzed (using 2001 data). Considering all crashes, the rate was 46 crashes per 1,000 drivers for all drivers compared to 173 crashes per 1,000 drivers for teenage drivers. Considering fatal crashes, the rate was 27 fatal crashes per 100,000 drivers for all drivers compared to 80 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 2001 were compared to an average of the preceding four years (1997-2000). There was a decrease in total crashes (1.2 percent) when comparing 2001 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 1998 (125,698). The number in 1998 was affected by incomplete data submitted from Jefferson County at the time of data analysis. When the subsequent reports are considered, the number of crashes in 1998 was very similar to the other years. This did not affect the number of reported fatal crashes in 1998. The number of fatal crashes and fatalities in 2001 decreased compared to the previous four-year average. The number of fatal crashes decreased by 5.0 percent while the number of fatalities decreased by 3.3 percent. The number of fatalities ranged from 819 in 1999 to 869 in 1998. The number of injury crashes and injuries in 2001 was lower than the previous four-year average. There was a 7.2 percent decrease in injury crashes with a 8.1 percent decrease in injuries. The number of injuries varied from 49,919 in 2001 to 56,342 in 1997.

Vehicle-miles traveled has generally increased over the five-year period. However the vehicle miles traveled has decreased slightly in 2001 by 0.5 percent.

There were decreases in the fatal crash rate (3.4 percent) and fatality crash rate (2.1 percent). The total crash rate varied from a low of 270 C/100 MVM in 1998 to 299 C/100 MVM in 1997. The fatality crash rate in 1999 had the lowest rate in this five-year period. There has been a downward trend in the fatality crash rate over the past several years.

Trends in the number of specific types of crashes also are presented in Table 41. Those trends are discussed in the section dealing with that crash category.

There was a total of 657,344 crashes in the five-year period, of which 3,770 (0.6 percent) were fatal crashes and 174,646 (26.6 percent) were injury crashes. Those crashes resulted in 4,219 fatalities and 267,293 injuries. There is a large range used when estimating crash costs. Using National Safety Council estimates of motor vehicle crash cost, considering economic or comprehensive costs, results in an estimate for 2001 of 1.9 to 5.3 billion dollars for the cost of Kentucky traffic crashes or an average cost of $14,500 to $40,600 per crash.

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 13.3 percent in 2001 compared to the period from 1997 through 2000. The number of crashes has remained fairly constant from 1996 through 2000 with a range of from 1,077 to 1,190. Pedestrian collisions are a severe type of crash. In 2001, pedestrian crashes accounted for only 0.8 percent of all crashes but 2.6 percent of injury crashes and 7.0 percent of fatal crashes. The number of injury crashes decreased by 14.5 percent in 2001 while the number of fatal crashes decreased by 9.4 percent in 2001 compared to the 1997 through 2000 average. Injury crashes ranged from 842 in 2001 to 1,057 in 1997 while fatal crashes ranged from 52 in 2000 to 65 in 1998.

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: Robertson, Todd, Marion, Henderson, and Kenton. 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, Pikeville, and Springfield. Newport and Covington had substantially 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 and Daviess. 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 Fulton. The rate in Newport was substantially above any other city.

The number of bicycle crashes decreased in 2001 (16.8 percent) compared to the average of 1997 through 2000. The number of bicycle crashes has ranged from 507 in 2001 to 662 in 1997. This is a severe type of crash. In 2001, while bicycle crashes accounted for 0.4 percent of all crashes, they accounted for 1.2 percent of injury crashes and also 1.1 percent of fatal crashes. The number of injury crashes decreased by 20.3 percent in 2001 while the number of fatal crashes decreased by 3.0 percent compared to the 1997 through 2000 average. The range in injury crashes was from 389 in 2001 to 512 in 1997 and 1999 while the number of fatal crashes ranged from 4 in 2000 to 10 in 1997 and 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, Pendleton, Breathitt, Boyd, and Pike (Table 47). The highest rate is in Pike County. From Table 48, those cities having the highest rates in each population category are Louisville, Paducah, Madisonville, Pikeville, and Prestonsburg.

There was a major increase in the number of motorcycle crashes in 2001 (38.2 percent) compared to the 1997 through 2000 average. The numbers over the five-year period ranged from a high of 1,283 in 2001 to a low of 736 in 1997. This is a severe type of crash. Data in 2001 show that motorcycle crashes accounted for 1.0 percent of all crashes but 2.8 percent of injury crashes and 7.9 percent of fatal crashes. The number of injury crashes increased by 30.8 percent while the number of fatal crashes increased by 80.5 percent in 2001 compared to the 1997 through 2000 average. The number of injury crashes ranged from 565 in 1997 to 910 in 2001 while the number of fatal crashes ranged from 26 in 1998 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. 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 Crittenden, Washington, Breathitt, Jessamine, and Christian. 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 Irvine. The highest rate was in Irvine.

The trend analysis presented in Table 41 indicates there was an increase in this type of crash in 2001 (14.1 percent increase) compared to the 1997 through 2000 average. The annual number of this type of crash ranged from a high of 932 in 2000 to a low of 648 in 1999. The number of injury crashes ranged from 150 in 1997 to 110 in 1999. There were two fatal crashes involving a school bus in 2001.

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 contains at least one interstate highway. Other counties having a high rate either contained an interstate highway or had a large amount of coal truck traffic.

The trend analysis showed there was an increase in the number of truck crashes in 2001 (8.0 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. 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 and 2001 reversed the decreasing trend over the past several years. The number of injury crashes increased by 0.7 percent while the number of fatal crashes increased by 1.9 percent in 2001 compared to the 1997 through 2000 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 108 in 1997. Considering the five year period, truck crashes represent 6.6 percent of all crashes, 5.3 percent of injury crashes, and 12.4 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 Hopkins, and Pulaski. The highest rate is in Grant County with the highest number in Jefferson County. There were no train crashes in 54 of the 120 counties in the five-year period of 1997 through 2001. Several of the counties with the highest rates in their population category were in counties with a large amount of coal production.

The trend analysis for motor vehicle-train crashes is given in Table 41. There was a range in train crashes from 70 in 1998 to 57 in 1997 and 1999. The number of train crashes in 2001 was 5.3 percent more than the 1997 through 2000 average. The number of injury crashes decreased by 12.2 percent in 2001 compared to the 1997 through 2000 average with a range of from 16 in 1999 to 25 in 1998. The number of fatal crashes ranged from two to five over 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 5.55 percent in 2001.

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. Vital 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 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.

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.

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 be considered as candidates for participation in the program.

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

11.3 ALCOHOL-RELATED CRASHES

1. The number of alcohol-related crashes increased in 2001 compared to the previous four-year average but has decreased from the level prior to 1996. There has been a decrease 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	Calloway
2	Hopkins
3	Logan
4	Bullitt
5	Henry
6	Harrison
7	Madison
8	Montgomery
9	Pike
10	Knox
11	Clay
12	Woodford
13	Breathitt
14	Greenup
15	Marion
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.

1. Richmond
2. Covington
3. Owensboro
4. Newport
5. Shively

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 Click It or Ticket Campaign conducted around the Memorial Day holiday in 2000 shows that these types of programs 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	Calloway
2	Crittenden
3	Warren
4	Jefferson
5	Owen
6	Harrison
7	Boyle
8	Rowan
9	Johnson
10	Knox
11	Pulaski
12	Franklin
13	Letcher
14	Boyd
15	Marion
16	Henderson

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

1. 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 7.5 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	Edmonson
4	Nelson
5	Owen
6	Bourbon
7	Garrard
8	Lewis
9	Pike
10	Knox
11	Clay
12	Franklin
13	Letcher
14	Greenup
15	Taylor
16	McLean

2. 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:

1. Lexington
2. Hopkinsville
3. Bowling Green
4. Frankfort
5. Richmond
6. Erlanger
7. Somerset

3. 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 which have much lower crash rates.

4. 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 85th percentile speed. Recommendations for speed limits on various types of roads in Kentucky have been developed.

11.6 TEENAGE DRIVERS

1. Graduated licensing legislation was passed in the 1996 Kentucky legislature as a method to restrict teenage drivers from being exposed to driving environments which surpass their driving experience. The effectiveness of this legislation should be evaluated.

2. 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. These results indicate the need for increasing restrictions on teenage drivers who have completed the permit stage.

2. 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 substantially 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 and Covington 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

1. Pike County had the highest crash rate in the state (Table 47) as did the city of Pikeville (Table 48) which is in Pike County. Also, McCracken County had the second highest rate of crashes in its population category while the city of Paducah (in McCracken County) also had a high rate of this type of crash. Evaluations of this type of crash in these counties and cities are warranted.
2. 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 fatal crashes increased dramatically in 1999, 2000, and 2001 along with a substantial increase for total and injury crashes. 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 fatal crashes support the need to reenact the requirement for the use of motorcycle helmets.
3. The large increase in the number of motorcycle crashes warrants a more detailed analysis to determine the reasons for the increase in the number and severity of this type of crash.

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 which allows heavy loads. A 1999 research report conducted by the University of Kentucky investigated heavy truck involvement in traffic crashes and 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 after repeal of the vehicle inspection law. 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 with the percentage starting in 1995, and continuing through 2001, less than 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.

TABLE 1. COMPARISON OF 1997 - 2001 CRASH RATES*

STATISTIC	1997	1998	1999	2000	1997-2000 Average	2001	Percent Change***
Crashes	84,917	79,301	79,893	89,480	83,398	81,556	-2.2
Mileage	23,272	27,881	28,081	27,941	26,794	28,499	6.4
Crashes Per Mile	3.65	2.84	2.85	3.20	3.14	2.86	-8.8
Vehicle Miles (Billion)	36.90	39.11	40.56	40.92	39.37	41.70	5.9
AADT	4,344	3,843	3,958	4,013	4,040	4,009	-0.8
Crash Rate**	230	203	197	219	212	196	-7.7
Fatal Crash Rate**	1.66	1.61	1.46	1.44	1.54	1.52	-1.5
Injury Crash Rate**	69	61	58	60	62	54	-12.9

* 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 1997 through 2000 average to 2001.

TABLE 2. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1997-2001)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
One-Lane	50	900	163	52	1.2
Two-Lane	22,482	1,620	252	85	3.0
Three-Lane	32	5,170	233	73	2.0
Four-Lane Divided (Non-Interstate or Parkway)	505	11,330	123	40	1.5
Four-Lane Undivided	47	15,120	264	65	1.4
Interstate	528	30,580	49	13	0.7
Parkway	566	9,020	58	15	0.8
All	24,210	2,650	174	57	2.1

* Average for the five years.

TABLE 3. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1997-2001)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASH RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	1,931	6,850	308	78	0.9
Three-Lane	32	12,220	497	106	1.2
Four-Lane Divided (Non-Interstate or Parkway)	378	23,900	307	79	0.9
Four-Lane Undivided	266	19,330	500	122	1.1
Interstate	240	65,260	93	22	0.4
Parkway	52	11,790	104	25	1.1
All **	2,924	15,360	258	64	0.7

* Average for the five years.

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

TABLE 4. COMPARISON OF 1997 - 2001 CRASH RATES BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION

LOCATION	HIGHWAY TYPE	1997	1998	1999	2000	1997-2000 Average	2001	Percent Change*
Rural	One-Lane	365	269	53	285	243	324	33.4
	Two-Lane	267	254	236	255	253	248	-1.9
	Three-Lane	474	269	198	142	271	142	-47.4
	Four-Lane Divided (Non-Interstate or Parkway)	124	115	120	124	121	130	7.3
	Four-Lane Undivided	241	237	241	341	265	270	1.8
	Interstate	52	46	50	51	50	48	-2.7
	Parkway	60	54	50	61	56	64	13.7
	All	183	174	163	177	174	173	-0.5
Urban	Two-Lane	363	301	285	333	320	268	-16.3
	Three-Lane	572	475	430	547	506	449	-11.2
	Four-Lane Divided	356	305	311	323	324	247	-23.6
	Four-Lane Undivided	568	467	485	546	517	434	-15.9
	Interstate	99	84	94	98	94	91	-2.4
	Parkway	107	98	103	98	102	115	13.5
	All	296	245	247	278	266	226	-15.3

* Percent change from 1997 through 2000 to 2001.

TABLE 5. STATEWIDE CRASH RATES FOR "SPOTS" BY HIGHWAY TYPE CLASSIFICATION (1997-2001)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	134	167	0.33	0.49
	Two-Lane	167,019	74,941	0.59	0.76
	Three-Lane	694	105	1.89	0.70
	Four-Lane Divided (Non-Interstate or Parkway)	12,808	1,683	4.14	0.37
	Four-Lane Undivided	3,407	156	5.52	0.79
	Interstate	14,573	1,759	11.16	0.15
	Parkway	5,377	1,887	3.29	0.17
	All Rural	204,012	80,701	0.97	0.52
Urban	Two-Lane	74,496	6,438	2.50	0.93
	Three-Lane	3,582	108	4.46	1.49
	Four-Lane Divided	50,625	1,259	8.73	0.92
	Four-Lane Undivided	46,927	888	7.06	1.50
	Interstate	26,642	800	23.82	0.28
	Parkway	1,154	172	4.30	0.31
	All Urban**	211,121	9,748	5.61	0.77

* 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 (1997-2001)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE-MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.80	4	2.67	7
	Two-Lane	2.23	7	7.43	15
	Three-Lane	6.59	14	21.96	35
	Four-Lane Divided (Non-Interstate or Parkway)	7.61	15	25.37	39
	Four-Lane Undivided	21.84	34	72.80	95
	Interstate	8.29	16	27.62	42
	Parkway	2.85	8	9.50	18
	All Rural	2.53	7	8.43	16
Urban	Two-Lane	11.57	21	38.57	55
	Three-Lane	33.23	49	110.77	138
	Four-Lane Divided	40.20	57	133.99	164
	Four-Lane Undivided	52.87	72	176.25	211
	Interstate	33.30	49	111.00	139
	Parkway	6.72	14	22.40	35
	All Urban**	21.66	34	72.19	95

* 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 (1997-2001)

	STATE-MAINTAINED		ALL ROADS					
			TOTAL CRASHES		FATAL CRASHES		FATAL OR INJURY CRASHES	
COUNTY	TOTAL CRASHES	CRASH RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Adair	1,468	185	2,386	251	24	2.5	642	68
Allen	1,378	230	2,065	279	14	1.9	654	88
Anderson	1,777	198	2,387	224	20	1.9	693	65
Ballard	754	178	1,068	213	9	1.8	358	71
Barren	3,324	162	6,577	274	32	1.3	1,974	82
Bath	1,143	147	1,531	177	16	1.8	471	54
Bell	2,279	167	3,404	220	25	1.6	1,141	74
Boone	12,625	212	17,028	253	58	0.9	4,103	61
Bourbon	2,293	251	3,306	306	26	2.4	919	85
Boyd	5,663	259	9,879	379	29	1.1	2,545	98
Boyle	3,606	329	4,653	350	33	2.5	1,206	91
Bracken	977	225	1,314	261	15	3.0	374	74
Breathitt	1,868	264	2,183	268	34	4.2	1,036	127
Breckinridge	1,204	187	1,488	181	19	2.3	585	71
Bullitt	4,885	142	6,458	162	43	1.1	1,868	47
Butler	980	135	1,231	145	24	2.8	413	49
Caldwell	1,117	134	1,701	177	19	2.0	472	49
Calloway	2,828	248	3,908	277	31	2.2	1,067	76
Campbell	8,328	246	13,778	339	37	0.9	2,809	69
Carlisle	257	97	298	94	8	2.5	117	37
Carroll	1,802	166	2,214	187	13	1.1	582	49
Carter	2,409	139	3,510	178	43	2.2	1,149	58
Casey	933	171	1,234	185	24	3.6	415	62
Christian	7,375	207	9,702	243	58	1.5	2,722	68
Clark	3,152	153	5,942	252	38	1.6	1,353	57
Clay	1,824	174	2,393	199	45	3.7	997	83
Clinton	637	155	779	158	12	2.4	215	44
Crittenden	926	272	1,136	268	13	3.1	415	98
Cumberland	331	103	449	118	18	4.7	146	38
Daviess	7,843	237	17,132	416	57	1.4	3,990	97
Edmonson	908	191	1,199	208	18	3.1	419	73
Elliott	479	263	565	251	9	4.0	215	95
Estill	1,337	268	1,852	294	14	2.2	616	98
Fayette	26,283	238	63,300	485	120	0.9	14,278	109
Fleming	1,023	184	1,396	202	19	2.7	469	68
Floyd	4,386	186	5,290	198	62	2.3	2,450	92
Franklin	6,011	249	8,165	287	38	1.3	1,799	63
Fulton	584	181	1,001	264	13	3.4	322	85
Gallatin	883	86	1,076	98	6	0.5	377	34
Garrard	1,572	266	2,018	285	14	2.0	659	93
Grant	3,461	162	4,404	188	30	1.3	1,171	50
Graves	3,262	185	4,836	231	40	1.9	1,382	66
Grayson	2,154	163	2,653	171	31	2.0	1,010	65
Green	886	227	1,311	272	12	2.5	406	84
Greenup	2,616	189	3,958	234	28	1.7	1,239	73
Hancock	617	141	840	163	14	2.7	270	52
Hardin	10,393	187	13,455	212	74	1.2	3,313	52
Harlan	2,890	198	3,705	220	38	2.3	1,305	77
Harrison	1,893	357	2,776	406	19	2.8	737	108
Hart	1,678	96	2,111	111	38	2.0	692	37
Henderson	6,311	244	9,582	321	37	1.2	2,325	78
Henry	1,699	138	2,013	147	23	1.7	617	45
Hickman	406	131	521	146	7	2.0	191	54
Hopkins	5,833	212	8,142	257	40	1.3	1,944	61
Jackson	1,100	256	1,423	267	17	3.2	557	104
Jefferson	68,282	241	136,754	406	350	1.0	31,476	94
Jessamine	4,790	316	6,358	335	31	1.6	1,591	84
Johnson	2,368	229	2,813	230	21	1.7	1,125	92
Kenton	16,307	262	28,025	382	53	0.7	5,960	81
Knott	1,488	175	1,811	187	30	3.1	805	83

TABLE 7. CRASH RATES BY COUNTY FOR STATE-MAINTAINED SYSTEM AND ALL ROADS (1997-2001)(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	2,882	213	3,984	256	35	2.2	1,475	95
Larue	1,335	167	1,696	183	19	2.1	479	52
Laurel	6,947	207	8,478	223	62	1.6	2,461	65
Lawrence	1,057	116	1,511	146	19	1.8	532	51
Lee	417	161	562	177	12	3.8	201	63
Leslie	1,025	167	1,339	191	31	4.4	706	101
Letcher	2,344	206	2,893	216	31	2.3	1,211	90
Lewis	1,127	169	1,509	195	36	4.6	518	67
Lincoln	1,584	154	2,075	172	24	2.0	807	67
Livingston	945	153	1,076	152	7	1.0	367	52
Logan	2,549	204	3,408	230	26	1.8	1,008	68
Lyon	947	89	1,176	105	12	1.1	354	32
McCracken	8,008	241	13,595	348	69	1.8	3,897	100
McCreary	1,194	197	1,525	213	23	3.2	548	76
McLean	1,010	213	1,192	202	11	1.9	373	63
Madison	9,045	227	13,020	294	86	1.9	3,201	72
Magoffin	1,040	167	1,263	176	15	2.1	637	89
Marion	1,834	289	2,473	317	23	2.9	719	92
Marshall	3,181	154	3,929	159	35	1.4	1,161	47
Martin	1,165	176	1,328	173	12	1.6	559	73
Mason	2,558	245	3,810	326	34	2.9	872	75
Meade	2,074	197	2,550	202	33	2.6	830	66
Menifee	471	224	552	210	6	2.3	227	86
Mercer	2,010	227	3,025	282	14	1.3	884	82
Metcalfe	878	175	1,081	184	16	2.7	317	54
Monroe	544	140	926	190	13	2.7	293	60
Montgomery	2,696	234	3,787	275	31	2.2	1,038	75
Morgan	1,402	250	1,585	239	20	3.0	630	95
Muhlenberg	3,544	218	4,723	247	42	2.2	1,402	73
Nelson	4,178	219	5,715	255	51	2.3	1,449	65
Nicholas	556	173	861	226	10	2.6	273	72
Ohio	2,175	144	2,791	163	29	1.7	970	57
Oldham	3,753	185	4,467	185	19	0.8	1,180	49
Owen	938	264	1,201	271	10	2.3	413	93
Owsley	319	193	376	186	5	2.5	123	61
Pendleton	1,366	289	1,928	322	19	3.2	580	97
Perry	3,603	241	5,076	290	40	2.3	1,903	109
Pike	7,839	226	10,727	265	110	2.7	4,632	115
Powell	1,168	141	1,702	183	22	2.4	571	61
Pulaski	6,430	252	8,824	285	65	2.1	2,311	75
Robertson	96	145	121	139	1	1.2	48	55
Rockcastle	1,894	94	2,298	107	24	1.1	769	36
Rowan	3,395	263	4,336	297	20	1.4	1,183	81
Russell	1,215	167	1,561	183	15	1.8	471	55
Scott	4,356	137	6,501	189	34	1.0	1,711	50
Shelby	4,223	167	5,542	196	53	1.9	1,407	50
Simpson	2,198	152	2,754	173	27	1.7	735	46
Spencer	774	185	1,014	195	16	3.1	348	67
Taylor	2,385	275	3,673	343	16	1.5	849	79
Todd	940	194	1,213	209	13	2.2	401	69
Trigg	1,197	149	1,542	169	14	1.5	496	54
Trimble	836	267	1,022	269	9	2.4	311	82
Union	1,733	235	2,242	258	15	1.7	711	82
Warren	12,987	250	20,291	341	74	1.2	5,351	90
Washington	1,052	184	1,418	212	17	2.5	434	65
Wayne	1,722	239	2,252	257	21	2.4	692	79
Webster	1,579	176	1,909	186	17	1.7	632	62
Whitley	3,499	135	4,998	171	59	2.0	1,510	52
Wolfe	771	145	996	168	24	4.0	358	60
Woodford	2,271	178	3,435	232	29	2.0	840	57
STATEWIDE	415,147	208	657,344	283	3,758	1.6	176,520	76

* 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
(1997-2001)

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY	TOTAL POPULATION	TOTAL MILEAGE DRIVEN 100 MVM
UNDER 10,000	21	155,526	98.36
10,000 - 14,999	25	313,612	181.50
15,000 - 24,999	32	611,992	374.28
25,000 - 50,000	27	954,656	582.64
OVER 50,000	15	2,005,983	1,085.14

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	16,981	173	208	8
10,000 - 14,999	36,678	202	233	6
15,000 - 24,999	81,423	218	243	14
25,000 - 50,000	141,695	243	263	8
OVER 50,000	380,567	351	363	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	221	2.25	6.77	0
10,000 - 14,999	442	2.44	6.12	0
15,000 - 24,999	776	2.07	4.71	0
25,000 - 50,000	1,003	1.72	3.46	0
OVER 50,000	1,316	1.21	1.99	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	5,635	57.3	78.0	5
10,000 - 14,999	12,462	68.7	86.7	7
15,000 - 24,999	25,334	67.7	81.8	11
25,000 - 50,000	40,717	69.9	80.4	8
OVER 50,000	92,372	85.1	91.4	5

TABLE 10. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1997-2001)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Trimble	1,022	269	*
Crittenden	1,136	268	*
Fulton	1,001	264	*
Bracken	1,314	261	*
Elliott	565	251	*
Nicholas	861	226	*
Ballard	1,068	213	*
Menifee	552	210	*
McLean	1,192	202	
Owsley	376	186	
Lee	562	177	
Wolfe	996	168	
Hancock	840	163	
Clinton	779	158	
Livingston	1,076	152	
Hickman	521	146	
Robertson	121	139	
Cumberland	449	118	
Lyon	1,176	105	
Gallatin	1,076	98	
Carlisle	298	94	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,928	322	*
Garrard	2,018	285	*
Green	1,311	272	*
Owen	1,201	271	*
Jackson	1,423	267	*
Morgan	1,585	239	*
Washington	1,418	212	
Todd	1,213	209	
Edmonson	1,199	208	
Fleming	1,396	202	
Lewis	1,509	195	
Spencer	1,014	195	
Leslie	1,339	191	
Monroe	926	190	
Carroll	2,214	187	
Webster	1,909	186	
Metcalfe	1,081	184	
Larue	1,696	183	
Powell	1,702	183	
Bath	1,531	177	
Caldwell	1,701	177	
Magoffin	1,263	176	
Martin	1,328	173	
Trigg	1,542	169	
Butler	1,231	145	
POPULATION CATEGORY 15,000-24,999			
Harrison	2,776	406	*
Taylor	3,673	343	*
Mason	3,810	326	*
Marion	2,473	317	*
Bourbon	3,306	306	*
Rowan	4,336	297	*
Estill	1,852	294	*
Mercer	3,025	282	*
Allen	2,065	279	*
Montgomery	3,787	275	*
Breathitt	2,183	268	*
Union	2,242	258	*
Wayne	2,252	257	*
Adair	2,386	251	*
Woodford	3,435	232	
Johnson	2,813	230	
Anderson	2,387	224	
McCreary	1,525	213	
Clay	2,393	199	
Grant	4,404	188	
Knott	1,811	187	
Casey	1,234	185	
Russell	1,561	183	
Breckinridge	1,488	181	
Simpson	2,754	173	
Lincoln	2,075	172	
Grayson	2,653	171	
Ohio	2,791	163	
Henry	2,013	147	
Lawrence	1,511	146	
Hart	2,111	111	
Rockcastle	2,298	107	
POPULATION CATEGORY 25,000-50,000			
Boyd	9,879	379	*
Boyle	4,653	350	*
Jessamine	6,358	335	*
Henderson	9,582	321	*
Perry	5,076	290	*
Franklin	8,165	287	*
Calloway	3,908	277	*
Barren	6,577	274	*
Hopkins	8,142	257	
Knox	3,984	256	
Nelson	5,715	255	
Clark	5,942	252	
Muhlenberg	4,723	247	
Greenup	3,958	234	
Graves	4,836	231	
Logan	3,408	230	
Harlan	3,705	220	
Bell	3,404	220	
Letcher	2,893	216	
Meade	2,550	202	
Floyd	5,290	198	
Shelby	5,542	196	
Scott	6,501	189	
Oldham	4,467	185	
Carter	3,510	178	
Whitley	4,998	171	
Marshall	3,929	159	
POPULATION CATEGORY OVER 50,000			
Fayette	63,300	485	*
Daviess	17,132	416	*
Jefferson	136,754	406	*
Kenton	28,025	382	*
McCracken	13,595	348	
Warren	20,291	341	
Campbell	13,778	339	
Madison	13,020	294	
Pulaski	8,824	285	
Pike	10,727	265	
Boone	17,028	253	
Christian	9,702	243	
Laurel	8,478	223	
Hardin	13,455	212	
Bullitt	6,458	162	

* Critical crash rate

TABLE 11. CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1997-2001)(STATE-MAINTAINED SYSTEM)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Crittenden	926	272	*
Trimble	836	267	*
Elliott	479	263	*
Bracken	977	225	*
Menifee	471	224	*
McLean	1,010	213	*
Owsley	319	193	*
Fulton	584	181	
Ballard	754	178	
Nicholas	556	173	
Lee	417	161	
Clinton	637	155	
Livingston	945	153	
Wolfe	771	145	
Robertson	96	145	
Hancock	617	141	
Hickman	406	131	
Cumberland	331	103	
Carlisle	257	97	
Lyon	947	89	
Gallatin	883	86	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,366	289	*
Garrard	1,572	266	*
Owen	938	264	*
Jackson	1,100	256	*
Morgan	1,402	250	*
Green	886	227	*
Todd	940	194	
Edmonson	908	191	
Spencer	774	185	
Washington	1,052	184	
Fleming	1,023	184	
Webster	1,579	176	
Martin	1,165	176	
Metcalfe	878	175	
Lewis	1,127	169	
Leslie	1,025	167	
Larue	1,335	167	
Magoffin	1,040	167	
Carroll	1,802	166	
Trigg	1,197	149	
Bath	1,143	147	
Powell	1,168	141	
Monroe	544	140	
Butler	980	135	
Caldwell	1,117	134	
POPULATION CATEGORY 15,000-24,999			
Harrison	1,893	357	*
Marion	1,834	289	*
Taylor	2,385	275	*
Estill	1,337	268	*
Breathitt	1,868	264	*
Rowan	3,395	263	*
Bourbon	2,293	251	*
Mason	2,558	245	*
Wayne	1,722	239	*
Union	1,733	235	*
Montgomery	2,696	234	*
Allen	1,378	230	*
Johnson	2,368	229	*
Mercer	2,010	227	*
Anderson	1,777	198	
McCreary	1,194	197	
Breckinridge	1,204	187	
Adair	1,468	185	
Woodford	2,271	178	
Knott	1,488	175	
Clay	1,824	174	
Casey	933	171	
Russell	1,215	167	
Grayson	2,154	163	
Grant	3,461	162	
Lincoln	1,584	154	
Simpson	2,198	152	
Ohio	2,175	144	
Henry	1,699	138	
Lawrence	1,057	116	
Hart	1,678	96	
Rockcastle	1,894	94	
POPULATION CATEGORY 25,000-50,000			
Boyle	3,606	329	*
Jessamine	4,790	316	*
Boyd	5,663	259	*
Franklin	6,011	249	*
Calloway	2,828	248	*
Henderson	6,311	244	*
Perry	3,603	241	*
Nelson	4,178	219	*
Muhlenberg	3,544	218	*
Knox	2,882	213	
Hopkins	5,833	212	
Letcher	2,344	206	
Logan	2,549	204	
Harlan	2,890	198	
Meade	2,074	197	
Greenup	2,616	189	
Floyd	4,386	186	
Graves	3,262	185	
Oldham	3,753	185	
Bell	2,279	167	
Shelby	4,223	167	
Barren	3,324	162	
Marshall	3,181	154	
Clark	3,152	153	
Carter	2,409	139	
Scott	4,356	137	
Whitley	3,499	135	
POPULATION CATEGORY OVER 50,000			
Kenton	16,307	262	*
Pulaski	6,430	252	*
Warren	12,987	250	*
Campbell	8,328	246	*
Jefferson	68,282	241	
McCracken	8,008	241	
Fayette	26,283	238	
Daviess	7,843	237	
Madison	9,045	227	
Pike	7,839	226	
Boone	12,625	212	
Christian	7,375	207	
Laurel	6,947	207	
Hardin	10,393	187	
Bullitt	4,885	142	

