Research Report
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ANALYSIS OF TRAFFIC ACCIDENT DATA IN KENTUCKY (1995 - 1999)

by

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EXECUTIVE SUMMARY

This report includes an analysis of traffic accident data in Kentucky for the years of 1995 through 1999. A primary objective of this study was to determine average accident statistics for Kentucky highways. Average and critical numbers and rates of accidents 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 accidents.

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 accident 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 accidents, and train accidents.

1.0 INTRODUCTION

Several reports have previously been prepared dealing with calculating statewide traffic accident rates for Kentucky (1, 2, 3, 4, 5, 6) and preparation of the problem identification portion of Kentucky's Annual Highway Safety Plan (7, 8, 9, 10, 11, 12). The first report analyzed accident data in 1978. This is the fourteenth report providing a combination of those two report areas (13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25). Traffic accident data for the five-year period of 1995 through 1999 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 accidents. However, before that procedure may be utilized, average accident 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 accident statistics for Kentucky. Those statistics may then be used in the high-accident location identification program to identify locations which should be investigated. Those locations are then inspected, and their accidents are analyzed to determine if a pattern of accidents exist. When applicable, recommendations for improvements can then be presented. A past study involved development of accident reduction factors that may be used in the cost-optimization procedure to rank proposed safety improvements (26).

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 having the objective of reducing the number and severity of traffic accidents. The second major objective of this report is to provide data which 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

Accident and volume data bases were used to obtain traffic accident statistics. Traffic accident data are currently obtained from the computer accident file containing all police-reported accidents. This file is obtained from data placed on computer by the Kentucky State Police (KSP). All police agencies in the state are required to send a copy of all traffic accident reports to the KSP. A change starting with the 1994 file involves the exclusion of parking lot accidents from the file so none of these accidents are included in the data file. Summaries were prepared from an analysis of the accident data.

Volume data and 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 was originally obtained from the Statewide Mileage File (SMF). Starting with the 1995 data, data were obtained from the Highway Performance Monitoring System (HPMS) file. Therefore, all the data used in this analysis came from the HPMS file. This file is used because it has more current information than could be obtained from the SMF. Data for a five-year period are combined in this report. The HPMS was used to obtain the roadway information needed to compute accident rates as a function of various roadway characteristics such as number of lanes.

A computer program using the accident file and the HPMS file was used to calculate rates for the state-maintained system. A separate computer program was used to obtain additional accident summaries considering all reported traffic accidents.

Rates were calculated for: 1) state-maintained roads having known traffic volumes, route numbers, and mileposts and 2) all streets and highways on and off the state-maintained system. Rates were provided in terms of accidents per 100 million vehicle-miles (ACC/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 1990 census have continued to be used. Data from the 2000 census will be used starting with the next report.

In addition to average accident rates, critical rates and numbers of accidents are required for the high-accident location program. Both types of rates were calculated. The following formula was used to calculate critical accident rates:

$$A_c = A_a + K(\text{sqrt}(A_a/M)) + 1/(2M) \quad (1)$$

in which

A_c = critical accident rate,
A_a = average accident 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 accidents, the following formula was used:

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

in which

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

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

3.0 STATEWIDE ACCIDENT RATES

All of the rates referred to in this section apply to state-maintained roads having known traffic volumes, route numbers, and mileposts. Accident rates are given in terms of accidents per 100 million vehicle-miles (ACC/100 MVM). Approximately 28,000 miles are included in this category using the HPMS file. This compares to over 70,000 miles of public roads in Kentucky. While only approximately 40 percent of the total miles are state maintained, in 1999 these roads accounted for approximately 85 percent of the vehicle miles traveled and 60 percent of the accidents. The accident rate on the state-maintained system is dramatically less than on the non-state maintained system. The major reason for the higher rate on roads not included in the state

maintained analysis is that accidents which occurred on state-maintained roadways, but were not provided with the information necessary to be assigned to a specific location on a roadway, could not be included in the accident total assigned to the state-maintained category. There is a need to improve the procedure for placing route and milepoint information on the accident report.

A comparison of 1995, 1996, 1997, 1998 and 1999 accident statistics on streets and highways having known traffic volumes, route numbers, and mileposts is shown in Table 1. The number of accidents on the state-maintained road system was slightly lower in 1999 compared to the average of the previous four years. The combination of the increase in the vehicle-miles driven with the decrease in the number of accidents resulted in a 11.7 percent decrease in the accident rate in 1999 compared to the previous four-year average. The overall accident rate in 1999 was 197 accidents per 100 million vehicle-miles (ACC/100 MVM). This represents a decrease from the previous accident rates. The accident rates for the previous four years varied from 203 to 246 ACC/100 MVM.

The fatal accident rate showed a similar decrease (11.5 percent) in 1999 compared to the previous four-year average. The fatal accident rate in 1999 was the lowest of the five years. There has been a general long term trend of a decreasing fatal accident rate. The fatal accident rate of 1.79 ACC/100 MVM in 1995 compares to 1.46 ACC/100 MVM in 1999. The injury accident rate decreased by 14.1 percent in 1999 compared to the previous four-year average. The injury accident rate has remained fairly stable prior to 1999 with the range of 61 to 76 ACC/100 MVM between 1995 and 1998 compared to 58 ACC/100 MVM in 1999.

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

Accident rates required to implement the high-accident spot-improvement program in Kentucky are average rural and urban rates by highway type. The current classification is basically by 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 (1995-1999) 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. In some cases, the county and route was given but the milepoint was not noted. The number of accidents for each section was then obtained from the accident

file. The total accident rate (accidents per 100 million vehicle-miles), as well as injury and fatal accident rates, were calculated.

On rural highways, the small number of three-lane highways had the highest rates (Table 2). Three- lane highways also had the highest injury accident rate. The fatal accident rate on two-lane highways was substantially higher than the other road types. Interstates had the lowest rates, followed closely by parkways. The advantage of median-separated highways is shown when comparing rates for four-lane divided (non-interstate or parkway) and four-lane undivided highways. The overall accident rate for a divided highway (which would not typically have access control) was almost 50 percent less than for an undivided highway, although the average daily traffic was similar.

On urban highways, the highest overall accident rates were on four-lane undivided and three-lane highways (Table 3). The same two highway types also had the highest injury accident rates. Urban parkways had a slightly higher fatal accident rate than the other types. The lowest overall accident rate and injury accident rate were on interstates and parkways.

Tables 2 and 3 show that the overall total accident rate on urban highways was about 57 percent higher than that on rural highways. Also, the injury rate on urban highways was 16 percent greater than that for rural highways. However, the fatal accident rate on urban highways was only about one-third that for rural highways.

Variations in accident 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 accident rate in urban areas (13.1 percent) compared to rural areas (9.6 percent). Only a small percentage (about 10 percent) of state-maintained mileage was classified as urban. The rates fluctuated significantly for the highway types with a small number of miles. The rates decreased in 1999 for all highway types except rural four-lane undivided.

Trends in overall accident rates representative of rural and urban areas are shown graphically in Figure 1 for the period 1995 through 1999. In addition, trends in accident 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 accident rates for sections of highway of various lengths. In addition to highway sections, Kentucky's high-accident location procedure uses highway spots, defined as having a length of 0.3 mile and representing a specific identifiable point on a highway.

Statewide accident rates for "spots", by highway-type classification, are listed in Table 5 using 1995 through 1999 data.

The first step in Kentucky's procedure for identifying high-accident locations involves identifying spots and sections that have more than the critical numbers of accidents. Then, the accident rates for those locations are compared to critical accident rates. Statewide averages and critical numbers of accidents for "spots" and 1-mile sections by highway-type classification are presented in Table 6 for 1995 through 1999. Critical numbers of accidents, such as those listed in Table 6, are used to establish the "number of accidents" criterion for determining the initial list of locations. For example, six accidents in this time period would be the critical number of accidents 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 (1997-1999) with the results shown in APPENDIX B. Data for 0.1 mile spots are also given.

Critical numbers of accidents for various section lengths were determined for each highway type using Equation 2. 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 accidents given in this appendix are for the five-year period of 1995 through 1999.

After the initial list of locations meeting the critical number criterion is compiled, comparisons between accident rates for those locations and critical accident rates are made. Critical accident-rate tables for highway sections for the five-year period of 1995 through 1999 are presented in APPENDIX D. Critical accident 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 accidents per 100 MVM and were calculated using Equation 1.

Critical accident-rate tables for 0.3 mile "spots" are contained in APPENDIX E. Those rates are presented in units of accidents per million vehicles and also were determined using Equation 1. These rates are for the five-year period of 1995 through 1999.

4.0 COUNTY ACCIDENT STATISTICS

Accident rates were calculated for each county considering 1) only the state-maintained system and 2) all roads within the county. The accident rates are presented in terms of ACC/100 MVM. Total accident rates were calculated for both

categories. Also, using all roads in the county, accident rates were calculated considering fatal accidents only and fatal-or-injury accidents only. Those rates are presented in Table 7. The numbers given represent the accidents reported by the various police agencies in each county. If any agency does not report the accidents they investigate, the number of accidents 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 compared to the total estimated miles driven in the state was then distributed to each county based upon the proportion 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 accident statistics, county populations in descending order were tabulated and presented in Table 8. The populations use data from the 1990 census. The counties were then grouped into five categories based upon population. Using accidents on all roads in the county, average and critical accident rates were calculated (Table 9). The total accident rate and injury-or-fatal accident rates increased as population increased while the fatal accident rate decreased with increased population. The critical accident rate was calculated using Equation 1. Critical rates (in terms of accidents per 100 million vehicle-miles) were calculated for total accidents, fatal accidents, and injury-or-fatal accidents. The numbers of counties having rates above critical in each population category were determined. The total number was 40 for total accidents, 32 for injury-or-fatal accidents, and two for fatal accidents. The consistency in accident data that has been observed during the past few years is shown in that 38 of the 40 counties determined to have a critical accident rate when total accidents were considered were also identified as having a critical accident rate in the previous report (25).

Table 10 contains a list of numbers of accidents and total accident 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 accident rate, with the critical rates identified.

Accident 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 all five population categories the same county had the highest rate considering all roads or state-maintained roads. These counties were Trimble County (in the under 10,000 category), Pendleton County (in the 10,000 to 14,999 population category), Harrison

County (in the 15,000 to 24,999 population category), Boyle County (in the 25,000 to 50,000 population category) and Fayette County (in the over 50,000 population category). When all roads are considered, Fayette County, followed by Jefferson, Daviess, and Harrison Counties, had the highest rates in the state. When only state-maintained roads are considered, Harrison County had the highest rate followed by Pendleton, Boyle, and Fayette Counties. Robertson and Carlisle Counties, which are in the lowest population category, had the lowest rates in the state. Accident rates were higher when all roads were considered compared to rates for only the state-maintained system.

Using accidents on all roads in the county, injury or fatal accident rates are listed in Table 12 in descending order by population category. Counties having critical rates are identified. Counties having the highest rates for their population categories were Owen, Pendleton, Breathitt and Harrison, Perry, and Pike. Pike County had the highest rate in the state while Carlisle County had the lowest rate.

Similar rates for fatal accidents are listed in Table 13. Counties having the highest rates for their population categories were Crittenden, Leslie, Bourbon, Knox, and Pike. The highest rates were generally for the smallest counties where there would be more driving on two-lane rural roads which would have a speed limit higher than in urban areas. Pike and Madison Counties were the only counties identified as having a critical fatal accident rate.

A summary of other miscellaneous accident data used in the problem identification process is presented by county in Table 14. This table includes the number of accidents by county by year; percent change in the 1999 accident total from the previous four-year average; percentages of accidents involving alcohol, drugs, and speeding; percentage of fatal accidents; percentage of injury-or-fatal accidents; and percentage of drivers using safety belts.

5.0 CITY ACCIDENT STATISTICS

Accident statistics were analyzed for cities by using the 1995 through 1999 accident data. The primary group of cities included in the analysis were those having a population over 2,500 that were incorporated and had a police agency. Incorporated cities were eliminated if they did not have a police agency. Incorporated cities in Jefferson County, such as St. Matthews, Jeffersontown, and Shively, were included separately from Louisville because of a desire to analyze accidents for each police reporting agency. Therefore, for Louisville, only the population of the city area was included instead of a metropolitan area population.

Table 15 is a summary of accident rates for cities having populations more than 2,500 that are incorporated and have police agencies. The cities also had to be included in the 1990 census. That table included 113 cities. Rates in terms of ACC/100 MVM are listed for the state-maintained system while rates in terms of accidents per 1,000 population are listed using all streets in the city. The number of accidents in a city on the state-maintained system was obtained using the city code given on the HPMS file. The number of accidents in a city on all roads was obtained using the code given on the accident tape. The table notes a few cities in which matches could not be obtained such that the only data are for all roads with no data for the state-maintained system.

Additional statistics are listed for each of those cities in Table 16. Rates for fatal accidents, pedestrian-motor vehicle accidents, bicycle-related motor vehicle accidents, and motorcycle accidents are provided. Those rates are in terms of accidents per 10,000 population. Percentages of accidents involving speeding or alcohol are also listed.

Total accident rates for all cities listed in the 1990 census are summarized in APPENDIX F (Table F-1). A total of 435 cities was listed in the census. Included for the cities were population, number of accidents, and accident rate (accidents per 1,000 population). In order to obtain accident information, a code for the city must be available. No such code was available for 85 of the cities. These were generally the smallest cities.

Accidents on the state-maintained system of highways within a city only accounted for a portion of all the accidents occurring within a city. In many instances, this percentage of accidents on the state-maintained system was only a small percentage of total accidents. Therefore, total accident rates were used to determine critical accident rates for cities. Accident 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 accident rate. The cities for which a match could not be obtained using city code listed in the HPMS file would not be listed in Table 17. Lexington, Richmond, Erlanger, Fort Wright, Lancaster, and Dry Ridge had the highest accident 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. A total of 160 cities is listed in this table. The average accident rate for all cities in a category is also listed. The overall rates were highest for cities in the population categories between 10,000 and 55,000. The lowest overall rate was for the 1,000 to 2,499 population category. The large range in rates was 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 accident rates for cities by population category are listed in Table 18. They are tabulated in order of descending accident rates and critical rates are identified. The order of rates for cities is very different in Table 18 compared to Table 17. Thirty-four cities were identified as having total accident rates above critical. Louisville, Bowling Green, Florence, London, and Crestview Hills had the highest total accident rates in their respective population ranges. Fatal accident rates, by city and population category, are listed in Table 19. They also are tabulated in order of descending fatal accident rates. Louisville, Paducah, Somerset, Shelbyville, and Prestonsburg had the highest fatal accident rates in their respective population ranges with no city identified as having a critical fatal accident rate.

6.0 ALCOHOL- AND DRUG-RELATED ACCIDENTS

Alcohol- and drug-related accidents 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 accidents in which alcohol was listed as a contributing factor on the accident report has averaged about 5,809 per year for the past five years. Alcohol-related fatalities have averaged 239 per year during the past five years (using Fatal Accident Reporting System data). If the cost of an average motor-vehicle accident is used, the estimated annual cost of alcohol-related accidents in Kentucky is in the range of $83 to $230 million depending on the source of the accident cost estimates (economic cost or comprehensive cost from the National Safety Council).

The effectiveness of alcohol enforcement programs has varied throughout the years for various parts of the country. Several enforcement programs have been conducted in Kentucky and evaluations of some of the programs have been documented (27). Results from the programs of increased enforcement in Fayette, McCracken, and Warren counties indicated a significant reduction in alcohol-related accidents during enforcement hours of the program. There were dramatic increases in DUI arrests in the three areas evaluated. Approximately 90 percent of the respondents to a survey questionnaire were in favor of Traffic Alcohol Programs as a means of reducing alcohol-related accidents. Benefit-cost ratios were calculated and were determined as being greater than 1.0 for all areas evaluated. Very similar results were obtained after an impact evaluation of traffic alcohol programs in Jefferson County (28).

The number of alcohol-related accidents has generally decreased over the past several years. In the early 1980's, the annual number of alcohol accidents was over 10,000. In 1984, there were 9,007 alcohol-related accidents (6.6 percent of all accidents). 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 accidents 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 accidents decreased to 6,150 in 1996, 6,070 in 1997, and 5,222 in 1998. The 1999 total of 5,441 is a 7.8 percent decrease compared to the previous four-year average. The 1998 number was the lowest number since the first year this trend analysis was started in 1978. Alcohol-related accidents represented 4.4 percent of all accidents during this five-year period. The number of alcohol-related fatalities in 1999 (222) decreased by 8.6 percent over the 1995-1998 average (243). The number in 1999 was the higher than for 1998 but still showed a continuation of a decreasing trend over the past several years.

To identify alcohol-related accident problem areas, percentages of accidents involving alcohol were summarized for counties and cities as shown in Tables 20 and 21, respectively. In Table 20, number and percentage of accidents involving alcohol were determined by considering all drivers and two age categories (16 through 18 years and 19 through 20 years). This allowed a separate analysis for young drivers. The counties are listed by county population group in order of descending percentages of alcohol accidents for all drivers. Counties in each population category having the highest percentage of accidents, considering all drivers, involving alcohol are Robertson, Magoffin, Marion, Floyd, and Pike.

The information provided in Table 20 also may be used to determine the counties that have the highest percentages of accidents involving alcohol for young drivers by county population category. The counties identified as having the highest percentages of alcohol-related accidents, considering only young drivers, were not typically the same as those identified when all drivers were considered. For the 16 through 18 years of age category, the counties in each population category having the highest percentages of accidents involving alcohol are Owsley, Magoffin, Marion, Floyd, and Pike. For the 19 to 20 age category, counties having the highest percentage are Robertson, Monroe, Lincoln, Letcher and Harlan, and Madison. No counties had the highest percentage for each group of drivers (all drivers, ages 16 through 18 and ages 19 and 20).

Table 21 is a summary of number and percentage of accidents involving alcohol for cities. For each population category, cities having the highest percentages of accidents involving alcohol are Lexington, Covington, 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 accident. Five years of conviction data (1995 through 1999) 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 were Robertson, Green, McLean, Oldham, and Marshall. Counties having the lowest rates of alcohol convictions per alcohol-related accident were Owen, Green, Marion, Nelson, and Kenton. Counties having low rates for either convictions per 1,000 licensed drivers or convictions per alcohol-related accident may be candidates for increased enforcement or other special programs (especially if they have a high percentage of alcohol-related accidents). 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 1995 and 1996 to a high of almost 33,000 in 1998. The number of alcohol convictions in 1999 was approximately the same as 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 1995 through 1999 (Table 24). The arrest data for "driving under the influence" have been obtained from annual Crime in Kentucky reports distributed by the Kentucky State Police. However, starting in 1996, DUI arrest data were not available from the Kentucky State Police for inclusion into this report. Data were available from the Administrative Office of the Courts (AOC). Since combining these two data sources would create inconsistent data, the AOC data were used rather than using data which from two different data sources. The statewide percentage of alcohol convictions per arrest over these three years was 78.6 percent. The percentages varied from a low of 41.0 percent in Owsley County to a high of 94.6 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 had a conviction percentage over 90 percent (Grant, Fleming, McLean, Lewis, Mason, Union, Caldwell, Laurel, Henderson, Grayson, and Fayette). Only three counties had a conviction rate under 60 percent (Owsley, McCreary, 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 76.9 to 79.1 percent. Counties having the highest conviction percentages in the various population categories were Fayette, Laurel, Grant, Fleming, and McLean. Counties having the lowest conviction percentages for the various population categories were Kenton, Floyd, Clay, Monroe, and Owsley.

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 field sobriety or BAC tests fail to confirm the drunk-driving charge. In addition, the severity of the penalty for drunk driving could influence police officers,

and they might reduce a drunk-driving charge to reckless driving. Similarly, in some instances, the judicial system has been responsible for reducing charges from drunk driving 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 1995 through 1999 the highest number of convictions was in 1996. The level for 1995 through 1999 has been fairly constant. The number in 1999 was a 5.4 percent decrease from the average number in the previous four years. The highest rates (convictions per 1,000 licensed drivers) occurred in Gallatin, Marion, Clinton and Lyon Counties. The lowest rates were in Oldham, Spencer, Trimble and Hancock Counties.

Drugs continue to be listed as a contributing factor in a relatively small percentage of all accidents. However, the number of drug-related accidents increased dramatically in 1999 (33.7 percent) compared to the 1995 through 1998 average. There has been a trend of a larger number of this type of accident over the past several years. The lowest number of drug-related accidents occurred in 1995 with 406 accidents (0.32 percent of all accidents) compared to a high of 656 in 1999 (0.50 percent of all accidents). As may be seen, the percentage of accidents in which drugs are listed on the report as a contributing factor is very small. The number of drug-related injury accidents increased by 40.5 percent in 1999 compared to the 1995-1998 average with a range of from 208 in 1995 to 355 in 1999. The small number of drug-related fatal accidents identified on the police report as a contributing factor ranged from 12 in 1995 and 1999 to 15 in 1996 with a decrease of 11.1 percent in 1999 compared to the 1995-1998 average. However, FARS data show that the presence of drugs was identified in 112 fatal accidents.

Percentages of accidents 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 accidents by population category were Robertson, Leslie, Johnson and Clay, Knox, and Pike. The data in Table 27 show most of the counties with the highest percentages are in southeast Kentucky. The highest percentages of this type of accident were in Leslie and Martin Counties.

Another summary was prepared to show percentages of accidents involving drugs by city population categories (Table 28). Within each population category, cities having the highest percentages of drug-related accidents were Lexington, Richmond and Covington and Bowling Green, Middlesboro, Williamsburg, and Barbourville.

7.0 OCCUPANT PROTECTION

The percentages of drivers of passenger cars involved in traffic accidents 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 1995 through 1999. The rates varied from a high of 94.6 percent in Fayette County to a low of 67.5 percent in Robertson County. Observational surveys have been conducted across the state for several years and have shown significantly lower rates than that reported in the accident 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, 22 counties had rates over 90 percent while only 16 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 in Table 29. Those counties were selected on the basis of their safety belt usage rate, accident 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 accident rates (either total accident rate or injury or fatal accident rate). Also, an attempt was made to select counties which 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 accidents, by year, from 1995 through 1999 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 1995 through 1999. 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 accident data has been substantially higher than determined from observational surveys. For example, the statewide observational

survey for 1999 resulted in a driver usage rate of 59 percent (29) compared to the 91 percent reflected in the accident 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 10 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 accident severity. 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 accident, 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 79 percent and the chance of receiving a non-incapacitating injury is reduced by 67 percent. Safety belts will greatly decrease the possibility of injury in accidents 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 34 percent (from 7.30 percent for drivers not wearing safety belts to 11.12 percent for drivers wearing safety belts). The chance of receiving either a fatal or incapacitating injury was reduced by 82 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 reductions in accident severity were determined to be statistically significant (probability of 0.99) (30).

The change in accident severity for drivers wearing and not wearing a safety belt is presented in Table 32 for the years 1995 through 1999. The reduction in severity from the use of safety belts has remained consistent. There has been an increase in the severity of injuries to drivers not wearing a safety belt over the time period.

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 accident report), and the associated accident 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 1995 through 1999 were used along with an estimate of the economic cost of traffic accidents provided by the National Safety Council (as shown in the footnote in Table 33). The actual number of fatalities and incapacitating injuries for 1995 through 1999 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 79 percent for incapacitating injuries. Accident cost estimates were $970,000 for a fatality and $45,800 for an incapacitating injury. For example, if 70 percent of all drivers involved in accidents in Kentucky wore safety belts, there would be a potential annual reduction of about 147 fatalities and a potential annual reduction in the cost of fatalities and serious injuries of approximately 192 million dollars.

A summary of usage and effectiveness of child safety seats for children under the age of four who were involved in traffic accidents is presented in Table 34. Data are for 1995 through 1999. Age categories in the accident 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 52 fatalities (children age three and under) occurring during the study period, 29 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 700 incapacitating injuries, 485 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 92-percent reduction in fatalities for children in restraints, a 83-percent reduction in incapacitating injuries, a 78-percent reduction in non-incapacitating injuries, and a 53-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 accident data was 94 percent in 1999. This compares to the usage rate of 89 percent found in the 1999 observational survey (29).

Additional analysis of accident data related to other aspects of safety belt usage is included in APPENDIX G. Accident severity is related to accident type, speed limit, and ejection and usage is related to driver age and sex.

8.0 SPEED-RELATED ACCIDENTS

Speed is one of the most common contributing factors in total accidents and fatal accidents. Speed-related accidents had remained fairly constant at slightly over 10,000 from 1995 through 1997 before decreasing to slightly over 9,000 in 1998. The

number of speed-related accidents in 1999 was almost identical to the 1998 total. The number of speed-related accidents decreased by 9.5 percent in 1999 compared to the previous four years. For the five-year period, speed-related accidents represented 7.5 percent of all accidents, 12.0 percent of injury accidents, and 26.9 percent of fatal accidents. The number of speed-related fatal accidents decreased by 0.7 percent in 1999 compared to the previous four years. The number of speed-related fatal accidents ranged from a high of 230 in 1997 to a low of 182 in 1995. The number of speed-related injury accidents decreased by 8.7 percent in 1999 compared to the previous four years. The number of speed-related injury accidents ranged from a high of 4,494 in 1996 to a low of 3,990 in 1999.

As a means of analyzing speed-related accidents, accidents 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 accidents, those counties having the highest percentages in each population category were Menifee, Garrard, Lincoln, Knox, and Pike. There were several counties having a high percentage of speed-related accidents in the southeastern section of the state. A similar summary of accidents involving unsafe speeds for cities was prepared and is presented in Table 36. Those cities having the highest percentages in each population category were Lexington, Hopkinsville, Erlanger, Villa Hills and Pikeville, and Park Hills.

In addition to accident analysis, the other major area of analysis for unsafe speed was speed convictions. Areas having large percentages of accidents 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 accident are included. There has been a substantial increase in speeding convictions over the past few years. The number of speeding convictions increased from 72,972 in 1995 to 103,696 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, Jackson, Wayne, Letcher, and Pike. The counties identified as having the lowest rates of speeding convictions per speed-related accident were Elliott, Jackson, Wayne, Harlan, and Pike. There was a predominance of counties having high percentages of speed-related accidents 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 study of Kentucky speed limits, moving speed data were taken on various highway types (31). 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. Recommendations for speed limits were given in that report (31).

9.0 TEENAGE DRIVERS

A separate analysis was conducted to determine the frequency of accidents involving teenage drivers. A review of driver records show that teenage drivers account for approximately six percent of licensed drivers in Kentucky. However, accident data show that teenage drivers are involved in a much higher percentage of traffic accidents. Using 1999 data, it was found that teenage drivers were involved in about 21 percent of all accidents, 24 percent of injury accidents, and 17 percent of fatal accidents. Teenage drivers (using drivers with a learner permit) are over represented by a factor of 3.4 in all accidents, 3.7 in injury accidents, and 3.2 in fatal accidents.