* Critical crash rate

TABLE 12. INJURY OR FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED) (1997-2001)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Crittenden	415	98	*
Elliott	215	95	*
Menifee	227	86	*
Fulton	322	85	*
Trimble	311	82	*
Bracken	374	74	
Nicholas	273	72	
Ballard	358	71	
Lee	201	63	
McLean	373	63	
Owsley	123	61	
Wolfe	358	60	
Robertson	48	55	
Hickman	191	54	
Livingston	367	52	
Hancock	270	52	
Clinton	215	44	
Cumberland	146	38	
Carlisle	117	37	
Gallatin	377	34	
Lyon	354	32	
POPULATION CATEGORY 10,000-14,999			
Jackson	557	104	*
Leslie	706	101	*
Pendleton	580	97	*
Morgan	630	95	*
Garrard	659	93	*
Owen	413	93	*
Magoffin	637	89	*
Green	406	84	
Edmonson	419	73	
Martin	559	73	
Todd	401	69	
Fleming	469	68	
Lewis	518	67	
Spencer	348	67	
Washington	434	65	
Webster	632	62	
Powell	571	61	
Monroe	293	60	
Trigg	496	54	
Bath	471	54	
Metcalfe	317	54	
Larue	479	52	
Butler	413	49	
Caldwell	472	49	
Carroll	582	49	
POPULATION CATEGORY 15,000-24,999			
Breathitt	1,036	127	*
Harrison	737	108	*
Estill	616	98	*
Johnson	1,125	92	*
Marion	719	92	*
Allen	654	88	*
Bourbon	919	85	*
Clay	997	83	*
Knott	805	83	*
Mercer	884	82	*
Union	711	82	*
Rowan	1,183	81	
Wayne	692	79	
Taylor	849	79	
McCreary	548	76	
Mason	872	75	
Montgomery	1,038	75	
Breckinridge	585	71	
Adair	642	68	
Lincoln	807	67	
Anderson	693	65	
Grayson	1,010	65	
Casey	415	62	
Woodford	840	57	
Ohio	970	57	
Russell	471	55	
Lawrence	532	51	
Grant	1,171	50	
Simpson	735	46	
Henry	617	45	
Hart	692	37	
Rockcastle	769	36	
POPULATION CATEGORY 25,000-50,000			
Perry	1,903	109	*
Boyd	2,545	98	*
Knox	1,475	95	*
Floyd	2,450	92	*
Boyle	1,206	91	*
Letcher	1,211	90	*
Jessamine	1,591	84	*
Barren	1,974	82	*
Henderson	2,325	78	
Harlan	1,305	77	
Calloway	1,067	76	
Bell	1,141	74	
Greenup	1,239	73	
Muhlenberg	1,402	73	
Logan	1,008	68	
Graves	1,382	66	
Meade	830	66	
Nelson	1,449	65	
Franklin	1,799	63	
Hopkins	1,944	61	
Carter	1,149	58	
Clark	1,353	57	
Whitley	1,510	52	
Scott	1,711	50	
Shelby	1,407	50	
Oldham	1,180	49	
Marshall	1,161	47	
POPULATION CATEGORY OVER 50,000			
Pike	4,632	115	*
Fayette	14,278	109	*
McCracken	3,897	100	*
Daviess	3,990	97	*
Jefferson	31,476	94	*
Warren	5,351	90	
Kenton	5,960	81	
Pulaski	2,311	75	
Madison	3,201	72	
Campbell	2,809	69	
Christian	2,722	68	
Laurel	2,461	65	
Boone	4,103	61	
Hardin	3,313	52	
Bullitt	1,868	47	

* Critical crash rate

TABLE 13. FATAL CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1997-2001)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	CRASH RATE (CRASHES PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Cumberland	18	4.7	
Wolfe	24	4.0	
Elliott	9	4.0	
Lee	12	3.8	
Fulton	13	3.4	
Crittenden	13	3.1	
Bracken	15	3.0	
Hancock	14	2.7	
Nicholas	10	2.6	
Carlisle	8	2.5	
Owsley	5	2.5	
Trimble	9	2.4	
Clinton	12	2.4	
Menifee	6	2.3	
Hickman	7	2.0	
McLean	11	1.9	
Ballard	9	1.8	
Robertson	1	1.2	
Lyon	12	1.1	
Livingston	7	1.0	
Gallatin	6	0.5	
POPULATION CATEGORY 10,000-14,999			
Lewis	36	4.6	
Leslie	31	4.4	
Pendleton	19	3.2	
Jackson	17	3.2	
Edmonson	18	3.1	
Spencer	16	3.1	
Morgan	20	3.0	
Butler	24	2.8	
Fleming	19	2.7	
Metcalfe	16	2.7	
Monroe	13	2.7	
Washington	17	2.5	
Green	12	2.5	
Powell	22	2.4	
Owen	10	2.3	
Todd	13	2.2	
Magoffin	15	2.1	
Larue	19	2.1	
Caldwell	19	2.0	
Garrard	14	2.0	
Bath	16	1.8	
Webster	17	1.7	
Martin	12	1.6	
Trigg	14	1.5	
Carroll	13	1.1	
POPULATION CATEGORY 15,000-24,999			
Breathitt	34	4.2	
Clay	45	3.7	
Casey	24	3.6	
McCreary	23	3.2	
Knott	30	3.1	
Marion	23	2.9	
Mason	34	2.9	
Harrison	19	2.8	
Adair	24	2.5	
Wayne	21	2.4	
Bourbon	26	2.4	
Breckinridge	19	2.3	
Estill	14	2.2	
Montgomery	31	2.2	
Grayson	31	2.0	
Woodford	29	2.0	
Lincoln	24	2.0	
Hart	38	2.0	
Allen	14	1.9	
Anderson	20	1.9	
Russell	15	1.8	
Lawrence	19	1.8	
Ohio	29	1.7	
Johnson	21	1.7	
Simpson	27	1.7	
Union	15	1.7	
Henry	23	1.7	
Taylor	16	1.5	
Rowan	20	1.4	
Mercer	14	1.3	
Grant	30	1.3	
Rockcastle	24	1.1	
POPULATION CATEGORY 25,000-50,000			
Meade	33	2.6	
Boyle	33	2.5	
Letcher	31	2.3	
Perry	40	2.3	
Floyd	62	2.3	
Harlan	38	2.3	
Nelson	51	2.3	
Carter	43	2.2	
Muhlenberg	42	2.2	
Knox	35	2.2	
Calloway	31	2.2	
Whitley	59	2.0	
Graves	40	1.9	
Shelby	53	1.9	
Logan	26	1.8	
Greenup	28	1.7	
Clark	38	1.6	
Bell	25	1.6	
Jessamine	31	1.6	
Marshall	35	1.4	
Barren	32	1.3	
Franklin	38	1.3	
Hopkins	40	1.3	
Henderson	37	1.2	
Boyd	29	1.1	
Scott	34	1.0	
Oldham	19	0.8	
POPULATION CATEGORY OVER 50,000			
Pike	110	2.7	*
Pulaski	65	2.1	*
Madison	86	1.9	
McCracken	69	1.8	
Laurel	62	1.6	
Christian	58	1.5	
Daviess	57	1.4	
Hardin	74	1.2	
Warren	74	1.2	
Bullitt	43	1.1	
Jefferson	350	1.0	
Campbell	37	0.9	
Fayette	120	0.9	
Boone	58	0.9	
Kenton	53	0.7	

* Critical crash rate

TABLE 14. MISCELLANEOUS CRASH DATA FOR EACH COUNTY

COUNTY	NUMBER OF CRASHES BY YEAR 1997	1998	1999	2000	2001	1997-2000 AVERAGE	2001 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	452	441	466	556	471	479	-1.6	4.4	0.8	1.01	26.9	78.4	6.2
Allen	399	444	509	377	336	432	-22.3	5.0	0.7	0.68	31.7	83.7	6.7
Anderson	484	442	515	484	462	481	-4.0	5.3	0.3	0.84	29.0	87.7	8.0
Ballard	229	226	188	256	169	225	-24.8	6.6	0.7	0.84	33.5	88.8	8.0
Barren	1,394	1,328	1,297	1,275	1,283	1,324	-3.1	3.6	0.3	0.49	30.0	85.5	6.9
Bath	308	305	289	324	305	307	-0.5	6.3	0.6	1.05	30.8	86.3	10.3
Bell	778	600	612	697	717	672	6.7	4.6	2.0	0.73	33.5	87.6	7.2
Boone	3,160	3,337	3,507	3,691	3,333	3,424	-2.7	3.6	0.2	0.34	24.1	93.3	7.1
Bourbon	716	717	684	625	564	686	-17.7	5.3	0.8	0.79	27.8	85.7	8.8
Boyd	2,060	2,009	2,073	1,915	1,822	2,014	-9.5	3.4	0.7	0.29	25.8	91.3	5.9
Boyle	951	965	941	949	847	952	-11.0	3.2	0.3	0.71	25.9	91.8	6.3
Bracken	250	250	279	271	264	263	0.6	4.9	0.2	1.14	28.5	82.1	8.1
Breathitt	405	429	450	442	457	432	5.9	7.0	2.2	1.56	47.5	87.5	9.3
Breckinridge	343	241	281	300	323	291	10.9	5.4	0.1	1.28	39.3	89.8	3.8
Bullitt	1,235	1,295	1,325	1,324	1,279	1,295	-1.2	5.6	0.3	0.67	28.9	90.9	4.6
Butler	249	260	220	231	271	240	12.9	6.3	0.7	1.95	33.5	85.8	9.9
Caldwell	374	345	323	355	304	349	-13.0	4.8	0.9	1.12	27.7	89.6	9.5
Calloway	501	408	970	1,024	1,005	726	38.5	5.0	0.5	0.79	27.3	88.7	6.1
Campbell	2,717	2,674	3,027	2,746	2,614	2,791	-6.3	4.4	0.4	0.27	20.4	92.2	5.7
Carlisle	38	88	35	69	68	58	18.3	4.0	0.3	2.68	39.3	89.1	7.7
Carroll	461	401	474	441	437	444	-1.6	6.2	0.5	0.59	26.3	86.6	7.9
Carter	723	741	721	659	666	711	-6.3	5.5	1.1	1.23	32.7	85.8	13.7
Casey	269	169	257	264	275	240	14.7	7.8	1.1	1.94	33.6	80.7	11.3
Christian	2,066	1,888	1,973	1,913	1,862	1,960	-5.0	4.6	0.4	0.60	28.1	92.3	9.4
Clark	1,215	1,162	1,260	1,195	1,110	1,208	-8.1	4.2	0.5	0.64	22.8	92.9	6.0
Clay	443	478	455	503	514	470	9.4	5.7	3.2	1.88	41.7	86.1	9.8
Clinton	136	142	175	162	164	154	6.7	4.5	0.9	1.54	27.6	79.2	5.4
Crittenden	193	251	222	220	250	222	12.9	5.5	1.2	1.14	36.5	88.3	7.1
Cumberland	127	65	84	100	73	94	-22.3	4.0	1.1	4.01	32.5	79.6	5.3
Daviess	3,403	3,442	3,229	3,576	3,482	3,413	2.0	4.1	0.5	0.33	23.3	92.2	5.2
Edmonson	235	220	247	230	267	233	14.6	5.2	0.4	1.50	34.9	87.8	13.4
Elliott	84	118	60	159	144	105	36.8	10.6	0.9	1.59	38.1	84.0	12.2
Estill	423	436	399	306	288	391	-26.3	6.7	1.1	0.76	33.3	87.5	12.6
Fayette	12,710	12,219	12,324	13,040	13,007	12,573	3.4	4.2	0.4	0.19	22.6	95.3	5.2
Fleming	305	298	293	246	254	286	-11.0	5.4	0.6	1.36	33.6	81.6	8.2
Floyd	1,079	1,086	1,048	1,004	1,073	1,054	1.8	6.0	2.4	1.17	46.3	88.8	10.6
Franklin	1,563	1,489	1,567	1,731	1,815	1,588	14.3	4.3	0.4	0.47	22.0	90.6	8.9
Fulton	203	221	158	237	182	205	-11.1	5.6	0.9	1.30	32.2	85.4	4.5
Gallatin	215	230	226	202	203	218	-7.0	6.3	0.4	0.56	35.0	87.9	13.1
Garrard	424	402	420	398	374	411	-9.0	5.4	0.5	0.69	32.7	87.9	17.2
Grant	858	864	902	915	865	885	-2.2	3.7	0.2	0.68	26.6	91.2	10.8
Graves	1,053	998	988	895	902	984	-8.3	4.1	0.5	0.83	28.6	91.3	7.8
Grayson	395	459	290	747	762	473	61.2	4.8	0.5	1.17	38.1	88.1	9.5
Green	294	276	245	231	265	262	1.3	4.8	0.2	0.92	31.0	89.2	3.8
Greenup	845	750	738	791	834	781	6.8	5.4	1.3	0.71	31.3	90.8	10.1
Hancock	189	195	179	137	140	175	-20.0	5.4	0.2	1.67	32.1	85.5	6.2
Hardin	2,769	2,558	2,611	2,773	2,744	2,678	2.5	3.3	0.3	0.55	24.6	94.1	6.3
Harlan	806	763	709	735	692	753	-8.1	5.4	1.7	1.03	35.2	88.5	12.6
Harrison	572	544	520	584	556	555	0.2	4.8	0.5	0.68	26.5	88.3	5.9
Hart	329	428	524	417	413	425	-2.7	4.4	0.5	1.80	32.8	91.9	8.8
Henderson	1,897	1,958	1,865	2,028	1,834	1,937	-5.3	3.5	0.4	0.39	24.3	94.4	6.5
Henry	398	369	373	439	434	395	9.9	6.6	0.3	1.14	30.7	85.1	15.2
Hickman	122	96	119	100	84	109	-23.1	6.1	1.0	1.34	36.7	87.3	9.0
Hopkins	1,697	1,749	1,611	1,565	1,520	1,656	-8.2	2.8	0.5	0.49	23.9	93.8	9.0
Jackson	262	273	327	261	300	281	6.9	6.3	1.5	1.19	39.1	83.2	14.9
Jefferson	29,609	23,244	28,013	29,214	26,674	27,520	-3.1	3.4	0.2	0.26	23.0	93.5	3.5
Jessamine	1,266	1,188	1,188	1,344	1,372	1,247	10.1	5.0	0.5	0.49	25.0	91.3	8.2
Johnson	510	561	552	600	590	556	6.2	5.4	3.6	0.75	40.0	88.4	8.0
Kenton	5,539	5,422	6,011	5,666	5,387	5,660	-4.8	4.5	0.4	0.19	21.3	92.2	7.3
Knott	324	365	373	347	402	352	14.1	5.4	1.4	1.66	44.5	88.2	8.2
Knox	769	738	787	849	841	786	7.0	5.3	2.6	0.88	37.0	87.5	14.5

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

COUNTY	NUMBER OF CRASHES BY YEAR 1997	1998	1999	2000	2001	1997-2000 AVERAGE	2001 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	321	358	335	355	327	342	-4.5	4.7	0.2	1.12	28.2	89.4	6.8
Laurel	1,665	1,669	1,648	1,703	1,793	1,671	7.3	3.5	1.3	0.73	29.0	92.2	7.1
Lawrence	282	310	329	293	297	304	-2.1	5.7	2.2	1.26	35.2	86.7	7.8
Lee	129	116	138	104	75	122	-38.4	7.5	1.4	2.14	35.8	83.2	13.5
Leslie	265	242	308	248	276	266	3.9	6.9	3.5	2.32	52.7	82.5	12.9
Letcher	577	590	649	557	520	593	-12.3	6.0	1.5	1.07	41.9	86.7	9.4
Lewis	332	326	335	269	247	316	-21.7	7.5	0.7	2.39	34.3	79.3	10.7
Lincoln	398	408	389	506	374	425	-12.1	6.6	0.6	1.16	38.9	83.2	16.4
Livingston	180	219	222	240	215	215	-0.1	5.6	0.7	0.65	34.1	90.5	8.6
Logan	712	668	714	646	668	685	-2.5	4.8	0.6	0.76	29.6	85.4	5.9
Lyon	262	229	245	239	201	244	-17.5	3.6	0.6	1.02	30.1	90.0	12.5
McCracken	2,927	2,637	2,904	2,562	2,565	2,758	-7.0	3.9	0.4	0.51	28.7	93.6	4.5
McCreary	271	260	319	330	345	295	16.9	5.9	1.0	1.51	35.9	87.7	14.7
McLean	272	233	226	228	233	240	-2.8	4.6	0.3	0.92	31.3	85.7	9.8
Madison	2,590	2,646	2,541	2,615	2,628	2,598	1.2	5.2	0.4	0.66	24.6	90.4	11.3
Magoffin	297	255	225	245	241	256	-5.7	8.6	3.3	1.19	50.4	85.0	9.5
Marion	480	472	499	524	498	494	0.9	10.7	0.3	0.93	29.1	82.7	8.5
Marshall	757	777	710	795	890	760	17.1	4.1	0.6	0.89	29.5	89.7	8.7
Martin	222	303	253	285	265	266	-0.3	6.3	4.2	0.90	42.1	84.1	10.7
Mason	820	806	824	730	630	795	-20.8	5.0	0.5	0.89	22.9	85.5	6.1
Meade	484	522	544	520	480	518	-7.2	6.1	0.5	1.29	32.5	88.9	6.1
Menifee	114	104	134	91	109	111	-1.6	10.0	0.2	1.09	41.1	79.3	17.8
Mercer	652	662	531	599	581	611	-4.9	5.0	0.7	0.46	29.2	88.5	11.5
Metcalfe	232	191	163	248	247	209	18.5	4.3	0.1	1.48	29.3	77.0	6.3
Monroe	145	161	250	195	175	188	-6.8	5.5	0.5	1.40	31.6	79.0	5.3
Montgomery	726	706	720	826	809	745	8.7	5.5	0.3	0.82	27.4	89.5	6.2
Morgan	317	310	305	309	344	310	10.9	4.5	0.0	1.26	39.7	87.0	15.0
Muhlenberg	988	985	901	956	893	958	-6.7	4.1	0.8	0.89	29.7	86.8	8.6
Nelson	1,081	1,007	1,220	1,206	1,201	1,129	6.4	5.2	0.3	0.89	25.4	91.4	8.1
Nicholas	175	163	185	168	170	173	-1.6	9.3	1.4	1.16	31.7	79.8	9.9
Ohio	577	506	474	608	626	541	15.7	4.1	0.6	1.04	34.8	90.8	8.7
Oldham	892	915	986	867	807	915	-11.8	3.3	0.4	0.43	26.4	94.1	10.0
Owen	268	231	223	269	210	248	-15.2	6.8	0.1	0.83	34.4	84.1	18.7
Owsley	64	46	129	87	50	82	-38.7	9.8	1.1	1.33	32.7	79.4	10.4
Pendleton	385	392	378	381	392	384	2.1	6.6	0.7	0.99	30.1	87.8	8.2
Perry	1,019	1,011	993	1,048	1,005	1,018	-1.3	5.0	1.4	0.79	37.5	90.0	6.4
Pike	2,269	2,310	2,007	2,056	2,085	2,161	-3.5	5.6	2.3	1.03	43.2	89.4	17.2
Powell	343	350	370	323	316	347	-8.8	5.1	0.7	1.29	33.5	85.4	9.1
Pulaski	1,753	1,788	1,737	1,677	1,869	1,739	7.5	3.5	0.7	0.74	26.2	90.9	7.1
Robertson	17	9	15	46	34	22	56.3	10.7	0.0	0.83	39.7	79.6	9.1
Rockcastle	441	472	505	443	437	465	-6.1	3.4	1.0	1.04	33.5	85.5	9.4
Rowan	813	794	912	905	912	856	6.5	3.6	0.4	0.46	27.3	89.6	9.4
Russell	338	297	339	366	221	335	-34.0	6.1	1.2	0.96	30.2	83.9	8.5
Scott	1,392	1,248	1,283	1,345	1,233	1,317	-6.4	3.8	0.2	0.52	26.3	91.9	7.5
Shelby	1,036	1,023	1,060	1,229	1,194	1,087	9.8	5.3	0.3	0.96	25.4	90.8	7.1
Simpson	540	570	564	520	560	549	2.1	4.1	0.5	0.98	26.7	86.6	6.0
Spencer	187	209	197	235	186	207	-10.1	7.5	0.7	1.58	34.3	85.9	12.2
Taylor	796	722	748	688	719	739	-2.6	4.2	0.5	0.44	23.1	84.2	6.1
Todd	269	270	235	225	214	250	-14.3	4.5	0.7	1.07	33.1	80.7	10.9
Trigg	320	312	322	264	324	305	6.4	3.8	0.5	0.91	32.2	89.7	5.6
Trimble	209	202	206	208	197	206	-4.5	5.0	0.4	0.88	30.4	87.7	12.5
Union	438	472	457	469	406	459	-11.5	5.9	0.4	0.67	31.7	88.2	12.2
Warren	4,125	4,070	3,893	4,003	4,200	4,023	4.4	3.8	0.5	0.36	26.4	91.8	8.7
Washington	293	312	269	268	276	286	-3.3	6.4	0.1	1.20	30.6	83.4	10.2
Wayne	461	465	491	492	343	477	-28.1	3.8	0.6	0.93	30.7	80.9	6.7
Webster	398	425	346	400	340	392	-13.3	4.5	0.5	0.89	33.1	92.4	9.1
Whitley	1,053	1,029	959	1,013	944	1,014	-6.9	4.2	1.1	1.18	30.2	89.4	11.9
Wolfe	248	182	205	205	156	210	-25.7	5.9	0.9	2.41	35.9	85.8	10.6
Woodford	721	671	639	712	692	686	0.9	6.3	0.3	0.84	24.5	91.7	9.2
STATEWIDE	134,161	125,698	132,216	135,079	130,190	131,789	-1.2	4.3	0.6	0.57	26.9	91.4	7.0

* Percent change in the 2001 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 1997-2001)

		STATE-MAINTAINED SYSTEM		ALL ROADS	
CITY	POPULATION	TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
Lexington	260,512	10,535	543	49,852	38
Louisville	256,231	29,294	255	63,112	49
Owensboro	54,067	3,165	475	9,949	37
Bowling Green	49,296	7,033	508	12,097	49
Covington	43,370	4,541	319	8,819	41
Hopkinsville	30,089	3,767	320	5,069	34
Frankfort	27,741	3,451	366	4,290	31
Henderson	27,373	2,795	304	5,564	41
Richmond	27,152	1,423	678	5,337	39
Jeffersontown	26,633	1,249	445	3,867	29
Paducah	26,307	2,352	309	7,076	54
Florence	23,551	4,661	308	7,034	60
Elizabethtown	22,542	4,024	298	5,063	45
Ashland	21,981	2,434	493	4,812	44
Radcliff	21,961	1,391	310	2,271	21
Nicholasville	19,680	1,816	454	2,809	29
Madisonville	19,307	2,042	538	3,647	38
Georgetown	18,080	836	373	2,739	30
Newport	17,048	2,377	902	3,589	42
Winchester	16,724	1,220	349	3,185	38
Erlanger	16,676	1,721	946	3,235	39
Fort Thomas	16,495	288	390	1,007	12
Saint Matthews	15,852	523	927	2,619	33
Danville	15,477	1,202	734	2,928	38
Shively	15,157	804	747	3,739	49
Independence	14,982	1,468	408	1,420	19
Murray	14,950	1,020	329	1,357	18
Glasgow	13,019	727	199	2,727	42
Somerset	11,352	1,871	406	3,407	60
Campbellsville	10,498	995	439	2,013	38
Middlesboro	10,384	783	241	1,392	27
Bardstown	10,374	1,201	382	2,196	42
Mayfield	10,349	596	489	1,812	35
Shelbyville	10,085	1,088	394	1,846	37
Berea	9,851	889	501	1,400	28
Edgewood	9,400	113	607	726	15
Lyndon	9,369	***	***	95	2
Paris	9,183	856	371	1,498	33
Lawrenceburg	9,014	470	505	750	17
Maysville	8,993	946	243	2,099	47
Mount Washington	8,485	286	232	762	18
Shepherdsville	8,334	608	570	1,461	35
Alexandria	8,286	562	388	1,009	24
Elsmere	8,139	267	492	605	15
Fort Mitchell	8,089	378	643	1,206	30
Harrodsburg	8,014	603	512	1,390	35
Franklin	7,996	532	362	1,115	28
Villa Hills	7,948	23	154	290	7
Corbin	7,742	665	316	1,940	50
Flatwoods	7,605	124	149	530	14
Versailles	7,511	697	399	1,215	32
Russellville	7,149	610	197	1,355	38
Oak Grove	7,064	***	***	951	27
Taylor Mill	6,913	134	326	968	28
Highland Heights	6,554	507	143	715	22
Princeton	6,536	299	135	815	25
Bellevue	6,480	153	248	944	29
Pikeville	6,295	791	217	1,706	54
Cynthiana	6,258	645	691	1,119	36
Leitchfield	6,139	568	252	542	18
Monticello	5,981	504	212	1,264	42
Dayton	5,966	7	161	419	14
Morehead	5,914	931	454	1,783	60
Wilmore	5,905	140	417	187	6

TABLE 15. CRASH RATES FOR CITIES HAVING POPULATION OVER 2,500
(FOR STATE-MAINTAINED SYSTEM AND ALL ROADS FOR 1997-2001)(continued)

		STATE-MAINTAINED SYSTEM		ALL ROADS	
CITY	POPULATION	TOTAL CRASHES	CRASH RATE*	TOTAL CRASHES	CRASH RATE**
Central City	5,893	388	221	790	27
Mount Sterling	5,876	716	438	1,414	48
Middletown	5,744	***	***	153	5
Lebanon	5,718	689	496	1,033	36
London	5,692	1,867	393	2,614	92
Fort Wright	5,681	580	451	1,668	59
La Grange	5,676	244	328	786	28
Williamsburg	5,143	340	134	773	30
Westwood	4,888	***	***	***	***
Hazard	4,806	510	205	1,838	77
Ludlow	4,409	47	225	239	11
Greenville	4,398	450	461	709	32
Scottsville	4,327	485	416	868	40
Benton	4,197	601	440	714	34
Vine Grove	4,169	247	261	284	14
Paintsville	4,132	574	370	944	46
Columbia	4,014	352	228	830	41
Crescent Springs	3,931	***	***	622	32
Grayson	3,877	164	211	865	45
Carrollton	3,846	254	411	714	37
Cold Spring	3,806	598	419	800	42
Lancaster	3,734	231	660	563	30
Russell	3,645	268	242	660	36
Prestonsburg	3,612	559	326	1,022	57
Providence	3,611	262	318	287	16
Barbourville	3,589	393	214	699	39
Morganfield	3,494	380	552	571	33
Southgate	3,472	118	341	419	24
Stanford	3,430	104	83	328	19
West Liberty	3,277	284	415	380	23
Williamstown	3,227	***	***	547	34
Marion	3,196	242	374	394	25
Beaver Dam	3,033	97	171	475	31
Stanton	3,029	160	136	380	25
Flemingsburg	3,010	79	124	348	23
Dawson Springs	2,980	154	335	241	16
Park Hills	2,977	126	560	177	12
Union	2,893	***	***	330	23
Crestview Hills	2,889	***	***	817	57
Indian Hills	2,882	***	***	31	2
Hodgenville	2,874	242	336	595	41
Lakeside Park	2,869	304	479	361	25
Irvine	2,843	234	439	540	38
Fulton	2,775	175	156	374	27
Calvert City	2,701	181	136	255	19
Tompkinsville	2,660	97	124	493	37
Springfield	2,634	358	469	469	36
Wilder	2,624	***	***	529	40
Cumberland	2,611	67	93	230	18
Mount Vernon	2,592	213	319	596	46
Hartford	2,571	65	179	141	11
Hickman	2,560	37	102	124	10
Morgantown	2,544	104	166	414	33

* 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 (1997-2001) (ALL ROADS)

CITY	POPULATION	FATAL CRASHES		PEDESTRIAN MOTOR VEHICLE CRASHES		BICYCLE-RELATED 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	92	0.71	515	4.00	288	2.20	225	1.7	5.2	4.0
Louisville	256,231	121	0.94	994	7.80	573	4.50	369	2.9	2.7	2.9
Owensboro	54,067	13	0.48	73	2.70	95	3.50	55	2.0	2.9	3.3
Bowling Green	49,296	16	0.65	73	3.00	48	1.90	64	2.6	6.5	2.9
Covington	43,370	8	0.37	235	10.80	89	4.10	37	1.7	4.7	4.5
Hopkinsville	30,089	14	0.93	61	4.10	41	2.70	21	1.4	8.3	3.3
Frankfort	27,741	10	0.72	30	2.20	16	1.20	23	1.7	6.0	3.3
Henderson	27,373	11	0.80	55	4.00	50	3.70	35	2.6	4.2	2.6
Richmond	27,152	13	0.96	30	2.20	21	1.50	29	2.1	5.6	4.5
Jeffersontown	26,633	4	0.30	16	1.20	16	1.20	13	1.0	3.6	2.2
Paducah	26,307	16	1.22	42	3.20	38	2.90	55	4.2	3.7	3.0
Florence	23,551	12	1.02	39	3.30	34	2.90	23	2.0	4.4	2.5
Elizabethtown	22,542	11	0.98	17	1.50	20	1.80	26	2.3	4.1	1.8
Ashland	21,981	7	0.64	31	2.80	22	2.00	39	3.5	4.2	2.2
Radcliff	21,961	4	0.36	15	1.40	9	0.80	14	1.3	2.0	2.8
Nicholasville	19,680	6	0.61	39	4.00	20	2.00	11	1.1	4.7	4.1
Madisonville	19,307	6	0.62	24	2.50	26	2.70	37	3.8	3.9	1.8
Georgetown	18,080	4	0.44	17	1.90	7	0.80	10	1.1	3.1	2.5
Newport	17,048	3	0.35	102	12.00	67	7.90	25	2.9	3.0	5.3
Winchester	16,724	4	0.48	29	3.50	13	1.60	22	2.6	2.5	3.2
Erlanger	16,676	9	1.08	19	2.30	21	2.50	21	2.5	10.6	4.0
Fort Thomas	16,495	4	0.48	16	1.90	7	0.80	5	0.6	7.2	3.6
Saint Matthews	15,852	4	0.50	17	2.10	9	1.10	4	0.5	1.8	1.9
Danville	15,477	12	1.55	18	2.30	12	1.60	10	1.3	4.3	2.3
Shively	15,157	6	0.79	46	6.10	24	3.20	20	2.6	3.3	4.4
Independence	14,982	4	0.53	17	2.30	4	0.50	10	1.3	6.5	4.9
Murray	14,950	2	0.27	5	0.70	7	0.90	10	1.3	4.0	2.1
Glasgow	13,019	3	0.46	12	1.80	11	1.70	18	2.8	3.1	2.1
Somerset	11,352	15	2.64	19	3.30	6	1.10	14	2.5	5.8	1.5
Campbellsville	10,498	2	0.38	13	2.50	11	2.10	9	1.7	4.8	2.8
Middlesboro	10,384	1	0.19	11	2.10	10	1.90	5	1.0	4.0	5.0
Bardstown	10,374	4	0.77	17	3.30	15	2.90	10	1.9	2.8	2.9
Mayfield	10,349	3	0.58	15	2.90	8	1.50	4	0.8	1.9	1.7
Shelbyville	10,085	10	1.98	23	4.60	9	1.80	6	1.2	3.7	4.1
Berea	9,851	6	1.22	7	1.40	9	1.80	2	0.4	4.6	2.5
Edgewood	9,400	0	0.00	6	1.30	3	0.60	2	0.4	4.1	1.9
Lyndon	9,369	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Paris	9,183	1	0.22	16	3.50	7	1.50	11	2.4	4.5	4.1
Lawrenceburg	9,014	2	0.44	8	1.80	5	1.10	4	0.9	2.0	4.1
Maysville	8,993	10	2.22	15	3.30	12	2.70	7	1.6	4.4	3.6
Mount Washington	8,485	1	0.24	7	1.60	1	0.20	4	0.9	2.9	4.9
Shepherdsville	8,334	9	2.16	8	1.90	3	0.70	8	1.9	2.7	3.8
Alexandria	8,286	7	1.69	1	0.20	2	0.50	7	1.7	4.4	2.4
Elsmere	8,139	0	0.00	11	2.70	6	1.50	2	0.5	7.1	5.0
Fort Mitchell	8,089	1	0.25	7	1.70	3	0.70	9	2.2	7.3	5.4
Harrodsburg	8,014	2	0.50	18	4.50	6	1.50	9	2.2	4.0	3.3
Franklin	7,996	5	1.25	9	2.30	7	1.80	6	1.5	2.8	3.7
Villa Hills	7,948	0	0.00	2	0.50	2	0.50	4	1.0	11.4	5.2
Corbin	7,742	6	1.55	13	3.40	12	3.10	9	2.3	4.6	2.4
Flatwoods	7,605	0	0.00	6	1.60	4	1.10	1	0.3	4.3	2.3
Versailles	7,511	1	0.27	15	4.00	6	1.60	5	1.3	5.1	3.3
Russellville	7,149	3	0.84	11	3.10	10	2.80	15	4.2	5.0	2.5
Oak Grove	7,064	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Taylor Mill	6,913	0	0.00	4	1.20	1	0.30	3	0.9	9.3	4.2
Highland Heights	6,554	1	0.31	3	0.90	5	1.50	3	0.9	8.1	3.2
Princeton	6,536	1	0.31	6	1.80	6	1.80	4	1.2	6.1	2.6
Bellevue	6,480	1	0.31	10	3.10	16	4.90	2	0.6	2.8	2.9
Pikeville	6,295	11	3.49	20	6.40	2	0.60	19	6.0	7.9	3.8
Cynthiana	6,258	1	0.32	13	4.20	9	2.90	4	1.3	2.3	3.0
Leitchfield	6,139	3	0.98	9	2.90	1	0.30	4	1.3	4.2	3.3
Monticello	5,981	6	2.01	9	3.00	9	3.00	3	1.0	6.6	2.7
Dayton	5,966	0	0.00	15	5.00	4	1.30	5	1.7	4.8	6.2