The involvement rate of teenage drivers compared to all drivers in total and fatal accidents was compared (using 1999 data). Considering all accidents, the rate was 48 accidents per 1,000 drivers for all drivers compared to 176 accidents per 1,000 drivers for teenage drivers. Considering fatal accidents, the rate was 27 fatal accidents per 100,000 drivers for all drivers compared to 73 fatal accidents per 100,000 teenage drivers. These rates again show the over representation of teenage drivers in both total and fatal accidents.

10.0 GENERAL ACCIDENT STATISTICS

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

10.1 ACCIDENT TREND ANALYSIS

An analysis of accident trends over the five-year period is summarized in Table 41. The 1999 accidents were compared to an average of the preceding four years (1995-1998). There was an increase in total accidents (1.3 percent) when comparing

1999 to the previous four years. It should be noted that accidents in parking lots have not been included in the accident data since 1994.

The highest number of accidents occurred in 1996 (134,558) 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 accidents in 1998 is almost identical to the number in 1999. This did not affect the number of fatal accidents. The number of fatal accidents and fatalities in 1999 decreased compared to the previous four-year average. The number of fatal accidents decreased by 3.9 percent while the number of fatalities decreased by 4.7 percent. The number of fatalities ranged from 819 in 1999 to 869 in 1998. The number of injury accidents and injuries in 1999 was very similar to the previous four-year average. There was a 0.9 percent increase in injury accidents with a 0.4 percent decrease in injuries. The number of injuries varied from 52,952 in 1998 to 56,342 in 1997.

Vehicle-miles traveled has increased steadily over the five-year period. The larger increase in vehicle miles traveled, combined with the decrease in the number of accidents, resulted in a decrease (7.4 percent) in the total accident rate in 1999 compared to the previous four-year average. There were also decreases in the fatal accident rate (12.5 percent) and fatality accident rate (13.1 percent). The total accident rate in 1999 was close to 1998 which was the lowest for the five-year period. The fatal and fatality accident rates in 1999 were the lowest in this time period.

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

There was a total of 654,286 accidents in the five-year period, of which 3,764 (0.6 percent) were fatal accidents and 179,386 (27.4 percent) were injury accidents. Those accidents resulted in 4,255 fatalities and 276,070 injuries. There is a large range used when estimating accident costs. Using National Safety Council estimates of motor vehicle accident cost, considering economic or comprehensive costs, results in an estimate for 1999 of 1.9 to 5.3 billion dollars for the cost of Kentucky traffic accidents or an average cost of $14,200 to $39,900 per accident.

Additional general statistics compiled by county for accidents involving pedestrians, bicycles, motorcycles, school buses, and trucks are included in Table 42. Numbers of accidents and average annual accidents per 10,000 population were included.

10.2 PEDESTRIAN ACCIDENTS

The number of pedestrian accidents decreased by 4.2 percent in 1999 compared to the period 1995 through 1998. The number of accidents has remained fairly constant from 1995 through 1999 with a range of from 1,077 to 1,199. Pedestrian collisions are a severe type of accident. In 1999, pedestrian accidents accounted for only 0.8 percent of all accidents but 2.8 percent of injury accidents and 7.5 percent of fatal accidents. The number of injury accidents decreased by 3.5 percent in 1999 while the number of fatal accidents decreased by 8.7 percent in 1999 compared to the 1995-1998 average. Injury accidents ranged from 966 in 1998 to 1,085 in 1996 while fatal accidents ranged from 56 in 1996 to 65 in 1998.

A summary of pedestrian accident statistics by county and population category is presented in Table 43. Numbers of accidents and annual accident rates per 10,000 population are included. From the listing of accident rates in descending order, the following counties had the highest rates in each population category: Wolfe, Washington, Grant, Henderson, and Kenton. A similar analysis was performed for pedestrian accidents by city and population category. Results are summarized in Table 44 and the following cities had the highest rates in their respective population categories: Louisville, Covington, Newport, Shelbyville, and Springfield. Covington and Newport had substantially higher rates than any other city.

10.3 BICYCLE ACCIDENTS

Numbers and rates of motor-vehicle accidents involving bicycles by county are listed in Table 45. Counties were grouped by population category. The counties having the highest accident rate in each category are Carroll and Fulton, Caldwell, Marion and Union and Bourbon, Henderson, and Fayette. A similar summary was prepared for cities and the results are presented in Table 46. Cities having the highest rate of bicycle-related accidents in each population category are Louisville, Covington, Newport, Bardstown, and Carrollton. The rate in Newport was substantially above any other city.

The number of bicycle accidents decreased in 1999 (8.5 percent) compared to the average of 1995 through 1998. The number of bicycle accidents has ranged from 587 in 1998 to 706 in 1995. This is a severe type of accident. In 1999, while bicycle accidents accounted for 0.5 percent of all accidents, they accounted for 1.4 percent of injury accidents and also 1.4 percent of fatal accidents. The number of injury accidents decreased by 4.8 percent in 1999 while the number of fatal accidents increased by 38 percent compared to the 1995-1998 average. The range in injury accidents was from 480 in 1998 to 602 in 1995 while the number of fatal accidents ranged from 4 in 1995 to 10 in 1997 and 1999.

10.4 MOTORCYCLE ACCIDENTS

County and city statistics for accidents involving motorcycles are presented in Tables 47 and 48, respectively. For each population category, counties having the highest rates for motorcycle accidents per 10,000 population were Lyon, Pendleton, Breathitt, Floyd, and Pike (Table 47). From Table 48, those cities having the highest rates in each population category were Louisville, Bowling Green, Madisonville, Pikeville, and Prestonsburg.

There was a major increase in the number of motorcycle accidents in 1999 (30.3 percent) compared to the 1995 to 1998 average. The numbers over the five-year period ranged from a high of 1,033 in 1999 to a low of 736 in 1997. This is a severe type of accident. Data in 1999 show that motorcycle accidents accounted for 0.8 percent of all accidents but 2.1 percent of injury accidents and 5.8 percent of fatal accidents. The number of injury accidents increased by 25.3 percent while the number of fatal accidents increased by 66.3 percent in 1999 compared to the 1995-1998 average. The number of injury accidents ranged from 581 in 1996 to 774 in 1999 while the number of fatal accidents ranged from 21 in 1995 to 42 in 1999. It should be noted that 1999 was the first full year after repeal of the law requiring motorcyclist to wear a helmet.

10.5 SCHOOL BUS ACCIDENTS

School bus accident 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 accidents by county and population category. Counties having the highest rates in each population category are Spencer, Anderson, Montgomery, Jessamine, and Madison. 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 Shepherdsville. The highest rate was in London.

The trend analysis presented in Table 41 indicates there was a decrease in this type of accident in 1999 (18.9 percent decrease) compared to 1995 through 1998. The annual number of this type of accident ranged from a high of 822 in 1997 to a low of 648 in 1999. The number of injury accidents ranged from 150 in 1997 to 93 in 1996. There were no fatal accidents involving a school bus in 1999.

10.6 TRUCK ACCIDENTS

Truck accidents included both single unit and combination trucks. A summary of those accidents by county is given in Table 51. Counties having the highest rates in each population category were Gallatin, Hart, Grant, Laurel, 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 a decrease in the number of truck accidents in 1999 (12.5 percent) compared to the previous four-year average. The number in 1999 was almost identical to that in 1998. The number of truck accidents ranged from a high of 9,975 in 1996 to a low of 7,642 in 1999. The number of injury accidents decreased by 16.5 percent while the number of fatal accidents decreased by 18 percent in 1999 compared to the 1995-1998 average. The number of injury accidents ranged from 1,665 in 1999 to 2,292 in 1996 while the number of fatal accidents ranged from 82 in 1999 to 108 in 1997. Considering the five year period, truck accidents represent 6.5 percent of all accidents, 5.4 percent of injury accidents, and 12.8 percent of fatal accidents.

10.7 TRAIN ACCIDENTS

A summary of motor vehicle-train accidents by county is presented in Table 52. Counties having the highest rates in each population category were Lee, Todd, Grant, Oldham and Pike. The highest rate was in Grant County. There were no train accidents in 51 counties in the five-year period of 1995 through 1999. 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 vehicles-railroad train accidents is given in Table 41. There was a range in train accidents from 94 in 1995 to 57 in 1997 and 1999. The number of train accidents in 1999 was 24 percent less than the 1995 through 1998 average. The number of injury accidents decreased by 40.2 percent compared to the 1995-1998 average with a range of from 16 in 1999 to 38 in 1995. The number of fatal accidents decreased by 46.7 percent with a range of 2 in 1999 to 5 in 1995.

10.8 VEHICLE DEFECTS

The requirement for an annual vehicle inspection was repealed in 1978. A summary of the involvement of vehicle defects in accidents before and after repeal of that law is presented in Table 53. The percent of accidents 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 has averaged 6.36 percent for 1980 through 1999. There has been a general decrease in this percentage since a maximum of 7.43 percent in 1980-1984 down to 5.27 percent in 1995-1999. Starting in 1993, the percentage of accidents involving a vehicle defect was lower than that noted prior to repeal of the vehicle inspection requirement.

11.0 SUMMARY AND RECOMMENDATIONS

11.1 STATEWIDE ACCIDENT RATES

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

Each accident must be identified accurately to perform a complete accident analysis. Many accidents which occur on a state-maintained road do not have the necessary route and milepoint information to be included in the detailed analysis. Efforts must be made to increase the number of accident reports having the necessary location information. Part of this effort would be to inform the investigating agencies of the importance of placing the proper route and milepoint for all accidents occurring on state maintained roads. The roadway reference log has been updated to provide a more comprehensive list of milepoints which should be used.

The fatal accident rate on rural, two lane roadways is much higher than any road type. The factors contributing to this high rate should be identified with countermeasures recommended.

11.2 COUNTY AND CITY ACCIDENT STATISTICS

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

A program has been used 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 has been 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 accident 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. Richmond
2. Shively
3. Georgetown
4. Crestview Hills
5. Oak Grove
6. Cold Springs
7. Shepherdsville
8. Prestonsburg
9. Harlan
10. Grayson
11. Mt. Vernon
12. Scottsville
13. Hodgenville
14. Columbia
15. Irvine

11.3 ALCOHOL-RELATED ACCIDENTS

1. The number of alcohol-related accidents decreased in 1999 compared to the previous four-year average and has decreased farther from the level prior to 1995. There has been an even larger decrease in the number of alcohol-related fatal accidents and fatalities. This may be related to increased enforcement and public information campaigns that have increased public awareness.

As part of the analysis, percentages of alcohol-related accidents were tabulated for counties and cities. In addition, alcohol conviction rates were tabulated by county. Those counties having relatively high percentages of alcohol-related accidents (Table 20) and low average numbers of alcohol convictions per alcohol accident (Table 23) were identified as potential locations where increased enforcement may be beneficial. Counties were also required to have 125 or more alcohol-related accidents 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.

Post Number	County
1	Graves
2	Christian
3	Barren
4	Nelson
5	Carroll
6	Kenton
7	Lincoln
8	Mason
9	Floyd
10	Knox
11	Whitley
12	Anderson
13	Letcher
14	Carter
15	Taylor
16	Union

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. Again, the criterion of 125 or more alcohol-related accidents within a five-year period was applied (Table 21). The following are candidate cities for a program of increased alcohol enforcement.

1. Covington,
2. Richmond,
3. Hopkinsville,
4. Owensboro,
5. Henderson,
6. Ashland,
7. Nicholasville, and
8. Erlanger.

11.4 OCCUPANT PROTECTION

1. Even though a statewide safety belt law has been passed, efforts to increase safety belt usage must continue. The various types of safety belt programs which 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 accidents, 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. These types of programs should be implemented on a statewide level. Usage rates and accident 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). These counties were identified in Table 29. A list of those counties, by State Police Post, follows:

Post Number	County
1	Fulton
2	Crittenden
3	Barren
4	Breckinridge
5	Carroll
6	Pendleton
7	Estill
8	Menifee
9	Floyd
10	Bell
11	Whitley
12	Spencer
13	Leslie
14	Carter
15	Monroe
16	Union

2. To maintain up-to-date usage statistics and to monitor the effect of the statewide safety belt law, annual statewide observational surveys should 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 ACCIDENTS

1. Unsafe speed has been shown to be a primary contributing factor in fatal accidents and a common contributing factor in all accidents. Those counties having high percentages of speed-related accidents (Table 35) and low average number of speeding convictions per speed-related accident (Table 38) were identified as possible locations for increased enforcement. Locations meeting the criteria for accidents and

convictions also were required to have at least 150 speed-related accidents during the five-year study period and speed-related accidents were at least 7.5 percent of total accidents. 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	Graves
2	Muhlenberg
3	Warren
4	Nelson
5	Owen
6	Boone
7	Madison
8	Rowan
9	Floyd
10	Harlan
11	McCreary
12	Franklin
13	Letcher
14	Carter
15	Marion
16	Ohio

2. By analyzing speed-related accident rates for cities and applying the criterion of at least 150 accidents during the five-year period and speed related accidents were five percent or more of total accidents (Table 36), the following cities were recommended for additional programs of speed enforcement:

1. Hopkinsville,
2. Bowling Green,
3. Frankfort,
4. Richmond,
5. Erlanger,
6. Independence,
7. Somerset, and
8. Pikeville.

3. Increased speed enforcement should be implemented on roads which have been identified as having the highest percentage of speed-related accidents. Consideration should be given to the types of roadways which have the highest accident 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 accident 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 (31).

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 preliminary evaluation of the graduated license program shows a reduction in accidents 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 teen drivers who have completed the permit stage (32).

2. The lack of driving experience would be related to the over representation of teenage drivers in traffic accidents. 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 ACCIDENT STATISTICS

Pedestrians

The accident rate analyses identified Covington and Newport as cities having substantially higher pedestrian accident 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 accident rate in their population category for this type of accident (Table 46) (as with pedestrian accidents). A study of

this type of accident could be included with the previously mentioned study of pedestrian accidents.

Motorcycles

1. Pike County had the highest accident rate in the state (Table 47) as did Pikeville (Table 48) which is in Pike County. Also, Warren County had the second highest rate of accidents in its population category while Bowling Green (which is in Warren County) had the highest rate of this type of accident in its population category. Evaluations of this type of accident 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 (29). Also, the number of fatal accidents increased dramatically in 1999 with also a substantial increase for injury accidents.. An investigation should be made to determine if this increase was related to the repeal of the helmet law. The requirement for the use of motorcycle helmets should be reenacted.

Truck Accidents

Several counties with a large number of truck accidents were in counties with a large amount of coal truck traffic. Coal trucks are hauling on an extended weight system which allows heavy loads. A recent research report investigated heavy truck involvement in traffic accidents and recommended countermeasures related to the vehicle, driver, or roadway (33). Implementation of these countermeasures should be considered.

Vehicle Defects

The percentage of accidents involving vehicle defects increased after repeal of the vehicle inspection law. It could be concluded that the repeal of that law resulted in additional accidents involving vehicle defects. However, the percentage of accidents involving a vehicle defect has decreased in recent years with the percentage starting in 1993, and continuing through 1999, less than before repeal of the inspection law. A study could be conducted to determine whether the defects that have contributed to accidents 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 accidents.

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TABLE 1. Comparison of 1995, 1996, 1997, 1998 and, 1999 Accidents Rates*

STATISTIC	1995	1996	1997	1998	1995-1998 Average	1999	Percent Change***
Accidents	84,205	77,204	84,917	79,301	81,407	79,893	-1.9
Mileage	27,734	27,808	23,272	27,881	26,674	28,081	5.3
Accidents Per Mile	3.04	2.78	3.65	2.84	3.08	2.85	-7.4
Vehicle Miles (Billion)	34.19	36.29	36.90	39.11	36.62	40.56	10.8
AADT	3,378	3,575	4,344	3,843	3,785	3,958	4.6
Accident Rate**	246	213	230	203	223	197	-11.7
Fatal Accident Rate**	1.79	1.54	1.66	1.61	1.65	1.46	-11.5
Injury Accident Rate**	76	64	69	61	68	58	-14.1

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

** Accidents Rates are given in terms of accidents per 100 million vehicle-miles (ACC/100 MVM).

*** Percent change from 1995-1998 average to 1999.

Table 2. Statewide Rural Accident Rates By Highway Type Classification (1995-1999)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	ACCIDENTS RATES (ACCIDENTS PER 100 MVM) ALL	INJURY	FATAL
One-Lane	49	800	142	42	1.4
Two-Lane	22,497	1,550	252	90	3.1
Three-Lane	30	5,540	270	93	1.7
Four-Lane Divided (Non-Interstate or Parkway)	458	11,040	119	42	1.7
Four-Lane Undivided	43	15,540	226	66	1.4
Interstate	527	28,300	52	14	0.7
Parkway	567	8,450	60	16	0.9
All	24,170	2,510	176	61	2.2

* Average for the five years.

Table 3. Statewide Urban Accident Rates By Highway Type Classification (1995-1999)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	ACCIDENTS RATES (ACCIDENTS PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	1,837	6,810	333	87	1.0
Three-Lane	31	12,210	531	124	1.0
Four-Lane Divided (Non-Interstate or Parkway)	365	23,080	330	89	0.8
Four-Lane Undivided	248	19,110	541	138	0.9
Interstate	231	63,110	96	23	0.5
Parkway	51	11,390	105	26	1.1
All	2,785	15,060	276	71	0.7

* Average for the five years.

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

TABLE 4. Comparison of 1995, 1996, 1997, 1998 and, 1999 Accidents Rates By Rural and Urban Highway Type Classification

LOCATION	HIGHWAY TYPE	1995	1996	1997	1998	1995-1998 Average	1999	Percent Change*
Rural	One-Lane	364	217	365	269	304	53	-82.7
	Two-Lane	267	236	267	254	256	236	-7.8
	Three-Lane	234	230	474	269	302	198	-34.4
	Four-Lane Divided (Non-Interstate or Parkway)	140	102	124	115	120	120	-0.4
	Four-Lane Undivided	228	182	241	237	222	241	8.5
	Interstate	54	60	52	46	53	50	-5.9
	Parkway	74	68	60	54	64	50	-21.1
	All	193	170	183	174	180	163	-9.6
Urban	Two-Lane	389	333	363	301	347	285	-17.9
	Three-Lane	675	513	572	475	559	430	-23.0
	Four-Lane Divided	366	314	356	305	335	311	-7.3
	Four-Lane Undivided	676	525	568	467	559	485	-13.3
	Interstate	98	106	99	84	97	94	-3.1
	Parkway	101	114	107	98	105	103	-2.6
	All	323	274	296	245	284	247	-13.1

* Percent change from 1995-1998 to 1999

Table 5. Statewide Accident Rates for "SPOTS" by Highway Type Classification (1995-1999)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF ACCIDENTS	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	ACCIDENTS PER MILLION VEHICLES PER SPOT
Rural	One-Lane	102	165	0.29	0.43
	Two-Lane	160,483	74,989	0.57	0.76
	Three-Lane	813	99	2.02	0.81
	Four-Lane Divided (Non-Interstate or Parkway)	11,020	1,526	4.03	0.36
	Four-Lane Undivided	2,747	143	5.67	0.68
	Interstate	14,167	1,755	10.33	0.16
	Parkway	5,263	1,889	3.09	0.18
	All Rural	194,595	80,567	0.91	0.53
Urban	Two-Lane	76,116	6,124	2.49	1.00
	Three-Lane	3,690	104	4.46	1.59
	Four-Lane Divided	50,742	1,218	8.42	0.99
	Four-Lane Undivided	46,696	826	6.97	1.62
	Interstate	25,519	770	23.03	0.29
	Parkway	1,116	171	4.16	0.31
	All Urban**	210,916	9,283	5.50	0.83

* 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 Accidents for "SPOTS" and One-Mile Sections by Highway Type Classification (1995-1999)*

RURAL OR URBAN	HIGHWAY TYPE	ACCIDENTS PER SPOT		ACCIDENTS PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.62	3	2.06	6
	Two-Lane	2.14	6	7.13	15
	Three-Lane	8.18	16	27.28	41
	Four-Lane Divided (Non-Interstate or Parkway)	7.22	15	24.07	37
	Four-Lane Undivided	19.25	31	64.18	85
	Interstate	8.07	16	26.90	41
	Parkway	2.79	8	9.29	18
	All Rural	2.42	7	8.05	16
Urban	Two-Lane	12.43	22	41.43	59
	Three-Lane	35.52	51	118.40	147
	Four-Lane Divided	41.65	59	138.85	170
	Four-Lane Undivided	56.56	76	188.55	224
	Interstate	33.13	48	110.45	138
	Parkway	6.53	14	21.76	34
	All Urban**	22.72	35	75.73	99

* 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. Accident Rates by County for State-Maintained System and All Roads (1995-1999)

COUNTY	STATE-MAINTAINED		ALL ROADS					
			TOTAL ACCIDENTS		FATAL ACCIDENTS		FATAL OR INJURY ACCIDENTS	
	TOTAL ACCIDENTS	ACCIDENT RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Adair	1,584	214	2,222	254	22	2.5	606	69
Allen	1,323	235	2,121	311	22	3.2	647	95
Anderson	1,648	201	2,293	238	25	2.6	732	76
Ballard	806	200	1,078	228	11	2.3	354	75
Barren	3,742	195	6,463	292	41	1.9	2,101	95
Bath	1,180	164	1,576	198	15	1.9	478	60
Bell	2,385	188	3,534	249	26	1.8	1,166	82
Boone	12,473	232	16,018	266	58	1.0	4,084	68
Bourbon	2,165	249	3,428	339	42	4.1	976	96
Boyd	5,131	241	10,224	409	18	0.7	2,629	105
Boyle	3,161	313	4,675	386	32	2.6	1,258	104
Bracken	885	231	1,238	279	14	3.2	351	79
Breathitt	1,637	237	2,100	267	28	3.6	925	117
Breckinridge	1,033	168	1,323	172	22	2.9	535	70
Bullitt	4,569	141	6,527	177	45	1.2	1,968	53
Butler	994	147	1,257	161	22	2.8	445	57
Caldwell	1,189	155	1,862	211	18	2.0	513	58
Calloway	2,311	218	3,469	266	25	1.9	1,051	81
Campbell	7,963	245	14,158	367	42	1.1	3,059	79
Carlisle	194	75	239	79	8	2.6	101	33
Carroll	1,624	164	2,186	204	14	1.3	615	57
Carter	2,581	159	3,538	194	42	2.3	1,142	63
Casey	637	122	918	146	24	3.8	348	55
Christian	7,192	210	9,845	259	48	1.3	2,867	75
Clark	3,063	158	5,912	268	38	1.7	1,482	67
Clay	1,652	165	2,127	189	42	3.7	877	78
Clinton	510	134	740	163	13	2.9	216	48
Crittenden	840	252	1,089	269	24	5.9	408	101
Cumberland	334	111	485	137	15	4.2	146	41
Daviess	8,094	260	16,895	443	55	1.4	3,939	103
Edmonson	873	199	1,136	218	12	2.3	414	79
Elliott	391	224	474	226	6	2.9	207	99
Estill	1,416	294	1,981	333	18	3.0	665	112
Fayette	30,233	304	60,474	519	117	1.0	14,104	121
Fleming	958	183	1,468	229	19	3.0	484	76
Floyd	4,330	188	5,370	209	62	2.4	2,469	96
Franklin	5,422	240	7,721	293	33	1.3	1,826	69
Fulton	623	195	1,027	276	12	3.2	317	85
Gallatin	978	108	1,160	121	7	0.7	417	44
Garrard	1,291	235	1,730	267	24	3.7	583	90
Grant	3,161	158	4,192	193	30	1.4	1,207	56
Graves	3,120	187	5,032	257	42	2.1	1,485	76
Grayson	1,657	130	2,013	137	34	2.3	992	68
Green	916	245	1,327	293	12	2.6	400	88
Greenup	2,733	204	3,990	247	28	1.7	1,301	81
Hancock	643	161	888	190	12	2.6	335	72
Hardin	10,226	200	13,405	231	67	1.2	3,443	59
Harlan	3,027	217	3,896	243	35	2.2	1,349	84
Harrison	1,817	367	2,684	428	21	3.4	733	117
Hart	1,663	102	2,121	121	37	2.1	674	38
Henderson	5,918	236	9,612	336	40	1.4	2,405	84
Henry	1,566	130	1,903	144	26	2.0	593	45
Hickman	412	140	509	151	9	2.7	190	56
Hopkins	5,592	209	8,276	272	39	1.3	1,973	65
Jackson	946	241	1,334	278	16	3.3	531	111
Jefferson	69,482	258	140,574	445	336	1.1	32,920	104
Jessamine	4,010	298	6,034	365	37	2.2	1,521	92
Johnson	2,097	212	2,827	244	26	2.2	1,186	102
Kenton	16,415	281	28,365	416	44	0.6	6,618	97
Knott	1,411	166	1,722	181	30	3.2	759	80

Table 7. Accident Rates by County for State-Maintained System and All Roads (1995-1999)(continued)