TABLE 16. MISCELLANEOUS CRASH DATA FOR CITIES HAVING POPULATION OVER 2,500 (1997-2001) (ALL ROADS)(continued)

CITY	POPULATION	FATAL CRASHES		PEDESTRIAN MOTOR VEHICLE CRASHES		BICYCLE-RELATED 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	5	1.69	12	4.10	6	2.00	10	3.4	3.6	2.5
Wilmore	5,905	0	0.00	0	0.00	1	0.30	0	0.0	7.5	1.6
Central City	5,893	5	1.70	2	0.70	4	1.40	7	2.4	4.3	3.4
Mount Sterling	5,876	8	2.72	15	5.10	1	0.30	5	1.7	3.3	3.4
Middletown	5,744	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Lebanon	5,718	1	0.35	11	3.80	10	3.50	4	1.4	4.2	5.0
London	5,692	7	2.46	9	3.20	7	2.50	7	2.5	4.2	1.9
Fort Wright	5,681	1	0.35	11	3.90	2	0.70	4	1.4	5.9	2.5
La Grange	5,676	4	1.41	5	1.80	0	0.00	2	0.7	3.8	1.8
Williamsburg	5,143	5	1.94	2	0.80	1	0.40	3	1.2	6.0	3.6
Hazard	4,806	2	0.83	15	6.20	1	0.40	5	2.1	3.2	2.9
Ludlow	4,409	0	0.00	9	4.10	4	1.80	0	0.0	2.9	7.1
Greenville	4,398	4	1.82	5	2.30	4	1.80	4	1.8	6.1	2.5
Scottsville	4,327	3	1.39	2	0.90	1	0.50	5	2.3	4.3	2.6
Benton	4,197	2	0.95	2	1.00	1	0.50	3	1.4	4.2	1.7
Vine Grove	4,169	1	0.48	0	0.00	2	1.00	1	0.5	6.7	7.4
Paintsville	4,132	4	1.94	4	1.90	1	0.50	5	2.4	2.8	2.0
Columbia	4,014	1	0.50	5	2.50	2	1.00	6	3.0	3.9	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	6	3.10	2	1.00	3	1.5	4.0	2.1
Carrollton	3,846	3	1.56	3	1.60	8	4.20	6	3.1	3.1	4.9
Cold Spring	3,806	2	1.05	5	2.60	2	1.10	7	3.7	6.0	3.4
Lancaster	3,734	1	0.54	10	5.40	1	0.50	3	1.6	5.7	3.2
Russell	3,645	0	0.00	3	1.60	4	2.20	4	2.2	4.1	2.9
Prestonsburg	3,612	6	3.32	6	3.30	0	0.00	8	4.4	4.0	3.6
Providence	3,611	1	0.55	1	0.60	7	3.90	5	2.8	5.6	3.5
Barbourville	3,589	2	1.11	6	3.30	1	0.60	2	1.1	6.4	2.7
Morganfield	3,494	0	0.00	7	4.00	4	2.30	0	0.0	7.9	2.8
Southgate	3,472	0	0.00	2	1.20	2	1.20	2	1.2	1.9	2.6
Stanford	3,430	1	0.58	1	0.60	2	1.20	3	1.7	7.3	3.4
West Liberty	3,277	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Williamstown	3,227	3	1.86	7	4.30	1	0.60	4	2.5	8.6	2.7
Marion	3,196	1	0.63	6	3.80	0	0.00	3	1.9	3.6	1.8
Beaver Dam	3,033	2	1.32	0	0.00	1	0.70	3	2.0	3.4	2.1
Stanton	3,029	3	1.98	2	1.30	1	0.70	0	0.0	4.5	4.2
Flemingsburg	3,010	0	0.00	2	1.30	0	0.00	1	0.7	2.9	2.9
Dawson Springs	2,980	1	0.67	2	1.30	2	1.30	4	2.7	5.8	3.3
Park Hills	2,977	0	0.00	1	0.70	1	0.70	0	0.0	18.1	8.5
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	3	2.09	6	4.20	1	0.70	3	2.1	4.2	2.7
Lakeside Park	2,869	1	0.70	6	4.20	0	0.00	3	2.1	5.3	3.3
Irvine	2,843	0	0.00	7	4.90	3	2.10	2	1.4	6.3	4.8
Fulton	2,775	1	0.72	3	2.20	6	4.30	2	1.4	2.4	3.5
Calvert City	2,701	3	2.22	1	0.70	2	1.50	4	3.0	7.1	1.2
Tompkinsville	2,660	1	0.75	5	3.80	1	0.80	2	1.5	2.4	2.2
Springfield	2,634	1	0.76	9	6.80	0	0.00	2	1.5	4.5	4.9
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	1	0.80	1	0.80	4	3.1	5.2	3.0
Mount Vernon	2,592	5	3.86	3	2.30	2	1.50	5	3.9	5.2	2.9
Hartford	2,571	2	1.56	0	0.00	0	0.00	2	1.6	5.7	3.5
Hickman	2,560	0	0.00	1	0.80	3	2.30	0	0.0	2.4	3.2
Morgantown	2,544	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
STATEWIDE	1,619,469	629	0.78	3,155	3.9	1,904	2.35	1,589	2.0	4.3	3.2

* Crashes Per 10,000 Population

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1997-2001)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE C/100 MVM	CITY	NUMBER OF CRASHES (1997-2001)	AVERAGE RATE C/100 MVM
OVER 200,000	2	296	Lexington	10,535	543
			Louisville	29,294	255
20,000-55,000	13	365	Richmond	1,423	678
			Bowling Green	7,033	508
			Ashland	2,434	493
			Owensboro	3,165	475
			Jeffersontown	1,249	445
			Frankfort	3,451	366
			Hopkinsville	3,767	320
			Covington	4,541	319
			Radcliff	1,391	310
			Paducah	2,352	309
			Florence	4,661	308
			Henderson	2,795	304
			Elizabethtown	4,024	298
10,000-19,999	19	455	Erlanger	1,721	946
			Saint Matthews	523	927
			Newport	2,377	902
			Shively	804	747
			Danville	1,202	734
			Madisonville	2,042	538
			Mayfield	596	489
			Nicholasville	1,816	454
			Campbellsville	995	439
			Independence	1,468	408
			Somerset	1,871	406
			Shelbyville	1,088	394
			Fort Thomas	288	390
			Bardstown	1,201	382
			Georgetown	836	373
			Winchester	1,220	349
			Murray	1,020	329
			Middlesboro	783	241
			Glasgow	727	199
5,000-9,999	35	318	Cynthiana	645	691
			Fort Mitchell	378	643
			Edgewood	113	607
			Shepherdsville	608	570
			Harrodsburg	603	512
			Lawrenceburg	470	505
			Berea	889	501
			Lebanon	689	496
			Elsmere	267	492
			Morehead	931	454
			Fort Wright	580	451
			Mount Sterling	716	438
			Wilmore	140	417
			Versailles	697	399
			London	1,867	393
			Alexandria	562	388
			Paris	856	371
			Franklin	532	362
			La Grange	244	328
			Taylor Mill	134	326
			Corbin	665	316
			Leitchfield	568	252
			Bellevue	153	248
			Maysville	946	243
			Mount Washington	286	232
			Central City	388	221

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1997-2001)(continued)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE C/100 MVM	CITY	NUMBER OF CRASHES (1997-2001)	AVERAGE RATE C/100 MVM
5,000-9,999 (cont.)	35	318	Pikeville	791	217
			Monticello	504	212
			Russellville	610	197
			Dayton	7	161
			Villa Hills	23	154
			Flatwoods	124	149
			Highland Heights	507	143
			Princeton	299	135
			Williamsburg	340	134
2,500-4,999	38	287	Lancaster	231	660
			Park Hills	126	560
			Morganfield	380	552
			Lakeside Park	304	479
			Springfield	358	469
			Greenville	450	461
			Benton	601	440
			Irvine	234	439
			Cold Spring	598	419
			Scottsville	485	416
			West Liberty	284	415
			Carrollton	254	411
			Marion	242	374
			Paintsville	574	370
			Southgate	118	341
			Hodgenville	242	336
			Dawson Springs	154	335
			Prestonsburg	559	326
			Mount Vernon	213	319
			Providence	262	318
			Vine Grove	247	261
			Russell	268	242
			Columbia	352	228
			Ludlow	47	225
			Barbourville	393	214
			Grayson	164	211
			Hazard	510	205
			Hartford	65	179
			Beaver Dam	97	171
			Morgantown	104	166
			Fulton	175	156
			Calvert City	181	136
			Stanton	160	136
			Tompkinsville	97	124
			Flemingsburg	79	124
			Hickman	37	102
			Cumberland	67	93
			Stanford	104	83
1,000-2,499	58	222	Dry Ridge	296	782
			Jackson	261	518
			Horse Cave	292	480
			Walton	240	454
			Clay City	68	346
			Falmouth	155	339
			Louisa	181	338
			Livermore	69	335
			Vanceburg	63	323
			Albany	202	311
			Uniontown	18	308
			Owenton	138	303
			Owingsville	132	295

TABLE 17. CRASH RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1997-2001)(continued)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE C/100 MVM	CITY	NUMBER OF CRASHES (1997-2001)	AVERAGE RATE C/100 MVM
1,000-2,499 (cont.)	58	222	Sebree	87	289
			Elkhorn City	95	288
			Salyersville	146	285
			Sturgis	78	270
			Edmonton	159	268
			Liberty	187	265
			Brandenburg	315	263
			Manchester	354	256
			Eminence	92	248
			Evarts	74	242
			Harlan	331	229
			Hardinsburg	88	228
			Cave City	295	227
			Elkton	106	226
			Jenkins	116	223
			Augusta	1,286	219
			Lacenter	54	218
			Nortonville	52	213
			Earlington	104	209
			Raceland	59	206
			Beattyville	106	205
			South Shore	315	205
			Whitesburg	195	194
			Catlettsburg	249	192
			Junction City	24	182
			Anchorage	32	179
			Cadiz	236	178
			Muldraugh	129	169
			Lewisport	15	164
			Russell Springs	251	157
			Cloverport	62	157
			Clinton	62	157
			Pineville	86	152
			Olive Hill	57	139
			Clay	19	136
			Warsaw	15	134
			Eddyville	162	132
			Carlisle	26	124
			Burkesville	67	121
			Jamestown	108	113
			Lebanon Junction	14	103
			Auburn	41	102
			Greensburg	43	93
			Worthington	7	90
			Munfordville	141	68

TABLE 18. TOTAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER) (1997-2001)(ALL ROADS)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 1000 POPULATION)	
POPULATION CATEGORY OVER 200,000			
Louisville	63,112	49.3	*
Lexington	49,852	38.3	
POPULATION CATEGORY 20,000-55,000			
Florence	7,034	59.7	*
Paducah	7,076	53.8	*
Bowling Green	12,097	49.1	*
Elizabethtown	5,063	44.9	
Ashland	4,812	43.8	
Henderson	5,564	40.7	
Covington	8,819	40.7	
Richmond	5,337	39.3	
Owensboro	9,949	36.8	
Hopkinsville	5,069	33.7	
Frankfort	4,290	30.9	
Jeffersontown	3,867	29.0	
Radcliff	2,271	20.7	
POPULATION CATEGORY 10,000-19,999			
Somerset	3,407	60.0	*
Shively	3,739	49.3	*
Bardstown	2,196	42.3	
Newport	3,589	42.1	
Glasgow	2,727	41.9	
Erlanger	3,235	38.8	
Campbellsville	2,013	38.4	
Winchester	3,185	38.1	
Madisonville	3,647	37.8	
Danville	2,928	37.8	
Shelbyville	1,846	36.6	
Mayfield	1,812	35.0	
Saint Matthews	2,619	33.0	
Georgetown	2,739	30.3	
Nicholasville	2,809	28.5	
Middlesboro	1,392	26.8	
Independence	1,420	19.0	
Murray	1,357	18.2	
Fort Thomas	1,007	12.2	
POPULATION CATEGORY 5,000-9,999			
London	2,614	91.8	*
Morehead	1,783	60.3	*
Fort Wright	1,668	58.7	*
Pikeville	1,706	54.2	*
Corbin	1,940	50.1	*
Mount Sterling	1,414	48.1	*
Maysville	2,099	46.7	*
Monticello	1,264	42.3	*
Russellville	1,355	37.9	
Lebanon	1,033	36.1	
Cynthiana	1,119	35.8	
Shepherdsville	1,461	35.1	
Harrodsburg	1,390	34.7	
Paris	1,498	32.6	
Versailles	1,215	32.4	
Williamsburg	773	30.1	
Fort Mitchell	1,206	29.8	
Bellevue	944	29.1	
Berea	1,400	28.4	
Taylor Mill	968	28.0	
Franklin	1,115	27.9	
La Grange	786	27.7	
Oak Grove	951	26.9	
Central City	790	26.8	
Princeton	815	24.9	
Alexandria	1,009	24.4	
Highland Heights	715	21.8	
Mount Washington	762	18.0	
Leitchfield	542	17.7	
Lawrenceburg	750	16.6	
Edgewood	726	15.4	
Elsmere	605	14.9	
Dayton	419	14.0	
Flatwoods	530	13.9	
Villa Hills	290	7.3	
Wilmore	187	6.3	
Middletown	153	5.3	
Lyndon	95	2.0	
POPULATION CATEGORY 2,500-4,999			
Hazard	1,838	76.5	*
Crestview Hills	817	56.6	*
Prestonsburg	1,022	56.6	*
Mount Vernon	596	46.0	*
Paintsville	944	45.7	*
Grayson	865	44.6	*
Cold Spring	800	42.0	
Hodgenville	595	41.4	
Columbia	830	41.4	
Wilder	529	40.3	
Scottsville	868	40.1	
Barbourville	699	39.0	
Irvine	540	38.0	
Tompkinsville	493	37.1	
Carrollton	714	37.1	
Russell	660	36.2	
Springfield	469	35.6	
Benton	714	34.0	
Williamstown	547	33.9	
Morganfield	571	32.7	
Morgantown	414	32.5	
Greenville	709	32.2	
Crescent Springs	622	31.6	
Beaver Dam	475	31.3	
Lancaster	563	30.2	
Fulton	374	27.0	
Lakeside Park	361	25.2	
Stanton	380	25.1	
Marion	394	24.7	
Southgate	419	24.1	
West Liberty	380	23.2	
Flemingsburg	348	23.1	
Union	330	22.8	
Stanford	328	19.1	
Calvert City	255	18.9	
Cumberland	230	17.6	
Dawson Springs	241	16.2	
Providence	287	15.9	
Vine Grove	284	13.6	
Park Hills	177	11.9	
Hartford	141	11.0	
Ludlow	239	10.8	
Hickman	124	9.7	
Indian Hills	31	2.2	

* Critical crash rate

TABLE 19. FATAL CRASH RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1997-2001)(ALL ROADS)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	121	0.94
Lexington	92	0.71
POPULATION CATEGORY 20,000-55,000		
Paducah	16	1.22
Florence	12	1.02
Elizabethtown	11	0.98
Richmond	13	0.96
Hopkinsville	14	0.93
Henderson	11	0.80
Frankfort	10	0.72
Bowling Green	16	0.65
Ashland	7	0.64
Owensboro	13	0.48
Covington	8	0.37
Radcliff	4	0.36
Jeffersontown	4	0.30
POPULATION CATEGORY 10,000-19,999		
Somerset	15	2.64
Shelbyville	10	1.98
Danville	12	1.55
Erlanger	9	1.08
Shively	6	0.79
Bardstown	4	0.77
Madisonville	6	0.62
Nicholasville	6	0.61
Mayfield	3	0.58
Independence	4	0.53
Saint Matthews	4	0.50
Fort Thomas	4	0.48
Winchester	4	0.48
Glasgow	3	0.46
Georgetown	4	0.44
Campbellsville	2	0.38
Newport	3	0.35
Murray	2	0.27
Middlesboro	1	0.19
POPULATION CATEGORY 5,000-9,999		
Pikeville	11	3.49
Mount Sterling	8	2.72
London	7	2.46
Maysville	10	2.22
Shepherdsville	9	2.16
Monticello	6	2.01
Williamsburg	5	1.94
Central City	5	1.70
Morehead	5	1.69
Alexandria	7	1.69
Corbin	6	1.55
La Grange	4	1.41
Franklin	5	1.25
Berea	6	1.22
Leitchfield	3	0.98
Russellville	3	0.84
Harrodsburg	2	0.50
Lawrenceburg	2	0.44
Lebanon	1	0.35
Fort Wright	1	0.35
Cynthiana	1	0.32
Bellevue	1	0.31
Princeton	1	0.31
Highland Heights	1	0.31
Versailles	1	0.27
Fort Mitchell	1	0.25
Mount Washington	1	0.24
Paris	1	0.22
POPULATION CATEGORY 2,500-4,999		
Mount Vernon	5	3.86
Prestonsburg	6	3.32
Calvert City	3	2.22
Hodgenville	3	2.09
Stanton	3	1.98
Paintsville	4	1.94
Williamstown	3	1.86
Greenville	4	1.82
Carrollton	3	1.56
Hartford	2	1.56
Scottsville	3	1.39
Beaver Dam	2	1.32
Barbourville	2	1.11
Cold Spring	2	1.05
Benton	2	0.95
Hazard	2	0.83
Springfield	1	0.76
Tompkinsville	1	0.75
Fulton	1	0.72
Lakeside Park	1	0.70
Dawson Springs	1	0.67
Marion	1	0.63
Stanford	1	0.58
Providence	1	0.55
Lancaster	1	0.54
Grayson	1	0.52
Columbia	1	0.50

* Critical crash rate

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (1997-2001) ALL	NUMBER OF ALCOHOL-RELATED CRASHES (1997-2001) 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	13	3	10.7	7.3
Elliott	60	11	10.6	6.4
Menifee	55	13	10.0	7.6
Owsley	37	7	9.8	6.7
Nicholas	80	14	9.3	5.3
Lee	42	3	7.5	2.1
Ballard	70	8	6.6	2.7
Gallatin	68	12	6.3	4.1
Hickman	32	4	6.1	2.7
Wolfe	59	9	5.9	3.1
Fulton	56	1	5.6	0.4
Livingston	60	3	5.6	0.8
Crittenden	63	11	5.5	2.7
Hancock	45	2	5.4	0.9
Trimble	51	8	5.0	2.5
Bracken	64	7	4.9	1.8
McLean	55	8	4.6	2.0
Clinton	35	1	4.5	0.3
Carlisle	12	3	4.0	3.3
Cumberland	18	2	4.0	1.1
Lyon	42	9	3.6	3.4
POPULATION CATEGORY 10,000 - 14,999				
Magoffin	109	20	8.6	5.3
Spencer	76	11	7.5	3.3
Lewis	113	15	7.5	3.5
Leslie	93	8	6.9	2.2
Owen	82	10	6.8	2.5
Pendleton	127	14	6.6	2.3
Washington	91	14	6.4	2.6
Martin	84	15	6.3	3.5
Bath	96	12	6.3	3.0
Butler	77	12	6.3	2.3
Jackson	89	12	6.3	2.7
Carroll	138	18	6.2	2.7
Monroe	51	8	5.5	2.4
Fleming	76	16	5.4	3.4
Garrard	109	14	5.4	2.5
Edmonson	62	2	5.2	0.5
Powell	86	14	5.1	2.6
Caldwell	82	11	4.8	2.0
Green	63	7	4.8	1.7
Larue	80	14	4.7	2.6
Morgan	72	5	4.5	1.0
Todd	55	6	4.5	1.6
Webster	85	16	4.5	2.8
Metcalfe	47	3	4.3	1.0
Trigg	58	6	3.8	1.4
POPULATION CATEGORY 15,000 - 24,999				
Marion	264	36	10.7	4.1
Casey	96	15	7.8	3.4
Breathitt	152	33	7.0	5.3
Estill	125	20	6.7	3.1
Henry	132	14	6.6	2.5
Lincoln	136	28	6.6	4.7
Woodford	215	27	6.3	2.7
Russell	95	17	6.1	3.6
McCreary	90	10	5.9	1.9
Lawrence	86	16	5.7	4.2
Clay	136	11	5.7	1.6
Union	133	20	5.7	2.6
Montgomery	210	31	5.5	2.6

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

COUNTY	NUMBER OF ALCOHOL-RELATED CRASHES (1997-2001) ALL	NUMBER OF ALCOHOL-RELATED CRASHES (1997-2001) 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)				
Breckinridge	81	7	5.4	1.1
Knott	98	15	5.4	2.7
Johnson	152	15	5.4	1.7
Anderson	126	23	5.3	3.1
Bourbon	174	18	5.3	2.0
Mason	191	27	5.0	2.6
Allen	103	16	5.0	2.3
Mercer	150	21	5.0	2.1
Grayson	128	12	4.8	1.3
Harrison	133	24	4.8	2.4
Hart	93	7	4.4	1.2
Adair	105	22	4.4	2.5
Taylor	156	33	4.2	2.3
Ohio	115	11	4.1	1.3
Simpson	113	11	4.1	1.3
Wayne	86	14	3.8	1.7
Grant	161	20	3.7	1.5
Rowan	158	30	3.6	1.9
Rockcastle	79	5	3.4	0.8
POPULATION CATEGORY 25,000 - 49,999				
Meade	156	22	6.1	2.3
Letcher	175	24	6.0	3.0
Floyd	319	48	6.0	3.2
Carter	193	25	5.5	2.4
Harlan	201	30	5.4	2.7
Greenup	212	32	5.4	2.5
Knox	213	18	5.3	1.4
Shelby	291	31	5.3	2.0
Nelson	297	36	5.2	1.7
Jessamine	320	40	5.0	2.0
Calloway	195	42	5.0	2.6
Perry	253	34	5.0	2.3
Logan	164	19	4.8	1.7
Bell	156	17	4.6	1.8
Franklin	353	48	4.3	2.2
Clark	252	35	4.2	2.0
Barren	234	26	4.2	1.3
Whitley	208	32	4.2	2.1
Marshall	161	15	4.1	1.2
Graves	198	33	4.1	2.0
Muhlenberg	192	27	4.1	1.8
Scott	245	37	3.8	2.1
Henderson	336	41	3.5	1.3
Boyd	333	56	3.4	1.9
Oldham	147	30	3.3	1.9
Boyle	147	21	3.2	1.5
Hopkins	229	22	2.8	0.9
POPULATION CATEGORY 50,000 - OVER				
Pike	605	71	5.6	2.3
Bullitt	360	39	5.6	1.7
Madison	682	107	5.2	2.5
Christian	444	51	4.6	1.8
Kenton	1264	129	4.5	1.7
Campbell	608	59	4.4	1.4
Fayette	2655	267	4.2	1.6
Daviess	700	113	4.1	1.7
McCracken	535	63	3.9	1.5
Warren	768	103	3.8	1.4
Boone	605	71	3.6	1.3
Laurel	300	34	3.5	1.3
Pulaski	305	35	3.5	1.2
Jefferson	4704	359	3.4	1.1
Hardin	440	64	3.3	1.5

TABLE 21. CRASHES INVOLVING ALCOHOL BY CITY AND POPULATION CATEGORY(IN ORDER OF DECREASING PRECENTAGES)(1997-2001)

CITY	NUMBER OF ALCOHOL-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING ALCOHOL
POPULATION CATEGORY OVER 200,000		
Lexington	2,013	4.0
Louisville	1,854	2.9
POPULATION CATEGORY 20,000-55,000		
Richmond	240	4.5
Covington	394	4.5
Owensboro	325	3.3
Hopkinsville	169	3.3
Frankfort	143	3.3
Paducah	210	3.0
Bowling Green	345	2.9
Radcliff	63	2.8
Henderson	145	2.6
Florence	176	2.5
Jeffersontown	85	2.2
Ashland	107	2.2
Elizabethtown	91	1.8
POPULATION CATEGORY 10,000-19,999		
Newport	192	5.3
Middlesboro	69	5.0
Independence	69	4.9
Shively	165	4.4
Nicholasville	115	4.1
Shelbyville	75	4.1
Erlanger	130	4.0
Fort Thomas	36	3.6
Winchester	103	3.2
Bardstown	63	2.9
Campbellsville	56	2.8
Georgetown	68	2.5
Danville	66	2.3
Glasgow	58	2.1
Murray	28	2.1
Saint Matthews	50	1.9
Madisonville	65	1.8
Mayfield	30	1.7
Somerset	51	1.5
POPULATION CATEGORY 5,000-9,999		
Dayton	26	6.2
Fort Mitchell	65	5.4
Villa Hills	15	5.2
Lebanon	52	5.0
Elsmere	30	5.0
Mount Washington	37	4.9
Taylor Mill	41	4.2
Lawrenceburg	31	4.1
Paris	62	4.1
Shepherdsville	55	3.8
Pikeville	64	3.8
Franklin	41	3.7
Maysville	75	3.6
Williamsburg	28	3.6
Central City	27	3.4
Mount Sterling	48	3.4
Leitchfield	18	3.3
Versailles	40	3.3
Harrodsburg	46	3.3
Highland Heights	23	3.2
Cynthiana	34	3.0
Bellevue	27	2.9
Monticello	34	2.7
Princeton	21	2.6
Russellville	34	2.5
Morehead	44	2.5
Fort Wright	42	2.5
Berea	35	2.5
Alexandria	24	2.4
Corbin	46	2.4
Flatwoods	12	2.3
Edgewood	14	1.9
London	49	1.9
La Grange	14	1.8
Wilmore	3	1.6
POPULATION CATEGORY 2,500-4,999		
Park Hills	15	8.5
Vine Grove	21	7.4
Ludlow	17	7.1
Springfield	23	4.9
Carrollton	35	4.9
Irvine	26	4.8
Stanton	16	4.2
Prestonsburg	37	3.6
Providence	10	3.5
Fulton	13	3.5
Hartford	5	3.5
Cold Spring	27	3.4
Stanford	11	3.4
Dawson Springs	8	3.3
Lakeside Park	12	3.3
Hickman	4	3.2
Hickman	4	3.2
Cumberland	7	3.0
Hazard	53	2.9
Mount Vernon	17	2.9
Flemingsburg	10	2.9
Russell	19	2.9
Morganfield	16	2.8
Williamstown	15	2.7
Barbourville	19	2.7
Hodgenville	16	2.7
Southgate	11	2.6
Scottsville	23	2.6
Greenville	18	2.5
Columbia	20	2.4
Tompkinsville	11	2.2
Beaver Dam	10	2.1
Grayson	18	2.1
Paintsville	19	2.0
Marion	7	1.8
Benton	12	1.7
Calvert City	3	1.2

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1997-2001)

COUNTY	1997	1998	1999	2000	2001	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
Adair	157	160	111	153	162	743	13.4	7.8
Allen	100	119	94	97	110	520	8.8	5.1
Anderson	137	172	225	158	180	872	12.8	6.2
Ballard	122	98	93	88	122	523	17.2	6.7
Barren	286	276	225	232	282	1,301	9.9	5.2
Bath	69	62	86	55	96	368	9.8	4.0
Bell	444	337	366	357	366	1,870	21.9	11.3
Boone	641	687	550	659	601	3,138	10.3	5.2
Bourbon	161	154	173	213	150	851	12.4	4.3
Boyd	264	361	364	306	309	1,604	9.3	5.0
Boyle	164	138	151	116	155	724	7.7	4.7
Bracken	47	53	44	28	41	213	7.3	3.6
Breathitt	129	122	124	104	108	587	12.5	4.2
Breckinridge	88	111	80	83	94	456	7.0	6.2
Bullitt	475	431	464	576	408	2,354	10.5	6.4
Butler	113	134	124	116	58	545	12.5	7.5
Caldwell	80	78	97	74	105	434	9.1	5.4
Calloway	296	267	164	208	203	1,138	9.9	6.4
Campbell	845	1,030	873	855	648	4,251	14.2	6.7
Carlisle	31	44	32	21	31	159	8.0	13.3
Carroll	199	172	135	215	127	848	24.5	6.1
Carter	167	187	143	236	326	1,059	12.0	5.5
Casey	190	188	148	112	90	728	14.6	8.7
Christian	753	957	850	694	769	4,023	23.2	8.7
Clark	367	354	353	367	311	1,752	15.1	6.3
Clay	187	253	295	286	208	1,229	18.8	9.8
Clinton	81	134	125	93	78	511	15.4	15.0
Crittenden	43	54	68	84	92	341	10.3	5.0
Cumberland	58	77	98	65	72	370	15.3	23.1
Daviess	608	700	655	596	822	3,381	10.5	5.1
Edmonson	53	39	30	36	22	180	4.4	2.7
Elliott	44	49	27	50	37	207	9.4	3.8
Estill	130	120	131	98	116	595	11.7	4.3
Fayette	2,443	2,420	2,119	1,824	1,965	10,771	12.4	4.4
Fleming	63	48	65	78	77	331	6.9	4.4
Floyd	320	445	345	419	391	1,920	14.0	5.7
Franklin	431	455	333	443	429	2,091	12.5	6.0
Fulton	115	123	122	140	117	617	25.6	11.9
Gallatin	66	87	101	115	116	485	18.2	7.5
Garrard	78	92	171	133	127	601	11.9	5.9
Grant	249	218	217	165	149	998	12.9	6.5
Graves	255	268	282	311	367	1,483	11.6	7.8
Grayson	152	228	139	130	122	771	9.1	6.4
Green	37	50	37	42	46	212	5.4	3.3
Greenup	291	309	321	299	398	1,618	12.3	7.3
Hancock	51	76	56	57	37	277	8.9	6.6
Hardin	615	663	688	691	553	3,210	10.6	7.1
Harlan	484	436	475	336	386	2,117	20.3	11.0
Harrison	164	132	98	108	99	601	9.6	4.4
Hart	109	113	105	130	78	535	9.4	6.1
Henderson	412	391	447	467	520	2,237	14.0	6.6
Henry	193	166	113	114	126	712	13.4	4.9
Hickman	29	46	29	29	26	159	8.4	5.3
Hopkins	416	364	403	365	437	1,985	12.2	8.3
Jackson	123	97	101	100	81	502	11.7	5.2
Jefferson	3,947	3,800	3,507	3,845	3,135	18,234	7.8	3.8
Jessamine	223	237	314	431	471	1,676	12.7	5.1
Johnson	177	152	192	206	254	981	12.4	5.7
Kenton	1,000	1,066	1,157	1,160	1,142	5,525	10.8	4.1
Knott	162	138	122	77	124	623	11.7	5.7
Knox	342	327	334	208	184	1,395	14.2	6.7
Larue	72	67	72	71	55	337	7.1	4.6
Laurel	501	714	679	677	628	3,199	18.2	10.7

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1997-2001) (continued)

COUNTY	1997	1998	1999	2000	2001	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
Lawrence	131	138	118	149	195	731	14.2	9.3
Lee	72	44	53	59	47	275	11.3	6.1
Leslie	112	64	122	109	115	522	12.8	5.2
Letcher	152	165	140	116	99	672	7.9	3.8
Lewis	112	138	98	101	112	561	12.3	5.0
Lincoln	118	105	98	98	120	539	7.0	3.9
Livingston	128	94	77	81	65	445	12.3	6.0
Logan	173	200	205	206	199	983	10.8	6.2
Lyon	77	73	56	78	85	369	13.7	8.2
McCracken	703	751	589	573	567	3,183	13.1	6.0
McCreary	91	138	188	189	95	701	13.3	7.1
McLean	56	49	43	38	56	242	6.7	4.7
Madison	859	889	667	646	689	3,750	16.4	5.1
Magoffin	113	100	154	134	128	629	14.8	5.4
Marion	163	149	183	173	161	829	14.0	3.1
Marshall	168	250	216	190	191	1,015	8.8	6.0
Martin	102	85	122	178	135	622	15.3	7.9
Mason	164	147	125	164	161	761	13.0	3.9
Meade	301	302	214	193	171	1,181	14.2	7.7
Menifee	23	25	61	31	33	173	8.1	3.5
Mercer	156	171	107	76	130	640	8.5	4.7
Metcalfe	77	61	58	65	43	304	9.0	6.3
Monroe	61	49	79	55	53	297	7.4	5.1
Montgomery	159	161	178	153	129	780	10.0	4.0
Morgan	107	101	89	72	90	459	11.5	6.3
Muhlenberg	201	198	198	185	211	993	9.0	5.4
Nelson	243	269	207	259	319	1,297	9.7	4.3
Nicholas	45	71	51	69	48	284	11.1	3.4
Ohio	166	117	113	126	132	654	8.2	5.1
Oldham	161	177	164	150	169	821	5.1	5.4
Owen	43	57	53	38	31	222	6.3	2.6
Owsley	43	37	30	75	73	258	15.1	6.6
Pendleton	79	104	54	75	89	401	8.0	3.4
Perry	413	325	347	283	357	1,725	17.2	6.6
Pike	656	484	406	395	613	2,554	11.2	4.2
Powell	110	125	151	132	131	649	14.5	8.1
Pulaski	390	400	390	356	295	1,831	9.1	6.6
Robertson	13	9	7	3	12	44	5.7	3.4
Rockcastle	261	220	201	229	240	1,151	21.4	12.6
Rowan	290	283	219	251	282	1,325	19.8	8.6
Russell	177	167	115	128	128	715	12.3	6.6
Scott	242	239	230	199	255	1,165	10.1	4.9
Shelby	349	292	368	399	272	1,680	15.2	6.3
Simpson	153	210	183	169	173	888	15.5	8.1
Spencer	59	58	70	79	81	347	8.2	4.6
Taylor	214	212	153	169	143	891	11.2	5.5
Todd	104	95	63	75	84	421	10.8	7.0
Trigg	100	130	91	76	146	543	11.9	9.5
Trimble	34	66	49	25	26	200	6.9	3.9
Union	166	153	138	197	176	830	15.4	6.1
Warren	1,251	1,235	938	982	856	5,262	17.6	6.8
Washington	50	53	55	55	65	278	7.2	3.0
Wayne	81	94	101	95	113	484	7.6	5.4
Webster	38	66	56	120	74	354	7.2	4.4
Whitley	211	262	344	330	194	1,341	12.2	6.4
Wolfe	82	76	74	89	77	398	16.5	5.9
Woodford	200	250	233	262	223	1,168	13.8	5.2
TOTAL *	32,052	32,829	30,534	30,604	29,896	155,915	11.5	5.4

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

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES)
(1997-2001)

POPULATION	COUNTY	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED CRASH
UNDER 10,000	Fulton	25.6	Cumberland	23.1
	Gallatin	18.2	Clinton	15.0
	Ballard	17.2	Carlisle	13.3
	Wolfe	16.5	Fulton	11.9
	Clinton	15.4	Lyon	8.2
	Cumberland	15.3	Gallatin	7.5
	Owsley	15.1	Ballard	6.7
	Lyon	13.7	Owsley	6.6
	Livingston	12.3	Hancock	6.6
	Lee	11.3	Lee	6.1
	Nicholas	11.1	Livingston	6.0
	Crittenden	10.3	Wolfe	5.9
	Elliott	9.4	Hickman	5.3
	Hancock	8.9	Crittenden	5.0
	Hickman	8.4	McLean	4.7
	Menifee	8.1	Trimble	3.9
	Carlisle	8.0	Elliott	3.8
	Bracken	7.3	Bracken	3.6
	Trimble	6.9	Menifee	3.5
	McLean	6.7	Robertson	3.4
	Robertson	5.7	Nicholas	3.4
10,000-14,999	Carroll	24.5	Trigg	9.5
	Martin	15.3	Powell	8.1
	Magoffin	14.8	Martin	7.9
	Powell	14.5	Butler	7.5
	Leslie	12.8	Todd	7.0
	Butler	12.5	Metcalfe	6.3
	Lewis	12.3	Morgan	6.3
	Garrard	11.9	Carroll	6.1
	Trigg	11.9	Garrard	5.9
	Jackson	11.7	Magoffin	5.4
	Morgan	11.5	Caldwell	5.4
	Todd	10.8	Jackson	5.2
	Bath	9.8	Leslie	5.2
	Caldwell	9.1	Monroe	5.1
	Metcalfe	9.0	Lewis	5.0
	Spencer	8.2	Spencer	4.6
	Pendleton	8.0	Larue	4.6
	Monroe	7.4	Fleming	4.4
	Washington	7.2	Webster	4.4
	Webster	7.2	Bath	4.0
	Larue	7.1	Pendleton	3.4
	Fleming	6.9	Green	3.3
	Owen	6.3	Washington	3.0
	Green	5.4	Edmonson	2.7
	Edmonson	4.4	Owen	2.6
15,000-24,999	Rockcastle	21.4	Rockcastle	12.6
	Rowan	19.8	Clay	9.8
	Clay	18.8	Lawrence	9.3
	Simpson	15.5	Casey	8.7
	Union	15.4	Rowan	8.6
	Casey	14.6	Simpson	8.1
	Lawrence	14.2	Adair	7.8
	Marion	14.0	McCreary	7.1
	Woodford	13.8	Russell	6.6
	Henry	13.4	Grant	6.5
	Adair	13.4	Grayson	6.4
	McCreary	13.3	Anderson	6.2
	Mason	13.0	Breckinridge	6.2
	Grant	12.9	Hart	6.1
	Anderson	12.8	Union	6.1
	Breathitt	12.5	Knott	5.7
	Bourbon	12.4	Johnson	5.7
	Johnson	12.4	Taylor	5.5

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1997-2001) (continued)

POPULATION	COUNTY	PER 1,000 LICENSED DRIVERS ANNUAL AVERAGE ALCOHOL CONVICTIONS	COUNTY	RELATED PER ALCOHOL-CONVICTIONS ALCOHOL CRASH
15,000-24,999	Russell	12.3	Wayne	5.4
(cont'd)	Estill	11.7	Woodford	5.2
	Knott	11.7	Ohio	5.1
	Taylor	11.2	Allen	5.1
	Montgomery	10.0	Henry	4.9
	Harrison	9.6	Mercer	4.7
	Hart	9.4	Harrison	4.4
	Grayson	9.1	Bourbon	4.3
	Allen	8.8	Estill	4.3
	Mercer	8.5	Breathitt	4.2
	Ohio	8.2	Montgomery	4.0
	Wayne	7.6	Lincoln	3.9
	Breckinridge	7.0	Mason	3.9
	Lincoln	7.0	Marion	3.1
25,000 - 49,999	Bell	21.9	Bell	11.3
	Harlan	20.3	Harlan	11.0
	Perry	17.2	Hopkins	8.3
	Shelby	15.2	Graves	7.8
	Clark	15.1	Meade	7.7
	Meade	14.2	Greenup	7.3
	Knox	14.2	Knox	6.7
	Floyd	14.0	Henderson	6.6
	Henderson	14.0	Perry	6.6
	Jessamine	12.7	Whitley	6.4
	Franklin	12.5	Calloway	6.4
	Greenup	12.3	Clark	6.3
	Hopkins	12.2	Shelby	6.3
	Whitley	12.2	Logan	6.2
	Carter	12.0	Marshall	6.0
	Graves	11.6	Franklin	6.0
	Logan	10.8	Floyd	5.7
	Scott	10.1	Carter	5.5
	Barren	9.9	Oldham	5.4
	Calloway	9.9	Muhlenberg	5.4
	Nelson	9.7	Barren	5.2
	Boyd	9.3	Jessamine	5.1
	Muhlenberg	9.0	Boyd	5.0
	Marshall	8.8	Scott	4.9
	Letcher	7.9	Boyle	4.7
	Boyle	7.7	Nelson	4.3
	Oldham	5.1	Letcher	3.8
50,000 - OVER	Christian	23.2	Laurel	10.7
	Laurel	18.2	Christian	8.7
	Warren	17.6	Hardin	7.1
	Madison	16.4	Warren	6.8
	Campbell	14.2	Campbell	6.7
	McCracken	13.1	Pulaski	6.6
	Fayette	12.4	Bullitt	6.4
	Pike	11.2	McCracken	6.0
	Kenton	10.8	Boone	5.2
	Hardin	10.6	Madison	5.1
	Daviess	10.5	Daviess	5.1
	Bullitt	10.5	Fayette	4.4
	Boone	10.3	Pike	4.2
	Pulaski	9.1	Kenton	4.1
	Jefferson	7.8	Jefferson	3.8

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI ARREST (BY COUNTY) (1997-2001)

COUNTY	TOTAL DUI ARRESTS*	TOTAL DUI CONVICTIONS**	CONVICTION PERCENTAGE
Adair	1,043	743	71.2
Allen	744	520	69.9
Anderson	1,192	872	73.2
Ballard	655	523	79.8
Barren	1,921	1,301	67.7
Bath	528	368	69.7
Bell	2,808	1,870	66.6
Boone	4,596	3,138	68.3
Bourbon	1,289	851	66.0
Boyd	2,242	1,604	71.5
Boyle	1,077	724	67.2
Bracken	298	213	71.5
Breathitt	969	587	60.6
Breckinridge	611	456	74.6
Bullitt	3,707	2,354	63.5
Butler	727	545	75.0
Caldwell	543	434	79.9
Calloway	1,616	1,138	70.4
Campbell	5,601	4,251	75.9
Carlisle	219	159	72.6
Carroll	1,202	848	70.5
Carter	1,830	1,059	57.9
Casey	1,015	728	71.7
Christian	5,645	4,023	71.3
Clark	2,113	1,752	82.9
Clay	2,557	1,229	48.1
Clinton	793	511	64.4
Crittenden	430	341	79.3
Cumberland	535	370	69.2
Daviess	4,368	3,381	77.4
Edmonson	286	180	62.9
Elliott	289	207	71.6
Estill	928	595	64.1
Fayette	13,215	10,771	81.5
Fleming	399	331	83.0
Floyd	2,917	1,920	65.8
Franklin	3,189	2,091	65.6
Fulton	812	617	76.0
Gallatin	855	485	56.7
Garrard	902	601	66.6
Grant	1,155	998	86.4
Graves	2,069	1,483	71.7
Grayson	990	771	77.9
Green	287	212	73.9
Greenup	2,318	1,618	69.8
Hancock	393	277	70.5
Hardin	4,390	3,210	73.1
Harlan	2,695	2,117	78.6
Harrison	807	601	74.5
Hart	733	535	73.0
Henderson	2,772	2,237	80.7
Henry	927	712	76.8
Hickman	225	159	70.7
Hopkins	2,410	1,985	82.4
Jackson	749	502	67.0
Jefferson	29,906	18,234	61.0
Jessamine	2,372	1,676	70.7
Johnson	1,481	981	66.2
Kenton	8,985	5,525	61.5
Knott	893	623	69.8
Knox	2,105	1,395	66.3
Larue	463	337	72.8

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI ARREST (BY COUNTY) (1997-2001) (continued)

COUNTY	TOTAL DUI ARRESTS*	TOTAL DUI CONVICTIONS**	CONVICTION PERCENTAGE
Laurel	4,216	3,199	75.9
Lawrence	1,006	731	72.7
Lee	405	275	67.9
Leslie	990	522	52.7
Letcher	1,004	672	66.9
Lewis	699	561	80.3
Lincoln	738	539	73.0
Livingston	538	445	82.7
Logan	1,456	983	67.5
Lyon	528	369	69.9
McCracken	4,083	3,203	78.4
McCreary	1,053	701	66.6
McLean	311	242	77.8
Madison	5,255	3,750	71.4
Magoffin	858	629	73.3
Marion	1,377	829	60.2
Marshall	1,322	1,015	76.8
Martin	848	622	73.3
Mason	1,010	761	75.3
Meade	1,601	1,181	73.8
Menifee	288	173	60.1
Mercer	743	640	86.1
Metcalfe	422	304	72.0
Monroe	475	297	62.5
Montgomery	1,110	780	70.3
Morgan	609	459	75.4
Muhlenberg	1,322	993	75.1
Nelson	1,780	1,297	72.9
Nicholas	432	284	65.7
Ohio	966	654	67.7
Oldham	1,339	821	61.3
Owen	360	222	61.7
Owsley	524	258	49.2
Pendleton	596	401	67.3
Perry	2,514	1,725	68.6
Pike	4,469	2,554	57.1
Powell	1,014	649	64.0
Pulaski	3,177	1,831	57.6
Robertson	71	44	62.0
Rockcastle	1,699	1,151	67.7
Rowan	1,605	1,325	82.6
Russell	1,095	715	65.3
Scott	1,703	1,165	68.4
Shelby	2,211	1,680	76.0
Simpson	1,187	888	74.8
Spencer	546	347	63.6
Taylor	1,151	891	77.4
Todd	572	421	73.6
Trigg	729	543	74.5
Trimble	265	200	75.5
Union	1,038	830	80.0
Warren	6,955	5,262	75.7
Washington	404	278	68.8
Wayne	746	484	64.9
Webster	506	354	70.0
Whitley	2,370	1,341	56.6
Wolfe	588	398	67.7
Woodford	1,629	1,168	71.7
TOTAL	224,299	155,935	69.5

* Obtained from Administrative Office of the Courts

** Obtained from Division of Driver Licensing of KY Transportation Cabinet

TABLE 25. DUI ARREST CONVICTION RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER) (1997-2001)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL DUI ARRESTS	TOTAL DUI CONVICTIONS	CONVICTION PERCENTAGE
UNDER 10,000	69.4	Livingston	538	445	82.7
		Ballard	655	523	79.8
		Crittenden	430	341	79.3
		Fulton	812	617	76.0
		Trimble	265	200	75.5
		McLean	1010	761	75.3
		Carlisle	219	159	72.6
		Elliott	289	207	71.6
		Bracken	298	213	71.5
		Hickman	225	159	70.7
		Hancock	393	277	70.5
		Lyon	528	369	69.9
		Cumberland	535	370	69.2
		Lee	405	275	67.9
		Wolfe	588	398	67.7
		Nicholas	432	284	65.7
		Clinton	793	511	64.4
		Robertson	71	44	62.0
		Menifee	288	173	60.1
		Gallatin	855	485	56.7
		Owsley	524	258	49.2
10,000-14,999	69.9	Fleming	399	331	83.0
		Lewis	699	561	80.3
		Caldwell	543	434	79.9
		Morgan	609	459	75.4
		Butler	727	545	75.0
		Trigg	729	543	74.5
		Green	287	212	73.9
		Todd	572	421	73.6
		Martin	858	629	73.3
		Larue	463	337	72.8
		Metcalfe	422	304	72.0
		Carroll	1202	848	70.5
		Webster	506	354	70.0
		Bath	528	368	69.7
		Washington	404	278	68.8
		Pendleton	596	401	67.3
		Jackson	749	502	67.0
		Garrard	902	601	66.6
		Magoffin	1053	701	66.6
		Powell	1014	649	64.0
		Spencer	546	347	63.6
		Edmonson	286	180	62.9
		Monroe	475	297	62.5
		Owen	360	222	61.7
		Leslie	990	522	52.7
15,000-24,999	71.5	Grant	1155	998	86.4
		Mercer	743	640	86.1
		Rowan	1605	1325	82.6
		Union	1038	830	80.0
		Grayson	990	771	77.9
		Marion	311	242	77.8
		Taylor	1151	891	77.4
		Henry	927	712	76.8
		Simpson	1187	888	74.8
		Breckinridge	611	456	74.6
		Harrison	807	601	74.5
		McCreary	848	622	73.3
		Anderson	1192	872	73.2
		Lincoln	738	539	73.0
		Hart	733	535	73.0

TABLE 25. DUI ARREST CONVICTION RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER) (1997-2001) (continued)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL ARRESTS	TOTAL CONVICTIONS	CONVICTION PERCENTAGE
15,000-24,999 (continued)		Lawrence	1006	731	72.7
		Casey	1015	728	71.7
		Woodford	1629	1168	71.7
		Adair	1043	743	71.2
		Montgomery	1110	780	70.3
		Allen	744	520	69.9
		Knott	893	623	69.8
		Rockcastle	1699	1151	67.7
		Ohio	966	654	67.7
		Johnson	1481	981	66.2
		Bourbon	1289	851	66.0
		Russell	1095	715	65.3
		Wayne	746	484	64.9
		Estill	928	595	64.1
		Breathitt	969	587	60.6
		Mason	1377	829	60.2
		Clay	2557	1229	48.1
25,000-49,999	70.2	Clark	2113	1752	82.9
		Hopkins	2410	1985	82.4
		Henderson	2772	2237	80.7
		Harlan	2695	2117	78.6
		Shelby	2211	1680	76.0
		Muhlenberg	1322	993	75.1
		Meade	1601	1181	73.8
		Nelson	1780	1297	72.9
		Graves	2069	1483	71.7
		Boyd	2242	1604	71.5
		Marshall	5255	3750	71.4
		Jessamine	2372	1676	70.7
		Calloway	1616	1138	70.4
		Greenup	2318	1618	69.8
		Perry	2514	1725	68.6
		Scott	1703	1165	68.4
		Barren	1921	1301	67.7
		Logan	1456	983	67.5
		Boyle	1077	724	67.2
		Letcher	1004	672	66.9
		Bell	2808	1870	66.6
		Knox	2105	1395	66.3
		Floyd	2917	1920	65.8
		Franklin	3189	2091	65.6
		Oldham	1339	821	61.3
		Carter	1830	1059	57.9
		Whitley	2370	1341	56.6
50,000 - OVER	70.3	Fayette	13215	10771	81.5
		Madison	4083	3203	78.4
		Daviess	4368	3381	77.4
		McCracken	1,322	1,015	76.8
		Campbell	5601	4251	75.9
		Laurel	4216	3199	75.9
		Warren	6955	5262	75.7
		Hardin	4390	3210	73.1
		Christian	5645	4023	71.3
		Boone	4596	3138	68.3
		Bullitt	3707	2354	63.5
		Kenton	8985	5525	61.5
		Jefferson	29906	18234	61.0
		Pulaski	3177	1831	57.6
		Pike	4469	2554	57.1

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1997-2001)

COUNTY	1997	1998	1999	2000	2001	TOTAL RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Adair	15	21	25	15	18	94	1.7
Allen	22	20	12	7	8	69	1.2
Anderson	17	24	38	24	19	122	1.8
Ballard	17	12	8	3	9	49	1.6
Barren	108	85	98	81	81	453	3.5
Bath	10	1	16	9	6	42	1.1
Bell	49	45	24	29	35	182	2.1
Boone	108	120	128	137	90	583	1.9
Bourbon	31	16	20	28	42	137	2.0
Boyd	59	68	78	56	71	332	1.9
Boyle	30	39	28	24	21	142	1.5
Bracken	20	17	14	18	12	81	2.8
Breathitt	12	11	27	17	17	84	1.8
Breckinridge	29	29	21	19	14	112	1.7
Bullitt	84	94	130	140	133	581	2.6
Butler	12	14	14	6	12	58	1.3
Caldwell	24	31	27	16	19	117	2.5
Calloway	39	40	18	28	26	151	1.3
Campbell	150	155	208	142	99	754	2.5
Carlisle	8	9	5	3	2	27	1.4
Carroll	18	16	18	16	18	86	2.5
Carter	21	42	45	80	98	286	3.3
Casey	25	31	15	11	10	92	1.8
Christian	133	84	90	80	90	477	2.8
Clark	21	16	22	28	36	123	1.1
Clay	29	30	42	33	23	157	2.4
Clinton	36	30	53	28	17	164	4.9
Crittenden	7	14	21	19	13	74	2.2
Cumberland	15	15	33	7	21	91	3.8
Daviess	88	122	103	67	59	439	1.4
Edmonson	16	7	5	6	2	36	0.9
Elliott	3	9	4	8	5	29	1.3
Estill	23	27	33	18	10	111	2.2
Fayette	513	437	414	445	294	2,103	2.4
Fleming	5	13	17	12	16	63	1.3
Floyd	79	77	45	47	38	286	2.1
Franklin	109	141	128	150	115	643	3.8
Fulton	7	12	16	12	8	55	2.3
Gallatin	24	20	27	33	29	133	5.0
Garrard	17	24	47	54	18	160	3.2
Grant	30	32	28	34	22	146	1.9
Graves	40	24	40	52	38	194	1.5
Grayson	34	47	33	40	38	192	2.3
Green	3	20	7	5	1	36	0.9
Greenup	46	59	75	47	71	298	2.3
Hancock	6	15	5	9	6	41	1.3
Hardin	200	179	172	117	118	786	2.6
Harlan	100	64	58	54	41	317	3.0
Harrison	29	29	22	20	12	112	1.8
Hart	19	18	7	9	9	62	1.1
Henderson	65	64	59	67	45	300	1.9
Henry	18	11	9	9	7	54	1.0
Hickman	1	9	9	8	6	33	1.7
Hopkins	76	57	42	47	43	265	1.6
Jackson	5	15	5	13	6	44	1.0
Jefferson	1,353	1,162	1,090	735	568	4,908	2.1
Jessamine	37	35	47	60	65	244	1.9
Johnson	38	25	25	42	33	163	2.1
Kenton	333	297	441	282	215	1,568	3.1
Knott	3	12	13	8	18	54	1.0
Knox	78	60	49	45	36	268	2.7
Larue	17	16	10	4	5	52	1.1
Laurel	46	51	44	50	50	241	1.4

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1997-2001) (continued)

COUNTY	1997	1998	1999	2000	2001	RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Lawrence	24	16	15	20	22	97	1.9
Lee	6	8	8	4	2	28	1.2
Leslie	10	6	20	16	4	56	1.4
Letcher	19	15	27	14	20	95	1.1
Lewis	12	15	27	12	15	81	1.8
Lincoln	22	34	28	20	20	124	1.6
Livingston	17	10	13	12	28	80	2.2
Logan	34	41	39	45	36	195	2.1
Lyon	23	19	30	28	38	138	5.1
McCracken	112	91	77	83	59	422	1.7
McCreary	25	26	29	9	9	98	1.9
McLean	13	9	6	15	13	56	1.6
Madison	40	55	65	85	80	325	1.4
Magoffin	23	11	6	10	7	57	1.3
Marion	60	37	53	30	27	207	3.5
Marshall	18	24	22	31	14	109	0.9
Martin	19	4	10	15	20	68	1.7
Mason	21	31	33	23	51	159	2.7
Meade	63	66	48	27	28	232	2.8
Menifee	8	7	13	6	13	47	2.2
Mercer	33	20	14	12	12	91	1.2
Metcalfe	21	22	21	27	22	113	3.3
Monroe	22	25	29	23	11	110	2.7
Montgomery	23	25	49	28	22	147	1.9
Morgan	14	18	7	8	6	53	1.3
Muhlenberg	39	34	16	20	44	153	1.4
Nelson	63	51	62	78	70	324	2.4
Nicholas	20	14	20	19	16	89	3.5
Ohio	23	27	15	14	15	94	1.2
Oldham	13	12	14	6	17	62	0.4
Owen	11	7	6	10	23	57	1.6
Owsley	9	10	17	14	8	58	3.4
Pendleton	21	24	14	16	20	95	1.9
Perry	40	39	27	18	13	137	1.4
Pike	115	84	61	50	66	376	1.6
Powell	16	13	12	10	9	60	1.3
Pulaski	98	120	88	106	92	504	2.5
Robertson	5	1	3	6	2	17	2.2
Rockcastle	41	43	36	28	28	176	3.3
Rowan	34	33	51	42	28	188	2.8
Russell	16	7	11	10	19	63	1.1
Scott	76	57	46	48	42	269	2.3
Shelby	22	40	47	49	33	191	1.7
Simpson	9	15	19	16	15	74	1.3
Spencer	0	9	4	9	6	28	0.7
Taylor	33	40	17	28	29	147	1.8
Todd	17	15	12	12	9	65	1.7
Trigg	23	23	19	20	12	97	2.1
Trimble	3	1	0	0	2	6	0.2
Union	15	15	19	29	14	92	1.7
Warren	210	191	119	124	107	751	2.5
Washington	14	10	11	10	13	58	1.5
Wayne	10	25	20	20	12	87	1.4
Webster	14	19	16	22	6	77	1.6
Whitley	45	54	56	82	55	292	2.7
Wolfe	12	13	23	19	17	84	3.5
Woodford	25	38	43	43	40	189	2.2
TOTAL	6,384	6,038	6,020	5,294	4,568	28,304	2.1

TABLE 27. PERCENTAGE OF CRASHES INVOLVING DRUGS BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY UNDER 10,000		
Nicholas	12	1.4
Lee	8	1.4
Crittenden	14	1.2
Cumberland	5	1.1
Owsley	4	1.1
Hickman	5	1.0
Clinton	7	0.9
Wolfe	9	0.9
Fulton	9	0.9
Elliott	5	0.9
Livingston	7	0.7
Ballard	8	0.7
Lyon	7	0.6
Gallatin	4	0.4
Trimble	4	0.4
McLean	3	0.3
Carlisle	1	0.3
Menifee	1	0.2
Bracken	2	0.2
Hancock	2	0.2
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Martin	56	4.2
Leslie	47	3.5
Magoffin	42	3.3
Jackson	21	1.5
Caldwell	15	0.9
Pendleton	13	0.7
Lewis	10	0.7
Spencer	7	0.7
Powell	12	0.7
Butler	9	0.7
Todd	9	0.7
Fleming	8	0.6
Bath	9	0.6
Webster	10	0.5
Garrard	11	0.5
Trigg	8	0.5
Monroe	5	0.5
Carroll	10	0.5
Edmonson	5	0.4
Larue	3	0.2
Green	3	0.2
Washington	1	0.1
Owen	1	0.1
Metcalfe	1	0.1
Morgan	0	0.0
POPULATION CATEGORY 15,000-24,999		
Johnson	100	3.6
Clay	76	3.2
Breathitt	47	2.2
Lawrence	33	2.2
Knott	25	1.4
Russell	18	1.2
Casey	13	1.1
Estill	21	1.1
Rockcastle	24	1.0
McCreary	15	1.0
Adair	20	0.8
Bourbon	26	0.8
Mercer	20	0.7
Allen	15	0.7
Ohio	18	0.6
Lincoln	13	0.6
Wayne	13	0.6
Simpson	14	0.5
Grayson	13	0.5
Hart	11	0.5
Taylor	19	0.5
Harrison	15	0.5
Mason	19	0.5
Rowan	19	0.4
Union	8	0.4
Montgomery	13	0.3
Woodford	10	0.3
Anderson	6	0.3
Marion	8	0.3
Henry	7	0.3
Grant	10	0.2
Breckinridge	1	0.1
POPULATION CATEGORY 25,000-50,000		
Knox	102	2.6
Floyd	127	2.4
Bell	69	2.0
Harlan	62	1.7
Letcher	44	1.5
Perry	72	1.4
Greenup	52	1.3
Carter	40	1.1
Whitley	57	1.1
Muhlenberg	38	0.8
Boyd	74	0.7
Logan	19	0.6
Marshall	25	0.6
Meade	14	0.5
Calloway	19	0.5
Clark	29	0.5
Hopkins	39	0.5
Jessamine	31	0.5
Graves	22	0.5
Henderson	37	0.4
Oldham	20	0.4
Franklin	29	0.4
Boyle	12	0.3
Barren	22	0.3
Nelson	19	0.3
Shelby	16	0.3
Scott	15	0.2
POPULATION CATEGORY OVER 50,000		
Pike	249	2.3
Laurel	106	1.3
Pulaski	58	0.7
Warren	107	0.5
Daviess	83	0.5
Fayette	230	0.4
Kenton	111	0.4
Campbell	60	0.4
Christian	39	0.4
Madison	54	0.4
McCracken	50	0.4
Hardin	47	0.3
Bullitt	22	0.3
Jefferson	237	0.2
Boone	36	0.2