COUNTY	STATE-MAINTAINED		ALL ROADS					
			TOTAL ACCIDENTS		FATAL ACCIDENTS		FATAL OR INJURY ACCIDENTS	
	TOTAL ACCIDENTS	ACCIDENT RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*
Knox	2,537	209	3,685	266	40	2.9	1,426	103
Larue	1,223	158	1,658	187	15	1.7	487	55
Laurel	6,029	195	7,986	230	66	1.9	2,556	74
Lawrence	958	110	1,417	145	24	2.5	531	54
Lee	411	166	564	188	13	4.3	215	72
Leslie	941	154	1,221	178	34	5.0	653	95
Letcher	2,350	210	2,976	229	27	2.1	1,190	92
Lewis	1,084	167	1,544	208	26	3.5	518	70
Lincoln	1,423	151	1,897	175	35	3.2	821	76
Livingston	904	155	1,070	163	8	1.2	385	59
Logan	2,466	219	3,487	264	30	2.3	1,018	77
Lyon	978	100	1,231	119	16	1.6	394	38
McCracken	7,645	239	14,524	391	60	1.6	4,148	112
McCreary	1,127	198	1,413	211	22	3.3	541	81
McLean	932	206	1,103	206	15	2.8	338	63
Madison	8,790	241	12,790	311	82	2.0	3,380	82
Magoffin	1,094	178	1,341	193	19	2.7	687	99
Marion	1,729	277	2,458	328	24	3.2	730	97
Marshall	2,852	142	3,758	167	43	1.9	1,181	52
Martin	1,167	168	1,391	180	13	1.7	555	72
Mason	2,490	254	4,002	360	27	2.4	937	84
Meade	2,036	207	2,533	218	25	2.2	854	74
Menifee	428	214	524	214	5	2.0	223	91
Mercer	1,954	240	3,094	316	13	1.3	976	100
Metcalfe	718	146	997	177	13	2.3	295	52
Monroe	525	136	817	172	16	3.4	290	61
Montgomery	2,307	214	3,693	292	36	2.8	1,006	79
Morgan	1,277	241	1,539	250	20	3.2	611	99
Muhlenberg	3,378	215	4,823	265	49	2.7	1,455	80
Nelson	3,714	211	5,368	263	49	2.4	1,481	73
Nicholas	499	163	763	213	6	1.7	229	64
Ohio	2,183	149	2,751	168	27	1.6	985	60
Oldham	3,677	203	4,542	214	20	0.9	1,228	58
Owen	860	263	1,149	286	11	2.7	405	101
Owsley	301	184	373	193	9	4.6	127	66
Pendleton	1,355	315	1,943	363	15	2.8	609	114
Perry	3,369	234	5,124	306	39	2.3	1,929	115
Pike	7,954	234	11,253	287	102	2.6	4,990	127
Powell	1,165	150	1,828	211	20	2.3	588	68
Pulaski	6,096	256	8,562	300	61	2.1	2,292	80
Robertson	46	72	63	78	1	1.2	28	34
Rockcastle	1,746	93	2,181	110	26	1.3	797	40
Rowan	3,201	270	4,011	302	22	1.7	1,099	83
Russell	1,268	183	1,637	205	13	1.6	517	65
Scott	3,832	133	6,411	207	37	1.2	1,763	57
Shelby	3,724	162	5,268	207	52	2.0	1,442	57
Simpson	1,839	135	2,615	176	26	1.8	748	50
Spencer	798	224	981	226	14	3.2	331	76
Taylor	2,259	277	3,706	370	18	1.8	909	91
Todd	989	221	1,298	244	19	3.6	428	80
Trigg	1,130	149	1,643	194	19	2.2	531	63
Trimble	839	291	1,003	291	8	2.3	324	94
Union	1,745	239	2,333	276	18	2.1	711	84
Warren	12,555	263	19,988	368	76	1.4	5,667	104
Washington	1,007	186	1,473	235	18	2.9	435	69
Wayne	1,548	237	2,215	281	22	2.8	695	88
Webster	1,536	177	1,913	195	11	1.1	654	67
Whitley	3,360	137	5,071	187	57	2.1	1,626	60
Wolfe	793	156	1,033	185	19	3.4	381	68
Woodford	2,152	179	3,466	253	32	2.3	953	69
STATEWIDE	405,520	217	654,286	304	3,765	1.7	181,423	84

* Accidents per 100 million vehicle-miles (ACC/100 MVM)

Table 8. COUNTY POPULATIONS (1990 CENSUS) IN DESCENDING ORDER

COUNTY	POPULATION	COUNTY	POPULATION	COUNTY	POPULATION
Jefferson	664,937	Meade	24,170	Fleming	12,292
Fayette	225,366	Scott	23,867	Pendleton	12,036
Kenton	142,031	Johnson	23,248	Jackson	11,955
Hardin	89,240	Clay	21,746	Powell	11,686
Daviess	87,189	Taylor	21,146	Larue	11,679
Campbell	83,866	Ohio	21,105	Morgan	11,648
Warren	76,673	Grayson	21,050	Garrard	11,579
Pike	72,583	Rowan	20,353	Monroe	11,401
Christian	68,941	Lincoln	20,045	Butler	11,245
McCracken	62,879	Woodford	19,955	Todd	10,940
Boone	57,589	Montgomery	19,561	Washington	10,441
Madison	57,508	Bourbon	19,236	Green	10,371
Boyd	51,150	Mercer	19,148	Trigg	10,361
Pulaski	49,489	Knott	17,906	Edmonson	10,357
Bullitt	47,567	Wayne	17,468	Bath	9,692
Hopkins	46,126	Mason	16,666	McLean	9,628
Franklin	43,781	Union	16,557	Carroll	9,292
Floyd	43,586	Marion	16,499	Crittenden	9,196
Laurel	43,438	Breckinridge	16,312	Clinton	9,135
Henderson	43,044	Harrison	16,248	Livingston	9,062
Greenup	36,742	Grant	15,737	Owen	9,035
Harlan	36,574	Breathitt	15,703	Metcalfe	8,963
Barren	34,001	McCreary	15,603	Fulton	8,271
Graves	33,550	Adair	15,360	Ballard	7,902
Whitley	33,326	Simpson	15,145	Hancock	7,864
Oldham	33,263	Hart	14,890	Bracken	7,766
Bell	31,506	Rockcastle	14,803	Lee	7,422
Muhlenberg	31,318	Russell	14,716	Spencer	6,801
Calloway	30,735	Allen	14,628	Cumberland	6,784
Jessamine	30,508	Estill	14,614	Nicholas	6,725
Perry	30,283	Anderson	14,571	Lyon	6,624
Nelson	29,710	Casey	14,211	Wolfe	6,503
Knox	29,676	Lawrence	13,998	Elliott	6,455
Clark	29,496	Webster	13,955	Trimble	6,090
Marshall	27,205	Leslie	13,642	Hickman	5,566
Letcher	27,000	Caldwell	13,232	Gallatin	5,393
Boyle	25,641	Magoffin	13,077	Carlisle	5,238
Shelby	24,824	Lewis	13,029	Menifee	5,092
Logan	24,416	Henry	12,823	Owsley	5,036
Carter	24,340	Martin	12,526	Robertson	2,124

TOTAL 3,685,278

Table 9. AVERAGE AND CRITICAL ACCIDENT RATES BY POPULATION CATEGORY (1995-1999 DATA)

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY	TOTAL POPULATION	TOTAL MILEAGE DRIVEN 100 MVM
UNDER 10,000	26	187,659	123.49
10,000 - 14,999	29	366,706	233.81
15,000 - 24,999	28	543,414	352.05
25,000 - 50,000	24	847,565	516.31
OVER 50,000	13	1,739,952	930.03

POPULATION CATEGORY	TOTAL NUMBER OF ACCIDENTS	ACCIDENTS PER 100 MVM	CRITICAL ACCIDENT RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	23,543	191	228	6
10,000 - 14,999	46,295	198	227	11
15,000 - 24,999	83,529	237	262	12
25,000 - 50,000	132,406	256	276	7
OVER 50,000	368,513	396	410	4

POPULATION CATEGORY	TOTAL NUMBER OF FATAL ACCIDENTS	FATAL ACCIDENTS PER 100 MVM	CRITICAL FATAL RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	298	2.41	7.05	0
10,000 - 14,999	583	2.49	6.01	0
15,000 - 24,999	805	2.29	4.94	0
25,000 - 50,000	974	1.89	3.71	0
OVER 50,000	1,105	1.19	1.97	2

POPULATION CATEGORY	TOTAL NUMBER OF FATAL OR INJURY ACCIDENTS	FATAL OR INJURY ACCIDENTS PER 100 MVM	CRITICAL FATAL OR INJURY ACCIDENT RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	7,810	63.2	84.8	6
10,000 - 14,999	15,920	68.1	85.1	9
15,000 - 24,999	26,126	74.2	88.4	7
25,000 - 50,000	39,719	76.9	87.9	7
OVER 50,000	91,848	98.8	105.6	3

TABLE 10. ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1995-1999 DATA)(ALL ROADS)

COUNTY	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Trimble	1,003	291	*
Owen	1,149	286	*
Bracken	1,238	279	*
Fulton	1,027	276	*
Crittenden	1,089	269	*
Ballard	1,078	228	*
Elliott	474	226	
Spencer	981	226	
Menifee	524	214	
Nicholas	763	213	
McLean	1,103	206	
Carroll	2,186	204	
Bath	1,576	198	
Owsley	373	193	
Hancock	888	190	
Lee	564	188	
Wolfe	1,033	185	
Metcalfe	997	177	
Clinton	740	163	
Livingston	1,070	163	
Hickman	509	151	
Cumberland	485	137	
Gallatin	1,160	121	
Lyon	1,231	119	
Carlisle	239	79	
Robertson	63	78	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,943	363	*
Estill	1,981	333	*
Allen	2,121	311	*
Green	1,327	293	*
Jackson	1,334	278	*
Garrard	1,730	267	*
Morgan	1,539	250	*
Todd	1,298	244	*
Anderson	2,293	238	*
Washington	1,473	235	*
Fleming	1,468	229	*
Edmonson	1,136	218	
Caldwell	1,862	211	
Powell	1,828	211	
Lewis	1,544	208	
Russell	1,637	205	
Webster	1,913	195	
Trigg	1,643	194	
Magoffin	1,341	193	
Larue	1,658	187	
Martin	1,391	180	
Leslie	1,221	178	
Monroe	817	172	
Butler	1,257	161	
Casey	918	146	
Lawrence	1,417	145	
Henry	1,903	144	
Hart	2,121	121	
Rockcastle	2,181	110	
POPULATION CATEGORY 15,000-24,999			
Harrison	2,684	428	*
Taylor	3,706	370	*
Mason	4,002	360	*
Bourbon	3,428	339	*
Marion	2,458	328	*
Mercer	3,094	316	*
Rowan	4,011	302	*
Montgomery	3,693	292	*
Wayne	2,215	281	*
Union	2,333	276	*
Breathitt	2,100	267	*
Logan	3,487	264	*
Adair	2,222	254	
Woodford	3,466	253	
Johnson	2,827	244	
Meade	2,533	218	
McCreary	1,413	211	
Scott	6,411	207	
Shelby	5,268	207	
Carter	3,538	194	
Grant	4,192	193	
Clay	2,127	189	
Knott	1,722	181	
Simpson	2,615	176	
Lincoln	1,897	175	
Breckinridge	1,323	172	
Ohio	2,751	168	
Grayson	2,013	137	
POPULATION CATEGORY 25,000-50,000			
Boyle	4,675	386	*
Jessamine	6,034	365	*
Henderson	9,612	336	*
Perry	5,124	306	*
Pulaski	8,562	300	*
Franklin	7,721	293	*
Barren	6,463	292	*
Hopkins	8,276	272	
Clark	5,912	268	
Calloway	3,469	266	
Knox	3,685	266	
Muhlenberg	4,823	265	
Nelson	5,368	263	
Graves	5,032	257	
Bell	3,534	249	
Greenup	3,990	247	
Harlan	3,896	243	
Laurel	7,986	230	
Letcher	2,976	229	
Oldham	4,542	214	
Floyd	5,370	209	
Whitley	5,071	187	
Bullitt	6,527	177	
Marshall	3,758	167	
POPULATION CATEGORY OVER 50,000			
Fayette	60,474	519	*
Jefferson	140,574	445	*
Daviess	16,895	443	*
Kenton	28,365	416	*
Boyd	10,224	409	
McCracken	14,524	391	
Warren	19,988	368	
Campbell	14,158	367	
Madison	12,790	311	
Pike	11,253	287	
Boone	16,018	266	
Christian	9,845	259	
Hardin	13,405	231	

* Critical accident rate

TABLE 11. ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1995-1999 DATA)(STATE-MAINTAINED SYSTEM)

COUNTY	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Trimble	839	291	*
Owen	860	263	*
Crittenden	840	252	*
Bracken	885	231	*
Spencer	798	224	*
Elliott	391	224	*
Menifee	428	214	*
McLean	932	206	*
Ballard	806	200	
Fulton	623	195	
Owsley	301	184	
Lee	411	166	
Carroll	1,624	164	
Bath	1,180	164	
Nicholas	499	163	
Hancock	643	161	
Wolfe	793	156	
Livingston	904	155	
Metcalfe	718	146	
Hickman	412	140	
Clinton	510	134	
Cumberland	334	111	
Gallatin	978	108	
Lyon	978	100	
Carlisle	194	75	
Robertson	46	72	
POPULATION CATEGORY 10,000-14,999			
Pendleton	1,355	315	*
Estill	1,416	294	*
Green	916	245	*
Morgan	1,277	241	*
Jackson	946	241	*
Allen	1,323	235	*
Garrard	1,291	235	*
Todd	989	221	*
Anderson	1,648	201	*
Edmonson	873	199	*
Washington	1,007	186	
Russell	1,268	183	
Fleming	958	183	
Magoffin	1,094	178	
Webster	1,536	177	
Martin	1,167	168	
Lewis	1,084	167	
Larue	1,223	158	
Caldwell	1,189	155	
Leslie	941	154	
Powell	1,165	150	
Trigg	1,130	149	
Butler	994	147	
Monroe	525	136	
Henry	1,566	130	
Casey	637	122	
Lawrence	958	110	
Hart	1,663	102	
Rockcastle	1,746	93	

COUNTY	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)	
POPULATION CATEGORY 15,000-24,999			
Harrison	1,817	367	*
Taylor	2,259	277	*
Marion	1,729	277	*
Rowan	3,201	270	*
Mason	2,490	254	*
Bourbon	2,165	249	*
Mercer	1,954	240	*
Union	1,745	239	*
Breathitt	1,637	237	*
Wayne	1,548	237	*
Logan	2,466	219	*
Montgomery	2,307	214	
Adair	1,584	214	
Johnson	2,097	212	
Meade	2,036	207	
McCreary	1,127	198	
Woodford	2,152	179	
Breckinridge	1,033	168	
Knott	1,411	166	
Clay	1,652	165	
Shelby	3,724	162	
Carter	2,581	159	
Grant	3,161	158	
Lincoln	1,423	151	
Ohio	2,183	149	
Simpson	1,839	135	
Scott	3,832	133	
Grayson	1,657	130	
POPULATION CATEGORY 25,000-50,000			
Boyle	3,161	313	*
Jessamine	4,010	298	*
Pulaski	6,096	256	*
Franklin	5,422	240	*
Henderson	5,918	236	*
Perry	3,369	234	*
Calloway	2,311	218	
Harlan	3,027	217	
Muhlenberg	3,378	215	
Nelson	3,714	211	
Letcher	2,350	210	
Hopkins	5,592	209	
Knox	2,537	209	
Greenup	2,733	204	
Oldham	3,677	203	
Barren	3,742	195	
Laurel	6,029	195	
Floyd	4,330	188	
Bell	2,385	188	
Graves	3,120	187	
Clark	3,063	158	
Marshall	2,852	142	
Bullitt	4,569	141	
Whitley	3,360	137	
POPULATION CATEGORY OVER 50,000			
Fayette	30,233	304	*
Kenton	16,415	281	*
Warren	12,555	263	
Daviess	8,094	260	
Jefferson	69,482	258	
Campbell	7,963	245	
Boyd	5,131	241	
Madison	8,790	241	
McCracken	7,645	239	
Pike	7,954	234	
Boone	12,473	232	
Christian	7,192	210	
Hardin	10,226	200	

* Critical accident rate

TABLE 12. INJURY OR FATAL ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED) (1995-1999 DATA)(ALL ROADS)

COUNTY	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)	
POPULATION CATEGORY UNDER 10,000			
Owen	405	101	*
Crittenden	408	101	*
Elliott	207	99	*
Trimble	324	94	*
Menifee	223	91	*
Fulton	317	85	*
Bracken	351	79	
Spencer	331	76	
Ballard	354	75	
Lee	215	72	
Hancock	335	72	
Wolfe	381	68	
Owsley	127	66	
Nicholas	229	64	
McLean	338	63	
Bath	478	60	
Livingston	385	59	
Carroll	615	57	
Hickman	190	56	
Metcalfe	295	52	
Clinton	216	48	
Gallatin	417	44	
Cumberland	146	41	
Lyon	394	38	
Robertson	28	34	
Carlisle	101	33	
POPULATION CATEGORY 10,000-14,999			
Pendleton	609	114	*
Estill	665	112	*
Jackson	531	111	*
Morgan	611	99	*
Magoffin	687	99	*
Allen	647	95	*
Leslie	653	95	*
Garrard	583	90	*
Green	400	88	*
Todd	428	80	
Edmonson	414	79	
Anderson	732	76	
Fleming	484	76	
Martin	555	72	
Lewis	518	70	
Washington	435	69	
Powell	588	68	
Webster	654	67	
Russell	517	65	
Trigg	531	63	
Monroe	290	61	
Caldwell	513	58	
Butler	445	57	
Casey	348	55	
Larue	487	55	
Lawrence	531	54	
Henry	593	45	
Rockcastle	797	40	
Hart	674	38	
POPULATION CATEGORY 15,000-24,999			
Breathitt	925	117	*
Harrison	733	117	*
Johnson	1,186	102	*
Mercer	976	100	*
Marion	730	97	*
Bourbon	976	96	*
Taylor	909	91	*
Wayne	695	88	
Union	711	84	
Mason	937	84	
Rowan	1,099	83	
McCreary	541	81	
Knott	759	80	
Montgomery	1,006	79	
Clay	877	78	
Logan	1,018	77	
Lincoln	821	76	
Meade	854	74	
Breckinridge	535	70	
Adair	606	69	
Woodford	953	69	
Grayson	992	68	
Carter	1,142	63	
Ohio	985	60	
Scott	1,763	57	
Shelby	1,442	57	
Grant	1,207	56	
Simpson	748	50	
POPULATION CATEGORY 25,000-50,000			
Perry	1,929	115	*
Boyle	1,258	104	*
Knox	1,426	103	*
Floyd	2,469	96	*
Barren	2,101	95	*
Letcher	1,190	92	*
Jessamine	1,521	92	*
Henderson	2,405	84	
Harlan	1,349	84	
Bell	1,166	82	
Greenup	1,301	81	
Calloway	1,051	81	
Pulaski	2,292	80	
Muhlenberg	1,455	80	
Graves	1,485	76	
Laurel	2,556	74	
Nelson	1,481	73	
Franklin	1,826	69	
Clark	1,482	67	
Hopkins	1,973	65	
Whitley	1,626	60	
Oldham	1,228	58	
Bullitt	1,968	53	
Marshall	1,181	52	
POPULATION CATEGORY OVER 50,000			
Pike	4,990	127	*
Fayette	14,104	121	*
McCracken	4,148	112	*
Boyd	2,629	105	
Jefferson	32,920	104	
Warren	5,667	104	
Daviess	3,939	103	
Kenton	6,618	97	
Madison	3,380	82	
Campbell	3,059	79	
Christian	2,867	75	
Boone	4,084	68	
Hardin	3,443	59	

* Critical accident rate

TABLE 13. FATAL ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1995-1999 DATA)(ALL ROADS)

COUNTY	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)
POPULATION CATEGORY UNDER 10,000		
Crittenden	24	5.9
Owsley	9	4.6
Lee	13	4.3
Cumberland	15	4.2
Wolfe	19	3.4
Fulton	12	3.2
Spencer	14	3.2
Bracken	14	3.2
Clinton	13	2.9
Elliott	6	2.9
McLean	15	2.8
Owen	11	2.7
Hickman	9	2.7
Hancock	12	2.6
Carlisle	8	2.6
Metcalfe	13	2.3
Trimble	8	2.3
Ballard	11	2.3
Menifee	5	2.0
Bath	15	1.9
Nicholas	6	1.7
Lyon	16	1.6
Carroll	14	1.3
Livingston	8	1.2
Robertson	1	1.2
Gallatin	7	0.7
POPULATION CATEGORY 10,000-14,999		
Leslie	34	5.0
Casey	24	3.8
Garrard	24	3.7
Todd	19	3.6
Lewis	26	3.5
Monroe	16	3.4
Jackson	16	3.3
Allen	22	3.2
Morgan	20	3.2
Estill	18	3.0
Fleming	19	3.0
Washington	18	2.9
Pendleton	15	2.8
Butler	22	2.8
Magoffin	19	2.7
Anderson	25	2.6
Green	12	2.6
Lawrence	24	2.5
Powell	20	2.3
Edmonson	12	2.3
Trigg	19	2.2
Hart	37	2.1
Caldwell	18	2.0
Henry	26	2.0
Larue	15	1.7
Martin	13	1.7
Russell	13	1.6
Rockcastle	26	1.3
Webster	11	1.1
POPULATION CATEGORY 15,000-24,999		
Bourbon	42	4.1
Clay	42	3.7
Breathitt	28	3.6
Harrison	21	3.4
McCreary	22	3.3
Marion	24	3.2
Lincoln	35	3.2
Knott	30	3.2
Breckinridge	22	2.9
Wayne	22	2.8
Montgomery	36	2.8
Adair	22	2.5
Mason	27	2.4
Woodford	32	2.3
Logan	30	2.3
Carter	42	2.3
Grayson	34	2.3
Johnson	26	2.2
Meade	25	2.2
Union	18	2.1
Shelby	52	2.0
Simpson	26	1.8
Taylor	18	1.8
Rowan	22	1.7
Ohio	27	1.6
Grant	30	1.4
Mercer	13	1.3
Scott	37	1.2
POPULATION CATEGORY 25,000-50,000		
Knox	40	2.9
Muhlenberg	49	2.7
Boyle	32	2.6
Nelson	49	2.4
Floyd	62	2.4
Perry	39	2.3
Jessamine	37	2.2
Harlan	35	2.2
Pulaski	61	2.1
Whitley	57	2.1
Graves	42	2.1
Letcher	27	2.1
Barren	41	1.9
Laurel	66	1.9
Marshall	43	1.9
Calloway	25	1.9
Bell	26	1.8
Clark	38	1.7
Greenup	28	1.7
Henderson	40	1.4
Franklin	33	1.3
Hopkins	39	1.3
Bullitt	45	1.2
Oldham	20	0.9
POPULATION CATEGORY OVER 50,000		
Pike	102	2.6 *
Madison	82	2.0 *
McCracken	60	1.6
Warren	76	1.4
Daviess	55	1.4
Christian	48	1.3
Hardin	67	1.2
Campbell	42	1.1
Jefferson	336	1.1
Boone	58	1.0
Fayette	117	1.0
Boyd	18	0.7
Kenton	44	0.6

* Critical accident rate

TABLE 14. MISCELLANEOUS ACCIDENT DATA FOR EACH COUNTY

COUNTY	NUMBER OF ACCIDENTS BY YEAR 1995	1996	1997	1998	1999	1995-1998 AVERAGE	1999 PERCENT CHANGE*	PERCENT OF ACCIDENTS INVOLVING ALCOHOL	PERCENT OF ACCIDENTS INVOLVING DRUGS	PERCENT FATAL ACCIDENTS	PERCENT INJURY OR FATAL ACCIDENTS	PERCENT OF DRIVERS USING SAFETY BELTS	PERCENT OF ACCIDENTS INVOLVING SPEEDING
Adair	431	432	452	441	466	439	6.2	4.3	0.5	0.99	27.3	75.8	6.1
Allen	392	377	399	444	509	403	26.3	5.2	0.4	1.04	30.5	84.0	6.4
Anderson	418	434	484	442	515	445	15.9	6.5	0.2	1.09	31.9	84.1	9.9
Ballard	218	217	229	226	188	223	-15.5	7.6	0.6	1.02	32.8	85.3	9.6
Barren	1,182	1,262	1,394	1,328	1,297	1,292	0.4	4.1	0.3	0.63	32.5	82.7	6.9
Bath	307	367	308	305	289	322	-10.2	5.6	0.2	0.95	30.3	84.5	11.3
Bell	786	758	778	600	612	731	-16.2	5.1	1.6	0.74	33.0	86.9	8.0
Boone	2,724	3,290	3,160	3,337	3,507	3,128	12.1	3.5	0.2	0.36	25.5	91.4	7.6
Bourbon	658	653	716	717	684	686	-0.3	5.8	0.5	1.23	28.5	84.2	10.5
Boyd	1,960	2,122	2,060	2,009	2,073	2,038	1.7	3.1	0.5	0.18	25.7	90.4	7.0
Boyle	927	891	951	965	941	934	0.8	3.4	0.2	0.68	26.9	91.2	6.9
Bracken	206	253	250	250	279	240	16.4	4.6	0.2	1.13	28.4	78.3	7.7
Breathitt	395	421	405	429	450	413	9.1	5.9	1.4	1.33	44.0	87.0	9.8
Breckinridge	233	225	343	241	281	261	7.9	5.0	0.2	1.66	40.4	86.8	6.7
Bullitt	1,331	1,341	1,235	1,295	1,325	1,301	1.9	5.6	0.4	0.69	30.2	89.2	5.4
Butler	279	249	249	260	220	259	-15.1	5.9	0.8	1.75	35.4	84.9	8.5
Caldwell	406	414	374	345	323	385	-16.0	4.4	0.5	0.97	27.6	87.5	9.8
Calloway	907	683	501	408	970	625	55.3	4.9	0.3	0.72	30.3	85.2	5.6
Campbell	2,791	2,949	2,717	2,674	3,027	2,783	8.8	4.7	0.3	0.30	21.6	90.7	5.6
Carlisle	36	42	38	88	35	51	-31.4	5.9	0.4	3.35	42.3	85.9	12.6
Carroll	445	405	461	401	474	428	10.7	6.3	0.6	0.64	28.1	84.2	10.5
Carter	643	710	723	741	721	704	2.4	5.6	0.5	1.19	32.3	84.3	13.2
Casey	104	119	269	169	257	165	55.5	8.8	1.2	2.61	37.9	75.3	11.8
Christian	1,866	2,052	2,066	1,888	1,973	1,968	0.3	4.9	0.3	0.49	29.1	92.2	9.6
Clark	1,053	1,222	1,215	1,162	1,260	1,163	8.3	4.8	0.5	0.64	25.1	90.7	7.2
Clay	360	391	443	478	455	418	8.9	5.6	1.7	1.97	41.2	84.1	9.8
Clinton	153	134	136	142	175	141	23.9	5.1	0.8	1.76	29.2	76.4	4.9
Crittenden	198	225	193	251	222	217	2.4	7.2	1.3	2.20	37.5	84.1	7.7
Cumberland	113	96	127	65	84	100	-16.2	3.5	0.0	3.09	30.1	74.7	4.5
Daviess	3,313	3,508	3,403	3,442	3,229	3,417	-5.5	4.0	0.4	0.33	23.3	90.7	5.5
Edmonson	240	194	235	220	247	222	11.1	4.8	0.5	1.06	36.4	85.7	14.6
Elliott	122	90	84	118	60	104	-42.0	11.6	0.8	1.27	43.7	79.6	19.4
Estill	376	347	423	436	399	396	0.9	7.0	0.9	0.91	33.6	83.2	13.7
Fayette	11,337	11,884	12,710	12,219	12,324	12,038	2.4	3.8	0.3	0.19	23.3	94.6	4.9
Fleming	266	306	305	298	293	294	-0.3	5.5	0.3	1.29	33.0	80.3	9.1
Floyd	1,114	1,043	1,079	1,086	1,048	1,081	-3.0	6.4	1.1	1.15	46.0	87.7	13.5
Franklin	1,475	1,627	1,563	1,489	1,567	1,539	1.9	4.5	0.3	0.43	23.6	89.5	9.9
Fulton	217	228	203	221	158	217	-27.3	5.0	0.4	1.17	30.9	79.9	3.1
Gallatin	240	249	215	230	226	234	-3.2	5.9	0.3	0.60	35.9	86.3	15.7
Garrard	210	274	424	402	420	328	28.2	5.9	0.5	1.39	33.7	86.6	19.4
Grant	819	749	858	864	902	823	9.7	4.0	0.3	0.72	28.8	88.5	14.0
Graves	962	1,031	1,053	998	988	1,011	-2.3	4.0	0.3	0.83	29.5	89.3	8.2
Grayson	416	453	395	459	290	431	-32.7	5.7	0.6	1.69	49.3	83.9	11.1
Green	268	244	294	276	245	271	-9.4	5.1	0.2	0.90	30.1	90.4	4.2
Greenup	786	871	845	750	738	813	-9.2	5.6	0.6	0.70	32.6	89.4	9.6
Hancock	168	157	189	195	179	177	1.0	5.7	0.3	1.35	37.7	81.9	7.2
Hardin	2,629	2,838	2,769	2,558	2,611	2,699	-3.2	3.3	0.2	0.50	25.7	93.1	6.6
Harlan	863	755	806	763	709	797	-11.0	5.4	1.0	0.90	34.6	86.9	14.2
Harrison	526	522	572	544	520	541	-3.9	4.9	0.4	0.78	27.3	87.2	5.6
Hart	433	407	329	428	524	399	31.2	4.1	0.4	1.74	31.8	91.3	7.7
Henderson	1,921	1,971	1,897	1,958	1,865	1,937	-3.7	3.9	0.2	0.42	25.0	93.4	6.8
Henry	392	371	398	369	373	383	-2.5	7.9	0.4	1.37	31.2	82.1	17.6
Hickman	94	78	122	96	119	98	22.1	7.3	0.8	1.77	37.3	81.9	10.4
Hopkins	1,626	1,593	1,697	1,749	1,611	1,666	-3.3	3.0	0.4	0.47	23.8	93.6	10.0
Jackson	238	234	262	273	327	252	29.9	6.4	1.4	1.20	39.8	84.6	16.7
Jefferson	28,586	31,122	29,609	23,244	28,013	28,140	-0.5	3.5	0.2	0.24	23.4	92.6	3.4
Jessamine	1,076	1,316	1,266	1,188	1,188	1,212	-1.9	5.2	0.4	0.61	25.2	89.8	8.0
Johnson	626	578	510	561	552	569	-2.9	6.3	1.7	0.92	42.0	87.4	8.8
Kenton	5,576	5,817	5,539	5,422	6,011	5,589	7.6	4.8	0.3	0.16	23.3	90.1	7.2
Knott	314	346	324	365	373	337	10.6	6.4	0.6	1.74	44.1	88.0	9.4
Knox	697	694	769	738	787	725	8.6	5.6	1.8	1.09	38.7	84.9	16.3