TABLE 28. PERCENTAGE OF CRASHES INVOLVING DRUGS BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF DRUG-RELATED CRASHES	PERCENTAGE OF CRASHES INVOLVING DRUGS
POPULATION CATEGORY OVER 200,000		
Lexington	113	0.2
Louisville	71	0.1
POPULATION CATEGORY 20,000-55,000		
Owensboro	28	0.3
Bowling Green	41	0.3
Paducah	21	0.3
Richmond	15	0.3
Covington	22	0.2
Frankfort	8	0.2
Ashland	11	0.2
Hopkinsville	12	0.2
Florence	8	0.1
Elizabethtown	6	0.1
Henderson	6	0.1
Radcliff	2	0.1
POPULATION CATEGORY 10,000-19,999		
Middlesboro	15	1.1
Fort Thomas	6	0.6
Newport	13	0.4
Campbellsville	8	0.4
Winchester	14	0.4
Somerset	10	0.3
Madisonville	7	0.2
Nicholasville	5	0.2
Shively	8	0.2
Glasgow	5	0.2
Independence	2	0.1
Murray	2	0.1
Danville	3	0.1
Erlanger	4	0.1
Georgetown	2	0.1
Bardstown	3	0.1
Mayfield	1	0.1
POPULATION CATEGORY 5,000-9,999		
Williamsburg	12	1.6
Corbin	22	1.1
London	17	0.7
La Grange	5	0.6
Central City	5	0.6
Monticello	7	0.6
Harrodsburg	9	0.6
Pikeville	9	0.5
Wilmore	1	0.5
Berea	5	0.4
Franklin	4	0.4
Flatwoods	2	0.4
Leitchfield	2	0.4
Bellevue	4	0.4
Highland Heights	2	0.3
Russellville	4	0.3
Mount Washington	2	0.3
Edgewood	2	0.3
Paris	5	0.3
Princeton	2	0.2
Elsmere	1	0.2
Versailles	2	0.2
Fort Mitchell	3	0.2
Morehead	4	0.2
Maysville	5	0.2
Cynthiana	2	0.2
Fort Wright	4	0.2
Taylor Mill	2	0.2
Lawrenceburg	1	0.1
Mount Sterling	1	0.1
Shepherdsville	2	0.1
POPULATION CATEGORY 2,500-4,999		
Barbourville	14	2.0
Irvine	6	1.1
Paintsville	9	1.0
Flemingsburg	3	0.9
Fulton	3	0.8
Hartford	1	0.7
Prestonsburg	7	0.7
Park Hills	1	0.6
Beaver Dam	3	0.6
Lancaster	3	0.5
Williamstown	3	0.5
Scottsville	4	0.5
Tompkinsville	2	0.4
Carrollton	3	0.4
Greenville	3	0.4
Dawson Springs	1	0.4
Stanford	1	0.3
Providence	1	0.3
Marion	1	0.3
Russell	2	0.3
Stanton	1	0.3
Hazard	6	0.3
Mount Vernon	2	0.3
Grayson	2	0.2
Morganfield	1	0.2
Columbia	1	0.1

TABLE 29. SAFETY BELT USAGE (DRIVERS OF PASSENGER CARS INVOLVED IN CRASHES BY COUNTY AND POPULATION CATEGORY) (IN DESCENDING ORDER)(1997-2001)

COUNTY	PERCENT SEAT BELT USAGE	
POPULATION CATEGORY UNDER 10,000		
Livingston	90.5	
Lyon	90.0	
Carlisle	89.1	
Ballard	88.8	
Crittenden	88.3	*
Gallatin	87.9	
Trimble	87.7	
Hickman	87.3	
Wolfe	85.8	
McLean	85.7	
Hancock	85.5	
Fulton	85.4	
Elliott	84.0	
Lee	83.2	
Bracken	82.1	
Nicholas	79.8	
Cumberland	79.6	
Robertson	79.6	
Owsley	79.4	
Menifee	79.3	
Clinton	79.2	
POPULATION CATEGORY 10,000-14,999		
Webster	92.4	
Trigg	89.7	
Caldwell	89.6	
Larue	89.4	
Green	89.2	
Garrard	87.9	
Pendleton	87.8	
Edmonson	87.8	
Morgan	87.0	
Carroll	86.6	
Bath	86.3	
Spencer	85.9	
Butler	85.8	
Powell	85.4	
Magoffin	85.0	
Owen	84.1	*
Martin	84.1	
Washington	83.4	
Jackson	83.2	
Leslie	82.5	
Fleming	81.6	
Todd	80.7	
Lewis	79.3	
Monroe	79.0	
Metcalfe	77.0	
POPULATION CATEGORY 15,000-24,999		
Hart	91.9	
Woodford	91.7	
Grant	91.2	
Ohio	90.8	
Breckinridge	89.8	
Rowan	89.6	*
Montgomery	89.5	
Mercer	88.5	
Johnson	88.4	*
Harrison	88.3	*
Union	88.2	
Knott	88.2	
Grayson	88.1	
Anderson	87.7	
McCreary	87.7	
Breathitt	87.5	
Estill	87.5	
Lawrence	86.7	
Simpson	86.6	
Clay	86.1	
Bourbon	85.7	
Rockcastle	85.5	
Mason	85.5	
Henry	85.1	
Taylor	84.2	
Russell	83.9	
Allen	83.7	
Lincoln	83.2	
Marion	82.7	*
Wayne	80.9	
Casey	80.7	
Adair	78.4	
POPULATION CATEGORY 25,000-50,000		
Henderson	94.4	*
Oldham	94.1	
Hopkins	93.8	
Clark	92.9	
Scott	91.9	
Boyle	91.8	*
Nelson	91.4	
Jessamine	91.3	
Boyd	91.3	*
Graves	91.3	
Greenup	90.8	
Shelby	90.8	
Franklin	90.6	*
Perry	90.0	
Marshall	89.7	
Whitley	89.4	
Meade	88.9	
Floyd	88.8	
Calloway	88.7	*
Harlan	88.5	
Bell	87.6	
Knox	87.5	*
Muhlenberg	86.8	
Letcher	86.7	*
Carter	85.8	
Barren	85.5	
Logan	85.4	
POPULATION CATEGORY OVER 50,000		
Fayette	95.3	
Hardin	94.1	
McCracken	93.6	
Jefferson	93.5	*
Boone	93.3	
Christian	92.3	
Daviess	92.2	
Campbell	92.2	
Laurel	92.2	
Kenton	92.2	
Warren	91.8	*
Bullitt	90.9	
Pulaski	90.9	*
Madison	90.4	
Pike	89.4	

* 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 1997-2001 (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
1997	82.8	84.5	86.9	89.2	92.3	90.2
1998	83.7	85.3	87.0	89.9	92.7	90.6
1999	83.9	85.5	87.3	90.7	93.4	91.3
2000	88.6	88.2	88.8	91.7	93.8	92.3
2001	88.7	88.3	89.1	92.4	94.6	92.9
All	85.2	86.1	87.7	90.7	93.2	91.3

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	1,664	1.70	762	0.08	95
Incapacitating	8,495	8.69	16,373	1.70	80
Non-Incapacitating	14,418	14.75	45,565	4.72	68
Possible Injury	11,063	11.32	69,283	7.18	37
Fatal or Incapacitating	10,159	10.39	17,135	1.78	83

* Based on 1997 through 2001 crash data. Total sample size for not wearing a safety belt was 977,65 compared to 965,062 for wearing a safety belt.

TABLE 32. CHANGE IN SEVERITY OF INJURIES BY YEAR (1997-2001)

Type of Injury	PERCENTAGE OF DRIVERS SUSTAINING A GIVEN INJURY				
	1997	1998	1999	2000	2001
	NOT WEARING SAFETY BELT				
Fatal	1.62	1.74	1.77	2.18	2.39
Incapacitating	8.19	8.54	8.95	7.61	9.89
Non-Incapacitating	14.42	14.45	14.26	13.63	17.13
Possible Injury	10.84	11.80	11.77	9.04	12.40
	WEARING SAFETY BELT				
Fatal	0.07	0.09	0.08	0.09	0.08
Incapacitating	1.69	1.67	1.64	1.33	1.50
Non-Incapacitating	4.65	4.62	4.64	3.90	4.93
Possible Injury	7.29	7.40	7.31	5.22	6.66

TABLE 33. POTENTIAL REDUCTION IN TRAFFIC CRASH FATALITIES AND CRASH SAVINGS FROM INCREASE IN DRIVER SAFETY 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	123	891	123.0	42.7	165.7
80	226	1,633	226.0	78.2	304.2
90	329	2,375	329.0	113.8	442.8

* Based on increase from the 58 percent usage rate determined from the 1997-2001 surveys, the percent reductions in Table 31, and the economic costs provided by the National Safety Council. These costs are $ 1,000,000 for a fatality and $47,900 for an incapacitating injury. The actual number of fatalities and incapacitation injuries for 1997 - 2001 were used along with the average usage rate over this time period. The usage rate reached 62 percent in 2001.

** 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) (1997-2001)

			RESTRAINT USED		
VARIABLE	CATEGORY	NONE	SAFETY BELT	CHILD SEAT	ANY RESTRAINT
Number With Given Injury	Fatal	20	5	18	23
	Incapacitating	134	210	155	365
	Non-Incapacitating	310	468	763	1231
	Possible Injury	354	1176	1468	2644
	None Detected	1217	11489	19066	30555
Percent With Given Injury	Fatal	0.98	0.04	0.08	0.07
	Incapacitating	6.58	1.57	0.72	1.05
	Non-Incapacitating	15.23	3.51	3.55	3.54
	Possible Injury	17.40	8.81	6.84	7.59
	None Detected	59.80	86.07	88.80	87.76
Percent Usage By Seat Position	Front	10.98	60.03	28.99	89.02
	Rear	2.98	25.13	71.89	97.02
	All Positions	5.52	36.22	58.26	94.48
Percent With Given Injury By Seat Position					
(Front)	Fatal	0.86	0.00	0.21	0.07
	Incapacitating	7.31	1.99	1.09	1.70
	Non-Incapacitating	15.63	4.81	4.12	4.59
	Possible Injury	18.51	10.70	7.78	9.75
	None Detected	57.70	82.50	86.80	83.90
(Rear)	Fatal	1.20	0.08	0.06	0.07
	Incapacitating	5.34	1.11	0.65	0.77
	Non-Incapacitating	14.55	2.06	3.45	3.09
	Possible Injury	15.49	6.71	6.66	6.67
	None Detected	63.42	90.04	89.18	89.40
YEAR	1997	593	3327	4379	7706
	1998	584	3713	4937	8650
	1999	546	3664	5288	8952
	2000	189	1366	3214	4580
	2001	123	1278	3652	4930

TABLE 35. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY UNDER 10,000		
Menifee	98	17.8
Lee	76	13.5
Gallatin	141	13.1
Trimble	128	12.5
Lyon	147	12.5
Elliott	69	12.2
Wolfe	106	10.6
Owsley	39	10.4
Nicholas	85	9.9
McLean	117	9.8
Robertson	11	9.1
Hickman	47	9.0
Livingston	92	8.6
Bracken	107	8.1
Ballard	85	8.0
Carlisle	23	7.7
Crittenden	81	7.1
Hancock	52	6.2
Clinton	42	5.4
Cumberland	24	5.3
Fulton	45	4.5
POPULATION CATEGORY 10,000-14,999		
Owen	225	18.7
Garrard	347	17.2
Morgan	237	15.0
Jackson	212	14.9
Edmonson	161	13.4
Leslie	173	12.9
Spencer	124	12.2
Todd	132	10.9
Lewis	162	10.7
Martin	142	10.7
Bath	157	10.3
Washington	144	10.2
Butler	122	9.9
Caldwell	161	9.5
Magoffin	120	9.5
Powell	155	9.1
Webster	173	9.1
Fleming	114	8.2
Pendleton	159	8.2
Carroll	175	7.9
Larue	115	6.8
Metcalfe	68	6.3
Trigg	87	5.6
Monroe	49	5.3
Green	50	3.8
POPULATION CATEGORY 15,000-24,999		
Lincoln	340	16.4
Henry	305	15.2
McCreary	224	14.7
Estill	234	12.6
Union	274	12.2
Mercer	347	11.5
Casey	139	11.3
Grant	477	10.8
Clay	235	9.8
Grayson	251	9.5
Rowan	407	9.4
Rockcastle	216	9.4
Breathitt	202	9.3
Woodford	317	9.2
Bourbon	291	8.8
Hart	185	8.8
Ohio	242	8.7
Marion	210	8.5
Russell	133	8.5
Knott	149	8.2
Johnson	226	8.0
Anderson	190	8.0
Lawrence	118	7.8
Allen	138	6.7
Wayne	151	6.7
Adair	147	6.2
Montgomery	235	6.2
Mason	233	6.1
Taylor	225	6.1
Simpson	165	6.0
Harrison	165	5.9
Breckinridge	57	3.8
POPULATION CATEGORY 25,000-50,000		
Knox	579	14.5
Carter	481	13.7
Harlan	468	12.6
Whitley	593	11.9
Floyd	563	10.6
Greenup	401	10.1
Oldham	448	10.0
Letcher	272	9.4
Hopkins	729	9.0
Franklin	729	8.9
Marshall	341	8.7
Muhlenberg	406	8.6
Jessamine	521	8.2
Nelson	463	8.1
Graves	376	7.8
Scott	488	7.5
Bell	244	7.2
Shelby	396	7.1
Barren	453	6.9
Henderson	620	6.5
Perry	327	6.4
Boyle	294	6.3
Calloway	239	6.1
Meade	156	6.1
Clark	359	6.0
Logan	201	5.9
Boyd	578	5.9
POPULATION CATEGORY OVER 50,000		
Pike	1,844	17.2
Madison	1,476	11.3
Christian	916	9.4
Warren	1,760	8.7
Kenton	2,036	7.3
Boone	1,205	7.1
Laurel	600	7.1
Pulaski	628	7.1
Hardin	847	6.3
Campbell	780	5.7
Daviess	889	5.2
Fayette	3,291	5.2
Bullitt	296	4.6
McCracken	614	4.5
Jefferson	4,819	3.5

TABLE 36. PERCENTAGE OF CRASHES INVOLVING UNSAFE SPEED BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF CRASHES (1997-2001)	PERCENT OF TOTAL CRASHES
POPULATION CATEGORY OVER 200,000		
Lexington	2,569	5.2
Louisville	1,717	2.7
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	421	8.3
Bowling Green	785	6.5
Frankfort	259	6.0
Richmond	297	5.6
Covington	417	4.7
Florence	313	4.4
Ashland	200	4.2
Henderson	232	4.2
Elizabethtown	210	4.1
Paducah	264	3.7
Jeffersontown	140	3.6
Owensboro	292	2.9
Radcliff	46	2.0
POPULATION CATEGORY 10,000-19,999		
Erlanger	344	10.6
Fort Thomas	73	7.2
Independence	93	6.5
Somerset	198	5.8
Campbellsville	96	4.8
Nicholasville	131	4.7
Danville	127	4.3
Middlesboro	56	4.0
Murray	54	4.0
Madisonville	143	3.9
Shelbyville	69	3.7
Shively	125	3.3
Glasgow	85	3.1
Georgetown	86	3.1
Newport	107	3.0
Bardstown	62	2.8
Winchester	80	2.5
Mayfield	34	1.9
Saint Matthews	46	1.8
POPULATION CATEGORY 5,000-9,999		
Villa Hills	33	11.4
Taylor Mill	90	9.3
Highland Heights	58	8.1
Pikeville	135	7.9
Wilmore	14	7.5
Fort Mitchell	88	7.3
Elsmere	43	7.1
Monticello	84	6.6
Princeton	50	6.1
Williamsburg	46	6.0
Fort Wright	99	5.9
Versailles	62	5.1
Russellville	68	5.0
Dayton	20	4.8
Berea	64	4.6
Corbin	89	4.6
Paris	67	4.5
Alexandria	44	4.4
Maysville	92	4.4
Flatwoods	23	4.3
Central City	34	4.3
Lebanon	43	4.2
Leitchfield	23	4.2
London	109	4.2
Edgewood	30	4.1
Harrodsburg	56	4.0
La Grange	30	3.8
Morehead	65	3.6
Mount Sterling	47	3.3
Mount Washington	22	2.9
Bellevue	26	2.8
Franklin	31	2.8
Shepherdsville	40	2.7
Cynthiana	26	2.3
Lawrenceburg	15	2.0
POPULATION CATEGORY 2,500-4,999		
Park Hills	32	18.1
Williamstown	47	8.6
Morganfield	45	7.9
Stanford	24	7.3
Calvert City	18	7.1
Vine Grove	19	6.7
Barbourville	45	6.4
Irvine	34	6.3
Greenville	43	6.1
Cold Spring	48	6.0
Dawson Springs	14	5.8
Lancaster	32	5.7
Hartford	8	5.7
Providence	16	5.6
Lakeside Park	19	5.3
Mount Vernon	31	5.2
Cumberland	12	5.2
Springfield	21	4.5
Stanton	17	4.5
Scottsville	37	4.3
Hodgenville	25	4.2
Benton	30	4.2
Russell	27	4.1
Grayson	35	4.0
Prestonsburg	41	4.0
Columbia	32	3.9
Marion	14	3.6
Beaver Dam	16	3.4
Hazard	58	3.2
Carrollton	22	3.1
Flemingsburg	10	2.9
Ludlow	7	2.9
Paintsville	26	2.8
Fulton	9	2.4
Tompkinsville	12	2.4
Hickman	3	2.4

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1997-2001)

COUNTY	1997	1998	1999	2000	2001	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
Adair	269	381	372	361	211	1,594	28.7	10.8
Allen	284	291	240	174	175	1,164	19.8	8.4
Anderson	1,505	1,608	1,409	1,382	1,210	7,114	104.7	37.4
Ballard	171	176	147	166	206	866	28.4	10.2
Barren	717	783	882	1,222	1,415	5,019	38.3	11.1
Bath	283	239	266	527	316	1,631	43.6	10.4
Bell	357	398	111	231	873	1,970	23.0	8.1
Boone	2,325	2,920	2,106	2,231	1,603	11,185	36.7	9.3
Bourbon	324	729	730	637	910	3,330	48.6	11.4
Boyd	1,487	1,525	1,573	1,344	1,661	7,590	44.2	13.1
Boyle	695	881	881	547	577	3,581	38.3	12.2
Bracken	396	478	260	174	261	1,569	53.8	14.7
Breathitt	153	96	81	106	192	628	13.4	3.1
Breckinridge	137	150	188	156	162	793	12.2	13.9
Bullitt	1,224	812	1,404	1,465	1,085	5,990	26.6	20.2
Butler	661	723	627	411	335	2,757	63.0	22.6
Caldwell	533	359	418	293	405	2,008	42.2	12.5
Calloway	302	431	518	628	636	2,515	21.9	10.5
Campbell	2,353	2,480	2,274	2,683	3,155	12,945	43.4	16.6
Carlisle	145	188	154	167	243	897	45.3	39.0
Carroll	628	572	570	614	587	2,971	85.7	17.0
Carter	495	587	960	1,361	801	4,204	47.8	8.7
Casey	168	207	143	142	127	787	15.8	5.7
Christian	910	671	754	965	987	4,287	24.7	4.7
Clark	431	527	554	647	867	3,026	26.1	8.4
Clay	243	757	660	200	410	2,270	34.7	9.7
Clinton	114	72	129	128	121	564	17.0	13.4
Crittenden	41	53	52	64	51	261	7.9	3.2
Cumberland	115	88	149	120	153	625	25.9	26.0
Daviess	2,255	2,522	2,800	2,391	1,964	11,932	37.1	13.4
Edmonson	136	74	38	70	84	402	9.8	2.5
Elliott	6	4	5	10	12	37	1.7	0.5
Estill	190	136	203	195	179	903	17.8	3.9
Fayette	9,309	9,682	9,516	7,807	6,599	42,913	49.2	13.0
Fleming	221	203	295	210	149	1,078	22.6	9.5
Floyd	291	475	334	153	182	1,435	10.5	2.5
Franklin	2,292	1,683	2,354	2,035	1,673	10,037	59.8	13.8
Fulton	68	157	197	166	148	736	30.6	16.4
Gallatin	571	365	654	494	528	2,612	98.1	18.5
Garrard	230	133	171	359	262	1,155	22.9	3.3
Grant	771	1,024	974	768	1,037	4,574	59.1	9.6
Graves	878	592	823	800	872	3,965	31.0	10.5
Grayson	328	714	576	349	554	2,521	29.9	10.0
Green	86	67	90	180	27	450	11.6	9.0
Greenup	563	464	597	259	544	2,427	18.5	6.1
Hancock	140	344	241	127	125	977	31.6	18.8
Hardin	4,647	4,593	4,805	4,008	4,312	22,365	73.6	26.4
Harlan	129	109	167	90	144	639	6.1	1.4
Harrison	246	366	408	407	302	1,729	27.6	10.5
Hart	317	355	343	231	215	1,461	25.7	7.9
Henderson	1,171	1,489	1,523	1,300	1,724	7,207	45.0	11.6
Henry	1,173	1,103	765	747	624	4,412	83.3	14.5
Hickman	180	249	167	184	148	928	49.1	19.7
Hopkins	641	1,231	1,633	1,632	1,623	6,760	41.6	9.3
Jackson	23	14	34	125	32	228	5.3	1.1
Jefferson	9,602	14,161	15,152	9,743	6,600	55,258	23.5	14.5
Jessamine	1,063	2,071	2,200	1,983	1,174	8,491	64.6	16.3
Johnson	133	176	234	139	101	783	9.9	3.5
Kenton	3,777	3,450	4,442	4,422	5,608	21,699	42.5	10.7
Knott	41	17	149	48	29	284	5.3	1.9
Knox	566	531	902	736	676	3,411	34.7	5.9
Larue	154	238	244	202	309	1,147	24.2	10.0
Laurel	1,524	1,549	1,402	2,129	926	7,530	43.0	12.6
Lawrence	400	504	400	439	318	2,061	40.1	17.5

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1997-2001)(continued)

COUNTY	1997	1998	1999	2000	2001	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
Lee	20	32	36	29	66	183	7.5	2.4
Leslie	322	451	367	276	336	1,752	42.9	10.1
Letcher	146	72	106	98	82	504	6.0	1.9
Lewis	379	356	308	254	178	1,475	32.2	9.1
Lincoln	331	541	609	428	243	2,152	27.8	6.3
Livingston	344	358	515	424	348	1,989	55.1	21.6
Logan	767	575	542	569	396	2,849	31.3	14.2
Lyon	601	632	428	420	380	2,461	91.2	16.7
McCracken	1,614	1,934	1,624	1,699	1,467	8,338	34.4	13.6
McCreary	212	195	178	192	128	905	17.2	4.0
McLean	292	162	85	143	331	1,013	28.1	8.7
Madison	1,242	1,471	2,012	1,322	1,199	7,246	31.6	4.9
Magoffin	74	39	20	8	13	154	3.6	1.3
Marion	328	271	340	287	162	1,388	23.5	6.6
Marshall	962	929	894	779	733	4,297	37.4	12.6
Martin	25	22	29	10	12	98	2.4	0.7
Mason	615	496	576	346	433	2,466	42.2	10.6
Meade	464	376	412	364	447	2,063	24.8	13.2
Menifee	6	24	22	34	45	131	6.2	1.3
Mercer	546	436	537	271	220	2,010	26.6	5.8
Metcalfe	271	250	275	310	251	1,357	40.0	20.0
Monroe	18	31	32	29	22	132	3.3	2.7
Montgomery	194	333	453	559	298	1,837	23.5	7.8
Morgan	277	366	202	229	258	1,332	33.3	5.6
Muhlenberg	519	469	466	442	400	2,296	20.9	5.7
Nelson	608	678	1,020	1,124	773	4,203	31.4	9.1
Nicholas	92	108	226	187	150	763	29.7	9.0
Ohio	654	305	460	356	856	2,631	33.0	10.9
Oldham	838	970	834	1,050	1,647	5,339	33.4	11.9
Owen	67	76	118	107	174	542	15.4	2.4
Owsley	0	3	25	23	1	52	3.1	1.3
Pendleton	497	339	267	177	265	1,545	30.8	9.7
Perry	886	417	266	126	173	1,868	18.7	5.7
Pike	185	272	292	253	164	1,166	5.1	0.6
Powell	280	427	446	333	483	1,969	43.9	12.7
Pulaski	1,018	1,051	942	747	691	4,449	22.1	7.1
Robertson	15	18	10	7	9	59	7.6	5.4
Rockcastle	349	602	578	538	367	2,434	45.3	11.3
Rowan	680	643	604	944	683	3,554	53.2	8.7
Russell	98	113	73	104	77	465	8.0	3.5
Scott	1,651	1,710	1,505	1,471	1,344	7,681	66.7	15.7
Shelby	1,304	1,246	1,570	1,290	1,086	6,496	58.8	16.4
Simpson	362	333	231	143	177	1,246	21.8	7.6
Spencer	230	190	311	179	201	1,111	26.1	9.0
Taylor	505	418	414	449	392	2,178	27.4	9.7
Todd	212	116	152	191	206	877	22.5	6.6
Trigg	323	316	271	250	232	1,392	30.4	16.0
Trimble	64	59	17	48	62	250	8.6	2.0
Union	365	254	162	193	181	1,155	21.4	4.2
Warren	2,047	2,391	2,165	1,888	2,404	10,895	36.4	6.2
Washington	774	456	467	401	300	2,398	62.4	16.7
Wayne	62	55	83	40	42	282	4.5	1.9
Webster	130	116	273	249	194	962	19.6	5.6
Whitley	295	318	677	675	309	2,274	20.7	3.8
Wolfe	862	1,703	1,621	1,045	1,785	7,016	290.3	66.2
Woodford	1,712	1,898	2,528	2,075	1,546	9,759	114.9	30.8
TOTAL*	89,322	98,449	103,126	90,269	84,961	466,127	34.2	10.3

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

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1997-2001)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
UNDER 10,000	Wolfe	290.3	Wolfe	66.2
	Gallatin	98.1	Carlisle	39.0
	Lyon	91.2	Cumberland	26.0
	Livingston	55.1	Livingston	21.6
	Bracken	53.8	Hickman	19.7
	Hickman	49.1	Hancock	18.8
	Carlisle	45.3	Gallatin	18.5
	Hancock	31.6	Lyon	16.7
	Fulton	30.6	Fulton	16.4
	Nicholas	29.7	Bracken	14.7
	Ballard	28.4	Clinton	13.4
	McLean	28.1	Ballard	10.2
	Cumberland	25.9	Nicholas	9.0
	Clinton	17.0	McLean	8.7
	Trimble	8.6	Robertson	5.4
	Crittenden	7.9	Crittenden	3.2
	Robertson	7.6	Lee	2.4
	Lee	7.5	Trimble	2.0
	Menifee	6.2	Menifee	1.3
	Owsley	3.1	Owsley	1.3
	Elliott	1.7	Elliott	0.5
10,000-14,999	Carroll	85.7	Butler	22.6
	Butler	63.0	Metcalfe	20.0
	Washington	62.4	Carroll	17.0
	Powell	43.9	Washington	16.7
	Bath	43.6	Trigg	16.0
	Leslie	42.9	Powell	12.7
	Caldwell	42.2	Caldwell	12.5
	Metcalfe	40.0	Bath	10.4
	Morgan	33.3	Leslie	10.1
	Lewis	32.2	Larue	10.0
	Pendleton	30.8	Pendleton	9.7
	Trigg	30.4	Fleming	9.5
	Spencer	26.1	Lewis	9.1
	Larue	24.2	Green	9.0
	Garrard	22.9	Spencer	9.0
	Fleming	22.6	Todd	6.6
	Todd	22.5	Morgan	5.6
	Webster	19.6	Webster	5.6
	Owen	15.4	Garrard	3.3
	Green	11.6	Monroe	2.7
	Edmonson	9.8	Edmonson	2.5
	Jackson	5.3	Owen	2.4
	Magoffin	3.6	Magoffin	1.3
	Monroe	3.3	Jackson	1.1
	Martin	2.4	Martin	0.7
15,000 - 24,999	Woodford	114.9	Anderson	33.3
	Anderson	104.7	Woodford	29.1
	Henry	83.3	Lawrence	16.9
	Grant	59.1	Henry	15.6
	Rowan	53.2	Adair	12.4
	Bourbon	48.6	Harrison	11.6
	Rockcastle	45.3	Taylor	11.1
	Mason	42.2	Rockcastle	10.4
	Lawrence	40.1	Breckinridge	10.0
	Clay	34.7	Clay	9.9
	Ohio	33.0	Ohio	9.8
	Grayson	29.9	Mason	9.8
	Adair	28.7	Grayson	9.7

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1997-2001) (continued)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED CRASH
15,000 - 24,999 (cont'd)	Lincoln	27.8	Clay	9.7
	Harrison	27.6	Grant	9.6
	Taylor	27.4	Rowan	8.7
	Mercer	26.6	Allen	8.4
	Hart	25.7	Hart	7.9
	Marion	23.5	Montgomery	7.8
	Montgomery	23.5	Simpson	7.6
	Simpson	21.8	Marion	6.6
	Union	21.4	Lincoln	6.3
	Allen	19.8	Mercer	5.8
	Estill	17.8	Casey	5.7
	McCreary	17.2	Union	4.2
	Casey	15.8	McCreary	4.0
	Breathitt	13.4	Estill	3.9
	Breckinridge	12.2	Russell	3.5
	Johnson	9.9	Johnson	3.5
	Russell	8.0	Breathitt	3.1
	Knott	5.3	Knott	1.9
	Wayne	4.5	Wayne	1.9
25,000 - 49,999	Scott	66.7	Shelby	16.4
	Jessamine	64.6	Jessamine	16.3
	Franklin	59.8	Scott	15.7
	Shelby	58.8	Logan	14.2
	Carter	47.8	Franklin	13.8
	Henderson	45.0	Meade	13.2
	Boyd	44.2	Boyd	13.1
	Hopkins	41.6	Marshall	12.6
	Barren	38.3	Boyle	12.2
	Boyle	38.3	Oldham	11.9
	Marshall	37.4	Henderson	11.6
	Knox	34.7	Barren	11.1
	Oldham	33.4	Graves	10.5
	Nelson	31.4	Calloway	10.5
	Logan	31.3	Hopkins	9.3
	Graves	31.0	Nelson	9.1
	Clark	26.1	Carter	8.7
	Meade	24.8	Clark	8.4
	Bell	23.0	Bell	8.1
	Calloway	21.9	Greenup	6.1
	Muhlenberg	20.9	Knox	5.9
	Whitley	20.7	Perry	5.7
	Perry	18.7	Muhlenberg	5.7
	Greenup	18.5	Whitley	3.8
	Floyd	10.5	Floyd	2.5
	Harlan	6.1	Letcher	1.9
	Letcher	6.0	Harlan	1.4
50,000 - OVER	Hardin	73.6	Hardin	26.4
	Fayette	49.2	Bullitt	20.2
	Campbell	43.4	Campbell	16.6
	Laurel	43.0	Jefferson	14.5
	Kenton	42.5	McCracken	13.6
	Daviess	37.1	Daviess	13.4
	Boone	36.7	Fayette	13.0
	Warren	36.4	Laurel	12.6
	McCracken	34.4	Kenton	10.7
	Madison	31.6	Boone	9.3
	Bullitt	26.6	Pulaski	7.1
	Christian	24.7	Warren	6.2
	Jefferson	23.5	Madison	4.9
	Pulaski	22.1	Christian	4.7
	Pike	5.1	Pike	0.6

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 (1997 - 2001)

Crash Statistic	Number in Given Year 1997	1998	1999	2000	4-Year Average 1997-2000	2001	2001 Percent Change*
Total Crashes	134,161	125,698	132,216	135,079	131,789	130,190	-1.2
Fatal Crashes	782	776	729	724**	762	759	-5.0
Fatalities	865	869	819	823**	851	843	-3.3
Injury Crashes	36,516	34,395	36,125	34,732	35,442	32,878	-7.2
Injuries	56,342	52,952	54,951	53,129	54,344	49,919	-8.1
Fatal and Injury Crashes	37,298	35,171	36,854	35,456	36,195	33,637	-7.1
Licensed Drivers (Millions)	2.57	2.63	2.67	2.75	2.66	2.80	5.5
Registered Vehicles (Millions)	3.01	3.20	3.15	3.29	3.16	3.30	4.3
Total Vehicle Miles (Billions)	44.863	46.577	47.816	46.680	46.484	46.255	-0.5
Total Crash/100 MVM	299	270	277	289	284	281	-0.8
Fatal Crash/100 MVM	1.74	1.67	1.52	1.55	1.62	1.57	-3.4
Fatalities/100 MVM	1.93	1.87	1.71	1.76	1.82	1.78	-2.1
Injuries/100 MVM	126	114	115	114	117	108	-7.9
Speed Related Crashes	10,435	9,099	9,112	9,633	9,570	8,310	-13.2
Speed Related Injury Crashes	4,488	4,030	3,990	3,682	4,048	3,122	-22.9
Speed Related Fatal Crashes	230	190	201	154	194	154	-20.5
Speed Convictions	89,572	98,662	103,696	90,863	95,698	85,565	-10.6
Alcohol Related Crashes	6,070	5,222	5,441	6,127	5,715	5,853	2.4
Alcohol Related Injury Crashes	2,949	2,482	2,592	2,903	2,732	2,633	-3.6
Alcohol Related Fatal Crashes	206	187	196	181	193	156	-19.0
Alcohol Related Fatalities	234	205	222	196	214	172	-19.7
DUI Arrests	40,567	42,100	43,254	49,470	43,848	48,892	11.5
DUI Convictions	32,106	32,837	31,263	31,243	31,862	30,583	-4.0
DUI Conviction Percentage	79.1	78.0	72.3	63.2	72.7	62.6	-13.9
DUI Arrests/ Alcohol Related Fatalities	173	205	195	252	206	284	38.5
Drug Related Crashes	***	***	756	990	873	1,206	38.1
Drug Related Injury Crashes	277	278	355	461	343	576	68.1
Drug Related Fatal Crashes	***	***	112	133	123	127	3.7
Pedestrian Related Crashes	1,190	1,077	1,117	1,124	1,127	977	-13.3
Pedestrian Related Injury Crashes	1,057	966	1,011	907	985	842	-14.5
Pedestrian Related Fatal Crashes	62	65	55	52	59	53	-9.4
Bicycle/Motor Vehicle Related Crashes	662	587	606	582	609	507	-16.8
Bicycle Related Injury Crashes	512	480	512	448	488	389	-20.3
Bicycle Related Fatal Crashes	10	9	10	4	8	8	-3.0
Motorcycle Related Crashes	736	835	1,033	1,110	929	1,283	38.2
Motorcycle Related Injury Crashes	565	647	774	797	696	910	30.8
Motorcycle Related Fatal Crashes	29	26	42	36	33	60	80.5
School Bus Crashes	822	775	648	932	794	906	14.1
School Bus Injury Crashes	150	144	110	149	138	141	2.0
School Bus Fatal Crashes	6	4	0	1	3	2	-27.3
Truck Crashes	8,249	7,670	7,642	10,276	8,459	9,134	8.0
Truck Injury Crashes	1,852	1,678	1,665	2,181	1,844	1,856	0.7
Truck Fatal Crashes	108	95	82	88	93	95	1.9
Train Crashes	57	70	57	59	61	64	5.3
Train Injury Crashes	23	25	16	18	21	18	-12.2
Train Fatal Crashes	4	3	2	4	3	5	53.8

* Percent change from 1997-2000 average to 2001.

** Includes 13 fatals on parking lots / private property.

*** Data for earlier years were not available. The 1999 and 2000 data include follow-up studies of drivers from FARS.

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	3	0.3	26	3.0	14	1.6	148	17.2
Allen	3	0.3	3	0.3	21	2.4	11	1.2	126	14.2
Anderson	15	1.6	8	0.8	22	2.3	29	3.0	146	15.3
Ballard	5	1.2	3	0.7	3	0.7	4	1.0	143	34.5
Barren	28	1.5	19	1.0	45	2.4	25	1.3	508	26.7
Bath	5	0.9	2	0.4	12	2.2	7	1.3	133	24.0
Bell	38	2.5	15	1.0	24	1.6	31	2.1	281	18.7
Boone	89	2.1	63	1.5	114	2.7	86	2.0	1875	43.6
Bourbon	21	2.2	9	0.9	21	2.2	26	2.7	234	24.2
Boyd	57	2.3	33	1.3	100	4.0	48	1.9	694	27.9
Boyle	24	1.7	15	1.1	26	1.9	20	1.4	287	20.7
Bracken	8	1.9	2	0.5	9	2.2	5	1.2	69	16.7
Breathitt	18	2.2	3	0.4	38	4.7	30	3.7	146	18.1
Breckinridge	8	0.9	4	0.4	13	1.4	6	0.6	94	10.1
Bullitt	40	1.3	11	0.4	57	1.9	57	1.9	589	19.2
Butler	8	1.2	0	0.0	9	1.4	10	1.5	76	11.7
Caldwell	8	1.2	6	0.9	15	2.3	5	0.8	142	21.7
Calloway	21	1.2	12	0.7	40	2.3	25	1.5	232	13.6
Campbell	213	4.8	135	3.0	101	2.3	67	1.5	895	20.2
Carlisle	0	0.0	0	0.0	4	1.5	1	0.4	35	13.1
Carroll	9	1.8	13	2.6	16	3.2	11	2.2	251	49.4
Carter	17	1.3	3	0.2	43	3.2	35	2.6	314	23.4
Casey	8	1.0	2	0.3	15	1.9	9	1.2	90	11.7
Christian	90	2.5	57	1.6	72	2.0	98	2.7	755	20.9
Clark	41	2.5	17	1.0	46	2.8	48	2.9	422	25.5
Clay	13	1.1	6	0.5	22	1.8	32	2.6	146	11.9
Clinton	5	1.0	0	0.0	3	0.6	4	0.8	55	11.4
Crittenden	11	2.3	0	0.0	13	2.8	13	2.8	77	16.4
Cumberland	4	1.1	0	0.0	3	0.8	3	0.8	30	8.4
Daviess	109	2.4	139	3.0	132	2.9	67	1.5	930	20.3
Edmonson	10	1.7	0	0.0	15	2.6	12	2.1	59	10.1
Elliott	6	1.8	0	0.0	15	4.4	3	0.9	41	12.2
Estill	14	1.8	6	0.8	19	2.5	17	2.2	66	8.6
Fayette	632	4.9	363	2.8	313	2.4	278	2.1	3463	26.6
Fleming	8	1.2	1	0.1	10	1.5	11	1.6	98	14.2
Floyd	46	2.2	6	0.3	81	3.8	87	4.1	416	19.6
Franklin	43	1.8	24	1.0	58	2.4	56	2.3	426	17.9
Fulton	7	1.8	11	2.8	10	2.6	5	1.3	103	26.6
Gallatin	9	2.3	4	1.0	15	3.8	4	1.0	158	40.2
Garrard	15	2.0	4	0.5	20	2.7	18	2.4	110	14.9
Grant	28	2.5	7	0.6	40	3.6	37	3.3	429	38.3
Graves	25	1.4	13	0.7	44	2.4	28	1.5	352	19.0
Grayson	21	1.7	4	0.3	26	2.2	21	1.7	214	17.8
Green	3	0.5	1	0.2	13	2.3	9	1.6	68	11.8
Greenup	15	0.8	19	1.0	36	2.0	20	1.1	208	11.3
Hancock	1	0.2	1	0.2	4	1.0	7	1.7	88	21.0
Hardin	58	1.2	47	1.0	108	2.3	76	1.6	982	20.9
Harlan	52	3.1	11	0.7	32	1.9	25	1.5	314	18.9
Harrison	22	2.4	11	1.2	14	1.6	15	1.7	139	15.5
Hart	15	1.7	4	0.5	11	1.3	16	1.8	321	36.8
Henderson	83	3.7	63	2.8	70	3.1	47	2.1	636	28.4
Henry	12	1.6	6	0.8	15	2.0	15	2.0	260	34.5
Hickman	5	1.9	1	0.4	6	2.3	2	0.8	42	16.0
Hopkins	40	1.7	36	1.5	87	3.7	32	1.4	544	23.4
Jackson	6	0.9	0	0.0	14	2.1	16	2.4	56	8.3
Jefferson	1742	5.0	943	2.7	879	2.5	892	2.6	8675	25.0
Jessamine	53	2.7	30	1.5	42	2.2	82	4.2	395	20.2
Johnson	10	0.9	6	0.5	35	3.0	22	1.9	147	12.5
Kenton	400	5.3	165	2.2	155	2.0	152	2.0	2173	28.7
Knott	10	1.1	4	0.5	26	2.9	24	2.7	174	19.7

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	25	1.6	17	1.1	40	2.5	34	2.1	213	13.4
Larue	8	1.2	1	0.1	10	1.5	6	0.9	146	21.8
Laurel	31	1.2	15	0.6	51	1.9	60	2.3	789	29.9
Lawrence	12	1.5	5	0.6	13	1.7	11	1.4	160	20.6
Lee	5	1.3	0	0.0	2	0.5	6	1.5	28	7.1
Leslie	9	1.5	3	0.5	21	3.4	16	2.6	142	22.9
Letcher	15	1.2	5	0.4	38	3.0	29	2.3	345	27.3
Lewis	13	1.8	2	0.3	6	0.9	12	1.7	132	18.7
Lincoln	10	0.9	5	0.4	21	1.8	9	0.8	148	12.7
Livingston	5	1.0	6	1.2	8	1.6	6	1.2	82	16.7
Logan	23	1.7	17	1.3	31	2.3	23	1.7	338	25.4
Lyon	2	0.5	1	0.2	18	4.5	1	0.2	140	34.7
McCracken	73	2.2	60	1.8	128	3.9	67	2.0	825	25.2
McCreary	8	0.9	5	0.6	15	1.8	14	1.6	87	10.2
McLean	4	0.8	6	1.2	14	2.8	10	2.0	109	21.9
Madison	63	1.8	40	1.1	90	2.5	82	2.3	957	27.0
Magoffin	10	1.5	2	0.3	13	2.0	10	1.5	68	10.2
Marion	24	2.6	13	1.4	25	2.7	9	1.0	134	14.7
Marshall	10	0.7	10	0.7	43	2.9	14	0.9	312	20.7
Martin	8	1.3	0	0.0	9	1.4	7	1.1	109	17.3
Mason	20	2.4	15	1.8	30	3.6	19	2.3	308	36.7
Meade	9	0.7	6	0.5	21	1.6	12	0.9	103	7.8
Menifee	4	1.2	1	0.3	6	1.8	4	1.2	24	7.3
Mercer	23	2.2	8	0.8	29	2.8	15	1.4	175	16.8
Metcalfe	6	1.2	0	0.0	8	1.6	14	2.8	100	19.9
Monroe	7	1.2	2	0.3	6	1.0	6	1.0	60	10.2
Montgomery	26	2.3	4	0.4	33	2.9	29	2.6	223	19.8
Morgan	4	0.6	3	0.4	18	2.6	16	2.3	72	10.3
Muhlenberg	18	1.1	9	0.6	51	3.2	27	1.7	368	23.1
Nelson	31	1.7	21	1.1	51	2.7	36	1.9	310	16.5
Nicholas	2	0.6	0	0.0	7	2.1	2	0.6	41	12.0
Ohio	6	0.5	5	0.4	22	1.9	15	1.3	226	19.7
Oldham	19	0.8	8	0.3	31	1.3	45	1.9	391	16.9
Owen	6	1.1	0	0.0	14	2.7	4	0.8	68	12.9
Owsley	3	1.2	1	0.4	3	1.2	6	2.5	28	11.5
Pendleton	7	1.0	0	0.0	28	3.9	14	1.9	156	21.7
Perry	40	2.7	9	0.6	39	2.7	52	3.5	432	29.4
Pike	77	2.2	11	0.3	174	5.1	77	2.2	1242	36.1
Powell	11	1.7	3	0.5	14	2.1	12	1.8	115	17.4
Pulaski	44	1.6	21	0.7	61	2.2	41	1.5	525	18.7
Robertson	3	2.6	0	0.0	2	1.8	0	0.0	4	3.5
Rockcastle	9	1.1	2	0.2	21	2.5	21	2.5	321	38.7
Rowan	19	1.7	11	1.0	35	3.2	21	1.9	228	20.6
Russell	8	1.0	0	0.0	17	2.1	5	0.6	98	12.0
Scott	27	1.6	19	1.1	43	2.6	34	2.1	613	37.1
Shelby	40	2.4	15	0.9	36	2.2	37	2.2	468	28.1
Simpson	13	1.6	8	1.0	12	1.5	4	0.5	398	48.5
Spencer	7	1.2	3	0.5	18	3.1	13	2.2	61	10.4
Taylor	15	1.3	14	1.2	24	2.1	12	1.0	139	12.1
Todd	13	2.2	1	0.2	15	2.5	5	0.8	107	17.9
Trigg	6	1.0	0	0.0	21	3.3	5	0.8	111	17.6
Trimble	4	1.0	1	0.2	15	3.7	8	2.0	85	20.9
Union	18	2.3	6	0.8	25	3.2	12	1.5	167	21.4
Warren	113	2.4	74	1.6	139	3.0	85	1.8	1284	27.8
Washington	12	2.2	1	0.2	15	2.7	18	3.3	104	19.1
Wayne	14	1.4	8	0.8	12	1.2	19	1.9	90	9.0
Webster	4	0.6	7	1.0	15	2.1	12	1.7	223	31.6
Whitley	31	1.7	15	0.8	42	2.3	32	1.8	437	24.4
Wolfe	9	2.5	3	0.8	6	1.7	7	2.0	69	19.5
Woodford	24	2.1	7	0.6	21	1.8	22	1.9	267	23.0

* Five-Year (1997-2001) Total.

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

TABLE 43. PEDESTRIAN CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)(ALL ROADS)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Robertson	3	2.6
Wolfe	9	2.5
Gallatin	9	2.3
Crittenden	11	2.3
Hickman	5	1.9
Bracken	8	1.9
Elliott	6	1.8
Fulton	7	1.8
Lee	5	1.3
Owsley	3	1.2
Ballard	5	1.2
Menifee	4	1.2
Cumberland	4	1.1
Clinton	5	1.0
Trimble	4	1.0
Livingston	5	1.0
McLean	4	0.8
Nicholas	2	0.6
Lyon	2	0.5
Hancock	1	0.2
Carlisle	0	0.0
POPULATION CATEGORY 10,000-14,999		
Todd	13	2.2
Washington	12	2.2
Garrard	15	2.0
Lewis	13	1.8
Carroll	9	1.8
Edmonson	10	1.7
Powell	11	1.7
Magoffin	10	1.5
Leslie	9	1.5
Martin	8	1.3
Larue	8	1.2
Fleming	8	1.2
Caldwell	8	1.2
Butler	8	1.2
Metcalfe	6	1.2
Spencer	7	1.2
Monroe	7	1.2
Owen	6	1.1
Trigg	6	1.0
Pendleton	7	1.0
Bath	5	0.9
Jackson	6	0.9
Morgan	4	0.6
Webster	4	0.6
Green	3	0.5
POPULATION CATEGORY 15,000-24,999		
Marion	24	2.6
Grant	28	2.5
Harrison	22	2.4
Mason	20	2.4
Union	18	2.3
Montgomery	26	2.3
Breathitt	18	2.2
Mercer	23	2.2
Bourbon	21	2.2
Woodford	24	2.1
Estill	14	1.8
Rowan	19	1.7
Hart	15	1.7
Grayson	21	1.7
Anderson	15	1.6
Henry	12	1.6
Simpson	13	1.6
Lawrence	12	1.5
Wayne	14	1.4
Adair	12	1.4
Taylor	15	1.3
Rockcastle	9	1.1
Knott	10	1.1
Clay	13	1.1
Russell	8	1.0
Casey	8	1.0
Lincoln	10	0.9
McCreary	8	0.9
Breckinridge	8	0.9
Johnson	10	0.9
Ohio	6	0.5
Allen	3	0.3
POPULATION CATEGORY 25,000-50,000		
Henderson	83	3.7
Harlan	52	3.1
Perry	40	2.7
Jessamine	53	2.7
Clark	41	2.5
Bell	38	2.5
Shelby	40	2.4
Boyd	57	2.3
Floyd	46	2.2
Franklin	43	1.8
Logan	23	1.7
Whitley	31	1.7
Nelson	31	1.7
Hopkins	40	1.7
Boyle	24	1.7
Scott	27	1.6
Knox	25	1.6
Barren	28	1.5
Graves	25	1.4
Carter	17	1.3
Calloway	21	1.2
Letcher	15	1.2
Muhlenberg	18	1.1
Oldham	19	0.8
Greenup	15	0.8
Marshall	10	0.7
Meade	9	0.7
POPULATION CATEGORY OVER 50,000		
Kenton	400	5.3
Jefferson	1,742	5.0
Fayette	632	4.9
Campbell	213	4.8
Christian	90	2.5
Daviess	109	2.4
Warren	113	2.4
McCracken	73	2.2
Pike	77	2.2
Boone	89	2.1
Madison	63	1.8
Pulaski	44	1.6
Bullitt	40	1.3
Hardin	58	1.2
Laurel	31	1.2

TABLE 44. PEDESTRIAN CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	994	7.8
Lexington	515	4.0
POPULATION CATEGORY 20,000-55,000		
Covington	235	10.8
Hopkinsville	61	4.1
Henderson	55	4.0
Florence	39	3.3
Paducah	42	3.2
Bowling Green	73	3.0
Ashland	31	2.8
Owensboro	73	2.7
Frankfort	30	2.2
Richmond	30	2.2
Elizabethtown	17	1.5
Radcliff	15	1.4
Jeffersontown	16	1.2
POPULATION CATEGORY 10,000-19,999		
Newport	102	12.0
Shively	46	6.1
Shelbyville	23	4.6
Nicholasville	39	4.0
Winchester	29	3.5
Bardstown	17	3.3
Somerset	19	3.3
Mayfield	15	2.9
Madisonville	24	2.5
Campbellsville	13	2.5
Erlanger	19	2.3
Danville	18	2.3
Independence	17	2.3
Middlesboro	11	2.1
Saint Matthews	17	2.1
Fort Thomas	16	1.9
Georgetown	17	1.9
Glasgow	12	1.8
Murray	5	0.7
POPULATION CATEGORY 5,000-9,999		
Pikeville	20	6.4
Mount Sterling	15	5.1
Dayton	15	5.0
Harrodsburg	18	4.5
Cynthiana	13	4.2
Morehead	12	4.1
Versailles	15	4.0
Fort Wright	11	3.9
Lebanon	11	3.8
Paris	16	3.5
Corbin	13	3.4
Maysville	15	3.3
London	9	3.2
Russellville	11	3.1
Bellevue	10	3.1
Monticello	9	3.0
Leitchfield	9	2.9
Elsmere	11	2.7
Franklin	9	2.3
Shepherdsville	8	1.9
Lawrenceburg	8	1.8
La Grange	5	1.8
Princeton	6	1.8
Fort Mitchell	7	1.7
Mount Washington	7	1.6
Flatwoods	6	1.6
Berea	7	1.4
Edgewood	6	1.3
Taylor Mill	4	1.2
Highland Heights	3	0.9
Williamsburg	2	0.8
Central City	2	0.7
Villa Hills	2	0.5
Alexandria	1	0.2
POPULATION CATEGORY 2,500-4,999		
Springfield	9	6.8
Hazard	15	6.2
Lancaster	10	5.4
Irvine	7	4.9
Williamstown	7	4.3
Hodgenville	6	4.2
Lakeside Park	6	4.2
Ludlow	9	4.1
Morganfield	7	4.0
Marion	6	3.8
Tompkinsville	5	3.8
Prestonsburg	6	3.3
Barbourville	6	3.3
Grayson	6	3.1
Cold Spring	5	2.6
Columbia	5	2.5
Mount Vernon	3	2.3
Greenville	5	2.3
Fulton	3	2.2
Paintsville	4	1.9
Carrollton	3	1.6
Russell	3	1.6
Flemingsburg	2	1.3
Dawson Springs	2	1.3
Stanton	2	1.3
Southgate	2	1.2
Benton	2	1.0
Scottsville	2	0.9
Hickman	1	0.8
Cumberland	1	0.8
Calvert City	1	0.7
Park Hills	1	0.7
Stanford	1	0.6

TABLE 45. BICYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Fulton	11	2.8
McLean	6	1.2
Livingston	6	1.2
Gallatin	4	1.0
Wolfe	3	0.8
Ballard	3	0.7
Bracken	2	0.5
Hickman	1	0.4
Owsley	1	0.4
Menifee	1	0.3
Lyon	1	0.2
Trimble	1	0.2
Hancock	1	0.2
Crittenden	0	0.0
Nicholas	0	0.0
Elliott	0	0.0
Lee	0	0.0
Carlisle	0	0.0
Clinton	0	0.0
Cumberland	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Carroll	13	2.6
Webster	7	1.0
Caldwell	6	0.9
Garrard	4	0.5
Spencer	3	0.5
Leslie	3	0.5
Powell	3	0.5
Bath	2	0.4
Morgan	3	0.4
Monroe	2	0.3
Magoffin	2	0.3
Lewis	2	0.3
Washington	1	0.2
Todd	1	0.2
Green	1	0.2
Larue	1	0.1
Fleming	1	0.1
Martin	0	0.0
Butler	0	0.0
Edmonson	0	0.0
Jackson	0	0.0
Pendleton	0	0.0
Owen	0	0.0
Trigg	0	0.0
Metcalfe	0	0.0
POPULATION CATEGORY 15,000-24,999		
Mason	15	1.8
Marion	13	1.4
Harrison	11	1.2
Taylor	14	1.2
Simpson	8	1.0
Rowan	11	1.0
Bourbon	9	0.9
Henry	6	0.8
Estill	6	0.8
Mercer	8	0.8
Wayne	8	0.8
Union	6	0.8
Anderson	8	0.8
Grant	7	0.6
Lawrence	5	0.6
Woodford	7	0.6
McCreary	5	0.6
Hart	4	0.5
Knott	4	0.5
Clay	6	0.5
Johnson	6	0.5
Montgomery	4	0.4
Lincoln	5	0.4
Ohio	5	0.4
Breathitt	3	0.4
Breckinridge	4	0.4
Adair	3	0.3
Grayson	4	0.3
Allen	3	0.3
Casey	2	0.3
Rockcastle	2	0.2
Russell	0	0.0
POPULATION CATEGORY 25,000-50,000		
Henderson	63	2.8
Jessamine	30	1.5
Hopkins	36	1.5
Boyd	33	1.3
Logan	17	1.3
Boyle	15	1.1
Nelson	21	1.1
Scott	19	1.1
Knox	17	1.1
Franklin	24	1.0
Barren	19	1.0
Greenup	19	1.0
Bell	15	1.0
Clark	17	1.0
Shelby	15	0.9
Whitley	15	0.8
Harlan	11	0.7
Calloway	12	0.7
Graves	13	0.7
Marshall	10	0.7
Muhlenberg	9	0.6
Perry	9	0.6
Meade	6	0.5
Letcher	5	0.4
Floyd	6	0.3
Oldham	8	0.3
Carter	3	0.2
POPULATION CATEGORY OVER 50,000		
Campbell	135	3.0
Daviess	139	3.0
Fayette	363	2.8
Jefferson	943	2.7
Kenton	165	2.2
McCracken	60	1.8
Warren	74	1.6
Christian	57	1.6
Boone	63	1.5
Madison	40	1.1
Hardin	47	1.0
Pulaski	21	0.7
Laurel	15	0.6
Bullitt	11	0.4
Pike	11	0.3

TABLE 46. BICYCLE CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	573	4.5
Lexington	288	2.2
POPULATION CATEGORY 20,000-55,000		
Covington	89	4.1
Henderson	50	3.7
Owensboro	95	3.5
Paducah	38	2.9
Florence	34	2.9
Hopkinsville	41	2.7
Ashland	22	2.0
Bowling Green	48	1.9
Elizabethtown	20	1.8
Richmond	21	1.5
Jeffersontown	16	1.2
Frankfort	16	1.2
Radcliff	9	0.8
POPULATION CATEGORY 10,000-19,999		
Newport	67	7.9
Shively	24	3.2
Bardstown	15	2.9
Madisonville	26	2.7
Erlanger	21	2.5
Campbellsville	11	2.1
Nicholasville	20	2.0
Middlesboro	10	1.9
Shelbyville	9	1.8
Glasgow	11	1.7
Winchester	13	1.6
Danville	12	1.6
Mayfield	8	1.5
Somerset	6	1.1
Saint Matthews	9	1.1
Murray	7	0.9
Fort Thomas	7	0.8
Georgetown	7	0.8
Independence	4	0.5
POPULATION CATEGORY 5,000-9,999		
Bellevue	16	4.9
Lebanon	10	3.5
Corbin	12	3.1
Monticello	9	3.0
Cynthiana	9	2.9
Russellville	10	2.8
Maysville	12	2.7
London	7	2.5
Morehead	6	2.0
Berea	9	1.8
Franklin	7	1.8
Princeton	6	1.8
Versailles	6	1.6
Harrodsburg	6	1.5
Elsmere	6	1.5
Paris	7	1.5
Highland Heights	5	1.5
Central City	4	1.4
Dayton	4	1.3
Flatwoods	4	1.1
Lawrenceburg	5	1.1
Fort Mitchell	3	0.7
Shepherdsville	3	0.7
Fort Wright	2	0.7
Pikeville	2	0.6
Edgewood	3	0.6
Alexandria	2	0.5
Villa Hills	2	0.5
Williamsburg	1	0.4
Mount Sterling	1	0.3
Taylor Mill	1	0.3
Wilmore	1	0.3
Leitchfield	1	0.3
Mount Washington	1	0.2
POPULATION CATEGORY 2,500-4,999		
Fulton	6	4.3
Carrollton	8	4.2
Providence	7	3.9
Morganfield	4	2.3
Hickman	3	2.3
Russell	4	2.2
Irvine	3	2.1
Greenville	4	1.8
Ludlow	4	1.8
Mount Vernon	2	1.5
Calvert City	2	1.5
Dawson Springs	2	1.3
Stanford	2	1.2
Southgate	2	1.2
Cold Spring	2	1.1
Grayson	2	1.0
Columbia	2	1.0
Vine Grove	2	1.0
Tompkinsville	1	0.8
Cumberland	1	0.8
Beaver Dam	1	0.7
Stanton	1	0.7
Park Hills	1	0.7
Hodgenville	1	0.7
Barbourville	1	0.6
Williamstown	1	0.6
Lancaster	1	0.5
Benton	1	0.5
Scottsville	1	0.5
Paintsville	1	0.5

TABLE 47. MOTORCYCLE CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Lyon	18	4.5
Elliott	15	4.4
Gallatin	15	3.8
Trimble	15	3.7
McLean	14	2.8
Crittenden	13	2.8
Fulton	10	2.6
Hickman	6	2.3
Bracken	9	2.2
Nicholas	7	2.1
Robertson	2	1.8
Menifee	6	1.8
Wolfe	6	1.7
Livingston	8	1.6
Carlisle	4	1.5
Owsley	3	1.2
Hancock	4	1.0
Cumberland	3	0.8
Ballard	3	0.7
Clinton	3	0.6
Lee	2	0.5
POPULATION CATEGORY 10,000-14,999		
Pendleton	28	3.9
Leslie	21	3.4
Trigg	21	3.3
Carroll	16	3.2
Spencer	18	3.1
Garrard	20	2.7
Owen	14	2.7
Washington	15	2.7
Morgan	18	2.6
Edmonson	15	2.6
Todd	15	2.5
Green	13	2.3
Caldwell	15	2.3
Bath	12	2.2
Powell	14	2.1
Jackson	14	2.1
Webster	15	2.1
Magoffin	13	2.0
Metcalfe	8	1.6
Fleming	10	1.5
Larue	10	1.5
Martin	9	1.4
Butler	9	1.4
Monroe	6	1.0
Lewis	6	0.9
POPULATION CATEGORY 15,000-24,999		
Breathitt	38	4.7
Grant	40	3.6
Mason	30	3.6
Rowan	35	3.2
Union	25	3.2
Johnson	35	3.0
Adair	26	3.0
Knott	26	2.9
Montgomery	33	2.9
Mercer	29	2.8
Marion	25	2.7
Estill	19	2.5
Rockcastle	21	2.5
Allen	21	2.4
Anderson	22	2.3
Bourbon	21	2.2
Grayson	26	2.2
Russell	17	2.1
Taylor	24	2.1
Henry	15	2.0
Casey	15	1.9
Ohio	22	1.9
McCreary	15	1.8
Clay	22	1.8
Lincoln	21	1.8
Woodford	21	1.8
Lawrence	13	1.7
Harrison	14	1.6
Simpson	12	1.5
Breckinridge	13	1.4
Hart	11	1.3
Wayne	12	1.2
POPULATION CATEGORY 25,000-50,000		
Boyd	100	4.0
Floyd	81	3.8
Hopkins	87	3.7
Carter	43	3.2
Muhlenberg	51	3.2
Henderson	70	3.1
Letcher	38	3.0
Marshall	43	2.9
Clark	46	2.8
Nelson	51	2.7
Perry	39	2.7
Scott	43	2.6
Knox	40	2.5
Graves	44	2.4
Barren	45	2.4
Franklin	58	2.4
Logan	31	2.3
Calloway	40	2.3
Whitley	42	2.3
Shelby	36	2.2
Jessamine	42	2.2
Greenup	36	2.0
Boyle	26	1.9
Harlan	32	1.9
Meade	21	1.6
Bell	24	1.6
Oldham	31	1.3
POPULATION CATEGORY OVER 50,000		
Pike	174	5.1
McCracken	128	3.9
Warren	139	3.0
Daviess	132	2.9
Boone	114	2.7
Jefferson	879	2.5
Madison	90	2.5
Fayette	313	2.4
Campbell	101	2.3
Hardin	108	2.3
Pulaski	61	2.2
Christian	72	2.0
Kenton	155	2.0
Bullitt	57	1.9
Laurel	51	1.9