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

COUNTY	NUMBER OF ACCIDENTS BY YEAR 1995	1996	1997	1998	1999	1995-1998 AVERAGE	1999 PERCENT CHANGE*	PERCENT OF ACCIDENTS INVOLVING ALCOHOL	PERCENT OF ACCIDENTS INVOLVING DRUGS	PERCENT FATAL ACCIDENTS	PERCENT INJURY OR FATAL ACCIDENTS	PERCENT OF DRIVERS USING SAFETY BELTS	PERCENT OF ACCIDENTS INVOLVING SPEEDING
Larue	319	325	321	358	335	331	1.3	4.6	0.1	0.90	29.4	85.8	8.3
Laurel	1,409	1,595	1,665	1,669	1,648	1,585	4.0	3.7	1.2	0.83	32.0	91.0	8.3
Lawrence	261	235	282	310	329	272	21.0	5.6	0.6	1.69	37.5	83.4	10.9
Lee	99	82	129	116	138	107	29.6	7.1	1.2	2.30	38.1	82.9	15.2
Leslie	211	195	265	242	308	228	34.9	8.3	2.6	2.78	53.5	80.2	15.6
Letcher	565	595	577	590	649	582	11.6	5.5	1.0	0.91	40.0	86.5	9.8
Lewis	237	314	332	326	335	302	10.8	6.7	0.4	1.68	33.5	76.2	10.5
Lincoln	353	349	398	408	389	377	3.2	7.2	0.4	1.85	43.3	80.5	21.0
Livingston	238	211	180	219	222	212	4.7	7.1	0.8	0.75	36.0	87.5	10.1
Logan	697	696	712	668	714	693	3.0	4.5	0.3	0.86	29.2	83.8	6.9
Lyon	241	254	262	229	245	247	-0.6	4.7	0.6	1.30	32.0	87.2	12.3
McCracken	3,067	2,989	2,927	2,637	2,904	2,905	0.0	3.8	0.4	0.41	28.6	92.1	4.8
McCreary	288	275	271	260	319	274	16.6	7.4	0.9	1.56	38.3	87.0	19.2
McLean	154	218	272	233	226	219	3.1	5.0	0.3	1.36	30.6	85.7	11.9
Madison	2,346	2,667	2,590	2,646	2,541	2,562	-0.8	5.6	0.4	0.64	26.4	89.0	12.9
Magoffin	291	273	297	255	225	279	-19.4	9.4	1.3	1.42	51.2	82.6	11.7
Marion	528	479	480	472	499	490	1.9	10.3	0.2	0.98	29.7	79.7	8.5
Marshall	736	778	757	777	710	762	-6.8	4.6	0.6	1.14	31.4	87.7	8.2
Martin	335	278	222	303	253	285	-11.1	5.6	2.3	0.93	39.9	84.9	11.4
Mason	728	824	820	806	824	795	3.7	4.7	0.3	0.67	23.4	83.6	6.2
Meade	478	505	484	522	544	497	9.4	6.0	0.4	0.99	33.7	88.4	8.1
Menifee	80	92	114	104	134	98	37.4	9.0	0.2	0.95	42.6	76.0	22.1
Mercer	600	649	652	662	531	641	-17.1	4.4	0.6	0.42	31.5	86.9	13.0
Metcalfe	196	215	232	191	163	209	-21.8	4.9	0.1	1.30	29.6	76.1	7.4
Monroe	98	163	145	161	250	142	76.4	7.2	0.5	1.96	35.5	70.3	6.9
Montgomery	743	798	726	706	720	743	-3.1	5.1	0.2	0.97	27.2	87.9	7.0
Morgan	294	313	317	310	305	309	-1.1	4.8	0.1	1.30	39.7	85.3	15.8
Muhlenberg	923	1,026	988	985	901	981	-8.1	3.7	0.6	1.02	30.2	86.4	9.4
Nelson	980	1,080	1,081	1,007	1,220	1,037	17.6	5.5	0.2	0.91	27.6	89.2	8.8
Nicholas	107	133	175	163	185	145	28.0	10.2	0.7	0.79	30.0	81.1	12.1
Ohio	618	576	577	506	474	569	-16.7	4.8	0.3	0.98	35.8	89.3	9.3
Oldham	872	877	892	915	986	889	10.9	3.3	0.5	0.44	27.0	92.8	9.4
Owen	197	230	268	231	223	232	-3.7	6.4	0.1	0.96	35.2	81.8	19.9
Owsley	75	59	64	46	129	61	111.5	10.2	0.5	2.41	34.0	69.9	10.2
Pendleton	373	415	385	392	378	391	-3.4	6.1	0.2	0.77	31.3	85.6	10.7
Perry	1,027	1,074	1,019	1,011	993	1,033	-3.8	5.5	0.8	0.76	37.6	89.8	7.5
Pike	2,381	2,286	2,269	2,310	2,007	2,312	-13.2	5.8	1.0	0.91	44.3	88.8	21.6
Powell	359	406	343	350	370	365	1.5	4.7	0.4	1.09	32.2	84.2	9.9
Pulaski	1,572	1,712	1,753	1,788	1,737	1,706	1.8	3.4	0.4	0.71	26.8	89.0	7.8
Robertson	11	11	17	9	15	12	25.0	14.3	1.6	1.59	44.4	67.5	14.3
Rockcastle	368	395	441	472	505	419	20.5	4.7	1.0	1.19	36.5	81.1	10.8
Rowan	749	743	813	794	912	775	17.7	3.5	0.4	0.55	27.4	88.7	11.5
Russell	359	304	338	297	339	325	4.5	6.4	0.7	0.79	31.6	82.0	6.8
Scott	1,179	1,309	1,392	1,248	1,283	1,282	0.1	3.7	0.2	0.58	27.5	91.6	7.8
Shelby	1,043	1,106	1,036	1,023	1,060	1,052	0.8	4.7	0.2	0.99	27.4	89.0	8.2
Simpson	472	469	540	570	564	513	10.0	4.2	0.5	0.99	28.6	84.1	5.8
Spencer	183	205	187	209	197	196	0.5	6.4	0.3	1.43	33.7	82.8	13.1
Taylor	720	720	796	722	748	740	1.1	4.3	0.5	0.49	24.5	81.7	6.1
Todd	254	270	269	270	235	266	-11.6	5.2	0.5	1.46	33.0	79.0	11.9
Trigg	321	368	320	312	322	330	-2.5	3.7	0.4	1.16	32.3	89.5	6.9
Trimble	174	212	209	202	206	199	3.4	5.2	0.3	0.80	32.3	84.7	14.4
Union	481	485	438	472	457	469	-2.6	6.0	0.3	0.77	30.5	86.1	12.1
Warren	3,927	3,973	4,125	4,070	3,893	4,024	-3.2	3.8	0.5	0.38	28.4	90.6	9.8
Washington	327	272	293	312	269	301	-10.6	6.2	0.1	1.22	29.5	81.7	9.9
Wayne	364	434	461	465	491	431	13.9	4.2	0.6	0.99	31.4	78.7	7.1
Webster	350	394	398	425	346	392	-11.7	4.1	0.4	0.58	34.2	91.5	9.4
Whitley	998	1,032	1,053	1,029	959	1,028	-6.7	4.1	0.7	1.12	32.1	86.5	14.6
Wolfe	181	217	248	182	205	207	-1.0	6.3	0.5	1.84	36.9	85.6	11.2
Woodford	668	767	721	671	639	707	-9.6	6.3	0.3	0.92	27.5	90.8	10.5
STATEWIDE	127,653	134,558	134,161	125,698	132,216	130,518	1.3	4.4	0.4	0.58	27.7	90.0	7.5

* Percent change in the 1998 accident total from the previous four-year total

TABLE 15. ACCIDENT RATES FOR INCORPORATED CITIES HAVING POPULATION OVER 2,500 (FOR STATE-MAINTAINED SYSTEM AND ALL ROADS FOR 1995-1999 DATA)

CITY	POPULATION	STATE-MAINTAINED SYSTEM TOTAL ACCIDENTS	STATE-MAINTAINED SYSTEM ACCIDENT RATE*	ALL ROADS TOTAL ACCIDENTS	ALL ROADS ACCIDENT RATE**
Louisville	269,063	17,607	267	79,946	59
Lexington	225,366	8,671	754	59,895	53
Owensboro	53,549	1,825	760	12,161	45
Covington	43,264	3,880	437	11,087	51
Bowling Green	40,641	3,401	580	14,908	73
Hopkinsville	29,809	1,891	289	6,300	42
Paducah	27,256	1,383	296	9,446	69
Frankfort	25,968	1,833	388	5,016	39
Henderson	25,945	1,227	222	6,706	52
Ashland	23,622	1,324	463	6,134	52
Jeffersontown	23,221	244	751	4,615	40
Richmond	21,155	975	883	6,389	60
Radcliff	19,772	338	163	2,897	29
Newport	18,871	1,755	826	4,608	49
Florence	18,624	1,951	862	8,262	89
Elizabethtown	18,167	1,236	275	6,220	69
Madisonville	16,200	739	567	4,382	54
Fort Thomas	16,032	85	423	1,223	15
Erlanger	15,979	998	1,047	3,786	47
Saint Matthews	15,800	551	729	4,517	57
Winchester	15,799	691	345	3,696	47
Shively	15,535	360	554	4,742	61
Murray	14,439	448	272	1,567	22
Nicholasville	13,603	462	260	3,247	48
Danville	12,420	692	683	3,524	57
Glasgow	12,351	382	183	3,369	55
Georgetown	11,414	552	519	3,336	59
Middlesboro	11,328	410	221	1,770	31
Somerset	10,733	666	354	4,123	77
Independence	10,444	166	276	1,683	32
Mayfield	9,935	478	588	2,323	47
Campbellsville	9,577	583	406	2,617	55
Berea	9,126	496	524	1,674	37
Paris	8,730	274	206	1,813	42
Morehead	8,357	339	532	1,720	41
Edgewood	8,143	1	36	895	22
Lyndon	8,037	***	***	80	2
Flatwoods	7,799	76	345	658	17
Villa Hills	7,739	***	***	347	9
Franklin	7,607	163	164	1,339	35
Russellville	7,454	541	345	1,730	46
Fort Mitchell	7,438	26	421	1,501	40
Corbin	7,419	286	247	2,225	60
Harrodsburg	7,335	474	645	1,752	48
Versailles	7,269	382	350	1,476	41
Maysville	7,169	428	234	2,576	72
Bellevue	6,997	225	264	1,119	32
Princeton	6,940	233	199	1,090	31
Elsmere	6,847	***	***	829	24
Bardstown	6,801	251	138	2,526	74
Dayton	6,576	***	***	553	17
Fort Wright	6,570	117	953	2,000	61
Cynthiana	6,497	422	723	1,347	42
Pikeville	6,324	464	274	2,011	64
Shelbyville	6,238	726	334	2,065	66
Lawrenceburg	5,911	264	392	851	29
London	5,757	764	557	3,230	112
Lebanon	5,695	325	505	1,261	44
Alexandria	5,592	2,664	487	1,306	47
Taylor Mill	5,530	***	***	1,269	46
Williamsburg	5,493	89	76	969	35
Hazard	5,416	103	145	2,262	84
Mount Sterling	5,362	484	358	1,790	67
Monticello	5,357	169	132	1,313	49

TABLE 15. ACCIDENT RATES FOR INCORPORATED CITIES HAVING POPULATION OVER 2,500 (FOR STATE-MAINTAINED SYSTEM AND ALL ROADS FOR 1995-1999 DATA)(continued)

CITY	POPULATION	STATE-MAINTAINED SYSTEM TOTAL ACCIDENTS	STATE-MAINTAINED SYSTEM ACCIDENT RATE*	ALL ROADS TOTAL ACCIDENTS	ALL ROADS ACCIDENT RATE**
Mount Washington	5,226	83	115	937	36
Middletown	5,016	***	***	218	9
Central City	4,979	200	269	1,038	42
Leitchfield	4,965	208	107	272	11
Shepherdsville	4,805	241	365	1,710	71
Ludlow	4,736	6	250	451	19
Greenville	4,689	290	400	907	39
Paintsville	4,354	139	116	1,230	57
Scottsville	4,278	350	467	1,135	53
Highland Heights	4,223	312	237	930	44
Wilmore	4,215	104	481	248	12
Providence	4,123	98	241	349	17
Russell	4,014	52	238	856	43
Benton	3,899	855	314	847	43
Lagrange	3,853	156	414	916	48
Columbia	3,845	372	296	918	48
Morganfield	3,776	248	666	689	37
Carrollton	3,715	122	311	802	43
Barbourville	3,658	174	407	823	45
Vine Grove	3,586	157	297	372	21
Prestonsburg	3,558	256	352	1,221	69
Grayson	3,510	151	431	991	57
Lancaster	3,421	167	733	641	38
Park Hills	3,321	***	***	237	14
Marion	3,320	213	322	538	32
Southgate	3,266	***	***	483	30
Lakeside Park	3,131	225	525	444	28
Dawson Springs	3,129	85	311	287	18
Cumberland	3,112	45	83	294	19
Fulton	3,078	187	259	478	31
Flemingsburg	3,071	64	136	428	28
Williamstown	3,023	***	***	675	45
Graymoor	2,911	***	***	82	6
Beaver Dam	2,904	1,502	310	562	39
Cold Springs	2,880	322	612	1,048	73
Springfield	2,875	224	352	571	40
Oak Grove	2,863	***	***	1,119	78
Tompkinsville	2,861	65	168	544	38
Irvine	2,836	109	396	676	48
Stanton	2,795	65	175	517	37
Jenkins	2,751	80	164	393	29
Hodgenville	2,721	102	174	711	52
Hickman	2,689	12	42	173	13
Stanford	2,686	46	56	297	22
Harlan	2,686	203	308	810	60
Mount Vernon	2,654	115	276	707	53
Crestview Hills	2,546	***	***	1,009	79
Hartford	2,532	30	107	122	10
Calvert City	2,531	126	157	316	25

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

TABLE 16. MISCELLANEOUS ACCIDENT DATA FOR INCORPORATED CITIES HAVING POPULATION OVER 2,500 (1995-1999 DATA FOR ALL ROADS)

CITY	POPULATION	FATAL ACCIDENTS		PEDESTRIAN MOTOR VEHICLE ACCIDENTS		BICYCLE-RELATED MOTOR VEHICLE ACCIDENTS		MOTORCYCLE ACCIDENTS		PERCENT OF ACCIDENTS INVOLVING SPEEDING	PERCENT OF ACCIDENTS INVOLVING ALCOHOL
		NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*		
Louisville	269,063	153	1.14	1,353	10.10	750	5.60	385	2.9	2.6	3.1
Lexington	225,366	114	1.01	635	5.60	436	3.90	246	2.2	4.9	3.8
Owensboro	53,549	18	0.67	94	3.50	108	4.00	68	2.5	3.1	3.2
Covington	43,264	11	0.51	316	14.60	128	5.90	52	2.4	4.9	4.9
Bowling Green	40,641	22	1.08	90	4.40	63	3.10	86	4.2	6.4	2.8
Hopkinsville	29,809	12	0.81	78	5.20	42	2.80	26	1.7	8.7	3.7
Paducah	27,256	22	1.61	51	3.70	45	3.30	54	4.0	3.7	2.9
Frankfort	25,968	10	0.77	39	3.00	19	1.50	22	1.7	5.9	3.3
Henderson	25,945	14	1.08	67	5.20	65	5.00	43	3.3	3.7	3.0
Ashland	23,622	5	0.42	59	5.00	33	2.80	43	3.6	4.9	2.1
Jeffersontown	23,221	5	0.43	26	2.20	16	1.40	14	1.2	3.4	2.4
Richmond	21,155	11	1.04	47	4.40	29	2.70	34	3.2	5.1	4.4
Radcliff	19,772	6	0.61	23	2.30	12	1.20	18	1.8	1.9	3.2
Newport	18,871	4	0.42	129	13.70	89	9.40	22	2.3	3.7	5.3
Florence	18,624	15	1.61	52	5.60	36	3.90	29	3.1	4.6	2.5
Elizabethtown	18,167	12	1.32	24	2.60	24	2.60	31	3.4	3.8	1.7
Madisonville	16,200	7	0.86	28	3.50	31	3.80	37	4.6	4.0	1.9
Fort Thomas	16,032	5	0.62	15	1.90	7	0.90	7	0.9	7.2	3.8
Erlanger	15,979	10	1.25	24	3.00	26	3.30	23	2.9	10.3	4.3
Saint Matthews	15,800	5	0.63	26	3.30	15	1.90	8	1.0	1.9	2.0
Winchester	15,799	4	0.51	31	3.90	22	2.80	18	2.3	2.5	3.6
Shively	15,535	10	1.29	53	6.80	32	4.10	23	3.0	3.4	4.0
Murray	14,439	2	0.28	12	1.70	10	1.40	13	1.8	2.4	2.7
Nicholasville	13,603	7	1.03	44	6.50	21	3.10	10	1.5	3.8	4.5
Danville	12,420	14	2.25	24	3.90	14	2.30	10	1.6	4.5	2.0
Glasgow	12,351	5	0.81	20	3.20	20	3.20	25	4.0	3.1	2.2
Georgetown	11,414	8	1.40	18	3.20	14	2.50	18	3.2	3.6	2.3
Middlesboro	11,328	1	0.18	13	2.30	14	2.50	5	0.9	4.2	4.9
Somerset	10,733	13	2.42	19	3.50	8	1.50	10	1.9	6.0	1.5
Independence	10,444	3	0.57	20	3.80	5	1.00	10	1.9	6.2	5.1
Mayfield	9,935	4	0.81	20	4.00	10	2.00	6	1.2	2.2	2.0
Campbellsville	9,577	3	0.63	19	4.00	9	1.90	10	2.1	4.2	2.8
Berea	9,126	5	1.10	13	2.80	14	3.10	6	1.3	4.6	2.6
Paris	8,730	4	0.92	23	5.30	13	3.00	6	1.4	5.0	4.2
Morehead	8,357	5	1.20	13	3.10	8	1.90	6	1.4	3.3	1.5
Edgewood	8,143	0	0.00	4	1.00	7	1.70	2	0.5	4.1	2.5
Lyndon	8,037	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Flatwoods	7,799	0	0.00	11	2.80	7	1.80	1	0.3	3.8	2.7
Villa Hills	7,739	0	0.00	0	0.00	2	0.50	5	1.3	9.2	5.2
Franklin	7,607	6	1.58	11	2.90	10	2.60	8	2.1	3.1	3.3
Russellville	7,454	4	1.07	13	3.50	10	2.70	15	4.0	5.2	2.4
Fort Mitchell	7,438	1	0.27	12	3.20	5	1.30	10	2.7	7.7	4.5
Corbin	7,419	10	2.70	11	3.00	9	2.40	11	3.0	5.4	2.5
Harrodsburg	7,335	4	1.09	19	5.20	7	1.90	8	2.2	4.0	3.3
Versailles	7,269	1	0.28	19	5.20	7	1.90	9	2.5	4.7	3.3
Maysville	7,169	8	2.23	21	5.90	10	2.80	7	2.0	4.9	3.0
Bellevue	6,997	1	0.29	23	6.60	15	4.30	7	2.0	3.7	3.5
Princeton	6,940	2	0.58	11	3.20	14	4.00	9	2.6	4.8	2.1
Elsmere	6,847	0	0.00	10	2.90	12	3.50	2	0.6	6.6	4.1
Bardstown	6,801	5	1.47	18	5.30	16	4.70	9	2.6	2.5	2.7
Dayton	6,576	0	0.00	24	7.30	9	2.70	4	1.2	4.5	6.5
Fort Wright	6,570	2	0.61	14	4.30	3	0.90	5	1.5	6.6	3.3
Cynthiana	6,497	1	0.31	14	4.30	9	2.80	5	1.5	2.1	2.7
Pikeville	6,324	8	2.53	22	7.00	2	0.60	20	6.3	9.2	4.1
Shelbyville	6,238	13	4.17	23	7.40	12	3.80	10	3.2	4.5	3.0
Lawrenceburg	5,911	1	0.34	8	2.70	5	1.70	10	3.4	2.2	4.7
London	5,757	8	2.78	12	4.20	6	2.10	8	2.8	4.6	1.9
Lebanon	5,695	0	0.00	13	4.60	11	3.90	4	1.4	4.6	3.8
Alexandria	5,592	8	2.86	10	3.60	3	1.10	4	1.4	4.7	3.1
Taylor Mill	5,530	0	0.00	6	2.20	0	0.00	2	0.7	9.0	4.4
Williamsburg	5,493	6	2.18	2	0.70	3	1.10	2	0.7	6.0	3.4
Hazard	5,416	3	1.11	14	5.20	3	1.10	9	3.3	3.1	2.8

TABLE 16. MISCELLANEOUS ACCIDENT DATA FOR INCORPORATED CITIES HAVING POPULATION OVER 2,500 (1995-1999 DATA FOR ALL ROADS)(continued)

CITY	POPULATION	FATAL ACCIDENTS		PEDESTRIAN MOTOR VEHICLE ACCIDENTS		BICYCLE-RELATED MOTOR VEHICLE ACCIDENTS		MOTORCYCLE ACCIDENTS		PERCENT OF ACCIDENTS INVOLVING SPEEDING	PERCENT OF ACCIDENTS INVOLVING ALCOHOL
		NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*		
Mount Sterling	5,362	10	3.73	17	6.30	4	1.50	4	1.5	3.2	3.5
Monticello	5,357	3	1.12	14	5.20	9	3.40	4	1.5	5.6	2.5
Mount Washington	5,226	0	0.00	8	3.10	1	0.40	3	1.1	4.4	4.3
Middletown	5,016	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Central City	4,979	9	3.62	8	3.20	5	2.00	5	2.0	4.2	2.7
Leitchfield	4,965	4	1.61	8	3.20	1	0.40	2	0.8	7.0	2.9
Shepherdsville	4,805	12	4.99	12	5.00	2	0.80	9	3.7	3.1	3.7
Ludlow	4,736	0	0.00	12	5.10	9	3.80	1	0.4	2.4	6.9
Greenville	4,689	6	2.56	8	3.40	3	1.30	3	1.3	5.7	2.2
Paintsville	4,354	9	4.13	11	5.10	2	0.90	7	3.2	2.2	2.5
Scottsville	4,278	4	1.87	5	2.30	2	0.90	5	2.3	4.5	2.8
Highland Heights	4,223	1	0.47	3	1.40	5	2.40	6	2.8	8.0	2.9
Wilmore	4,215	0	0.00	1	0.50	2	0.90	2	0.9	8.5	0.8
Providence	4,123	2	0.97	1	0.50	6	2.90	2	1.0	6.9	4.0
Russell	4,014	1	0.50	3	1.50	3	1.50	5	2.5	3.0	2.0
Benton	3,899	1	0.51	2	1.00	1	0.50	2	1.0	4.4	2.0
Lagrange	3,853	4	2.08	8	4.20	1	0.50	1	0.5	4.8	2.0
Columbia	3,845	3	1.56	5	2.60	3	1.60	4	2.1	3.8	2.1
Morganfield	3,776	0	0.00	9	4.80	6	3.20	0	0.0	6.5	2.2
Carrollton	3,715	2	1.08	5	2.70	8	4.30	5	2.7	3.5	5.1
Barbourville	3,658	3	1.64	11	6.00	1	0.50	1	0.5	7.9	2.6
Vine Grove	3,586	2	1.12	1	0.60	1	0.60	1	0.6	9.7	5.1
Prestonsburg	3,558	11	6.18	10	5.60	1	0.60	10	5.6	4.1	3.3
Grayson	3,510	1	0.57	5	2.80	2	1.10	0	0.0	3.4	1.7
Lancaster	3,421	3	1.75	7	4.10	4	2.30	3	1.8	4.8	3.6
Park Hills	3,321	0	0.00	2	1.20	1	0.60	0	0.0	16.5	8.0
Marion	3,320	1	0.60	7	4.20	1	0.60	2	1.2	2.8	2.6
Southgate	3,266	0	0.00	7	4.30	2	1.20	2	1.2	1.7	2.9
Lakeside Park	3,131	0	0.00	3	1.90	1	0.60	2	1.3	6.3	2.0
Dawson Springs	3,129	1	0.64	3	1.90	5	3.20	3	1.9	7.0	3.5
Cumberland	3,112	0	0.00	0	0.00	1	0.60	2	1.3	7.1	2.0
Fulton	3,078	3	1.95	5	3.20	5	3.20	3	1.9	3.3	3.1
Flemingsburg	3,071	2	1.30	6	3.90	0	0.00	2	1.3	3.7	3.7
Williamstown	3,023	4	2.65	7	4.60	1	0.70	3	2.0	8.3	2.5
Graymoor	2,911	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Beaver Dam	2,904	1	0.69	1	0.70	1	0.70	4	2.8	2.3	2.5
Cold Springs	2,880	1	0.69	6	4.20	2	1.40	7	4.9	4.9	3.3
Springfield	2,875	2	1.39	12	8.30	0	0.00	2	1.4	3.2	3.5
Oak Grove	2,863	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Tompkinsville	2,861	3	2.10	5	3.50	2	1.40	4	2.8	3.1	2.9
Irvine	2,836	1	0.71	6	4.20	3	2.10	3	2.1	5.5	4.7
Stanton	2,795	3	2.15	2	1.40	2	1.40	1	0.7	4.3	4.3
Jenkins	2,751	3	2.18	5	3.60	0	0.00	2	1.5	5.1	3.3
Hodgenville	2,721	4	2.94	5	3.70	1	0.70	3	2.2	3.9	3.0
Hickman	2,689	0	0.00	2	1.50	4	3.00	0	0.0	1.7	4.0
Stanford	2,686	2	1.49	2	1.50	0	0.00	2	1.5	10.4	4.4
Harlan	2,686	1	0.74	9	6.70	1	0.70	3	2.2	3.8	1.7
Mount Vernon	2,654	4	3.01	6	4.50	1	0.80	4	3.0	5.4	3.3
Crestview Hills	2,546	0	0.00	0	0.00	0	0.00	0	0.0	0.0	0.0
Hartford	2,532	1	0.79	0	0.00	1	0.80	1	0.8	6.6	1.6
Calvert City	2,531	3	2.37	2	1.60	1	0.80	3	2.4	7.3	2.5
STATEWIDE	1,487,023	772	1.04	4,140	5.6	2,503	3.37	1,753	2.4	4.2	3.2

* Accidents Per 10,000 Population

TABLE 17. ACCIDENT RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1995-1999)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE ACC/100 MVM	CITY	NUMBER OF ACCIDENTS (1995-1999)	AVERAGE RATE ACC/100 MVM
OVER 200,000	2	339	Lexington	8,671	754
			Louisville	17,607	267
20,000-55,000	10	419	Richmond	975	883
			Owensboro	1,825	760
			Jeffersontown	244	751
			Bowling Green	3,401	580
			Ashland	1,324	463
			Covington	3,880	437
			Frankfort	1,833	388
			Paducah	1,383	296
			Hopkinsville	1,891	289
			Henderson	1,227	222
10,000-19,999	18	434	Erlanger	998	1,047
			Florence	1,951	862
			Newport	1,755	826
			Saint Matthews	551	729
			Danville	692	683
			Madisonville	739	567
			Shively	360	554
			Georgetown	552	519
			Fort Thomas	85	423
			Somerset	666	354
			Winchester	691	345
			Independence	166	276
			Elizabethtown	1,236	275
			Murray	448	272
			Nicholasville	462	260
			Middlesboro	410	221
			Glasgow	382	183
			Radcliff	338	163
5,000-9,999	30	344	Fort Wright	117	953
			Cynthiana	422	723
			Harrodsburg	474	645
			Mayfield	478	588
			London	764	557
			Morehead	339	532
			Berea	496	524
			Lebanon	325	505
			Alexandria	2,664	487
			Fort Mitchell	26	421
			Campbellsville	583	406
			Lawrenceburg	264	392
			Mount Sterling	484	358
			Versailles	382	350
			Flatwoods	76	345
			Russellville	541	345
			Shelbyville	726	334
			Pikeville	464	274
			Bellevue	225	264
			Corbin	286	247
			Maysville	428	234
			Paris	274	206
			Princeton	233	199
			Franklin	163	164
			Hazard	103	145
			Bardstown	251	138
			Monticello	169	132
			Mount Washington	83	115
			Williamsburg	89	76
			Edgewood	1	36

TABLE 17. ACCIDENT RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1995-1999)(continued)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE ACC/100 MVM	CITY	NUMBER OF ACCIDENTS (1995-1999)	AVERAGE RATE ACC/100 MVM
2,500-4,999	41	282	Lancaster	167	733
			Morganfield	248	666
			Cold Springs	322	612
			Lakeside Park	225	525
			Wilmore	104	481
			Scottsville	350	467
			Grayson	151	431
			Lagrange	156	414
			Barbourville	174	407
			Greenville	290	400
			Irvine	109	396
			Shepherdsville	241	365
			Springfield	224	352
			Prestonsburg	256	352
			Marion	213	322
			Benton	855	314
			Carrollton	122	311
			Dawson Springs	85	311
			Beaver Dam	1,502	310
			Harlan	203	308
			Vine Grove	157	297
			Columbia	372	296
			Mount Vernon	115	276
			Central City	200	269
			Fulton	187	259
			Ludlow	6	250
			Providence	98	241
			Russell	52	238
			Highland Heights	312	237
			Stanton	65	175
			Hodgenville	102	174
			Tompkinsville	65	168
			Jenkins	80	164
			Calvert City	126	157
			Flemingsburg	64	136
			Paintsville	139	116
			Leitchfield	208	107
			Hartford	30	107
			Cumberland	45	83
			Stanford	46	56
			Hickman	12	42
1,000-2,499	59	209	Dry Ridge	170	684
			Greensburg	55	488
			Raceland	41	435
			Loyall	7	424
			Falmouth	194	410
			Walton	80	383
			Albany	448	363
			Owenton	132	343
			Evarts	94	340
			Salyersville	81	325
			West Liberty	128	323
			Eminence	73	318
			Uniontown	19	312
			Brandenburg	205	310
			Sturgis	48	307
			Livermore	29	302
			Owingsville	75	288
			Hardinsburg	48	287
			Junction City	22	269

TABLE 17. ACCIDENT RATES ON STATE-MAINTAINED STREETS BY CITY AND POPULATION CATEGORY (1995-1999)(continued)

POPULATION CATAGORY	NUMBER OF CITIES	AVERAGE RATE ACC/100 MVM	CITY	NUMBER OF ACCIDENTS (1995-1999)	AVERAGE RATE ACC/100 MVM
1,000-2,499 (cont.)	59	209	Vanceburg	53	257
			South Shore	501	253
			Manchester	270	240
			Jackson	36	234
			Louisa	63	230
			Edmonton	44	228
			Sebree	34	227
			Cave City	300	226
			Augusta	1,286	219
			Elkton	92	209
			Lacenter	41	206
			Earlington	54	205
			Clay City	34	199
			Warsaw	32	190
			Liberty	95	186
			Russell Springs	263	185
			Beattyville	81	179
			Catlettsburg	174	176
			Nortonville	29	172
			Lewisport	14	171
			Olive Hill	52	170
			Auburn	84	159
			Cloverport	53	156
			Clinton	53	156
			Carlisle	22	148
			Anchorage	58	147
			Eddyville	122	142
			Cadiz	121	137
			Morgantown	76	126
			Lebanon Junction	10	120
			Jamestown	36	109
			Horse Cave	41	102
			Pineville	28	92
			Clay	12	74
			Burgin	8	64
			Burkesville	31	60
			Worthington	2	57
			Whitesburg	8	56
			Munfordville	83	42
			Muldraugh	12	31

TABLE 18. TOTAL ACCIDENT RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER)
(1995-1999 DATA)(ALL ROADS)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 1000 POPULATION)	
POPULATION CATEGORY OVER 200,000			
Louisville	79,946	59.4	*
Lexington	59,895	53.2	
POPULATION CATEGORY 20,000-55,000			
Bowling Green	14,908	73.4	*
Paducah	9,446	69.3	*
Richmond	6,389	60.4	*
Ashland	6,134	51.9	
Henderson	6,706	51.7	
Covington	11,087	51.3	
Owensboro	12,161	45.4	
Hopkinsville	6,300	42.3	
Jeffersontown	4,615	39.7	
Frankfort	5,016	38.6	
POPULATION CATEGORY 10,000-19,999			
Florence	8,262	88.7	*
Somerset	4,123	76.8	*
Elizabethtown	6,220	68.5	*
Shively	4,742	61.0	*
Georgetown	3,336	58.5	*
Saint Matthews	4,517	57.2	*
Danville	3,524	56.7	*
Glasgow	3,369	54.6	
Madisonville	4,382	54.1	
Newport	4,608	48.8	
Nicholasville	3,247	47.7	
Erlanger	3,786	47.4	
Winchester	3,696	46.8	
Independence	1,683	32.2	
Middlesboro	1,770	31.3	
Radcliff	2,897	29.3	
Murray	1,567	21.7	
Fort Thomas	1,223	15.3	
POPULATION CATEGORY 5,000-9,999			
London	3,230	112.2	*
Hazard	2,262	83.5	*
Bardstown	2,526	74.3	*
Maysville	2,576	71.9	*
Mount Sterling	1,790	66.8	*
Shelbyville	2,065	66.2	*
Pikeville	2,011	63.6	*
Fort Wright	2,000	60.9	*
Corbin	2,225	60.0	*
Campbellsville	2,617	54.7	*
Monticello	1,313	49.0	
Harrodsburg	1,752	47.8	
Mayfield	2,323	46.8	
Alexandria	1,306	46.7	
Russellville	1,730	46.4	
Taylor Mill	1,269	45.9	
Lebanon	1,261	44.3	
Cynthiana	1,347	41.5	
Paris	1,813	41.5	
Morehead	1,720	41.2	
Versailles	1,476	40.6	
Fort Mitchell	1,501	40.4	
Berea	1,674	36.7	
Mount Washington	937	35.9	
Williamsburg	969	35.3	
Franklin	1,339	35.2	
Bellevue	1,119	32.0	
Princeton	1,090	31.4	
Lawrenceburg	851	28.8	
Elsmere	829	24.2	
Edgewood	895	22.0	
Flatwoods	658	16.9	
Dayton	553	16.8	
Villa Hills	347	9.0	
Middletown	218	8.7	
Lyndon	80	2.0	

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 1000 POPULATION)	
POPULATION CATEGORY 2,500-4,999			
Crestview Hills	1,009	79.3	*
Oak Grove	1,119	78.2	*
Cold Springs	1,048	72.8	*
Shepherdsville	1,710	71.2	*
Prestonsburg	1,221	68.6	*
Harlan	810	60.3	*
Paintsville	1,230	56.5	*
Grayson	991	56.5	*
Mount Vernon	707	53.3	*
Scottsville	1,135	53.1	*
Hodgenville	711	52.3	*
Columbia	918	47.8	*
Irvine	676	47.7	*
Lagrange	916	47.5	
Barbourville	823	45.0	
Williamstown	675	44.7	
Highland Heights	930	44.0	
Benton	847	43.4	
Carrollton	802	43.2	
Russell	856	42.7	
Central City	1,038	41.7	
Springfield	571	39.7	
Beaver Dam	562	38.7	
Greenville	907	38.7	
Tompkinsville	544	38.0	
Lancaster	641	37.5	
Stanton	517	37.0	
Morganfield	689	36.5	
Marion	538	32.4	
Fulton	478	31.1	
Southgate	483	29.6	
Jenkins	393	28.6	
Lakeside Park	444	28.4	
Flemingsburg	428	27.9	
Calvert City	316	25.0	
Stanford	297	22.1	
Vine Grove	372	20.7	
Ludlow	451	19.0	
Cumberland	294	18.9	
Dawson Springs	287	18.3	
Providence	349	16.9	
Park Hills	237	14.3	
Hickman	173	12.9	
Wilmore	248	11.8	
Leitchfield	272	11.0	
Hartford	122	9.6	
Graymoor	82	5.6	

* Critical accident rate

TABLE 19. FATAL ACCIDENT RATES BY CITY AND POPULATION CATEGORY (IN DESCENDING ORDER WITH CRITICAL RATES IDENTIFIED)(1995-1999 DATA)(ALL ROADS)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	153	1.14
Lexington	114	1.01
POPULATION CATEGORY 20,000-55,000		
Paducah	22	1.61
Henderson	14	1.08
Bowling Green	22	1.08
Richmond	11	1.04
Hopkinsville	12	0.81
Frankfort	10	0.77
Owensboro	18	0.67
Covington	11	0.51
Jeffersontown	5	0.43
Ashland	5	0.42
POPULATION CATEGORY 10,000-19,999		
Somerset	13	2.42
Danville	14	2.25
Florence	15	1.61
Georgetown	8	1.40
Elizabethtown	12	1.32
Shively	10	1.29
Erlanger	10	1.25
Nicholasville	7	1.03
Madisonville	7	0.86
Glasgow	5	0.81
Saint Matthews	5	0.63
Fort Thomas	5	0.62
Radcliff	6	0.61
Independence	3	0.57
Winchester	4	0.51
Newport	4	0.42
Murray	2	0.28
Middlesboro	1	0.18
POPULATION CATEGORY 5,000-9,999		
Shelbyville	13	4.17
Mount Sterling	10	3.73
Alexandria	8	2.86
London	8	2.78
Corbin	10	2.70
Pikeville	8	2.53
Maysville	8	2.23
Williamsburg	6	2.18
Franklin	6	1.58
Bardstown	5	1.47
Morehead	5	1.20
Monticello	3	1.12
Hazard	3	1.11
Berea	5	1.10
Harrodsburg	4	1.09
Russellville	4	1.07
Paris	4	0.92
Mayfield	4	0.81
Campbellsville	3	0.63
Fort Wright	2	0.61
Princeton	2	0.58
Lawrenceburg	1	0.34
Cynthiana	1	0.31
Bellevue	1	0.29
Versailles	1	0.28
Fort Mitchell	1	0.27
POPULATION CATEGORY 2,500-4,999		
Prestonsburg	11	6.18
Shepherdsville	12	4.99
Paintsville	9	4.13
Central City	9	3.62
Mount Vernon	4	3.01
Hodgenville	4	2.94
Williamstown	4	2.65
Greenville	6	2.56
Calvert City	3	2.37
Jenkins	3	2.18
Stanton	3	2.15
Tompkinsville	3	2.10
Lagrange	4	2.08
Fulton	3	1.95
Scottsville	4	1.87
Lancaster	3	1.75
Barbourville	3	1.64
Leitchfield	4	1.61
Columbia	3	1.56
Stanford	2	1.49
Springfield	2	1.39
Flemingsburg	2	1.30
Vine Grove	2	1.12
Carrollton	2	1.08
Providence	2	0.97
Hartford	1	0.79
Harlan	1	0.74
Irvine	1	0.71
Beaver Dam	1	0.69
Cold Springs	1	0.69
Dawson Springs	1	0.64
Marion	1	0.60
Grayson	1	0.57
Benton	1	0.51
Russell	1	0.50
Highland Heights	1	0.47

* Critical accident rate

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

	NUMBER OF ALCOHOL-RELATED ACCIDENTS (1995-1999)			PERCENT OF TOTAL ACCIDENTS INVOLVING ALCOHOL		
COUNTY	ALL	AGES 16-18	AGES 19-20	ALL	AGES 16-18	AGES 19-20
			POPULATION CATEGORY UNDER 10,000			
Robertson	9	0	1	14.3	0.0	12.5
Elliott	55	6	4	11.6	5.9	6.3
Nicholas	78	3	6	10.2	2.0	7.8
Owsley	38	7	4	10.2	11.7	8.5
Menifee	47	6	7	9.0	5.6	10.4
Ballard	8.2	2	6	7.6	1.0	6.5
Hickman	37	4	1	7.3	3.7	2.7
Crittenden	78	5	7	7.2	1.9	6.0
Lee	40	2	4	7.1	2.6	7.4
Livingston	76	1	1	7.1	0.5	0.8
Spencer	63	5	6	6.4	2.5	4.9
Owen	73	1	4	6.4	0.4	3.5
Carroll	137	8	11	6.3	2.1	5.5
Wolfe	65	8	6	6.3	5.2	4.5
Gallatin	68	3	5	5.9	2.1	4.5
Carlisle	14	1	2	5.9	2.4	10.0
Hancock	51	0	4	5.7	0.0	5.2
Bath	88	8	5	5.6	3.3	2.8
Trimble	52	4	1	5.2	1.9	1.2
Clinton	38	0	2	5.1	0.0	2.3
Fulton	51	1	2	5.0	0.6	2.4
McLean	55	2	7	5.0	0.9	5.4
Metcalfe	49	1	3	4.9	0.6	3.2
Lyon	58	8	4	4.7	4.8	4.6
Bracken	57	6	4	4.6	2.7	3.8
Cumberland	17	1	1	3.5	0.9	1.9
			POPULATION CATEGORY 10,000 - 14,999			
Magoffin	126	13	12	9.4	6.0	7.7
Casey	81	4	5	8.8	2.3	5.1
Leslie	101	5	4	8.3	2.7	2.6
Henry	150	7	16	7.9	2.4	8.6
Monroe	59	9	8	7.2	4.5	9.1
Estill	139	11	15	7.0	2.6	5.2
Lewis	103	9	10	6.7	3.4	6.2
Anderson	148	11	15	6.5	2.4	6.1
Jackson	86	6	12	6.4	2.4	7.4
Russell	105	12	8	6.4	3.8	5.8
Washington	91	7	5	6.2	1.9	3.0
Pendleton	119	10	7	6.1	2.6	3.4
Garrard	102	7	9	5.9	2.5	5.0
Butler	74	9	5	5.9	2.6	3.4
Martin	78	3	10	5.6	1.2	5.8
Lawrence	80	7	9	5.6	3.5	7.1
Fleming	81	5	10	5.5	1.5	5.3
Todd	67	6	4	5.2	2.4	2.9
Allen	110	6	9	5.2	1.5	4.0
Green	68	3	3	5.1	1.3	2.2
Edmonson	54	2	3	4.8	0.8	2.0
Morgan	74	2	2	4.8	0.8	1.1
Rockcastle	102	5	2	4.7	1.4	0.8
Powell	86	8	8	4.7	2.3	3.9
Larue	76	10	7	4.6	2.8	3.6
Caldwell	82	7	1	4.4	1.7	0.5
Webster	79	8	8	4.1	2.2	3.8
Hart	87	4	7	4.1	1.2	3.5
Trigg	60	5	2	3.7	1.8	1.2
			POPULATION CATEGORY 15,000 - 24,999			
Marion	252	23	17	10.3	4.1	5.9
McCreary	104	7	6	7.4	2.6	3.3
Lincoln	137	10	17	7.2	2.8	8.4
Knott	111	6	8	6.4	2.3	3.7
Johnson	178	6	15	6.3	1.3	4.3
Woodford	219	16	17	6.3	2.7	4.8
Meade	151	15	8	6.0	2.3	2.9
Breathitt	123	6	9	5.9	1.8	3.9
Union	141	12	12	5.8	2.2	4.5

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

	NUMBER OF ALCOHOL-RELATED ACCIDENTS (1995-1999)			PERCENT OF TOTAL ACCIDENTS INVOLVING ALCOHOL		
COUNTY	ALL	AGES 16-18	AGES 19-20	ALL	AGES 16-18	AGES 19-20
			POPULATION CATEGORY 15,000 - 24,999 (continued)			
Bourbon	198	15	6	5.8	2.6	1.8
Grayson	114	6	8	5.7	1.6	3.4
Clay	119	7	5	5.6	2.2	2.0
Carter	199	5	20	5.6	0.8	4.7
Montgomery	188	15	19	5.1	2.2	4.1
Breckinridge	66	2	5	5.0	0.6	2.8
Harrison	132	12	13	4.9	2.0	4.4
Ohio	132	7	7	4.8	1.6	2.1
Mason	188	15	17	4.7	2.2	4.5
Shelby	246	13	19	4.7	1.5	3.7
Logan	156	10	12	4.5	1.3	3.1
Mercer	135	10	12	4.4	1.6	3.6
Adair	95	11	8	4.3	2.3	3.3
Taylor	160	16	18	4.3	1.9	3.8
Wayne	92	13	8	4.2	2.7	2.8
Simpson	110	4	6	4.2	0.8	2.2
Grant	166	9	9	4.0	1.1	2.1
Scott	238	12	17	3.7	1.1	2.4
Rowan	142	11	16	3.5	1.7	2.5
			POPULATION CATEGORY 25,000 - 50,000			
Floyd	343	29	26	6.4	3.2	4.2
Greenup	223	13	19	5.6	1.6	4.2
Bullitt	365	20	17	5.6	1.3	2.3
Knox	205	11	10	5.6	1.7	2.1
Nelson	296	26	20	5.5	2.1	3.0
Perry	281	22	23	5.5	2.5	3.5
Letcher	163	10	16	5.5	2.2	4.8
Harlan	210	22	21	5.4	3.1	4.8
Jessamine	312	17	22	5.2	1.6	3.0
Bell	180	12	12	5.1	2.3	3.3
Barren	266	17	24	4.9	1.3	3.3
Calloway	171	16	20	4.9	2.0	3.6
Clark	286	22	16	4.8	2.1	2.6
Marshall	174	12	7	4.6	1.4	1.9
Franklin	347	18	24	4.5	1.5	3.2
Whitley	208	16	17	4.1	1.8	3.0
Graves	203	16	16	4.0	1.5	3.0
Henderson	374	25	19	3.9	1.3	2.0
Laurel	294	24	16	3.7	1.7	1.7
Muhlenberg	179	9	12	3.7	0.9	2.2
Pulaski	287	22	17	3.4	1.3	1.7
Boyle	159	9	11	3.4	1.2	2.2
Oldham	148	8	20	3.3	0.7	4.4
Hopkins	251	19	15	3.0	1.2	1.6
			POPULATION CATEGORY OVER 50,000			
Pike	653	42	38	5.8	2.3	3.0
Madison	712	42	82	5.6	2.1	4.5
Christian	483	20	34	4.9	1.3	2.9
Kenton	1372	55	84	4.8	1.1	2.9
Campbell	659	32	42	4.7	1.3	2.6
Daviess	673	52	44	4.0	1.4	2.2
McCracken	547	34	39	3.8	1.2	2.4
Fayette	2323	95	168	3.8	1.2	2.1
Warren	760	66	48	3.8	1.8	1.6
Jefferson	4867	197	292	3.5	1.0	1.9
Boone	561	37	47	3.5	1.1	2.5
Hardin	437	19	35	3.3	0.8	2.1
Boyd	312	25	20	3.1	1.3	1.7

TABLE 21. ACCIDENTS INVOLVING ALCOHOL BY CITY AND POPULATION CATEGORY(IN ORDER OF DECREASING PRECENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ALCOHOL-RELATED ACCIDENTS	PERCENTAGE OF ACCIDENTS INVOLVING ALCOHOL
POPULATION CATEGORY OVER 200,000		
Lexington	2,297	3.8
Louisville	2,446	3.1
POPULATION CATEGORY 20,000-55,000		
Covington	548	4.9
Richmond	278	4.4
Hopkinsville	236	3.7
Frankfort	166	3.3
Owensboro	395	3.2
Henderson	201	3.0
Paducah	271	2.9
Bowling Green	411	2.8
Jeffersontown	110	2.4
Ashland	126	2.1
POPULATION CATEGORY 10,000-19,999		
Newport	245	5.3
Independence	86	5.1
Middlesboro	86	4.9
Nicholasville	145	4.5
Erlanger	163	4.3
Shively	191	4.0
Fort Thomas	46	3.8
Winchester	132	3.6
Radcliff	93	3.2
Murray	42	2.7
Florence	207	2.5
Georgetown	78	2.3
Glasgow	73	2.2
Saint Matthews	89	2.0
Danville	71	2.0
Madisonville	83	1.9
Elizabethtown	103	1.7
Somerset	61	1.5
POPULATION CATEGORY 5,000-9,999		
Dayton	36	6.5
Villa Hills	18	5.2
Lawrenceburg	40	4.7
Fort Mitchell	68	4.5
Taylor Mill	56	4.4
Mount Washington	40	4.3
Paris	76	4.2
Elsmere	34	4.1
Pikeville	83	4.1
Lebanon	48	3.8
Mount Sterling	63	3.5
Bellevue	39	3.5
Williamsburg	33	3.4
Franklin	44	3.3
Versailles	49	3.3
Fort Wright	65	3.3
Harrodsburg	57	3.3
Alexandria	41	3.1
Maysville	78	3.0
Shelbyville	61	3.0
Campbellsville	74	2.8
Hazard	63	2.8
Cynthiana	37	2.7
Flatwoods	18	2.7
Bardstown	69	2.7
Berea	44	2.6
Corbin	56	2.5
Edgewood	22	2.5
Monticello	33	2.5
Russellville	42	2.4
Princeton	23	2.1
Mayfield	46	2.0
London	61	1.9
Morehead	25	1.5
Lyndon	0	0.0
Middletown	0	0.0
POPULATION CATEGORY 2,500-4,999		
Park Hills	19	8.0
Ludlow	31	6.9
Carrollton	41	5.1
Vine Grove	19	5.1
Irvine	32	4.7
Stanford	13	4.4
Stanton	22	4.3
Hickman	7	4.0
Providence	14	4.0
Shepherdsville	64	3.7
Flemingsburg	16	3.7
Lancaster	23	3.6
Dawson Springs	10	3.5
Springfield	20	3.5
Jenkins	13	3.3
Prestonsburg	40	3.3
Cold Springs	35	3.3
Mount Vernon	23	3.3
Fulton	15	3.1
Hodgenville	21	3.0
Highland Heights	27	2.9
Tompkinsville	16	2.9
Leitchfield	8	2.9
Southgate	14	2.9
Scottsville	32	2.8
Central City	28	2.7
Marion	14	2.6
Barbourville	21	2.6
Paintsville	31	2.5
Williamstown	17	2.5
Beaver Dam	14	2.5
Calvert City	8	2.5
Morganfield	15	2.2
Greenville	20	2.2
Columbia	19	2.1
Russell	17	2.0
Lakeside Park	9	2.0
Lagrange	18	2.0
Benton	17	2.0
Cumberland	6	2.0
Harlan	14	1.7
Grayson	17	1.7
Hartford	2	1.6
Wilmore	2	0.8
Oak Grove	0	0.0
Crestview Hills	0	0.0
Graymoor	0	0.0