TABLE 48. MOTORCYCLE CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	369	2.9
Lexington	225	1.7
POPULATION CATEGORY 20,000-55,000		
Paducah	55	4.2
Ashland	39	3.5
Bowling Green	64	2.6
Henderson	35	2.6
Elizabethtown	26	2.3
Richmond	29	2.1
Owensboro	55	2.0
Florence	23	2.0
Frankfort	23	1.7
Covington	37	1.7
Hopkinsville	21	1.4
Radcliff	14	1.3
Jeffersontown	13	1.0
POPULATION CATEGORY 10,000-19,999		
Madisonville	37	3.8
Newport	25	2.9
Glasgow	18	2.8
Shively	20	2.6
Winchester	22	2.6
Erlanger	21	2.5
Somerset	14	2.5
Bardstown	10	1.9
Campbellsville	9	1.7
Danville	10	1.3
Independence	10	1.3
Murray	10	1.3
Shelbyville	6	1.2
Georgetown	10	1.1
Nicholasville	11	1.1
Middlesboro	5	1.0
Mayfield	4	0.8
Fort Thomas	5	0.6
Saint Matthews	4	0.5
POPULATION CATEGORY 5,000-9,999		
Pikeville	19	6.0
Russellville	15	4.2
Morehead	10	3.4
London	7	2.5
Paris	11	2.4
Central City	7	2.4
Corbin	9	2.3
Harrodsburg	9	2.2
Fort Mitchell	9	2.2
Shepherdsville	8	1.9
Mount Sterling	5	1.7
Dayton	5	1.7
Alexandria	7	1.7
Maysville	7	1.6
Franklin	6	1.5
Lebanon	4	1.4
Fort Wright	4	1.4
Versailles	5	1.3
Leitchfield	4	1.3
Cynthiana	4	1.3
Princeton	4	1.2
Williamsburg	3	1.2
Villa Hills	4	1.0
Monticello	3	1.0
Taylor Mill	3	0.9
Highland Heights	3	0.9
Lawrenceburg	4	0.9
Mount Washington	4	0.9
La Grange	2	0.7
Bellevue	2	0.6
Elsmere	2	0.5
Edgewood	2	0.4
Berea	2	0.4
Flatwoods	1	0.3
POPULATION CATEGORY 2,500-4,999		
Prestonsburg	8	4.4
Mount Vernon	5	3.9
Cold Spring	7	3.7
Carrollton	6	3.1
Cumberland	4	3.1
Columbia	6	3.0
Calvert City	4	3.0
Providence	5	2.8
Dawson Springs	4	2.7
Williamstown	4	2.5
Paintsville	5	2.4
Scottsville	5	2.3
Russell	4	2.2
Hazard	5	2.1
Lakeside Park	3	2.1
Hodgenville	3	2.1
Beaver Dam	3	2.0
Marion	3	1.9
Greenville	4	1.8
Stanford	3	1.7
Lancaster	3	1.6
Hartford	2	1.6
Grayson	3	1.5
Springfield	2	1.5
Tompkinsville	2	1.5
Benton	3	1.4
Irvine	2	1.4
Fulton	2	1.4
Southgate	2	1.2
Barbourville	2	1.1
Flemingsburg	1	0.7

TABLE 49. SCHOOL BUS CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Crittenden	13	2.8
Owsley	6	2.5
McLean	10	2.0
Wolfe	7	2.0
Trimble	8	2.0
Hancock	7	1.7
Lee	6	1.5
Fulton	5	1.3
Bracken	5	1.2
Menifee	4	1.2
Livingston	6	1.2
Ballard	4	1.0
Gallatin	4	1.0
Elliott	3	0.9
Cumberland	3	0.8
Clinton	4	0.8
Hickman	2	0.8
Nicholas	2	0.6
Carlisle	1	0.4
Lyon	1	0.2
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Washington	18	3.3
Metcalfe	14	2.8
Leslie	16	2.6
Garrard	18	2.4
Jackson	16	2.4
Morgan	16	2.3
Carroll	11	2.2
Spencer	13	2.2
Edmonson	12	2.1
Pendleton	14	1.9
Powell	12	1.8
Webster	12	1.7
Lewis	12	1.7
Fleming	11	1.6
Green	9	1.6
Magoffin	10	1.5
Butler	10	1.5
Bath	7	1.3
Martin	7	1.1
Monroe	6	1.0
Larue	6	0.9
Caldwell	5	0.8
Owen	4	0.8
Todd	5	0.8
Trigg	5	0.8
POPULATION CATEGORY 15,000-24,999		
Breathitt	30	3.7
Grant	37	3.3
Anderson	29	3.0
Knott	24	2.7
Bourbon	26	2.7
Montgomery	29	2.6
Clay	32	2.6
Rockcastle	21	2.5
Mason	19	2.3
Estill	17	2.2
Henry	15	2.0
Wayne	19	1.9
Johnson	22	1.9
Rowan	21	1.9
Woodford	22	1.9
Hart	16	1.8
Grayson	21	1.7
Harrison	15	1.7
McCreary	14	1.6
Adair	14	1.6
Union	12	1.5
Lawrence	11	1.4
Mercer	15	1.4
Ohio	15	1.3
Casey	9	1.2
Allen	11	1.2
Taylor	12	1.0
Marion	9	1.0
Lincoln	9	0.8
Breckinridge	6	0.6
Russell	5	0.6
Simpson	4	0.5
POPULATION CATEGORY 25,000-50,000		
Jessamine	82	4.2
Floyd	87	4.1
Perry	52	3.5
Clark	48	2.9
Carter	35	2.6
Franklin	56	2.3
Letcher	29	2.3
Shelby	37	2.2
Bell	31	2.1
Knox	34	2.1
Scott	34	2.1
Henderson	47	2.1
Nelson	36	1.9
Boyd	48	1.9
Oldham	45	1.9
Whitley	32	1.8
Muhlenberg	27	1.7
Logan	23	1.7
Calloway	25	1.5
Harlan	25	1.5
Graves	28	1.5
Boyle	20	1.4
Hopkins	32	1.4
Barren	25	1.3
Greenup	20	1.1
Marshall	14	0.9
Meade	12	0.9
POPULATION CATEGORY OVER 50,000		
Christian	98	2.7
Jefferson	892	2.6
Laurel	60	2.3
Madison	82	2.3
Pike	77	2.2
Fayette	278	2.1
Boone	86	2.0
Kenton	152	2.0
McCracken	67	2.0
Bullitt	57	1.9
Warren	85	1.8
Hardin	76	1.6
Campbell	67	1.5
Daviess	67	1.5
Pulaski	41	1.5

TABLE 50. SCHOOL BUS CRASH RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1997-2001)

CITY	NUMBER OF CRASHES (1997-2001)	ANNUAL CRASH RATE (CRASHES PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	411	3.2
Lexington	230	1.8
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	59	3.9
Ashland	28	2.5
Paducah	30	2.3
Frankfort	31	2.2
Richmond	28	2.1
Bowling Green	49	2.0
Florence	23	2.0
Covington	39	1.8
Henderson	20	1.5
Radcliff	16	1.5
Elizabethtown	16	1.4
Jeffersontown	15	1.1
Owensboro	24	0.9
POPULATION CATEGORY 10,000-19,999		
Nicholasville	39	4.0
Shively	28	3.7
Winchester	27	3.2
Shelbyville	15	3.0
Independence	20	2.7
Somerset	13	2.3
Mayfield	10	1.9
Bardstown	10	1.9
Madisonville	17	1.8
Georgetown	15	1.7
Middlesboro	8	1.5
Campbellsville	7	1.3
Danville	9	1.2
Murray	9	1.2
Glasgow	7	1.1
Newport	9	1.1
Erlanger	9	1.1
Saint Matthews	5	0.6
Fort Thomas	3	0.4
POPULATION CATEGORY 5,000-9,999		
London	12	4.2
Morehead	12	4.1
Monticello	12	4.0
Pikeville	12	3.8
Taylor Mill	12	3.5
Mount Sterling	9	3.1
Alexandria	12	2.9
Versailles	11	2.9
Maysville	12	2.7
Paris	11	2.4
Lawrenceburg	10	2.2
Russellville	8	2.2
Cynthiana	7	2.2
La Grange	6	2.1
Williamsburg	5	1.9
Villa Hills	7	1.8
Central City	5	1.7
Harrodsburg	6	1.5
Edgewood	7	1.5
Shepherdsville	6	1.4
Wilmore	4	1.4
Corbin	5	1.3
Mount Washington	5	1.2
Fort Wright	3	1.1
Dayton	3	1.0
Berea	4	0.8
Lebanon	2	0.7
Leitchfield	2	0.7
Highland Heights	2	0.6
Bellevue	2	0.6
Fort Mitchell	2	0.5
Franklin	1	0.3
Princeton	1	0.3
Flatwoods	1	0.3
Elsmere	1	0.2
POPULATION CATEGORY 2,500-4,999		
Irvine	7	4.9
Lancaster	8	4.3
Tompkinsville	5	3.8
Hazard	9	3.7
Barbourville	6	3.3
Columbia	6	3.0
Scottsville	6	2.8
Williamstown	4	2.5
Morganfield	4	2.3
Prestonsburg	4	2.2
Carrollton	4	2.1
Grayson	4	2.1
Beaver Dam	3	2.0
Paintsville	3	1.5
Lakeside Park	2	1.4
Benton	3	1.4
Vine Grove	3	1.4
Flemingsburg	2	1.3
Providence	2	1.1
Ludlow	2	0.9
Greenville	2	0.9
Cumberland	1	0.8
Dawson Springs	1	0.7
Fulton	1	0.7
Southgate	1	0.6
Marion	1	0.6
Stanford	1	0.6

TABLE 51. TRUCK CRASH RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Gallatin	158	40.2
Lyon	140	34.7
Ballard	143	34.5
Fulton	103	26.6
McLean	109	21.9
Hancock	88	21.0
Trimble	85	20.9
Wolfe	69	19.5
Bracken	69	16.7
Livingston	82	16.7
Crittenden	77	16.4
Hickman	42	16.0
Carlisle	35	13.1
Elliott	41	12.2
Nicholas	41	12.0
Owsley	28	11.5
Clinton	55	11.4
Cumberland	30	8.4
Menifee	24	7.3
Lee	28	7.1
Robertson	4	3.5
POPULATION CATEGORY 10,000-14,999		
Carroll	251	49.4
Webster	223	31.6
Bath	133	24.0
Leslie	142	22.9
Larue	146	21.8
Pendleton	156	21.7
Caldwell	142	21.7
Metcalfe	100	19.9
Washington	104	19.1
Lewis	132	18.7
Todd	107	17.9
Trigg	111	17.6
Powell	115	17.4
Martin	109	17.3
Garrard	110	14.9
Fleming	98	14.2
Owen	68	12.9
Green	68	11.8
Butler	76	11.7
Spencer	61	10.4
Morgan	72	10.3
Monroe	60	10.2
Magoffin	68	10.2
Edmonson	59	10.1
Jackson	56	8.3
POPULATION CATEGORY 15,000-24,999		
Simpson	398	48.5
Rockcastle	321	38.7
Grant	429	38.3
Hart	321	36.8
Mason	308	36.7
Henry	260	34.5
Bourbon	234	24.2
Woodford	267	23.0
Union	167	21.4
Rowan	228	20.6
Lawrence	160	20.6
Montgomery	223	19.8
Ohio	226	19.7
Knott	174	19.7
Breathitt	146	18.1
Grayson	214	17.8
Adair	148	17.2
Mercer	175	16.8
Harrison	139	15.5
Anderson	146	15.3
Marion	134	14.7
Allen	126	14.2
Lincoln	148	12.7
Johnson	147	12.5
Taylor	139	12.1
Russell	98	12.0
Clay	146	11.9
Casey	90	11.7
McCreary	87	10.2
Breckinridge	94	10.1
Wayne	90	9.0
Estill	66	8.6
POPULATION CATEGORY 25,000-50,000		
Scott	613	37.1
Perry	432	29.4
Henderson	636	28.4
Shelby	468	28.1
Boyd	694	27.9
Letcher	345	27.3
Barren	508	26.7
Clark	422	25.5
Logan	338	25.4
Whitley	437	24.4
Hopkins	544	23.4
Carter	314	23.4
Muhlenberg	368	23.1
Marshall	312	20.7
Boyle	287	20.7
Jessamine	395	20.2
Floyd	416	19.6
Graves	352	19.0
Harlan	314	18.9
Bell	281	18.7
Franklin	426	17.9
Oldham	391	16.9
Nelson	310	16.5
Calloway	232	13.6
Knox	213	13.4
Greenup	208	11.3
Meade	103	7.8
POPULATION CATEGORY OVER 50,000		
Boone	1,875	43.6
Pike	1,242	36.1
Laurel	789	29.9
Kenton	2,173	28.7
Warren	1,284	27.8
Madison	957	27.0
Fayette	3,463	26.6
McCracken	825	25.2
Jefferson	8,675	25.0
Hardin	982	20.9
Christian	755	20.9
Daviess	930	20.3
Campbell	895	20.2
Bullitt	589	19.2
Pulaski	525	18.7

TABLE 52. MOTOR VEHICLE-TRAIN CRASH RATES BY COUNTY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES) (1997-2001)

COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)	COUNTY	NUMBER OF CRASHES	ANNUAL CRASH RATE (CRASHES PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000			**POPULATION CATEGORY 15,000-24,999 (cont.)**		
Lee	3	0.76	Grayson	2	0.17
Bracken	2	0.48	Estill	1	0.13
Hickman	1	0.38	Breathitt	1	0.12
Fulton	1	0.26	Woodford	1	0.09
Gallatin	1	0.25	Casey	0	0.00
Lyon	1	0.25	Union	0	0.00
Hancock	1	0.24	Russell	0	0.00
Robertson	0	0.00	Adair	0	0.00
Owsley	0	0.00	Allen	0	0.00
Carlisle	0	0.00	Harrison	0	0.00
Menifee	0	0.00	Marion	0	0.00
Elliott	0	0.00	Breckinridge	0	0.00
Nicholas	0	0.00	Bourbon	0	0.00
Wolfe	0	0.00	Wayne	0	0.00
Cumberland	0	0.00	Rowan	0	0.00
Trimble	0	0.00	Montgomery	0	0.00
Ballard	0	0.00	Taylor	0	0.00
Crittenden	0	0.00	Clay	0	0.00
Clinton	0	0.00	**POPULATION CATEGORY 25,000-49,999**		
Livingston	0	0.00	Letcher	6	0.47
McLean	0	0.00	Hopkins	11	0.47
POPULATION CATEGORY 10,000 - 14,999			Bell	6	0.40
Todd	6	1.00	Oldham	9	0.39
Lewis	5	0.71	Muhlenberg	6	0.38
Carroll	2	0.39	Perry	5	0.34
Webster	2	0.28	Knox	5	0.31
Martin	1	0.16	Henderson	7	0.31
Metcalfe	0	0.00	Shelby	5	0.30
Owen	0	0.00	Boyd	7	0.28
Washington	0	0.00	Whitley	5	0.28
Bath	0	0.00	Nelson	5	0.27
Green	0	0.00	Scott	4	0.24
Edmonson	0	0.00	Floyd	5	0.24
Monroe	0	0.00	Marshall	2	0.13
Spencer	0	0.00	Harlan	2	0.12
Leslie	0	0.00	Barren	2	0.11
Trigg	0	0.00	Clark	1	0.06
Butler	0	0.00	Calloway	1	0.06
Caldwell	0	0.00	Greenup	1	0.05
Powell	0	0.00	Jessamine	1	0.05
Magoffin	0	0.00	Meade	0	0.00
Larue	0	0.00	Logan	0	0.00
Jackson	0	0.00	Carter	0	0.00
Fleming	0	0.00	Boyle	0	0.00
Morgan	0	0.00	Graves	0	0.00
Pendleton	0	0.00	Franklin	0	0.00
Garrard	0	0.00	**POPULATION CATEGORY 50,000 - OVER**		
POPULATION CATEGORY 15,000 - 24,999			Pulaski	6	0.21
Grant	12	1.07	McCracken	6	0.18
Lincoln	6	0.51	Jefferson	61	0.18
Simpson	4	0.49	Bullitt	5	0.16
McCreary	4	0.47	Pike	5	0.15
Henry	3	0.40	Madison	5	0.14
Rockcastle	3	0.36	Christian	5	0.14
Hart	3	0.34	Daviess	6	0.13
Knott	3	0.34	Hardin	6	0.13
Anderson	3	0.31	Kenton	9	0.12
Lawrence	2	0.26	Boone	4	0.09
Johnson	3	0.26	Laurel	2	0.08
Mason	2	0.24	Campbell	3	0.07
Mercer	2	0.19	Warren	3	0.06
Ohio	2	0.17	Fayette	7	0.05

TABLE 53. CRASHES INVOLVING VEHICLE DEFECT BEFORE AND AFTER REPEAL OF VEHICLE INSPECTION LAW

TIME PERIOD	TOTAL NUMBER OF CRASHES*	NUMBER OF CRASHES INVOLVING VEHICLE DEFECTS	PERCENT OF ALL CRASHES INVOLVING VEHICLE DEFECTS
October 1976 - May 1978 (20 Months Before Repeal of Law)	246,500	14,440	5.86
June 1978 - December 1979 (19 Months After Repeal of Law)	233,155	16,527	7.09
1980-1984	624,861	46,397	7.43
1985-1989	701,119	46,552	6.64
1990-1994	663,504	40,393	6.09
1995-1999	638,623	33,655	5.27
2000	131,027	6,481	4.95
2001	126,285	7,004	5.55

* Does not include crashes in which the vehicle defect code was unknown.

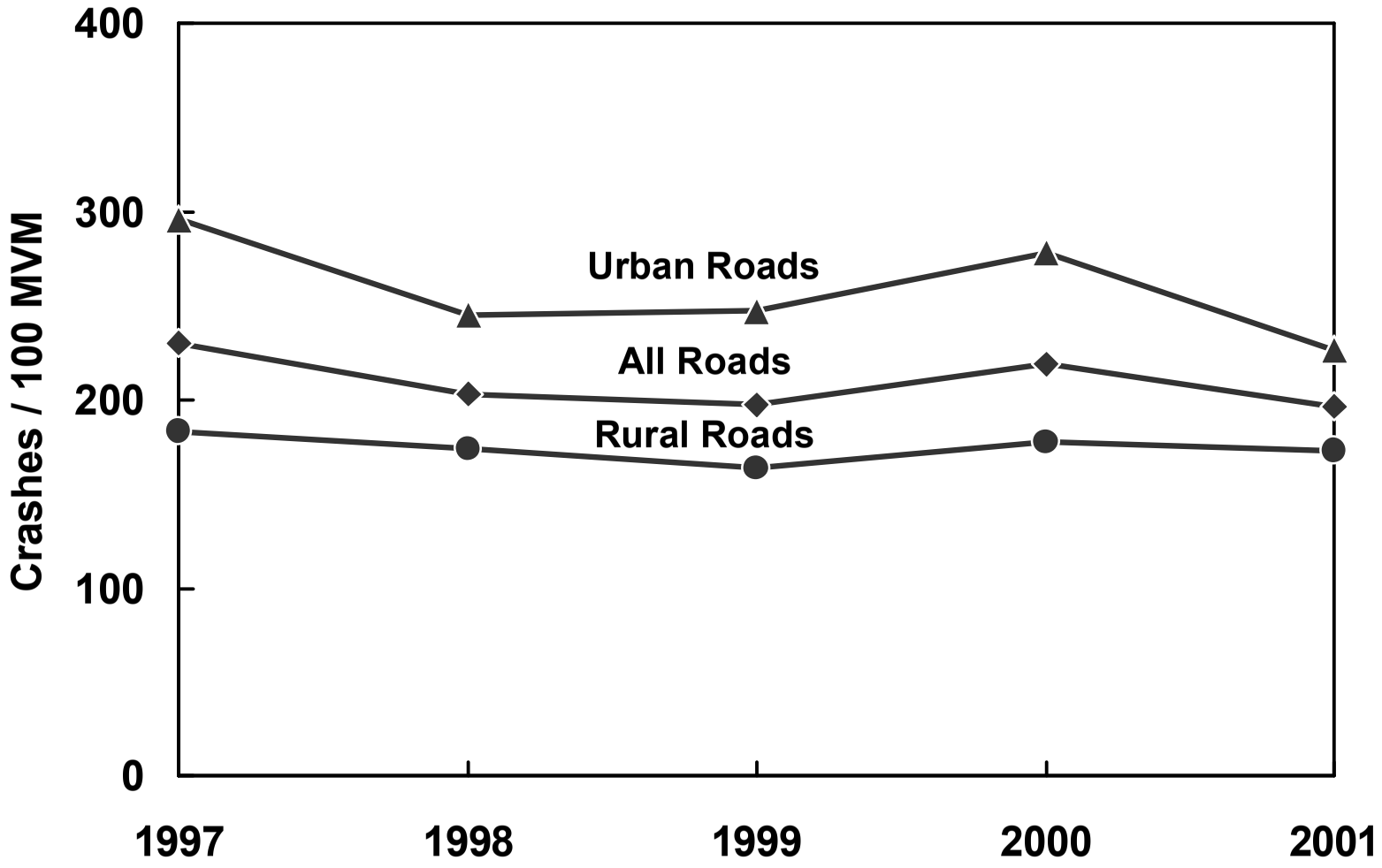

Figure 1. Trends in Crash Rates
(State-Maintained Roads)

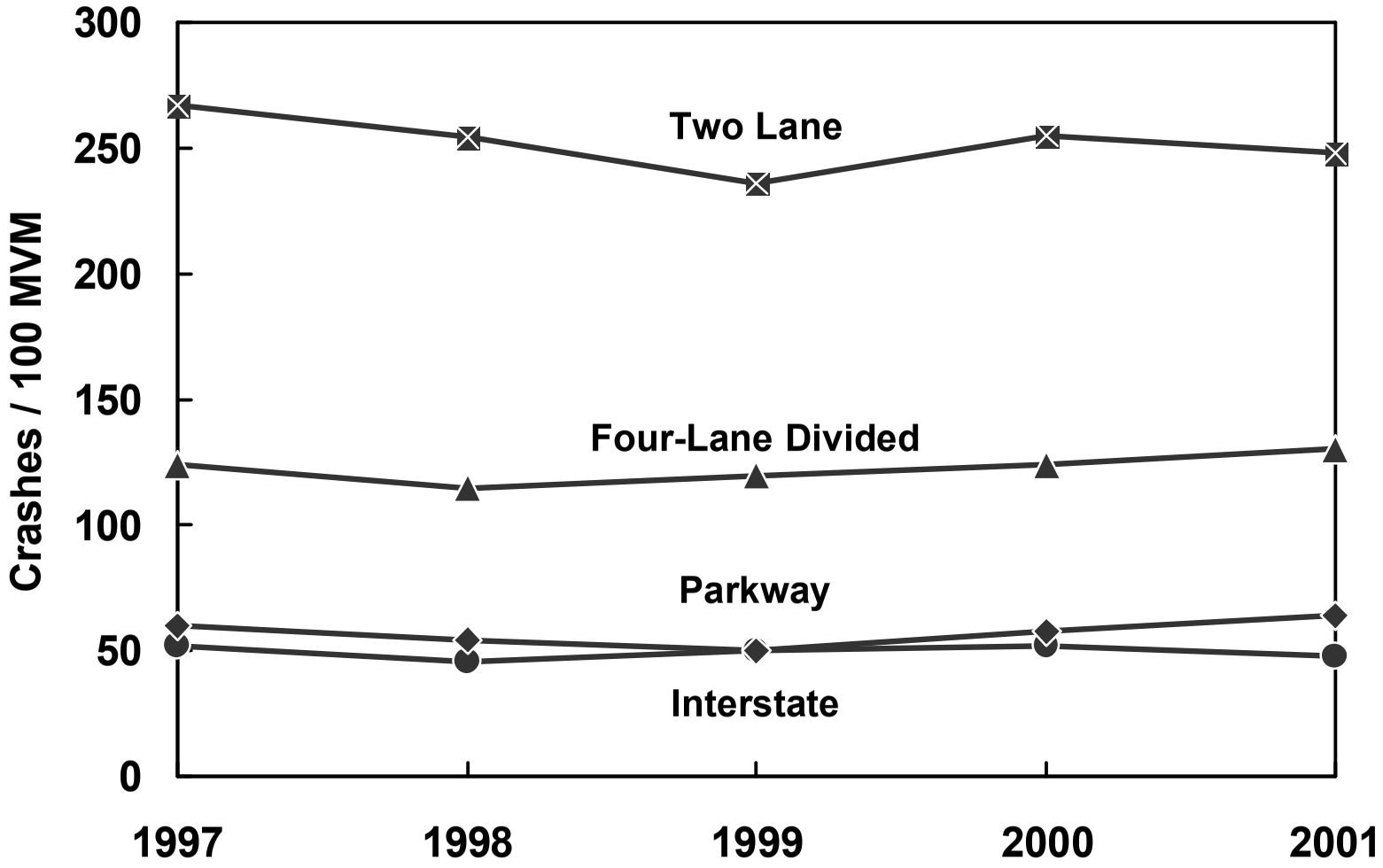

Figure 2. Trends in Rural Crash Rates
(State-Maintained Roads)

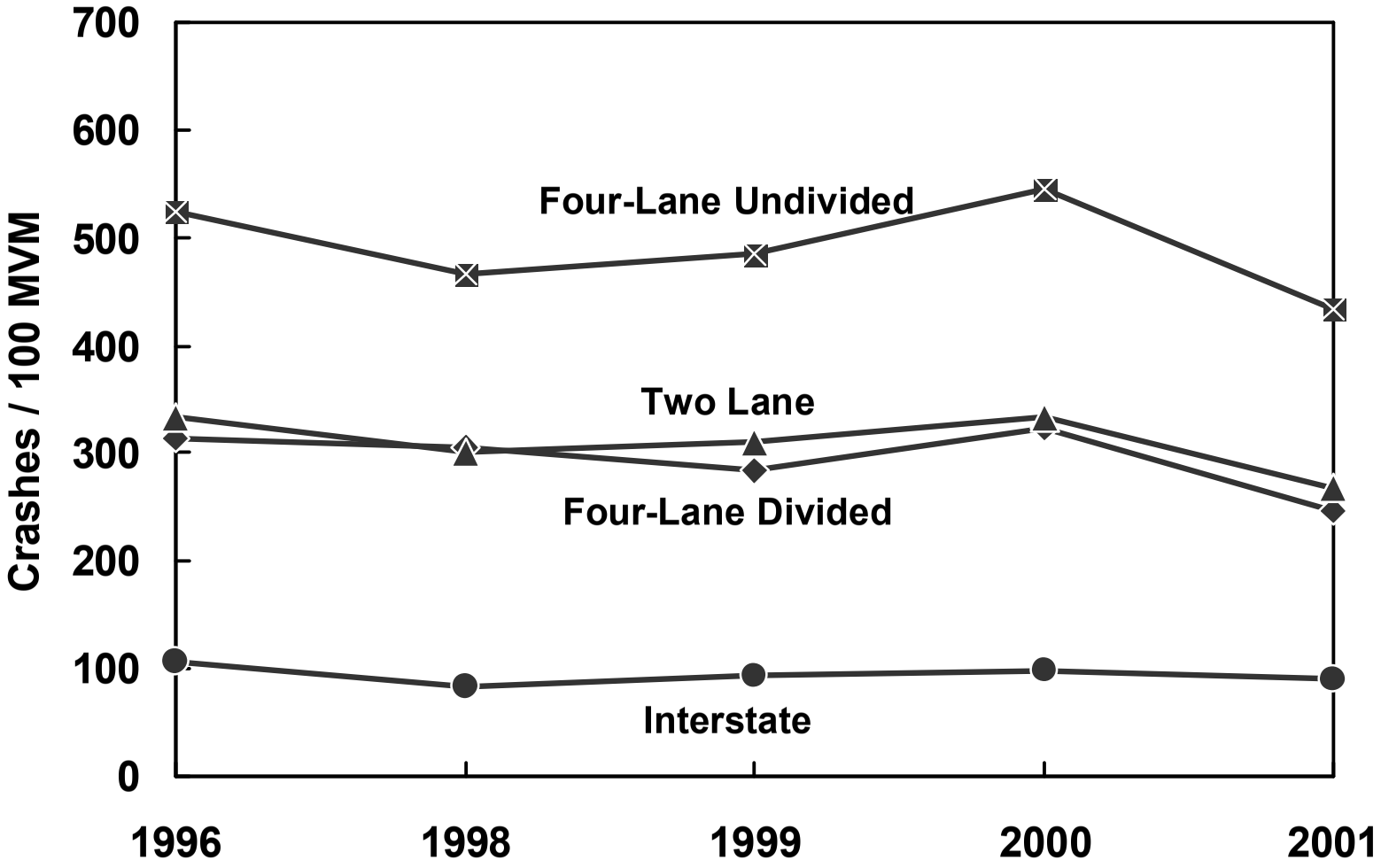

Figure 3. Trends in Urban Crash Rates
(State-Maintained Roads)

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 minor arterials. The lowest overall rates are for rural principal arterials (interstate) followed by urban principal arterials (interstate and other freeway). Rural principal arterials (non-interstate) also have a low total crash rate. Injury crash rates for the various categories are ordered similar to overall crash rates. However, the ordering for the fatal crash rates are very different. The highest fatal crash rates are for rural collectors 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 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 primary (non-interstate), 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 with the rate for the secondary system highest. Rates for the rural secondary and unclassified systems are between these two levels and are nearly the same.

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 which 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 either flat, rolling, or mountainous since a classification was not available for each

road segment. Considering the entire system, the rates for flat and rolling terrains are similar with the rate for mountainous terrain substantially higher.

Rates by rural-urban designation are shown in Table A-7. The lowest rate is for rural areas. The rate for small urban areas is very similar to that for urbanized areas, although the average traffic volume is much higher in urbanized areas. The presence of more freeway-type highways in the urbanized areas may account for this finding.

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 on 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, which 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 highest rate is for the lowest volume category (AADT under 1,000). 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 percentage of crashes occurring during wet or 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 both rural and urban roadways. There are large variations in the percentage of crashes occurring on the various highway types during snow or icy conditions. This percentage would change by year depending on the amount of snowfall any given year. The percentage on rural roads (4.4 percent) is substantially higher than that on urban roads (2.7 percent). The highest percentages are on interstates and parkways with the highest being about 9 percent. There are also large variations in the percentage of crashes occurring during darkness. The percentage is higher on rural roads (30 percent) than urban roads (22 percent). The highest percentages are on rural interstates and parkways with the highest being 43 percent. This would be expected given the amount of nighttime driving on these types of roadways.