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1995-1999 DATA)

COUNTY	1995	1996	1997	1998	1999	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED ACCIDENT
Adair	177	158	157	160	111	763	14.0	7.8
Allen	83	96	100	119	94	492	8.6	4.4
Anderson	110	133	137	172	225	777	11.7	5.5
Ballard	72	119	122	98	93	504	16.7	6.8
Barren	226	262	286	276	225	1,275	9.9	4.8
Bath	68	56	69	62	86	341	9.3	3.7
Bell	427	380	444	337	366	1,954	23.3	10.0
Boone	504	481	641	687	550	2,863	9.9	5.2
Bourbon	217	169	161	154	173	874	12.9	4.3
Boyd	285	325	264	361	364	1,599	9.3	5.1
Boyle	147	131	164	138	151	731	7.9	4.8
Bracken	61	58	47	53	44	263	9.2	4.7
Breathitt	140	97	129	122	124	612	13.1	5.1
Breckinridge	66	73	88	111	80	418	6.6	6.2
Bullitt	375	497	475	431	464	2,242	10.3	5.9
Butler	115	94	113	134	124	580	13.5	7.8
Caldwell	104	77	80	78	97	436	9.2	5.2
Calloway	202	297	296	267	164	1,226	10.9	8.3
Campbell	620	615	845	1,030	873	3,983	13.5	5.9
Carlisle	34	37	31	44	32	178	9.0	13.7
Carroll	214	163	199	172	135	883	26.0	6.4
Carter	250	170	167	187	143	917	10.6	4.7
Casey	106	162	190	188	148	794	16.2	9.6
Christian	486	560	753	957	850	3,606	21.3	7.5
Clark	288	281	367	354	353	1,643	14.5	5.8
Clay	149	195	187	253	295	1,079	16.6	9.5
Clinton	152	110	81	134	125	602	18.5	17.7
Crittenden	51	40	43	54	68	256	7.8	3.6
Cumberland	48	61	58	77	98	342	14.3	13.7
Daviess	633	597	608	700	655	3,193	10.0	4.5
Edmonson	47	52	53	39	30	221	5.5	4.1
Elliott	32	31	44	49	27	183	8.5	3.1
Estill	91	106	130	120	131	578	11.5	4.3
Fayette	2,636	2,485	2,443	2,420	2,119	12,103	14.1	5.1
Fleming	66	65	63	48	65	307	6.6	3.7
Floyd	380	366	320	445	345	1,856	13.6	5.1
Franklin	422	473	431	455	333	2,114	12.8	6.1
Fulton	146	136	115	123	122	642	26.8	10.4
Gallatin	68	55	66	87	101	377	14.9	5.4
Garrard	76	73	78	92	171	490	10.1	5.4
Grant	201	245	249	218	217	1,130	15.1	7.0
Graves	245	255	255	268	282	1,305	10.3	5.7
Grayson	166	142	152	228	139	827	10.0	6.8
Green	20	22	37	50	37	166	4.3	2.2
Greenup	233	273	291	309	321	1,427	10.9	6.2
Hancock	38	32	51	76	56	253	8.3	4.4
Hardin	588	640	615	663	688	3,194	10.7	7.4
Harlan	430	470	484	436	475	2,295	21.9	10.0
Harrison	127	201	164	132	98	722	11.7	5.9
Hart	105	146	109	113	105	578	10.3	6.7
Henderson	427	456	412	391	447	2,133	13.5	5.9
Henry	162	181	193	166	113	815	15.8	5.3
Hickman	42	24	29	46	29	170	9.0	4.0
Hopkins	435	454	416	364	403	2,072	12.8	8.0
Jackson	77	104	123	97	101	502	12.1	5.7
Jefferson	4,139	4,191	3,947	3,800	3,507	19,584	8.5	3.8
Jessamine	263	245	223	237	314	1,282	10.1	4.2
Johnson	163	165	177	152	192	849	10.8	4.5
Kenton	745	905	1,000	1,066	1,157	4,873	9.7	3.4
Knott	122	127	162	138	122	671	12.8	5.5
Knox	286	319	342	327	334	1,608	16.7	8.2
Larue	108	75	72	67	72	394	8.4	5.1
Laurel	589	447	501	714	679	2,930	17.2	9.9
Lawrence	145	94	131	138	118	626	12.4	7.1

TABLE 22. SUMMARY OF ALCOHOL CONVICTIONS BY COUNTY (1995-1999 DATA) (continued)

COUNTY	1995	1996	1997	1998	1999	TOTAL ALCOHOL CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED ACCIDENT
Lee	55	57	72	44	53	281	11.7	7.6
Leslie	89	63	112	64	122	450	11.1	4.2
Letcher	178	138	152	165	140	773	9.1	4.4
Lewis	101	66	112	138	98	515	11.4	5.2
Lincoln	150	128	118	105	98	599	7.9	4.2
Livingston	94	125	128	94	77	518	14.6	6.6
Logan	155	193	173	200	205	926	10.3	5.7
Lyon	102	105	77	73	56	413	15.6	7.2
McCracken	877	771	703	751	589	3,691	15.6	6.0
McCreary	87	129	91	138	188	633	12.2	6.5
McLean	34	48	56	49	43	230	6.4	4.3
Madison	987	741	859	889	667	4,143	18.7	6.0
Magoffin	121	152	113	100	154	640	15.1	5.2
Marion	196	126	163	149	183	817	14.1	3.2
Marshall	124	137	168	250	216	895	7.9	4.9
Martin	98	91	102	85	122	498	12.2	5.8
Mason	159	165	164	147	125	760	13.1	3.9
Meade	226	290	301	302	214	1,333	16.6	8.2
Menifee	21	19	23	25	61	149	7.2	3.4
Mercer	126	183	156	171	107	743	10.0	5.0
Metcalfe	44	40	77	61	58	280	8.4	6.5
Monroe	60	55	61	49	79	304	7.7	6.3
Montgomery	162	155	159	161	178	815	10.7	4.1
Morgan	62	72	107	101	89	431	10.9	5.6
Muhlenberg	269	251	201	198	198	1,117	10.2	7.2
Nelson	218	217	243	269	207	1,154	8.9	4.1
Nicholas	28	46	45	71	51	241	9.5	3.5
Ohio	148	157	166	117	113	701	9.0	5.4
Oldham	110	128	161	177	164	740	4.8	4.9
Owen	47	24	43	57	53	224	6.6	2.9
Owsley	30	32	43	37	30	172	10.3	4.9
Pendleton	81	80	79	104	54	398	8.2	3.6
Perry	472	356	413	325	347	1,913	19.1	6.8
Pike	561	447	656	484	406	2,554	11.2	3.7
Powell	112	97	110	125	151	595	13.5	6.1
Pulaski	362	371	390	400	390	1,913	9.7	6.5
Robertson	1	6	13	9	7	36	4.8	4.5
Rockcastle	183	269	261	220	201	1,134	21.2	10.6
Rowan	301	289	290	283	219	1,382	21.2	9.3
Russell	138	158	177	167	115	755	13.1	7.3
Scott	113	177	242	239	230	1,001	9.2	4.4
Shelby	225	219	349	292	368	1,453	13.6	6.5
Simpson	133	159	153	210	183	838	15.0	8.1
Spencer	49	46	59	58	70	282	7.1	4.6
Taylor	157	168	214	212	153	904	11.5	6.4
Todd	46	47	104	95	63	355	9.3	4.9
Trigg	109	129	100	130	91	559	12.5	8.3
Trimble	38	23	34	66	49	210	7.5	3.8
Union	158	178	166	153	138	793	14.7	5.6
Warren	862	1,041	1,251	1,235	938	5,327	18.2	6.9
Washington	65	52	50	53	55	275	7.3	3.3
Wayne	73	60	81	94	101	409	6.6	4.4
Webster	54	55	38	66	56	269	5.5	3.2
Whitley	183	149	211	262	344	1,149	10.7	5.6
Wolfe	65	61	82	76	74	358	15.3	5.8
Woodford	233	180	200	250	233	1,096	13.2	5.0
TOTAL *	30,162	30,270	32,052	32,829	30,534	155,847	11.7	5.3

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

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1995-1999)

POPULATION	COUNTY	ANNUAL AVERAGE ALCOHOL CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	ALCOHOL CONVICTIONS PER ALCOHOL-RELATED ACCIDENT
UNDER 10,000	Fulton	26.8	Clinton	17.7
	Carroll	26.0	Cumberland	13.7
	Clinton	18.5	Carlisle	13.7
	Ballard	16.7	Fulton	10.4
	Lyon	15.6	Lee	7.6
	Wolfe	15.3	Lyon	7.2
	Gallatin	14.9	Ballard	6.8
	Livingston	14.6	Livingston	6.6
	Cumberland	14.3	Metcalfe	6.5
	Mason	13.1	Carroll	6.4
	Lee	11.7	Wolfe	5.8
	Owsley	10.3	Gallatin	5.4
	Nicholas	9.5	Owsley	4.9
	Bath	9.3	Bracken	4.7
	Bracken	9.2	Spencer	4.6
	Carlisle	9.0	Robertson	4.5
	Hickman	9.0	Hancock	4.4
	Elliott	8.5	Hickman	4.0
	Metcalfe	8.4	Mason	3.9
	Hancock	8.3	Trimble	3.8
	Crittenden	7.8	Bath	3.7
	Trimble	7.5	Crittenden	3.6
	Menifee	7.2	Nicholas	3.5
	Spencer	7.1	Menifee	3.4
	Owen	6.6	Elliott	3.1
	Robertson	4.8	Owen	2.9
10,000 - 14,999	Rockcastle	21.2	Rockcastle	10.6
	Casey	16.2	Casey	9.6
	Henry	15.8	Trigg	8.3
	Magoffin	15.1	Butler	7.8
	Powell	13.5	Russell	7.3
	Butler	13.5	Lawrence	7.1
	Russell	13.1	Hart	6.7
	Trigg	12.5	McCreary	6.5
	Lawrence	12.4	Monroe	6.3
	McCreary	12.2	Powell	6.1
	Jackson	12.1	Jackson	5.7
	Anderson	11.7	Morgan	5.6
	Estill	11.5	Anderson	5.5
	Lewis	11.4	Garrard	5.4
	Leslie	11.1	Henry	5.3
	Morgan	10.9	Caldwell	5.2
	Hart	10.3	Lewis	5.2
	Garrard	10.1	Magoffin	5.2
	Todd	9.3	Larue	5.1
	Caldwell	9.2	Todd	4.9
	Allen	8.6	Allen	4.4
	Larue	8.4	Estill	4.3
	Pendleton	8.2	Leslie	4.2
	Monroe	7.7	Edmonson	4.1
	Washington	7.3	Fleming	3.7
	Fleming	6.6	Pendleton	3.6
	Webster	5.5	Washington	3.3
	Edmonson	5.5	Webster	3.2
	Green	4.3	Green	2.2
15,000 - 24,999	Rowan	21.2	Clay	9.5
	Clay	16.6	Rowan	9.2
	Meade	16.6	Meade	8.2
	Grant	15.1	Simpson	8.1
	Simpson	15.0	Adair	7.8
	Union	14.7	Grant	7.0
	Marion	14.1	Grayson	6.8
	Adair	14.0	Shelby	6.5

TABLE 23. ALCOHOL CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1995-1999) (continued)

POPULATION	COUNTY	PER 1,000 LICENSED DRIVERS ANNUAL AVERAGE ALCOHOL CONVICTIONS	COUNTY	RELATED PER ALCOHOL-CONVICTIONS ALCOHOL ACCIDENT
15,000 - 24,999 (cont.)	Shelby	13.6	Taylor	6.4
	Woodford	13.2	Breckinridge	6.2
	Breathitt	13.1	Harrison	5.9
	Bourbon	12.9	Martin	5.8
	Knott	12.8	Logan	5.7
	Martin	12.2	Union	5.6
	Harrison	11.7	Knott	5.5
	Taylor	11.5	Ohio	5.4
	Johnson	10.8	Breathitt	5.1
	Montgomery	10.7	Mercer	5.0
	Carter	10.6	Woodford	5.0
	Logan	10.3	Carter	4.7
	Mercer	10.0	Johnson	4.5
	Grayson	10.0	Wayne	4.4
	Scott	9.2	Scott	4.4
	Ohio	9.0	Bourbon	4.3
	Lincoln	7.9	McLean	4.3
	Breckinridge	6.6	Lincoln	4.2
	Wayne	6.6	Montgomery	4.1
	McLean	6.4	Marion	3.2
25,000 - 49,999	Bell	23.3	Bell	10.0
	Harlan	21.9	Harlan	10.0
	Perry	19.1	Laurel	9.9
	Madison	18.7	Calloway	8.3
	Laurel	17.2	Knox	8.2
	Knox	16.7	Hopkins	8.0
	Clark	14.5	Muhlenberg	7.2
	Floyd	13.6	Perry	6.8
	Henderson	13.5	Pulaski	6.5
	Franklin	12.8	Greenup	6.2
	Hopkins	12.8	Franklin	6.1
	Greenup	10.9	Madison	6.0
	Calloway	10.9	Bullitt	5.9
	Whitley	10.7	Henderson	5.9
	Bullitt	10.3	Clark	5.8
	Graves	10.3	Graves	5.7
	Muhlenberg	10.2	Whitley	5.6
	Jessamine	10.1	Floyd	5.1
	Barren	9.9	Oldham	4.9
	Pulaski	9.7	Barren	4.8
	Letcher	9.1	Boyle	4.8
	Nelson	8.9	Letcher	4.4
	Boyle	7.9	Jessamine	4.2
	Oldham	4.8	Nelson	4.1
OVER 50,000	Christian	21.3	Christian	7.5
	Warren	18.2	Hardin	7.4
	McCracken	15.6	Warren	6.9
	Fayette	14.1	McCracken	6.0
	Campbell	13.5	Campbell	5.9
	Pike	11.2	Boone	5.2
	Hardin	10.7	Boyd	5.1
	Daviess	10.0	Fayette	5.1
	Boone	9.9	Marshall	4.9
	Kenton	9.7	Daviess	4.5
	Boyd	9.3	Jefferson	3.8
	Jefferson	8.5	Pike	3.7
	Marshall	7.9	Kenton	3.4

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI ARREST (BY COUNTY) (1995-1999)

COUNTY	TOTAL DUI ARRESTS*	TOTAL DUI CONVICTIONS**	CONVICTION PERCENTAGE
Adair	1021	763	74.7
Allen	653	492	75.3
Anderson	991	777	78.4
Ballard	616	504	81.8
Barren	1748	1275	72.9
Bath	461	341	74.0
Bell	2576	1954	75.9
Boone	3716	2863	77.0
Bourbon	1067	874	81.9
Boyd	2169	1599	73.7
Boyle	1010	731	72.4
Bracken	293	263	89.8
Breathitt	907	612	67.5
Breckinridge	479	418	87.3
Bullitt	2995	2242	74.9
Butler	705	580	82.3
Caldwell	480	436	90.8
Calloway	1560	1226	78.6
Campbell	4916	3983	81.0
Carlisle	208	178	85.6
Carroll	1023	883	86.3
Carter	1323	917	69.3
Casey	1034	794	76.8
Christian	4536	3606	79.5
Clark	1944	1643	84.5
Clay	1984	1079	54.4
Clinton	853	602	70.6
Crittenden	295	256	86.8
Cumberland	480	342	71.3
Daviess	3853	3193	82.9
Edmonson	291	221	75.9
Elliott	254	183	72.0
Estill	849	578	68.1
Fayette	13452	12103	90.0
Fleming	325	307	94.5
Floyd	2833	1856	65.5
Franklin	2778	2114	76.1
Fulton	790	642	81.3
Gallatin	611	377	61.7
Garrard	666	490	73.6
Grant	1195	1130	94.6
Graves	1716	1305	76.0
Grayson	918	827	90.1
Green	222	166	74.8
Greenup	1750	1427	81.5
Hancock	300	253	84.3
Hardin	3689	3194	86.6
Harlan	2711	2295	84.7
Harrison	808	722	89.4
Hart	700	578	82.6
Henderson	2365	2133	90.2
Henry	958	815	85.1
Hickman	204	170	83.3
Hopkins	2305	2072	89.9
Jackson	745	502	67.4
Jefferson	27187	19584	72.0
Jessamine	1577	1282	81.3
Johnson	1239	849	68.5
Kenton	7164	4873	68.0
Knott	904	671	74.2
Knox	2135	1608	75.3
Larue	478	394	82.4

TABLE 24. PERCENTAGE OF DRIVERS CONVICTED OF DUI ARREST (BY COUNTY) (1995-1999) (continued)

COUNTY	TOTAL DUI ARRESTS*	TOTAL DUI CONVICTIONS**	CONVICTION PERCENTAGE
Laurel	3235	2930	90.6
Lawrence	876	626	71.5
Lee	406	281	69.2
Leslie	722	450	62.3
Letcher	998	773	77.5
Lewis	556	515	92.6
Lincoln	727	599	82.4
Livingston	614	518	84.4
Logan	1280	926	72.3
Lyon	475	413	86.9
McCracken	4226	3691	87.3
McCreary	1066	633	59.4
McLean	245	230	93.9
Madison	5245	4143	79.0
Magoffin	747	640	85.7
Marion	1217	817	67.1
Marshall	1036	895	86.4
Martin	707	498	70.4
Mason	822	760	92.5
Meade	1576	1333	84.6
Menifee	229	149	65.1
Mercer	867	743	85.7
Metcalfe	396	280	70.7
Monroe	506	304	60.1
Montgomery	1060	815	76.9
Morgan	537	431	80.3
Muhlenberg	1287	1117	86.8
Nelson	1350	1154	85.5
Nicholas	299	241	80.6
Ohio	867	701	80.9
Oldham	1011	740	73.2
Owen	292	224	76.7
Owsley	420	172	41.0
Pendleton	503	398	79.1
Perry	2469	1913	77.5
Pike	3602	2554	70.9
Powell	792	595	75.1
Pulaski	2749	1913	69.6
Robertson	52	36	69.2
Rockcastle	1611	1134	70.4
Rowan	1595	1382	86.6
Russell	967	755	78.1
Scott	1317	1001	76.0
Shelby	1876	1453	77.5
Simpson	994	838	84.3
Spencer	360	282	78.3
Taylor	1053	904	85.8
Todd	450	355	78.9
Trigg	701	559	79.7
Trimble	265	210	79.2
Union	871	793	91.0
Warren	6701	5327	79.5
Washington	359	275	76.6
Wayne	528	409	77.5
Webster	333	269	80.8
Whitley	1736	1149	66.2
Wolfe	471	358	76.0
Woodford	1332	1096	82.3
TOTAL	69584	54700	78.6

* 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) (1995-1999)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL ARRESTS	TOTAL CONVICTIONS	CONVICTION PERCENTAGE
UNDER 10,000	76.9	McLean	245	230	93.9
		Bracken	293	263	89.8
		Lyon	475	413	86.9
		Crittenden	295	256	86.8
		Carroll	1023	883	86.3
		Carlisle	208	178	85.6
		Livingston	614	518	84.4
		Hancock	300	253	84.3
		Hickman	204	170	83.3
		Ballard	616	504	81.8
		Fulton	790	642	81.3
		Nicholas	299	241	80.6
		Trimble	265	210	79.2
		Spencer	360	282	78.3
		Owen	292	224	76.7
		Wolfe	471	358	76.0
		Bath	461	341	74.0
		Elliott	254	183	72.0
		Cumberland	480	342	71.3
		Metcalfe	396	280	70.7
		Clinton	853	602	70.6
		Robertson	52	36	69.2
		Lee	406	281	69.2
		Menifee	229	149	65.1
		Gallatin	611	377	61.7
		Owsley	420	172	41.0
10,000-14,999	77.6	Fleming	325	307	94.5
		Lewis	556	515	92.6
		Caldwell	480	436	90.8
		Magoffin	747	640	85.7
		Henry	958	815	85.1
		Hart	700	578	82.6
		Larue	478	394	82.4
		Butler	705	580	82.3
		Webster	333	269	80.8
		Morgan	537	431	80.3
		Trigg	701	559	79.7
		Pendleton	503	398	79.1
		Todd	450	355	78.9
		Anderson	991	777	78.4
		Russell	967	755	78.1
		Casey	1034	794	76.8
		Washington	359	275	76.6
		Edmonson	291	221	75.9
		Allen	653	492	75.3
		Powell	792	595	75.1
		Green	222	166	74.8
		Garrard	666	490	73.6
		Lawrence	876	626	71.5
		Martin	707	498	70.4
		Rockcastle	1611	1134	70.4
		Estill	849	578	68.1
		Jackson	745	502	67.4
		Leslie	722	450	62.3
		Monroe	506	304	60.1
15,000-24,999	79.1	Grant	1195	1130	94.6
		Mason	822	760	92.5
		Union	871	793	91.0
		Grayson	918	827	90.1
		Harrison	808	722	89.4
		Breckinridge	479	418	87.3

TABLE 25. DUI ARREST CONVICTION RATES BY COUNTY AND POPULATION CATEGORY (IN DESCENDING ORDER) (1995-1999) (continued)

POPULATION CATEGORY	AVERAGE CONVICTION PERCENTAGE	COUNTY	TOTAL ARRESTS	TOTAL CONVICTIONS	CONVICTION PERCENTAGE
15,000-24,999 (continued)		Rowan	1595	1382	86.6
		Taylor	1053	904	85.8
		Mercer	867	743	85.7
		Meade	1576	1333	84.6
		Simpson	994	838	84.3
		Lincoln	727	599	82.4
		Woodford	1332	1096	82.3
		Bourbon	1067	874	81.9
		Ohio	867	701	80.9
		Wayne	528	409	77.5
		Shelby	1876	1453	77.5
		Montgomery	1060	815	76.9
		Scott	1317	1001	76.0
		Adair	1021	763	74.7
		Knott	904	671	74.2
		Logan	1280	926	72.3
		Carter	1323	917	69.3
		Johnson	1239	849	68.5
		Breathitt	907	612	67.5
		Marion	1217	817	67.1
		McCreary	1066	633	59.4
		Clay	1984	1079	54.4
		Laurel	3235	2930	90.6
25,000-50,000	78.9	Henderson	2365	2133	90.2
		Hopkins	2305	2072	89.9
		Muhlenberg	1287	1117	86.8
		Marshall	1036	895	86.4
		Nelson	1350	1154	85.5
		Harlan	2711	2295	84.7
		Clark	1944	1643	84.5
		Greenup	1750	1427	81.5
		Jessamine	1577	1282	81.3
		Calloway	1560	1226	78.6
		Perry	2469	1913	77.5
		Letcher	998	773	77.5
		Franklin	2778	2114	76.1
		Graves	1716	1305	76.0
		Bell	2576	1954	75.9
		Knox	2135	1608	75.3
		Bullitt	2995	2242	74.9
		Oldham	1011	740	73.2
		Barren	1748	1275	72.9
		Boyle	1010	731	72.4
		Pulaski	2749	1913	69.6
		Whitley	1736	1149	66.2
		Floyd	2833	1856	65.5
		Fayette	13452	12103	90.0
OVER 50,000	79.0	McCracken	4226	3691	87.3
		Hardin	3689	3194	86.6
		Daviess	3853	3193	82.9
		Campbell	4916	3983	81.0
		Christian	4536	3606	79.5
		Warren	6701	5327	79.5
		Madison	5245	4143	79.0
		Boone	3716	2863	77.0
		Boyd	2169	1599	73.7
		Jefferson	27187	19584	72.0
		Pike	3602	2554	70.9
		Kenton	7164	4873	68.0

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1995-1999 DATA)

COUNTY	1995	1996	1997	1998	1999	TOTAL RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Adair	33	23	15	21	25	117	2.1
Allen	10	14	22	20	12	78	1.4
Anderson	20	41	17	24	38	140	2.1
Ballard	17	32	17	12	8	86	2.8
Barren	76	97	108	85	98	464	3.6
Bath	11	8	10	1	16	46	1.3
Bell	29	32	49	45	24	179	2.1
Boone	176	137	108	120	128	669	2.3
Bourbon	56	45	31	16	20	168	2.5
Boyd	70	74	59	68	78	349	2.0
Boyle	26	32	30	39	28	155	1.7
Bracken	23	32	20	17	14	106	3.7
Breathitt	26	21	12	11	27	97	2.1
Breckinridge	23	15	29	29	21	117	1.8
Bullitt	90	103	84	94	130	501	2.3
Butler	19	10	12	14	14	69	1.6
Caldwell	32	20	24	31	27	134	2.8
Calloway	30	85	39	40	18	212	1.9
Campbell	118	145	150	155	208	776	2.6
Carlisle	7	19	8	9	5	48	2.4
Carroll	28	19	18	16	18	99	2.9
Carter	50	47	21	42	45	205	2.4
Casey	14	28	25	31	15	113	2.3
Christian	97	115	133	84	90	519	3.1
Clark	26	31	21	16	22	116	1.0
Clay	28	38	29	30	42	167	2.6
Clinton	15	26	36	30	53	160	4.9
Crittenden	6	14	7	14	21	62	1.9
Cumberland	12	14	15	15	33	89	3.7
Daviess	114	88	88	122	103	515	1.6
Edmonson	20	18	16	7	5	66	1.6
Elliott	10	3	3	9	4	29	1.4
Estill	21	21	23	27	33	125	2.5
Fayette	568	626	513	437	414	2,558	3.0
Fleming	20	24	5	13	17	79	1.7
Floyd	17	58	79	77	45	276	2.0
Franklin	46	64	109	141	128	488	3.0
Fulton	12	20	7	12	16	67	2.8
Gallatin	39	23	24	20	27	133	5.3
Garrard	27	20	17	24	47	135	2.8
Grant	25	38	30	32	28	153	2.0
Graves	43	34	40	24	40	181	1.4
Grayson	22	50	34	47	33	186	2.2
Green	9	8	3	20	7	47	1.2
Greenup	56	67	46	59	75	303	2.3
Hancock	0	1	6	15	5	27	0.9
Hardin	162	183	200	179	172	896	3.0
Harlan	74	88	100	64	58	384	3.7
Harrison	40	54	29	29	22	174	2.8
Hart	13	19	19	18	7	76	1.4
Henderson	55	44	65	64	59	287	1.8
Henry	13	9	18	11	9	60	1.2
Hickman	10	4	1	9	9	33	1.7
Hopkins	88	64	76	57	42	327	2.0
Jackson	15	16	5	15	5	56	1.3
Jefferson	1,358	1,218	1,353	1,162	1,090	6,181	2.7
Jessamine	44	33	37	35	47	196	1.5
Johnson	48	33	38	25	25	169	2.1
Kenton	270	326	333	297	441	1,667	3.3
Knott	19	10	3	12	13	57	1.1
Knox	60	78	78	60	49	325	3.4
Larue	19	23	17	16	10	85	1.8
Laurel	73	77	46	51	44	291	1.7

TABLE 26. SUMMARY OF RECKLESS DRIVING CONVICTIONS BY COUNTY (1995-1999 DATA) (continued)

COUNTY	1995	1996	1997	1998	1999	RECKLESS DRIVING CONVICTIONS (FIVE YEARS)	RECKLESS DRIVING CONVICTIONS PER 1,000 LICENSED DRIVERS
Lawrence	40	23	24	16	15	118	2.3
Lee	23	4	6	8	8	49	2.0
Leslie	23	18	10	6	20	77	1.9
Letcher	22	12	19	15	27	95	1.1
Lewis	21	19	12	15	27	94	2.1
Lincoln	39	38	22	34	28	161	2.1
Livingston	17	27	17	10	13	84	2.4
Logan	37	34	34	41	39	185	2.1
Lyon	18	33	23	19	30	123	4.7
McCracken	97	120	112	91	77	497	2.1
McCreary	29	38	25	26	29	147	2.8
McLean	9	5	13	9	6	42	1.2
Madison	58	83	40	55	65	301	1.4
Magoffin	33	38	23	11	6	111	2.6
Marion	66	79	60	37	53	295	5.1
Marshall	22	30	18	24	22	116	1.0
Martin	15	19	19	4	10	67	1.6
Mason	26	24	21	31	33	135	2.3
Meade	42	54	63	66	48	273	3.4
Menifee	6	3	8	7	13	37	1.8
Mercer	24	32	33	20	14	123	1.7
Metcalfe	11	13	21	22	21	88	2.6
Monroe	27	14	22	25	29	117	3.0
Montgomery	32	18	23	25	49	147	1.9
Morgan	7	20	14	18	7	66	1.7
Muhlenberg	39	57	39	34	16	185	1.7
Nelson	72	56	63	51	62	304	2.3
Nicholas	14	31	20	14	20	99	3.9
Ohio	26	18	23	27	15	109	1.4
Oldham	16	12	13	12	14	67	0.4
Owen	6	6	11	7	6	36	1.1
Owsley	15	10	9	10	17	61	3.6
Pendleton	24	30	21	24	14	113	2.3
Perry	57	45	40	39	27	208	2.1
Pike	117	112	115	84	61	489	2.1
Powell	17	14	16	13	12	72	1.6
Pulaski	85	86	98	120	88	477	2.4
Robertson	6	8	5	1	3	23	3.1
Rockcastle	27	56	41	43	36	203	3.8
Rowan	62	59	34	33	51	239	3.7
Russell	16	12	16	7	11	62	1.1
Scott	44	58	76	57	46	281	2.6
Shelby	12	21	22	40	47	142	1.3
Simpson	14	15	9	15	19	72	1.3
Spencer	5	3	0	9	4	21	0.5
Taylor	39	54	33	40	17	183	2.3
Todd	9	9	17	15	12	62	1.6
Trigg	32	39	23	23	19	136	3.0
Trimble	6	3	3	1	0	13	0.5
Union	19	22	15	15	19	90	1.7
Warren	123	167	210	191	119	810	2.8
Washington	9	11	14	10	11	55	1.5
Wayne	22	26	10	25	20	103	1.7
Webster	12	8	14	19	16	69	1.4
Whitley	42	34	45	54	56	231	2.1
Wolfe	5	18	12	13	23	71	3.0
Woodford	43	31	25	38	43	180	2.2
TOTAL	6,357	6,688	6,384	6,038	6,020	31,487	2.4

TABLE 27. PERCENTAGE OF ACCIDENTS INVOLVING DRUGS BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)(ALL ROADS)

COUNTY	NUMBER OF ACCIDENTS	PERCENT OF TOTAL ACCIDENTS
POPULATION CATEGORY UNDER 10,000		
Robertson	1	1.6
Crittenden	14	1.3
Lee	7	1.2
Hickman	4	0.8
Clinton	6	0.8
Livingston	9	0.8
Elliott	4	0.8
Nicholas	5	0.7
Carroll	13	0.6
Ballard	7	0.6
Lyon	7	0.6
Wolfe	5	0.5
Owsley	2	0.5
Fulton	4	0.4
Carlisle	1	0.4
Gallatin	4	0.3
McLean	3	0.3
Spencer	3	0.3
Hancock	3	0.3
Trimble	3	0.3
Bracken	2	0.2
Bath	3	0.2
Menifee	1	0.2
Metcalfe	1	0.1
Owen	1	0.1
Cumberland	0	0.0
POPULATION CATEGORY 10,000-14,999		
Leslie	32	2.6
Martin	32	2.3
Jackson	19	1.4
Magoffin	18	1.3
Casey	11	1.2
Rockcastle	21	1.0
Estill	18	0.9
Butler	10	0.8
Russell	11	0.7
Lawrence	8	0.6
Edmonson	6	0.5
Caldwell	10	0.5
Todd	7	0.5
Garrard	9	0.5
Monroe	4	0.5
Henry	8	0.4
Webster	8	0.4
Lewis	6	0.4
Powell	7	0.4
Hart	8	0.4
Allen	9	0.4
Trigg	7	0.4
Fleming	5	0.3
Anderson	4	0.2
Pendleton	4	0.2
Green	2	0.2
Washington	1	0.1
Larue	1	0.1
Morgan	1	0.1
POPULATION CATEGORY 15,000-24,999		
Johnson	49	1.7
Clay	36	1.7
Breathitt	29	1.4
McCreary	13	0.9
Knott	11	0.6
Wayne	13	0.6
Mercer	19	0.6
Grayson	13	0.6
Carter	17	0.5
Taylor	17	0.5
Simpson	12	0.5
Adair	11	0.5
Bourbon	18	0.5
Lincoln	7	0.4
Rowan	15	0.4
Harrison	10	0.4
Meade	9	0.4
Ohio	8	0.3
Mason	11	0.3
Union	6	0.3
Grant	14	0.3
Logan	9	0.3
Woodford	10	0.3
Marion	4	0.2
Breckinridge	2	0.2
Scott	13	0.2
Shelby	9	0.2
Montgomery	9	0.2
POPULATION CATEGORY 25,000-50,000		
Knox	67	1.8
Bell	58	1.6
Laurel	93	1.2
Floyd	59	1.1
Letcher	30	1.0
Harlan	39	1.0
Perry	43	0.8
Whitley	38	0.7
Marshall	21	0.6
Greenup	22	0.6
Muhlenberg	29	0.6
Clark	27	0.5
Oldham	21	0.5
Hopkins	31	0.4
Bullitt	24	0.4
Jessamine	25	0.4
Pulaski	35	0.4
Calloway	11	0.3
Graves	14	0.3
Barren	17	0.3
Franklin	27	0.3
Nelson	11	0.2
Henderson	24	0.2
Boyle	11	0.2
POPULATION CATEGORY OVER 50,000		
Pike	113	1.0
Warren	90	0.5
Boyd	49	0.5
Daviess	71	0.4
Madison	51	0.4
McCracken	53	0.4
Fayette	178	0.3
Campbell	42	0.3
Kenton	92	0.3
Christian	26	0.3
Boone	32	0.2
Hardin	31	0.2
Jefferson	220	0.2

TABLE 28. PERCENTAGE OF ACCIDENTS INVOLVING DRUGS BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF DRUG-RELATED ACCIDENTS	PERCENTAGE OF ACCIDENTS INVOLVING DRUGS
POPULATION CATEGORY OVER 200,000		
Lexington	176	0.3
Louisville	108	0.1
POPULATION CATEGORY 20,000-55,000		
Richmond	23	0.4
Covington	45	0.4
Bowling Green	57	0.4
Owensboro	40	0.3
Frankfort	14	0.3
Ashland	19	0.3
Paducah	27	0.3
Hopkinsville	13	0.2
Henderson	15	0.2
Jeffersontown	3	0.1
POPULATION CATEGORY 10,000-19,999		
Middlesboro	27	1.5
Fort Thomas	7	0.6
Winchester	20	0.5
Newport	18	0.4
Nicholasville	13	0.4
Madisonville	15	0.3
Radcliff	8	0.3
Glasgow	9	0.3
Somerset	14	0.3
Danville	6	0.2
Erlanger	9	0.2
Shively	11	0.2
Murray	3	0.2
Florence	16	0.2
Georgetown	3	0.1
Elizabethtown	7	0.1
Independence	2	0.1
Saint Matthews	0	0.0
POPULATION CATEGORY 5,000-9,999		
Williamsburg	16	1.7
London	24	0.7
Harrodsburg	12	0.7
Monticello	9	0.7
Pikeville	12	0.6
Princeton	5	0.5
Hazard	11	0.5
Corbin	12	0.5
Mount Washington	4	0.4
Berea	7	0.4
Franklin	6	0.4
Fort Mitchell	6	0.4
Fort Wright	8	0.4
Elsmere	3	0.4
Bellevue	4	0.4
Campbellsville	11	0.4
Paris	6	0.3
Maysville	8	0.3
Edgewood	3	0.3
Flatwoods	2	0.3
Bardstown	5	0.2
Russellville	4	0.2
Cynthiana	3	0.2
Morehead	4	0.2
Versailles	3	0.2
Taylor Mill	2	0.2
Alexandria	2	0.2
Shelbyville	2	0.1
Lawrenceburg	1	0.1
Mayfield	3	0.1
Mount Sterling	1	0.1
Lebanon	0	0.0
Dayton	0	0.0
Villa Hills	0	0.0
Lyndon	0	0.0
Middletown	0	0.0
POPULATION CATEGORY 2,500-4,999		
Barbourville	16	1.9
Leitchfield	4	1.5
Jenkins	6	1.5
Paintsville	17	1.4
Williamstown	6	0.9
Prestonsburg	11	0.9
Irvine	6	0.9
Harlan	7	0.9
Hartford	1	0.8
Ludlow	3	0.7
Beaver Dam	4	0.7
Flemingsburg	3	0.7
Mount Vernon	4	0.6
Greenville	5	0.6
Tompkinsville	3	0.6
Fulton	3	0.6
Providence	2	0.6
Carrollton	4	0.5
Lagrange	5	0.5
Central City	5	0.5
Lancaster	3	0.5
Park Hills	1	0.4
Russell	3	0.4
Scottsville	5	0.4
Wilmore	1	0.4
Grayson	3	0.3
Dawson Springs	1	0.3
Cumberland	1	0.3
Morganfield	2	0.3
Stanford	1	0.3
Highland Heights	3	0.3
Marion	1	0.2
Columbia	2	0.2
Benton	2	0.2
Stanton	1	0.2
Shepherdsville	3	0.2
Springfield	0	0.0
Lakeside Park	0	0.0
Vine Grove	0	0.0
Hodgenville	0	0.0
Hickman	0	0.0
Cold Springs	0	0.0
Southgate	0	0.0
Calvert City	0	0.0
Oak Grove	0	0.0
Graymoor	0	0.0
Crestview Hills	0	0.0

TABLE 29. SAFETY BELT USAGE (DRIVERS OF PASSENGER CARS INVOLVED IN ACCIDENTS BY COUNTY AND POPULATION CATEGORY) (IN DESCENDING ORDER)(1995-1999)

COUNTY	PERCENT SEAT BELT USAGE	
POPULATION CATEGORY UNDER 10,000		
Livingston	87.5	
Lyon	87.2	
Gallatin	86.3	
Carlisle	85.9	
McLean	85.7	
Wolfe	85.6	
Ballard	85.3	
Trimble	84.7	
Bath	84.5	
Carroll	84.2	*
Crittenden	84.1	*
Lee	82.9	
Spencer	82.8	*
Hancock	81.9	
Hickman	81.9	
Owen	81.8	
Nicholas	81.1	
Fulton	79.9	*
Elliott	79.6	
Bracken	78.3	
Clinton	76.4	
Metcalfe	76.1	
Menifee	76.0	*
Cumberland	74.7	
Owsley	69.9	
Robertson	67.5	
POPULATION CATEGORY 10,000-14,999		
Webster	91.5	
Hart	91.3	
Green	90.4	
Trigg	89.5	
Caldwell	87.5	
Garrard	86.6	
Larue	85.8	
Edmonson	85.7	*
Pendleton	85.6	
Morgan	85.3	
Martin	84.9	
Butler	84.9	
Jackson	84.6	
Powell	84.2	
Anderson	84.1	
Allen	84.0	
Lawrence	83.4	
Estill	83.2	*
Magoffin	82.6	
Henry	82.1	
Russell	82.0	
Washington	81.7	
Rockcastle	81.1	
Fleming	80.3	
Leslie	80.2	*
Todd	79.0	
Lewis	76.2	
Casey	75.3	
Monroe	70.3	*

COUNTY	PERCENT SEAT BELT USAGE	
POPULATION CATEGORY 15,000-24,999		
Scott	91.6	
Woodford	90.8	
Ohio	89.3	
Shelby	89.0	
Rowan	88.7	
Grant	88.5	
Meade	88.4	
Knott	88.0	
Montgomery	87.9	
Johnson	87.4	
Harrison	87.2	
McCreary	87.0	
Breathitt	87.0	
Mercer	86.9	
Breckinridge	86.8	*
Union	86.1	*
Carter	84.3	*
Bourbon	84.2	
Clay	84.1	
Simpson	84.1	
Grayson	83.9	
Logan	83.8	
Mason	83.6	
Taylor	81.7	
Lincoln	80.5	
Marion	79.7	
Wayne	78.7	
Adair	75.8	
POPULATION CATEGORY 25,000-50,000		
Hopkins	93.6	
Henderson	93.4	
Oldham	92.8	
Boyle	91.2	
Laurel	91.0	
Clark	90.7	
Jessamine	89.8	
Perry	89.8	
Franklin	89.5	
Greenup	89.4	
Graves	89.3	
Nelson	89.2	
Bullitt	89.2	
Pulaski	89.0	*
Marshall	87.7	
Floyd	87.7	*
Bell	86.9	*
Harlan	86.9	
Letcher	86.5	
Whitley	86.5	
Muhlenberg	86.4	
Calloway	85.2	
Knox	84.9	
Barren	82.7	*
POPULATION CATEGORY OVER 50,000		
Fayette	94.6	
Hardin	93.1	
Jefferson	92.6	
Christian	92.2	
McCracken	92.1	
Boone	91.4	
Daviess	90.7	
Campbell	90.7	
Warren	90.6	
Boyd	90.4	
Kenton	90.1	
Madison	89.0	
Pike	88.8	

* Counties with potential for intensive promotional campaigns. Selected based on safety belt usage, accident rates, location in state (one in each KSP post) and dates of past campaign recommendations.

TABLE 30. CHANGE IN SAFETY BELT USAGE FOR 1995-1999 (PASSENGER CAR DRIVERS INVOLVED IN ACCIDENTS) 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
1995	79.5	81.7	83.8	87.3	90.7	88.2
1996	83.2	83.2	85.6	89.0	91.9	89.8
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
All	82.9	84.2	86.2	89.3	92.3	90.1

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

	NOT WEARING SAFETY BELT		WEARING SAFETY BELT		
TYPE OF INJURY	NUMBER	PERCENT	NUMBER	PERCENT	PERCENT REDUCTION
Fatal	1,718	1.63	737	0.08	95 **
Incapacitating	8,845	8.38	16,604	1.72	79 **
Non-Incapacitating	14,660	13.89	44,420	4.60	67 **
Possible Injury	11,737	11.12	70,275	7.30	34 **
Fatal or Incapacitating	10,563	10.01	13,341	1.80	82 **

* Based on 1995 through 1999 accident data. Total sample size for not wearing a safety belt was 105,512 compared to 963,066 for wearing a safety belt

** Statistically significant reduction (probability of 0.99).

TABLE 32. CHANGE IN SEVERITY OF INJURIES BY YEAR (1995-1999 DATA)

Type of Injury	PERCENTAGE DRIVERS SUSTAINING A GIVEN INJURY 1995	1996	1997	1998	1999
			NOT WEARING SAFETY BELT		
Fatal	1.46	1.59	1.62	1.74	1.77
Incapacitating	8.30	8.03	8.19	8.54	8.95
Non-Incapacitating	13.06	13.47	14.42	14.45	14.26
Possible Injury	10.64	10.78	10.84	11.80	11.77
			WEARING SAFETY BELT		
Fatal	0.07	0.07	0.07	0.09	0.08
Incapacitating	1.88	1.74	1.69	1.67	1.64
Non-Incapacitating	4.48	4.57	4.65	4.62	4.64
Possible Injury	7.34	7.12	7.29	7.40	7.31

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

DRIVER USAGE RATE (PERCENT)	POTENTIAL ANNUAL REDUCTION IN NUMBER OF FATALITIES	SERIOUS INJURIES**	ANNUAL ACCIDENT SAVINGS (MILLION $) FROM REDUCTION IN FATALITIES	SERIOUS INJURIES	TOTAL
70	147	1,070	142.6	49.0	191.6
80	244	1,701	236.7	81.6	318.3
90	342	2,491	331.7	114.1	445.8

* Based on increase from the 55 percent usage rate determined from the 1995-1999 surveys, the percent reductions in Table 31, and the economic costs provided by the National Safety Council. These costs are $ 970,000 for a fatality and $45,800 for an incapacitating injury. The actual number of fatalties and incapacitation injuries for 1995 - 1999 were used along with the average usage rate over this time period. The usage rate reached 60 percent in 2000.

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

TABLE 34. USAGE AND EFFECTIVENESS OF CHILD SAFETY SEATS (1995-1999 ACCIDENT DATA FOR CHILDREN AGE THREE AND UNDER)

			RESTRAINT USED		
VARIABLE	CATEGORY	NONE	SAFETY BELT	CHILD SEAT	ANY RESTRAINT
Number	Fatal	23	5	24	29
With	Incapacitating	215	289	196	485
Given	Non-Incapacitating	463	613	802	1,415
Injury	Possible Injury	510	1,707	1,573	3,280
	None Detected	2,048	16,793	22,685	39,478
Percent	Fatal	0.71	0.03	0.09	0.06
With	Incapacitating	6.60	1.49	0.78	1.09
Given	Non-Incapacitating	14.21	3.16	3.17	3.17
Injury	Possible Injury	15.65	8.80	6.22	7.34
	None Detected	62.84	86.53	89.73	88.34
Percent	Middle Front	14.98	52.48	32.53	85.02
Usage	Right Front	10.15	61.49	28.36	89.85
By Seat	Left Rear	3.85	31.21	64.93	96.15
Position	Middle Rear	4.60	21.77	73.64	95.40
	Right Rear	3.41	27.65	68.94	96.59
	All Positions	6.80	40.48	52.73	93.20
Percent With Given Injury By Seat Position					
(Middle Front)	Fatal	0.51	0.00	0.08	0.03
	Incapacitating	5.25	1.59	0.70	1.25
	Non-Incapacitating	15.06	3.67	3.74	3.70
	Possible Injury	17.09	10.97	6.70	9.33
	None Detected	62.10	83.77	88.78	85.68
(Right Front)	Fatal	0.64	0.02	0.11	0.05
	Incapacitating	7.82	1.82	1.09	1.59
	Non-Incapacitating	15.00	4.40	3.50	4.12
	Possible Injury	16.66	10.29	7.56	9.42
	None Detected	59.89	83.48	87.73	84.82
(Left Rear)	Fatal	1.39	0.03	0.10	0.08
	Incapacitating	8.06	1.06	0.71	0.82
	Non-Incapacitating	13.33	0.48	3.15	2.28
	Possible Injury	13.33	5.63	5.61	5.61
	None Detected	63.89	92.80	90.44	91.20
(Middle Rear)	Fatal	0.95	0.00	0.12	0.09
	Incapacitating	3.79	1.13	0.89	0.94
	Non-Incapacitating	11.36	0.00	2.82	2.17
	Possible Injury	13.56	7.53	6.54	6.76
	None Detected	70.35	91.34	89.64	90.03
(Right Rear)	Fatal	0.48	0.06	0.07	0.07
	Incapacitating	4.78	1.03	0.60	0.73
	Non-Incapacitating	12.92	3.06	3.14	3.12
	Possible Injury	13.40	6.57	5.71	5.96
	None Detected	68.42	89.28	90.47	90.13
YEAR	1995	873	4,547	5,342	9,889
	1996	663	4,156	5,334	9,490
	1997	593	3,327	3,327	7,706
	1998	584	3,713	4,937	8,650
	1999	546	3,664	5,288	8,952

TABLE 35. PERCENTAGE OF ACCIDENTS INVOLVING UNSAFE SPEED BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	PERCENT OF TOTAL ACCIDENTS
POPULATION CATEGORY UNDER 10,000		
Menifee	116	22.1
Owen	229	19.9
Elliott	92	19.4
Gallatin	182	15.7
Lee	86	15.2
Trimble	144	14.4
Robertson	9	14.3
Spencer	129	13.1
Carlisle	30	12.6
Lyon	151	12.3
Nicholas	92	12.1
McLean	131	11.9
Bath	178	11.3
Wolfe	116	11.2
Carroll	230	10.5
Hickman	53	10.4
Owsley	38	10.2
Livingston	108	10.1
Ballard	103	9.6
Bracken	95	7.7
Crittenden	84	7.7
Metcalfe	74	7.4
Hancock	64	7.2
Clinton	36	4.9
Cumberland	22	4.5
Fulton	32	3.1
POPULATION CATEGORY 10,000-14,999		
Garrard	335	19.4
Henry	335	17.6
Jackson	223	16.7
Morgan	243	15.8
Leslie	190	15.6
Edmonson	166	14.6
Estill	271	13.7
Todd	154	11.9
Casey	108	11.8
Magoffin	157	11.7
Martin	158	11.4
Lawrence	154	10.9
Rockcastle	235	10.8
Pendleton	208	10.7
Lewis	162	10.5
Washington	146	9.9
Powell	181	9.9
Anderson	228	9.9
Caldwell	183	9.8
Webster	180	9.4
Fleming	134	9.1
Butler	107	8.5
Larue	138	8.3
Hart	164	7.7
Monroe	56	6.9
Trigg	114	6.9
Russell	112	6.8
Allen	135	6.4
Green	56	4.2
POPULATION CATEGORY 15,000-24,999		
Lincoln	398	21.0
McCreary	272	19.2
Grant	586	14.0
Carter	468	13.2
Mercer	402	13.0
Union	282	12.1
Rowan	463	11.5
Grayson	224	11.1
Bourbon	360	10.5
Woodford	364	10.5
Breathitt	205	9.8
Clay	208	9.8
Knott	162	9.4
Ohio	256	9.3
Johnson	249	8.8
Marion	210	8.5
Shelby	434	8.2
Meade	205	8.1
Scott	503	7.8
Wayne	158	7.1
Montgomery	257	7.0
Logan	240	6.9
Breckinridge	89	6.7
Mason	248	6.2
Taylor	226	6.1
Adair	136	6.1
Simpson	151	5.8
Harrison	150	5.6
POPULATION CATEGORY 25,000-50,000		
Knox	600	16.3
Whitley	741	14.6
Harlan	554	14.2
Floyd	727	13.5
Hopkins	828	10.0
Franklin	767	9.9
Letcher	293	9.8
Greenup	385	9.6
Muhlenberg	451	9.4
Oldham	425	9.4
Nelson	471	8.8
Laurel	664	8.3
Graves	415	8.2
Marshall	309	8.2
Bell	282	8.0
Jessamine	483	8.0
Pulaski	669	7.8
Perry	386	7.5
Clark	423	7.2
Barren	447	6.9
Boyle	324	6.9
Henderson	649	6.8
Calloway	194	5.6
Bullitt	353	5.4
POPULATION CATEGORY OVER 50,000		
Pike	2,426	21.6
Madison	1,651	12.9
Warren	1,961	9.8
Christian	946	9.6
Boone	1,216	7.6
Kenton	2,043	7.2
Boyd	711	7.0
Hardin	891	6.6
Campbell	796	5.6
Daviess	926	5.5
Fayette	2,961	4.9
McCracken	700	4.8
Jefferson	4,741	3.4

TABLE 36. PERCENTAGE OF ACCIDENTS INVOLVING UNSAFE SPEED BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ACCIDENTS (1995-1999)	PERCENT OF TOTAL ACCIDENTS
POPULATION CATEGORY OVER 200,000		
Lexington	2,916	4.9
Louisville	2,066	2.6
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	551	8.7
Bowling Green	950	6.4
Frankfort	295	5.9
Richmond	327	5.1
Covington	542	4.9
Ashland	299	4.9
Henderson	250	3.7
Paducah	346	3.7
Jeffersontown	155	3.4
Owensboro	379	3.1
POPULATION CATEGORY 10,000-19,999		
Erlanger	390	10.3
Fort Thomas	88	7.2
Independence	104	6.2
Somerset	248	6.0
Florence	381	4.6
Danville	160	4.5
Middlesboro	75	4.2
Madisonville	175	4.0
Elizabethtown	237	3.8
Nicholasville	122	3.8
Newport	169	3.7
Georgetown	121	3.6
Shively	162	3.4
Glasgow	105	3.1
Winchester	93	2.5
Murray	37	2.4
Saint Matthews	88	1.9
Radcliff	54	1.9
POPULATION CATEGORY 5,000-9,999		
Villa Hills	32	9.2
Pikeville	186	9.2
Taylor Mill	114	9.0
Fort Mitchell	116	7.7
Fort Wright	132	6.6
Elsmere	55	6.6
Williamsburg	58	6.0
Monticello	73	5.6
Corbin	120	5.4
Russellville	90	5.2
Paris	90	5.0
Maysville	125	4.9
Princeton	52	4.8
Versailles	70	4.7
Alexandria	61	4.7
London	150	4.6
Berea	77	4.6
Lebanon	58	4.6
Shelbyville	92	4.5
Dayton	25	4.5
Mount Washington	41	4.4
Campbellsville	109	4.2
Edgewood	37	4.1
Harrodsburg	70	4.0
Flatwoods	25	3.8
Bellevue	41	3.7
Morehead	57	3.3
Mount Sterling	58	3.2
Hazard	70	3.1
Franklin	42	3.1
Bardstown	62	2.5
Lawrenceburg	19	2.2
Mayfield	52	2.2
Cynthiana	28	2.1
POPULATION CATEGORY 2,500-4,999		
Park Hills	39	16.5
Stanford	31	10.4
Vine Grove	36	9.7
Wilmore	21	8.5
Williamstown	56	8.3
Highland Heights	74	8.0
Barbourville	65	7.9
Calvert City	23	7.3
Cumberland	21	7.1
Dawson Springs	20	7.0
Leitchfield	19	7.0
Providence	24	6.9
Hartford	8	6.6
Morganfield	45	6.5
Lakeside Park	28	6.3
Greenville	52	5.7
Irvine	37	5.5
Mount Vernon	38	5.4
Jenkins	20	5.1
Cold Springs	51	4.9
Lancaster	31	4.8
Lagrange	44	4.8
Scottsville	51	4.5
Benton	37	4.4
Stanton	22	4.3
Central City	44	4.2
Prestonsburg	50	4.1
Hodgenville	28	3.9
Columbia	35	3.8
Harlan	31	3.8
Flemingsburg	16	3.7
Carrollton	28	3.5
Grayson	34	3.4
Fulton	16	3.3
Springfield	18	3.2
Shepherdsville	53	3.1
Tompkinsville	17	3.1
Russell	26	3.0
Marion	15	2.8
Ludlow	11	2.4
Beaver Dam	13	2.3
Paintsville	27	2.2
Hickman	3	1.7
Southgate	8	1.7