TABLE A-1. STATEWIDE CRASH RATES BY FUNCTIONAL CLASSIFICATION (1997-2001)

LOCATION	FUNCTIONAL CLASSIFICATION	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Rural	Principal Arterial, Interstate	527	30,623	49	13	0.7
	Principal Arterial, Other Freeway	2,060	8,241	131	41	1.7
	Minor Arterial	1,610	4,289	245	77	2.6
	Major Collector	6,950	2,221	271	92	3.1
	Minor Collector	9,450	733	273	101	3.6
	Local System	4,505	509	215	73	2.3
Urban	Principal Arterial, Interstate	227	68,622	94	22	0.4
	Principal Arterial, Other Freeway	93	24,509	103	24	0.5
	Other Principal Arterial	653	19,426	426	106	1.1
	Minor Arterial	1,074	9,752	361	90	0.9
	Collector	785	4,027	203	53	0.8
	Local System	116	2,146	233	61	1.1

TABLE A-2. STATEWIDE CRASH RATES BY FEDERAL-AID SYSTEM (1997-2001)

FEDERAL-AID SYSTEM	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Interstate	41,213	754	42,072	71
Federal-Aid Primary (other than Interstate)	133,851	3,988	8,469	217
Federal-Aid Urban	114,829	2,041	8,790	351
Federal-Aid Secondary (Rural Only)	82,031	7,118	2,328	271
Non-Federal Aid	35,117	9,538	743	272

TABLE A-3. STATEWIDE CRASH RATES BY ADMINISTRATIVE CLASSIFICATION (1997-2001)

ADMINISTRATIVE CLASSIFICATION	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Primary	204,392	4,666	14,190	169
Secondary	169,273	6,737	3,479	396
Rural Secondary	49,497	12,159	787	283
Unclassified	8,085	2,259	734	267

TABLE A-4. STATEWIDE CRASH RATES BY MEDIAN TYPE
(RURAL ROADS WITH FOUR OR MORE LANES (1997-2001))

MEDIAN TYPE	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Undivided	3,774	73	17,348	162
Divided, Median Less Than 30 Feet, No Barrier	5,055	218	12,623	101
Divided, Median Greater Than 30 Feet, No Barrier	22,484	1,311	18,272	51

TABLE A-5. STATEWIDE CRASH RATES BY ACCESS CONTROL (1997-2001)

ACCESS CONTROL	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Full Control	51,032	1,445	27,162	71
Partial Control	29,165	777	9,205	223
No Control	334,347	25,386	2,389	302

TABLE A-6. STATEWIDE CRASH RATES FOR RURAL HIGHWAYS BY FEDERAL-AID SYSTEM AND TERRAIN (1997-2001)

FEDERAL-AID SYSTEM	CRASH RATES BY TERRAIN CLASSIFICATION (CRASHES/100MVM)		
	FLAT	ROLLING	MOUNTAINOUS
Interstate	55	56	47
Federal-Aid Primary	177	156	449
Federal-Aid Secondary	221	227	323
Non Federal-Aid	228	278	275
All	209	172	338

TABLE A-7. STATEWIDE CRASH RATES BY RURAL-URBAN DESIGNATION (1997-2001)

AREA TYPE	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Rural	204,026	24,210	2,653	174
Small Urban Area	71,732	1,226	10,492	305
Urbanized Area	136,281	1,285	22,014	264

TABLE A-8. STATEWIDE CRASH RATES BY ROUTE SIGNING IDENTIFIER (1997-2001)

ROUTE SIGNING IDENTIFIER	TOTAL CRASHES	AVERAGE TOTAL MILEAGE	AVERAGE AADT	CRASH RATES (CRASHES PER 100 MVM)
Interstate	41,213	754	42,061	71
US	160,710	3,551	8,016	309
State	211,944	22,154	2,019	260

TABLE A-9. RELATIONSHIP BETWEEN CRASH RATE AND TRAFFIC VOLUME (1997-2001)

VOLUME RANGE (AADT)	CRASH RATES (CRASHES PER 100 MVM)				
	INTERSTATE	FEDERAL-AID PRIMARY	FEDERAL-AID URBAN	FEDERAL-AID SECONDARY	NON-FEDERAL AID
0-999	*	423	758	346	284
1,000-2,499	*	251	298	241	246
2,500-4,999	*	242	350	294	324
5,000-9,999	63	157	257	247	217
10,000-19,999	52	180	336	284	173
20,000-29,999	48	330	445	401	*
30,000-39,999	57	418	409	*	*
40,000 or more	76	221	355	*	*

* 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 (1997-2001)

LOCATION	HIGHWAY TYPE	PERCENT OF ALL CRASHES		
		WET	SNOW OR ICE	DARKNESS
Rural	One-Lane	15	1.4	26
	Two-Lane	23	4.2	30
	Three-Lane	17	2.5	24
	Four-Lane Divided (Non-Interstate or Parkway)	19	2.8	27
	Four-Lane Undivided	19	2.0	21
	Interstate	20	8.7	41
	Parkway	23	8.2	43
	All Rural	22	4.4	30
Urban	Two-Lane	23	2.6	17
	Three-Lane	24	2.1	109
	Four-Lane Divided (Non-Interstate or Parkway)	20	2.0	18
	Four-Lane Undivided	21	1.4	19
	Interstate	26	7.6	41
	Parkway	21	8.1	33
	All Urban	22	2.7	22

APPENDIX B

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

TABLE B-1. STATEWIDE RURAL CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1999-2001)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
One-Lane	76	870	147	51	1.4
Two-Lane	23,357	1,600	246	82	2.9
Three-Lane	34	5,160	162	46	1.6
Four-Lane Divided (Non-Interstate or Parkway)	533	11,380	124	38	1.3
Four-Lane Undivided	47	14,920	281	63	1.2
Interstate	527	31,320	50	13	0.7
Parkway	565	9,260	58	15	0.7
All	25,140	2,630	171	55	2.0

* Average for the three years.

TABLE B-2. STATEWIDE URBAN CRASH RATES BY HIGHWAY TYPE CLASSIFICATION (1999-2001)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	CRASHES RATES (CRASHES PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	2,013	6,760	294	73	0.8
Three-Lane	33	12,080	479	96	1.4
Four-Lane Divided (Non-Interstate or Parkway)	385	24,350	293	74	0.9
Four-Lane Undivided	278	19,400	488	116	1.2
Interstate	246	65,670	94	22	0.4
Parkway	52	11,790	105	23	1.0
All **	3,033	15,300	250	60	0.7

* 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 (1999-2001)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	107	254	0.32	0.44
	Two-Lane	100,770	77,857	0.58	0.74
	Three-Lane	311	113	1.88	0.49
	Four-Lane Divided (Non-Interstate or Parkway)	8,260	1,776	4.15	0.37
	Four-Lane Undivided	2,144	156	5.45	0.84
	Interstate	9,011	1,758	11.43	0.15
	Parkway	3,340	1,884	3.38	0.17
	All Rural	123,943	83,800	0.96	0.51
Urban	Two-Lane	43,825	6,710	2.47	0.88
	Three-Lane	2,076	109	4.41	1.44
	Four-Lane Divided	30,071	1,283	8.89	0.88
	Four-Lane Undivided	28,853	927	7.08	1.47
	Interstate	16,664	820	23.97	0.28
	Parkway	703	173	4.30	0.32
	All Urban**	126,972	10,111	5.58	0.75

* 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 (1999-2001)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.42	3	1.40	5
	Two-Lane	1.29	5	4.31	10
	Three-Lane	2.74	8	9.15	17
	Four-Lane Divided (Non-Interstate or Parkway)	4.65	11	15.51	26
	Four-Lane Undivided	13.78	24	45.94	64
	Interstate	5.13	11	17.09	28
	Parkway	1.77	6	5.91	13
	All Rural	1.48	5	4.93	11
Urban	Two-Lane	6.53	14	21.77	34
	Three-Lane	18.99	31	63.31	84
	Four-Lane Divided	23.44	36	78.15	101
	Four-Lane Undivided	31.12	46	103.73	130
	Interstate	20.33	32	67.77	89
	Parkway	4.07	10	13.57	24
	All Urban**	12.56	22	41.86	59

* 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 (1999-2001)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF CRASHES	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	CRASHES PER MILLION VEHICLES PER SPOT
Rural	One-Lane	107	763	0.32	0.15
	Two-Lane	100,770	233,570	0.58	0.25
	Three-Lane	311	340	1.88	0.16
	Four-Lane Divided (Non-Interstate or Parkway)	8,260	5,327	4.15	0.12
	Four-Lane Undivided	2,144	467	5.45	0.28
	Interstate	9,011	5,273	11.43	0.05
	Parkway	3,340	5,653	3.38	0.06
	All Rural	123,943	251,400	0.96	0.17
Urban	Two-Lane	43,825	20,130	2.47	0.29
	Three-Lane	2,076	328	4.41	0.48
	Four-Lane Divided	30,071	3,848	8.89	0.29
	Four-Lane Undivided	28,853	2,782	7.08	0.49
	Interstate	16,664	2,459	23.97	0.09
	Parkway	703	518	4.30	0.11
	All Urban**	126,972	30,332	5.58	0.25

* 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 (1999-2001)

RURAL OR URBAN	HIGHWAY TYPE	CRASHES PER SPOT*		CRASHES PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.14	2	1.40	5
	Two-Lane	0.43	3	4.31	10
	Three-Lane	0.91	4	9.15	17
	Four-Lane Divided (Non-Interstate or Parkway)	1.55	5	15.51	26
	Four-Lane Undivided	4.59	11	45.94	64
	Interstate	1.71	6	17.09	28
	Parkway	0.59	3	5.91	13
	All Rural	0.49	3	4.93	11
Urban	Two-Lane	2.18	6	21.77	34
	Three-Lane	6.33	13	63.31	84
	Four-Lane Divided	7.81	16	78.15	101
	Four-Lane Undivided	10.37	19	103.73	130
	Interstate	6.78	14	67.77	89
	Parkway	1.36	5	13.57	24
	All Urban**	4.19	10	41.86	59

* 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)(1999-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE		
AADT	ONE-LANE	TWO-LANE	THREE-LANE
100	7.73	8.71	7.84
500	2.41	2.90	2.47
1,000	1.56	1.94	1.60
2,500	0.94	1.21	0.97
5,000	0.67	0.89	0.69
7,500	0.56	0.76	0.58
10,000	0.50	0.68	0.52
15,000	0.43	0.60	0.44
20,000	0.39	0.55	0.40

TABLE B-8. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(1999-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.24	3.04	1.74	1.83
1,000	1.43	2.04	1.06	1.12
2,500	0.84	1.29	0.58	0.62
5,000	0.59	0.95	0.39	0.42
10,000	0.44	0.74	0.27	0.30
15,000	0.37	0.65	0.22	0.25
20,000	0.33	0.59	0.20	0.22
30,000	0.29	0.53	0.17	0.19
40,000	0.27	0.50	0.15	0.17
50,000	0.25	0.47	0.14	0.15

TABLE B-9. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(1999-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE	
AADT	TWO-LANE	THREE-LANE
500	3.08	3.81
1,000	2.07	2.64
2,500	1.31	1.74
5,000	0.97	1.33
7,500	0.83	1.16
10,000	0.75	1.06
15,000	0.66	0.95
20,000	0.61	0.88
30,000	0.55	0.81
40,000	0.51	0.76

TABLE B-10. CRITICAL CRASH RATES FOR 0.1 MILE "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(1999-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	2.07	2.67	1.29	1.38
5,000	0.97	1.35	0.51	0.57
10,000	0.75	1.08	0.37	0.41
15,000	0.66	0.97	0.31	0.35
20,000	0.61	0.90	0.28	0.32
30,000	0.55	0.82	0.24	0.27
40,000	0.51	0.77	0.22	0.25
50,000	0.49	0.74	0.20	0.23
60,000	0.47	0.72	0.19	0.22
70,000	0.45	0.70	0.18	0.21
80,000	0.44	0.69	0.18	0.21
90,000	0.43	0.68	0.17	0.20
100,000	0.43	0.67	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 (1997-2001)

	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	23	41	57	73
Two-Lane	8	15	25	53	97	139	180
Three-Lane	17	35	61	137	258	377	494
Four-Lane Divided (Non-Interstate and Parkway)	19	39	70	156	295	431	566
Four-Lane Undivided	44	95	177	414	798	1,178	1,555
Interstate	20	42	75	169	320	467	613
Parkway	9	18	31	66	121	174	226

TABLE C-2. CRITICAL NUMBERS OF CRASH RATES ON URBAN HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (1997-2001)

	CRITICAL NUMBERS OF CRASHES FOR THE GIVEN SECTION LENGTH (MILES)					
HIGHWAY TYPE	0.4	1	2	5	8	10
Two-Lane	26	55	100	229	354	437
Three-Lane (Non-Interstate and Parkway)	62	138	260	615	963	1,194
Four-Lane Divided	73	164	311	737	1,157	1,435
Four-Lane Undivided	93	211	401	958	1,507	1,871
Interstate	62	139	261	616	965	1,196
Parkway	17	35	63	140	214	263

APPENDIX D

CRITICAL CRASH RATE TABLES FOR HIGHWAY SECTIONS

TABLE D-1. CRITICAL CRASH RATES FOR RURAL ONE-LANE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
100	1,800	1,207	845	562	434
200	1,207	845	617	434	349
300	975	699	523	380	313
400	845	617	470	349	292
500	760	562	434	328	278
700	653	493	389	301	259
1,000	562	434	349	278	243
1,500	481	380	313	256	228
2,000	434	349	292	243	219
2,500	403	328	278	234	213
3,000	380	313	267	228	209

TABLE D-2. CRITICAL CRASH RATES FOR RURAL TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
100	2,153	1,483	1,065	734	582	479
300	1,216	895	688	517	436	380
500	966	734	582	454	393	350
1,000	734	582	479	393	350	321
1,500	638	517	436	366	332	308
2,000	582	479	410	350	321	300
3,000	517	436	380	332	308	291
4,000	479	410	362	321	300	286
5,000	454	393	350	313	295	282
7,000	421	370	335	304	288	278
8,000	410	362	329	300	286	276
9,000	400	356	325	297	284	274
10,000	393	350	321	295	282	273

TABLE D-3. CRITICAL CRASH RATES FOR RURAL THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	3	5
100	2,082	1,427	1,020	855	699
300	1,167	855	654	570	489
500	924	699	551	489	428
1,000	699	551	452	410	368
1,500	605	489	410	376	343
2,000	551	452	385	356	328
3,000	489	410	356	333	310
4,000	452	385	339	319	299
5,000	428	368	328	310	292
6,000	410	356	319	303	287
7,000	396	347	312	298	283
8,000	385	339	307	293	279
9,000	376	333	303	290	277
10,000	368	328	299	287	274

TABLE D-4. CRITICAL CRASH RATES FOR RURAL FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	655	476	361	267	223
1,000	476	361	286	223	192
2,500	333	267	223	185	166
5,000	267	223	192	166	153
7,500	239	203	179	158	147
10,000	223	192	171	153	144
15,000	203	179	162	147	140
20,000	192	171	157	144	138
30,000	179	162	150	140	135
40,000	171	157	147	138	133
50,000	166	153	144	136	132

TABLE D-5. CRITICAL CRASH RATES FOR RURAL FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	993	757	601	471	408
1,000	757	601	497	408	364
2,500	563	471	408	354	327
5,000	471	408	364	327	308
7,500	431	381	346	315	300
10,000	408	364	334	308	295
20,000	364	334	313	295	286
30,000	346	321	304	289	282
40,000	334	313	299	286	279
50,000	327	308	295	284	278

TABLE D-6. CRITICAL CRASH RATES FOR RURAL INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	427	294	211	145	115	95
1,000	294	211	158	115	95	81
2,500	191	145	115	90	77	69
5,000	145	115	95	77	69	63
7,500	126	102	86	72	65	61
10,000	115	95	81	69	63	59
20,000	95	81	71	63	59	56
30,000	86	75	67	61	57	55
40,000	81	71	65	59	56	54
50,000	77	69	63	58	56	54

TABLE D-7. CRITICAL CRASH RATES FOR RURAL PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
400	519	355	254	174	137	112
700	381	270	200	143	116	98
1,000	317	230	174	128	106	91
1,500	262	194	151	114	97	85
2,000	230	174	137	106	91	81
3,000	194	151	121	97	85	77
4,000	174	137	112	91	81	74
5,000	160	128	106	88	79	72
7,000	143	116	98	83	75	70
10,000	128	106	91	79	72	68
20,000	106	91	81	72	68	65
40,000	91	81	74	68	65	63

TABLE D-8. CRITICAL CRASH RATES FOR URBAN TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,088	837	671	531	464
1,000	837	671	559	464	417
2,500	630	531	464	405	376
5,000	531	464	417	376	356
7,500	489	434	397	364	347
10,000	464	417	385	356	342
15,000	434	397	370	347	336
20,000	417	385	362	342	332
30,000	397	370	352	336	328
40,000	385	362	346	332	325
50,000	376	356	342	330	323

TABLE D-9. CRITICAL CRASH RATES FOR URBAN THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,456	1,153	949	776	692
1,000	1,153	949	811	692	634
2,500	899	776	692	619	583
5,000	776	692	634	583	557
7,500	724	656	608	567	546
10,000	692	634	593	557	540
15,000	656	608	575	546	532
20,000	634	593	565	540	527
30,000	608	575	552	532	521
40,000	593	565	545	527	518
50,000	583	557	540	524	516

TABLE D-10. CRITICAL CRASH RATES FOR URBAN FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	835	669	557	462	416
2,500	628	529	462	404	375
5,000	529	462	416	375	355
10,000	462	416	383	355	341
15,000	433	395	369	346	335
20,000	416	383	361	341	331
25,000	404	375	355	337	328
30,000	395	369	351	335	327
40,000	383	361	345	331	324
50,000	375	355	341	328	322
60,000	369	351	338	327	321

TABLE D-11. CRITICAL CRASH RATES FOR URBAN FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	1,157	953	815	696	637
2,500	903	780	696	622	586
5,000	780	696	637	586	560
10,000	696	637	596	560	542
15,000	659	611	578	549	534
20,000	637	596	568	542	530
25,000	622	586	560	538	527
30,000	611	578	555	534	524
40,000	596	568	548	530	521
50,000	586	560	542	527	519
60,000	578	555	539	524	517

TABLE D-12. CRITICAL CRASH RATES FOR URBAN INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	408	305	237	181	154
5,000	221	181	154	131	120
10,000	181	154	136	120	112
20,000	154	136	123	112	106
30,000	143	128	117	108	104
40,000	136	123	114	106	102
50,000	131	120	112	105	101
60,000	128	117	110	104	101
70,000	125	116	109	103	100
80,000	123	114	108	102	100
90,000	121	113	107	102	99
100,000	120	112	106	101	99

TABLE D-13. CRITICAL CRASH RATES FOR URBAN PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	603	434	326	238	197	168
1,000	434	326	255	197	168	149
2,500	300	238	197	161	144	132
5,000	238	197	168	144	132	124
7,500	212	179	156	137	127	120
10,000	197	168	149	132	124	118
15,000	179	156	141	127	120	115
20,000	168	149	136	124	118	114
30,000	156	141	130	120	115	112
40,000	149	136	126	118	114	111
90,000	134	125	119	113	111	109
50,000	144	132	124	117	113	110

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)(1997-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE		
AADT	ONE-LANE	TWO-LANE	THREE-LANE
100	7.45	8.76	8.48
500	2.93	3.66	3.50
1,000	2.10	2.70	2.57
2,500	1.44	1.92	1.82
5,000	1.14	1.56	1.47
7,500	1.01	1.40	1.32
10,000	0.94	1.31	1.23
15,000	0.85	1.21	1.13
20,000	0.80	1.15	1.07

TABLE E-2. CRITICAL CRASH RATES FOR "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.56	3.73	1.74	1.83
1,000	1.80	2.76	1.16	1.23
2,500	1.21	1.97	0.73	0.78
5,000	0.94	1.60	0.54	0.58
10,000	0.76	1.35	0.41	0.45
15,000	0.69	1.25	0.36	0.39
20,000	0.64	1.18	0.33	0.36
30,000	0.59	1.11	0.29	0.32
40,000	0.56	1.06	0.27	0.30
50,000	0.54	1.04	0.26	0.29

TABLE E-3. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE	
AADT	TWO-LANE	THREE-LANE
500	4.08	5.33
1,000	3.04	4.09
2,500	2.20	3.07
5,000	1.81	2.59
7,500	1.64	2.38
10,000	1.54	2.25
15,000	1.42	2.11
20,000	1.35	2.02
30,000	1.27	1.92
40,000	1.23	1.86

TABLE E-4. CRITICAL CRASH RATES FOR "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1997-2001)

	CRITICAL CRASH RATE (C/MV) BY HIGHWAY TYPE			
AADT	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	3.02	4.11	1.56	1.65
5,000	1.79	2.60	0.79	0.84
10,000	1.53	2.27	0.63	0.67
15,000	1.41	2.12	0.56	0.60
20,000	1.34	2.04	0.52	0.56
30,000	1.26	1.94	0.47	0.51
40,000	1.22	1.88	0.45	0.48
50,000	1.18	1.84	0.43	0.47
60,000	1.16	1.81	0.41	0.45
70,000	1.14	1.78	0.40	0.44
80,000	1.13	1.76	0.40	0.43
90,000	1.12	1.75	0.39	0.42
100,000	1.11	1.74	0.38	0.42

APPENDIX F

TOTAL CRASH RATES FOR CITIES INCLUDED IN 2000 CENSUS

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1997-2001)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Adairville	920	25	5	Campbellsburg	705	64	18
Albany	2,220	452	41	Campbellsville	10,498	2,013	38
Alexandria	8,286	1,009	24	Campton	424	340	160
Allen	150	117	156	Caneyville	627	75	24
Anchorage	2,264	92	8	Carlisle	1,917	260	27
Arlington	395	11	6	Carrollton	3,846	714	37
Ashland	21,981	4,812	44	Catlettsburg	1,960	481	49
Auburn	1,444	94	13	Cave City	1,880	426	45
Audubon Park	1,545	58	8	Centertown	416	22	11
Augusta	1,204	124	21	Central City	5,893	790	27
Bancroft	536	*	*	Cherrywood Village	327	2	1
Barbourmeade	1,260	1	0	Clarkson	794	110	28
Barbourville	3,589	699	39	Clay	1,179	69	12
Bardstown	10,374	2,196	42	Clay City	1,303	*	*
Bardwell	799	63	16	Clinton	1,415	*	*
Barlow	715	45	13	Cloverport	1,256	38	6
Beattyville	1,193	232	39	Coal Run	577	308	107
Beaver Dam	3,033	475	31	Cold Spring	3,806	800	42
Bedford	677	169	50	Columbia	4,014	830	41
Beechwood Village	1,173	2	0	Concord	28	1	7
Bellefonte	837	92	22	Corbin	7,742	1,940	50
Bellevue	6,480	944	29	Corinth	181	112	124
Bellewood	300	3	2	Corydon	744	86	23
Benham	599	32	11	Covington	43,370	8,819	41
Benton	4,197	714	34	Crab Orchard	842	111	26
Berea	9,851	1,400	28	Crescent Springs	3,931	622	32
Berry	310	21	14	Crestview	471	6	3
Blaine	245	18	15	Crestview Hills	2,889	817	57
Bloomfield	855	85	20	Crestwood	1,999	438	44
Blue Ridge Manor	623	1	0	Crittenden	2,401	386	32
Bonnieville	354	52	29	Crofton	838	69	17
Booneville	111	186	335	Cumberland	2,611	230	18
Bowling Green	49,296	12,097	49	Cynthiana	6,258	1,119	36
Bradfordsville	304	23	15	Danville	15,477	2,928	38
Brandenburg	2,049	461	45	Dawson Springs	2,980	241	16
Bremen	365	68	37	Dayton	5,966	419	14
Briarwood	554	1	0	Dixon	632	154	49
Broadfields	250	*	*	Dover	316	25	16
Brodhead	1,193	13	2	Drakesboro	627	66	21
Bromley	838	63	15	Dry Ridge	1,995	831	83
Brooksville	589	175	59	Earlington	1,649	158	19
Brownsville	921	244	53	Eddyville	2,350	190	16
Burgin	874	32	7	Edgewood	9,400	726	15
Burkesville	1,756	257	29	Edmonton	1,586	296	37
Burnside	637	88	28	Ekron	170	18	21
Butler	613	77	25	Elizabethtown	22,542	5,063	45
Cadiz	2,373	489	41	Elkhorn City	1,060	125	24
Calhoun	836	92	22	Elkton	1,984	254	26
Calvert City	2,701	255	19	Elsmere	8,139	605	15
Camargo	923	34	7	Eminence	2,231	107	10

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1997-2001)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Erlanger	16,676	3,235	39	Hopkinsville	30,089	5,069	34
Eubank	358	36	20	Horse Cave	2,252	180	16
Evarts	1,101	131	24	Houston Acres	491	2	1
Ewing	278	14	10	Hustonville	347	34	20
Fairfield	72	12	33	Hyden	204	186	182
Fairview	156	39	50	Independence	14,982	1,420	19
Falmouth	2,058	351	34	Indian Hills	2,882	31	2
Ferguson	881	24	5	Inez	466	145	62
Flatwoods	7,605	530	14	Irvine	2,843	540	38
Flemingsburg	3,010	348	23	Irvington	1,257	52	8
Florence	23,551	7,034	60	Island	435	63	29
Fordsville	531	59	22	Jackson	2,490	646	52
Forest Hills	494	10	4	Jamestown	1,624	164	20
Fort Mitchell	8,089	1,206	30	Jeffersontown	26,633	3,867	29
Fort Thomas	16,495	1,007	12	Jeffersonville	1,804	125	14
Fort Wright	5,681	1,668	59	Jenkins	2,401	239	20
Fountain Run	236	21	18	Junction City	2,184	148	14
Frankfort	27,741	4,290	31	Keeneland	383	2	1
Franklin	7,996	1,115	28	Kevil	574	59	21
Fredonia	420	55	26	Kingsley	428	5	2
Frenchburg	551	117	43	Kuttawa	596	62	21
Fulton	2,775	374	27	La Grange	5,676	786	28
Gamaliel	439	16	7	Lacenter	1,038	85	16
Georgetown	18,080	2,739	30	Lafayette	193	4	4
Germantown	190	41	43	Lakeside Park	2,869	361	25
Ghent	371	40	22	Lancaster	3,734	563	30
Glasgow	13,019	2,727	42	Latonia Lakes	325	28	17
Glencoe	251	34	27	Lawrenceburg	9,014	750	17
Grand Rivers	343	33	19	Lebanon	5,718	1,033	36
Gratz	89	14	32	Lebanon Junction	1,801	175	19
Grayson	3,877	865	45	Leitchfield	6,139	542	18
Greensburg	2,396	446	37	Lewisburg	903	72	16
Greenup	1,198	194	32	Lewisport	1,639	101	12
Greenville	4,398	709	32	Lexington	260,512	49,852	38
Guthrie	1,469	102	14	Liberty	1,850	298	32
Hanson	625	71	23	Livermore	1,482	527	71
Hardin	564	53	19	Livingston	228	111	97
Hardinsburg	2,345	315	27	London	5,692	2,614	92
Harlan	2,081	636	61	Lone Oak	454	253	112
Harrodsburg	8,014	1,390	35	Loretto	623	75	24
Hartford	2,571	141	11	Louisa	2,018	648	64
Hawesville	971	149	31	Louisville	256,231	63,112	49
Hazard	4,806	1,838	77	Loyall	766	45	12
Hazel	440	36	16	Ludlow	4,409	239	11
Henderson	27,373	5,564	41	Lynch	900	47	10
Hickman	2,560	124	10	Lyndon	9,369	95	2
Highland Heights	6,554	715	22	Lynnview	965	32	7
Hindman	787	219	56	Mackville	206	22	21
Hiseville	224	14	13	Madisonville	19,307	3,647	38
Hodgenville	2,874	595	41	Manchester	1,738	607	70

* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1997-2001)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION	CITY	POPULATION	NUMBER OF CRASHES	CRASHES PER 1000 POPULATION
Marion	3,196	394	25	Park Hills	2,977	177	12
Martin	633	182	58	Pembroke	797	37	9
Mayfield	10,349	1,812	35	Perryville	763	42	11
Maysville	8,993	2,099	47	Pewee Valley	1,436	142	20
Mchenry	417	37	18	Phelps	1,053	197	37
Mckee	878	176	40	Pikeville	6,295	1,706	54
Mcroberts	921	34	7	Pineville	2,093	357	34
Meadowvale	765	38	10	Pippa Passes	297	80	54
Meadowview Estates	422	5	2	Plantation	902	618	137
Melbourne	457	32	14	Pleasureville	869	34	8
Mentor	181	16	18	Plymouth Village	201	1	1
Middlesboro	10,384	1,392	27	Powderly	846	66	16
Middletown	5,744	153	5	Prestonsburg	3,612	1,022	57
Midway	1,620	103	13	Prestonville	164	31	38
Millersburg	842	82	20	Princeton	6,536	815	25
Milton	525	159	61	Providence	3,611	287	16
Minor Lane Heights	1,435	38	5	Raceland	2,355	148	13
Monterey	167	1,805	2,162	Radcliff	21,961	2,271	21
Monticello	5,981	1,264	42	Ravenna	693	37	11
Moorland	464	117	50	Richmond	27,152	5,337	39
Morehead	5,914	1,783	60	Rochester	186	5	5
Morganfield	3,494	571	33	Rockport	334	23	14
Morgantown	2,544	414	33	Rolling Hills	907	7	2
Mortons Gap	952	67	14	Russell	3,645	660	36
Mount Olivet	289	19	13	Russell Springs	2,399	573	48
Mount Sterling	5,876	1,414	48	Russellville	7,149	1,355	38
Mount Vernon	2,592	596	46	Sacramento	517	54	21
Mount Washington	8,485	762	18	Sadieville	263	39	30
Muldraugh	1,298	234	36	Saint Charles	309	23	15
Munfordville	1,563	361	46	Saint Matthews	15,852	2,619	33
Murray	14,950	1,357	18	Saint Regis Park	1,520	283	37
Nebo	220	34	31	Salem	769	49	13
New Castle	919	114	25	Salt Lick	342	75	44
New Haven	849	61	14	Salyersville	1,604	313	39
Newport	17,048	3,589	42	Sanders	246	15	12
Nicholasville	19,680	2,809	29	Sandy Hook	678	95	28
Norbourne Estates	461	3	1	Sardis	149	22	30
North Middleton	562	28	10	Science Hill	634	17	5
Northfield	970	78	16	Scottsville	4,327	868	40
Nortonville	1,264	131	21	Sebree	1,558	166	21
Oak Grove	7,064	951	27	Seneca Gardens	699	4	1
Oakland	260	18	14	Sharpsburg	295	53	36
Olive Hill	1,813	315	35	Shelbyville	10,085	1,846	37
Owensboro	54,067	9,949	37	Shepherdsville	8,334	1,461	35
Owenton	1,387	242	35	Shively	15,157	3,739	49
Owingsville	1,488	239	32	Silver Grove	1,215	124	20
Paducah	26,307	7,076	54	Simpsonville	1,281	116	18
Paintsville	4,132	944	46	Slaughters	238	11	9
Paris	9,183	1,498	33	Smithfield	102	49	96
Park City	517	60	23	Smithland	401	79	39

* Data Not Available

TABLE F-1. CRASHES AND CRASH RATES FOR ALL CITIES LISTED IN THE 2000 CENSUS (1997-2001)(continued)

CITY	POPULATION	NUMBER OF CRASHES	ANNUAL CRASHES PER 1000 POPULATION
Smiths Grove	784	100	26
Somerset	11,352	3,407	60
Sonora	350	87	50
South Carrollton	184	73	79
South Shore	1,226	76	12
Southgate	3,472	419	24
Sparta	230	40	35
Springfield	2,634	469	36
Stamping Ground	566	41	15
Stanford	3,430	328	19
Stanton	3,029	380	25
Strathmoor Village	625	1	0
Sturgis	2,030	181	18
Taylor Mill	6,913	968	28
Taylorsville	1,009	182	36
Tompkinsville	2,660	493	37
Trenton	419	14	7
Union	2,893	330	23
Uniontown	1,064	91	17
Upton	391	61	31
Vanceburg	1,731	214	25
Versailles	7,511	1,215	32
Vicco	318	65	41
Villa Hills	7,948	290	7
Vine Grove	4,169	284	14
Wallins Creek	257	107	83
Walton	2,450	450	37
Warfield	284	73	51
Warsaw	1,811	131	15
Water Valley	316	15	10
Waverly	297	38	26
Wayland	298	28	19
Wellington	561	*	*
West Liberty	3,277	380	23
West Point	1,100	193	35
Westwood	4,888	*	*
Westwood	612	*	*
Wheatcroft	173	12	14
Wheelwright	1,042	42	8
Whipps Millgate	415	*	*
White Plains	800	54	14
Whitesburg	1,600	407	51
Whitesville	632	78	25
Whitley City	1,111	274	49
Wickliffe	794	168	42
Wilder	2,624	529	40
Wildwood	247	2	2
Williamsburg	5,143	773	30
Williamstown	3,227	547	34
Willisburg	304	242	159
Wilmore	5,905	187	6
Winchester	16,724	3,185	38
Wingo	581	89	31
Woodburn	323	34	21
Woodland Hills	657	4	1
Woodlawn Park	1,033	7	1
Worthington	1,673	25	3
Worthville	215	25	23
Wurtland	1,049	63	12

* Data Not Available