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1995-1999 DATA)

COUNTY	1995	1996	1997	1998	1999	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED ACCIDENT
Adair	208	452	269	381	372	1,682	38.7	15.6
Allen	296	312	284	291	240	1,423	27.7	11.3
Anderson	795	1,424	1,505	1,608	1,409	6,741	114.5	33.0
Ballard	273	126	171	176	147	893	34.4	9.1
Barren	480	852	717	783	882	3,714	32.6	9.5
Bath	56	313	283	239	266	1,157	34.4	7.3
Bell	450	372	357	398	111	1,688	23.5	6.5
Boone	2,203	2,054	2,325	2,920	2,106	11,608	49.0	10.6
Bourbon	574	685	324	729	730	3,042	54.6	10.3
Boyd	1,422	1,452	1,487	1,525	1,573	7,459	51.2	11.2
Boyle	509	773	695	881	881	3,739	45.9	12.6
Bracken	604	541	396	478	260	2,279	91.5	27.5
Breathitt	86	58	153	96	81	474	11.6	2.9
Breckinridge	96	101	137	150	188	672	12.7	9.0
Bullitt	1,061	1,499	1,224	812	1,404	6,000	30.7	16.0
Butler	374	534	661	723	627	2,919	75.4	33.2
Caldwell	326	625	533	359	418	2,261	53.7	13.7
Calloway	434	708	302	431	518	2,393	23.0	15.6
Campbell	1,520	1,966	2,353	2,480	2,274	10,593	42.5	15.2
Carlisle	250	192	145	188	154	929	53.2	38.4
Carroll	685	742	628	572	570	3,197	122.7	17.4
Carter	506	464	495	587	960	3,012	41.8	8.2
Casey	117	110	168	207	143	745	17.1	8.1
Christian	767	803	910	671	754	3,905	28.2	4.9
Clark	617	684	431	527	554	2,813	31.8	8.8
Clay	56	348	243	757	660	2,064	33.1	10.9
Clinton	92	95	114	72	129	502	19.2	21.9
Crittenden	59	100	41	53	52	305	13.2	4.9
Cumberland	89	142	115	88	149	583	30.3	28.4
Daviess	1,410	1,854	2,255	2,522	2,800	10,841	39.2	13.2
Edmonson	82	186	136	74	38	516	16.1	3.9
Elliott	0	0	6	4	5	15	1.0	0.2
Estill	138	134	190	136	203	801	19.1	3.5
Fayette	9,540	9,559	9,309	9,682	9,516	47,606	65.9	18.7
Fleming	141	222	221	203	295	1,082	27.4	9.9
Floyd	152	167	291	475	334	1,419	12.0	2.1
Franklin	1,516	1,989	2,292	1,683	2,354	9,834	64.5	13.1
Fulton	128	70	68	157	197	620	29.3	14.3
Gallatin	611	805	571	365	654	3,006	136.5	16.1
Garrard	70	255	230	133	171	859	21.5	3.1
Grant	750	885	771	1,024	974	4,404	75.1	8.4
Graves	354	427	878	592	823	3,074	29.3	8.9
Grayson	148	255	328	714	576	2,021	26.4	9.0
Green	31	71	86	67	90	345	10.4	6.1
Greenup	525	645	563	464	597	2,794	24.4	8.7
Hancock	90	135	140	344	241	950	34.6	15.4
Hardin	2,690	4,228	4,647	4,593	4,805	20,963	78.6	25.8
Harlan	110	125	129	109	167	640	7.0	1.2
Harrison	308	409	246	366	408	1,737	34.7	14.3
Hart	406	417	317	355	343	1,838	41.3	17.0
Henderson	929	1,218	1,171	1,489	1,523	6,330	47.1	10.8
Henry	614	1,133	1,173	1,103	765	4,788	105.4	15.4
Hickman	136	74	180	249	167	806	48.5	17.6
Hopkins	1,219	1,158	641	1,231	1,633	5,882	42.8	8.0
Jackson	18	12	23	14	34	101	2.6	0.6
Jefferson	10,724	10,686	9,602	14,161	15,152	60,325	30.8	14.2
Jessamine	439	769	1,063	2,071	2,200	6,542	56.4	15.4
Johnson	87	178	133	176	234	808	11.7	3.6
Kenton	2,730	3,437	3,777	3,450	4,442	17,836	39.1	9.6
Knott	55	125	41	17	149	387	9.6	2.7
Knox	357	538	566	531	902	2,894	34.4	5.8
Larue	201	182	154	238	244	1,019	27.4	8.3
Laurel	843	1,591	1,524	1,549	1,402	6,909	47.1	11.3
Lawrence	503	544	400	504	400	2,351	53.7	17.4

TABLE 37. SUMMARY OF SPEEDING CONVICTIONS BY COUNTY (1995-1999 DATA)(continued)

COUNTY	1995	1996	1997	1998	1999	TOTAL SPEEDING CONVICTIONS (FIVE YEARS)	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	SPEEDING CONVICTIONS PER SPEED-RELATED ACCIDENT
Lee	41	28	20	32	36	157	7.8	2.3
Leslie	185	205	322	451	367	1,530	40.0	9.0
Letcher	77	85	146	72	106	486	6.9	1.9
Lewis	207	159	379	356	308	1,409	37.9	12.5
Lincoln	365	529	331	541	609	2,375	36.0	6.7
Livingston	260	476	344	358	515	1,953	59.2	19.6
Logan	318	634	767	575	542	2,836	36.2	12.8
Lyon	294	674	601	632	428	2,629	110.1	20.2
McCracken	1,311	1,599	1,614	1,934	1,624	8,082	37.6	11.8
McCreary	112	201	212	195	178	898	20.3	3.6
McLean	162	201	292	162	85	902	31.1	8.5
Madison	1,065	1,378	1,242	1,471	2,012	7,168	37.1	4.8
Magoffin	25	73	74	39	20	231	6.8	1.8
Marion	278	473	328	271	340	1,690	35.4	9.7
Marshall	629	815	962	929	894	4,229	42.1	15.5
Martin	35	15	25	22	29	126	4.9	1.1
Mason	284	330	615	496	576	2,301	44.8	10.5
Meade	294	353	464	376	412	1,899	27.6	9.6
Menifee	10	7	6	24	22	69	4.0	0.7
Mercer	446	645	546	436	537	2,610	40.6	7.3
Metcalfe	115	230	271	250	275	1,141	40.9	18.2
Monroe	30	22	18	31	32	133	3.7	3.0
Montgomery	99	168	194	333	453	1,247	18.8	5.3
Morgan	123	379	277	366	202	1,347	38.4	6.2
Muhlenberg	680	542	519	469	466	2,676	30.2	6.7
Nelson	443	516	608	678	1,020	3,265	29.8	8.2
Nicholas	131	114	92	108	226	671	33.9	10.7
Ohio	449	617	654	305	460	2,485	36.2	10.5
Oldham	980	763	838	970	834	4,385	36.4	14.3
Owen	132	84	67	76	118	477	18.0	2.4
Owsley	6	1	0	3	25	35	2.4	1.2
Pendleton	309	542	497	339	267	1,954	54.2	12.3
Perry	363	592	886	417	266	2,524	27.9	6.5
Pike	196	184	185	272	292	1,129	6.5	0.6
Powell	152	217	280	427	446	1,522	39.8	9.9
Pulaski	667	759	1,018	1,051	942	4,437	27.1	8.1
Robertson	33	22	15	18	10	98	16.1	11.8
Rockcastle	438	428	349	602	578	2,395	54.2	12.6
Rowan	796	769	680	643	604	3,492	62.8	9.3
Russell	71	119	98	113	73	474	11.5	7.3
Scott	662	1,198	1,651	1,710	1,505	6,726	68.8	13.8
Shelby	1,022	1,237	1,304	1,246	1,570	6,379	67.6	15.8
Simpson	247	251	362	333	231	1,424	29.5	11.3
Spencer	240	272	230	190	311	1,243	36.1	10.9
Taylor	362	763	505	418	414	2,462	37.1	15.2
Todd	154	182	212	116	152	816	26.3	6.1
Trigg	369	369	323	316	271	1,648	43.1	15.0
Trimble	59	41	64	59	17	240	12.0	2.3
Union	222	258	365	254	162	1,261	29.1	5.4
Warren	1,328	1,563	2,047	2,391	2,165	9,494	38.8	5.8
Washington	426	399	774	456	467	2,522	82.0	21.1
Wayne	21	49	62	55	83	270	5.4	2.2
Webster	65	203	130	116	273	787	18.7	5.3
Whitley	126	289	295	318	677	1,705	17.8	2.5
Wolfe	479	652	862	1,703	1,621	5,317	241.7	45.7
Woodford	1,519	1,824	1,712	1,898	2,528	9,481	137.2	29.0
TOTAL*	72,972	88,508	89,322	98,449	103,126	452,377	33.8	9.2

* Does not include speeding convictions where county was not specified

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1995-1999)

POPULATION CATEGORY	COUNTY	ANNUAL AVERAGE SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS	COUNTY	SPEEDING CONVICTIONS PER SPEED-RELATED ACCIDENT
UNDER 10,000	Wolfe	226.6	Wolfe	45.7
	Gallatin	118.8	Carlisle	38.4
	Lyon	99.5	Cumberland	28.4
	Carroll	94.0	Bracken	27.5
	Bracken	79.4	Clinton	21.9
	Livingston	55.0	Lyon	20.2
	Carlisle	47.2	Livingston	19.6
	Hickman	42.6	Metcalfe	18.2
	Metcalfe	34.1	Hickman	17.6
	Bath	31.5	Carroll	17.4
	Spencer	31.3	Gallatin	16.1
	Hancock	31.1	Hancock	15.4
	Ballard	29.6	Fulton	14.3
	Nicholas	26.4	Robertson	11.8
	Fulton	25.9	Spencer	10.9
	McLean	25.3	Nicholas	10.7
	Cumberland	24.4	Ballard	9.1
	Clinton	15.4	McLean	8.5
	Owen	14.0	Bath	7.3
	Robertson	13.1	Crittenden	4.9
	Crittenden	9.3	Owen	2.4
	Trimble	8.6	Trimble	2.3
	Lee	6.5	Lee	2.3
	Menifee	3.4	Owsley	1.2
	Owsley	2.1	Menifee	0.7
	Elliott	0.7	Elliott	0.2
10,000-14,999	Anderson	101.2	Butler	33.2
	Henry	92.9	Anderson	33.0
	Butler	68.1	Washington	21.1
	Washington	66.7	Lawrence	17.4
	Caldwell	48.0	Hart	17.0
	Lawrence	46.7	Henry	15.4
	Rockcastle	44.8	Trigg	15.0
	Pendleton	40.5	Caldwell	13.7
	Leslie	37.8	Rockcastle	12.6
	Trigg	36.8	Lewis	12.5
	Powell	34.6	Pendleton	12.3
	Morgan	34.0	Allen	11.3
	Hart	32.7	Fleming	9.9
	Lewis	31.1	Powell	9.9
	Allen	25.0	Leslie	9.0
	Fleming	23.2	Larue	8.3
	Larue	21.8	Casey	8.1
	Todd	21.4	Russell	7.3
	Garrard	17.7	Morgan	6.2
	Webster	16.0	Todd	6.1
	Estill	15.9	Green	6.1
	Casey	15.2	Webster	5.3
	Edmonson	12.8	Edmonson	3.9
	Green	8.9	Estill	3.5
	Russell	8.2	Garrard	3.1
	Magoffin	5.5	Monroe	3.0
	Monroe	3.4	Magoffin	1.8
	Martin	3.1	Martin	1.1
	Jackson	2.4	Jackson	0.6
15,000 - 24,999	Woodford	114.1	Woodford	29.0
	Scott	61.6	Shelby	15.8
	Shelby	59.8	Adair	15.6
	Grant	59.0	Taylor	15.2
	Rowan	53.6	Harrison	14.3
	Bourbon	45.0	Scott	13.8
	Mason	39.5	Logan	12.8
	Mercer	35.2	Simpson	11.3
	Carter	34.8	Clay	10.9
	Ohio	32.0	Ohio	10.5
	Logan	31.7	Mason	10.5

TABLE 38. SPEEDING CONVICTION RATES IN DECREASING ORDER (BY COUNTY POPULATION CATEGORIES) (1995-1999) (continued)

POPULATION CATEGORY	COUNTY	SPEEDING CONVICTIONS PER 1,000 LICENSED DRIVERS ANNUAL AVERAGE	COUNTY	SPEEDING RELATED PER SPEED-CONVICTIONS ACCIDENT
15,000 - 24,999	Lincoln	31.4	Bourbon	10.3
(cont'd)	Taylor	31.3	Marion	9.7
	Adair	30.9	Meade	9.6
	Marion	29.1	Rowan	9.3
	Harrison	28.2	Grayson	9.0
	Simpson	25.5	Breckinridge	9.0
	Clay	24.8	Grant	8.4
	Grayson	24.4	Carter	8.2
	Meade	23.7	Mercer	7.3
	Union	23.4	Lincoln	6.7
	McCreary	17.3	Union	5.4
	Montgomery	16.4	Montgomery	5.3
	Breckinridge	10.6	McCreary	3.6
	Johnson	10.3	Johnson	3.6
	Breathitt	10.1	Breathitt	2.9
	Knott	7.4	Knott	2.7
	Wayne	4.3	Wayne	2.2
25,000 - 50,000	Franklin	59.6	Bullitt	16.0
	Jessamine	51.5	Calloway	15.6
	Laurel	40.5	Marshall	15.5
	Boyle	40.3	Jessamine	15.4
	Henderson	40.0	Oldham	14.3
	Marshall	37.5	Franklin	13.1
	Hopkins	36.3	Boyle	12.6
	Knox	30.1	Laurel	11.3
	Barren	28.9	Henderson	10.8
	Oldham	28.6	Barren	9.5
	Bullitt	27.6	Graves	8.9
	Perry	25.2	Clark	8.8
	Nelson	25.2	Greenup	8.7
	Clark	24.8	Nelson	8.2
	Muhlenberg	24.5	Pulaski	8.1
	Graves	24.3	Hopkins	8.0
	Pulaski	22.6	Muhlenberg	6.7
	Greenup	21.4	Perry	6.5
	Calloway	21.3	Bell	6.5
	Bell	20.1	Knox	5.8
	Whitley	15.8	Whitley	2.5
	Floyd	10.4	Floyd	2.1
	Harlan	6.1	Letcher	1.9
	Letcher	5.7	Harlan	1.2
OVER 50,000	Hardin	70.3	Hardin	25.8
	Fayette	55.7	Fayette	18.7
	Boyd	43.4	Campbell	15.2
	Boone	40.1	Jefferson	14.2
	Campbell	35.9	Daviess	13.2
	Kenton	35.6	McCracken	11.8
	McCracken	34.1	Boyd	11.2
	Daviess	34.1	Boone	10.6
	Warren	32.4	Kenton	9.6
	Madison	32.3	Warren	5.8
	Jefferson	26.0	Christian	4.9
	Christian	23.1	Madison	4.8
	Pike	4.9	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. Accident Trend Analysis (1995 - 1999)

Accident Statistic	Number in Given Year 1995	1996	1997	1998	4-Year Average 1995-98	1999	1999 Percent Change*
Total Accidents	127,653	134,558	134,161	125,698	130,518	132,216	1.3
Fatal Accidents	739	738	782	776	759	729	-3.9
Fatalities	856	846	865	869	859	819	-4.7
Injury Accidents	35,916	36,434	36,516	34,395	35,815	36,125	0.9
Injuries	55,465	55,909	56,342	52,952	55,167	54,951	-0.4
Fatal and Injury Accidents	36,655	37,182	37,298	35,171	36,577	36,854	0.8
Licensed Drivers (Millions)	2.54	2.57	2.57	2.63	2.58	2.67	3.6
Registered Vehicles (Millions)	2.93	2.97	3.01	3.20	3.03	3.15	4.0
Total Vehicle Miles (Billions)	41.095	42.471	44.863	46.577	43.752	47.816	9.3
Total Acc/100 MVM	311	317	299	270	299	277	-7.4
Fatal Acc/100 MVM	1.80	1.74	1.74	1.67	1.74	1.52	-12.5
Fatalities/100 MVM	2.08	1.99	1.93	1.87	1.97	1.71	-13.1
Injuries/100 MVM	135	130	126	114	126	115	-8.9
Speed Related Accidents	10,013	10,713	10,435	9,099	10,065	9,112	-9.5
Speed Related Injury Accidents	4,474	4,494	4,488	4,030	4,372	3,990	-8.7
Speed Related Fatal Accidents	182	208	230	190	203	201	-0.7
Speed Convictions	72,972	88,508	89,572	98,662	87,429	103,696	18.6
Alcohol Related Accidents	6,163	6,150	6,070	5,222	5,901	5,441	-7.8
Alcohol Related Injury Accidents	3,048	2,955	2,949	2,482	2,859	2,592	-9.3
Alcohol Related Fatal Accidents	236	242	206	187	218	196	-10.1
Alcohol Related Fatalities	278	256	234	205	243	222	-8.6
DUI Arrests	38,943	39,064	40,567	42,100	40,169	43,254	7.7
DUI Convictions	30,222	30,283	32,106	32,837	31,362	31,263	-0.3
DUI Conviction Percentage	78.0	78.0	79.1	78	78	72	-7.7
DUI Arrests/ Alcohol Related Fatalities	140	153	173	205	168	195	16.1
Drug Related Accidents	406	489	533	535	491	656	33.7
Drug Related Injury Accidents	208	248	277	278	253	355	40.5
Drug Related Fatal Accidents	12	15	14	13	14	12	-11.1
Pedestrian Related Accidents	1,199	1,197	1,190	1,077	1,166	1,117	-4.2
Pedestrian Related Injury Accidents	1,081	1,085	1,057	966	1,047	1,011	-3.5
Pedestrian Related Fatal Accidents	58	56	62	65	60	55	-8.7
Bicycle/Motor Vehicle Related Accidents	706	695	662	587	663	606	-8.5
Bicycle Related Injury Accidents	602	557	512	480	538	512	-4.8
Bicycle Related Fatal Accidents	4	6	10	9	7	10	37.9
Motorcycle Related Accidents	852	747	736	835	793	1,033	30.3
Motorcycle Related Injury Accidents	677	581	565	647	618	774	25.3
Motorcycle Related Fatal Accidents	21	25	29	26	25	42	66.3
School Bus Accidents	788	810	822	775	799	648	-18.9
School Bus Injury Accidents	145	93	150	144	133	110	-17.3
School Bus Fatal Accidents	2	2	6	4	4	0	-100.0
Truck Accidents	9,055	9,975	8,249	7,670	8,737	7,642	-12.5
Truck Injury Accidents	2,156	2,292	1,852	1,678	1,995	1,665	-16.5
Truck Fatal Accidents	102	95	108	95	100	82	-18.0
Train Accidents	94	79	57	70	75	57	-24.0
Train Injury Accidents	38	21	23	25	27	16	-40.2
Train Fatal Accidents	5	3	4	3	4	2	-46.7

* Percent change from 1995-1998 average to 1999.

Table 42. NUMBER OF ACCIDENTS AND RATES BY ACCIDENT TYPE FOR EACH COUNTY

	PEDESTRIAN ACCIDENTS		BICYCLE ACCIDENTS		MOTORCYCLE ACCIDENTS		SCHOOL BUS ACCIDENTS		TRUCK ACCIDENTS	
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Adair	7	0.9	7	0.9	14	1.8	14	1.8	109	14.2
Allen	8	1.1	6	0.8	16	2.2	13	1.8	103	14.1
Anderson	13	1.8	9	1.2	18	2.5	27	3.7	137	18.8
Ballard	5	1.3	2	0.5	8	2.0	2	0.5	115	29.1
Barren	25	1.5	25	1.5	62	3.6	23	1.4	428	25.2
Bath	7	1.4	2	0.4	12	2.5	8	1.7	109	22.5
Bell	33	2.1	19	1.2	18	1.1	26	1.7	286	18.2
Boone	97	3.4	60	2.1	92	3.2	83	2.9	1598	55.5
Bourbon	26	2.7	15	1.6	15	1.6	25	2.6	206	21.4
Boyd	77	3.0	44	1.7	79	3.1	47	1.8	693	27.1
Boyle	27	2.1	15	1.2	18	1.4	17	1.3	261	20.4
Bracken	6	1.5	2	0.5	11	2.8	7	1.8	65	16.7
Breathitt	21	2.7	3	0.4	34	4.3	15	1.9	133	16.9
Breckinridge	7	0.9	6	0.7	10	1.2	6	0.7	78	9.6
Bullitt	36	1.5	11	0.5	47	2.0	65	2.7	489	20.6
Butler	8	1.4	2	0.4	7	1.2	9	1.6	60	10.7
Caldwell	14	2.1	14	2.1	13	2.0	7	1.1	116	17.5
Calloway	24	1.6	13	0.8	35	2.3	21	1.4	183	11.9
Campbell	238	5.7	135	3.2	93	2.2	60	1.4	832	19.8
Carlisle	1	0.4	2	0.8	3	1.1	1	0.4	25	9.5
Carroll	12	2.6	11	2.4	19	4.1	12	2.6	222	47.8
Carter	16	1.3	5	0.4	37	3.0	28	2.3	269	22.1
Casey	5	0.7	3	0.4	9	1.3	7	1.0	52	7.3
Christian	98	2.8	61	1.8	62	1.8	81	2.3	681	19.8
Clark	44	3.0	26	1.8	37	2.5	47	3.2	360	24.4
Clay	14	1.3	6	0.6	18	1.7	27	2.5	120	11.0
Clinton	4	0.9	1	0.2	1	0.2	5	1.1	48	10.5
Crittenden	9	2.0	1	0.2	9	2.0	9	2.0	55	12.0
Cumberland	5	1.5	0	0.0	0	0.0	2	0.6	23	6.8
Daviess	118	2.7	125	2.9	113	2.6	66	1.5	896	20.6
Edmonson	11	2.1	2	0.4	12	2.3	13	2.5	62	12.0
Elliott	6	1.9	0	0.0	13	4.0	0	0.0	31	9.6
Estill	13	1.8	7	1.0	16	2.2	13	1.8	54	7.4
Fayette	644	5.7	439	3.9	249	2.2	290	2.6	3098	27.5
Fleming	12	2.0	3	0.5	14	2.3	10	1.6	95	15.5
Floyd	45	2.1	14	0.6	81	3.7	59	2.7	448	20.6
Franklin	43	2.0	21	1.0	41	1.9	45	2.1	413	18.9
Fulton	10	2.4	10	2.4	6	1.5	4	1.0	81	19.6
Gallatin	6	2.2	5	1.9	12	4.5	3	1.1	167	61.9
Garrard	8	1.4	6	1.0	16	2.8	11	1.9	84	14.5
Grant	32	4.1	6	0.8	29	3.7	27	3.4	375	47.7
Graves	36	2.1	15	0.9	37	2.2	32	1.9	296	17.6
Grayson	15	1.4	4	0.4	18	1.7	13	1.2	154	14.6
Green	9	1.7	2	0.4	10	1.9	11	2.1	59	11.4
Greenup	27	1.5	22	1.2	23	1.3	19	1.0	192	10.5
Hancock	2	0.5	4	1.0	5	1.3	5	1.3	86	21.9
Hardin	66	1.5	48	1.1	87	1.9	65	1.5	781	17.5
Harlan	50	2.7	16	0.9	22	1.2	18	1.0	275	15.0
Harrison	17	2.1	10	1.2	14	1.7	15	1.8	154	19.0
Hart	10	1.3	4	0.5	11	1.5	17	2.3	245	32.9
Henderson	80	3.7	75	3.5	74	3.4	36	1.7	596	27.7
Henry	10	1.6	8	1.2	11	1.7	20	3.1	204	31.8
Hickman	4	1.4	1	0.4	5	1.8	4	1.4	35	12.6
Hopkins	40	1.7	43	1.9	79	3.4	34	1.5	557	24.2
Jackson	7	1.2	1	0.2	12	2.0	17	2.8	58	9.7
Jefferson	1877	5.6	1031	3.1	666	2.0	754	2.3	8682	26.1
Jessamine	50	3.3	26	1.7	31	2.0	70	4.6	333	21.8
Johnson	22	1.9	5	0.4	25	2.2	22	1.9	158	13.6
Kenton	438	6.2	208	2.9	137	1.9	149	2.1	1923	27.1
Knott	12	1.3	4	0.4	21	2.3	23	2.6	151	16.9

Table 42. NUMBER OF ACCIDENTS AND RATES BY ACCIDENT TYPE FOR EACH COUNTY (continued)

	PEDESTRIAN ACCIDENTS		BICYCLE ACCIDENTS		MOTORCYCLE ACCIDENTS		SCHOOL BUS ACCIDENTS		TRUCK ACCIDENTS	
	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**	NUMBER*	RATE**
Knox	34	2.3	15	1.0	41	2.8	29	2.0	169	11.4
Larue	9	1.5	2	0.3	5	0.9	7	1.2	111	19.0
Laurel	37	1.7	19	0.9	42	1.9	55	2.5	684	31.5
Lawrence	12	1.7	3	0.4	12	1.7	9	1.3	129	18.4
Lee	5	1.3	1	0.3	5	1.3	7	1.9	34	9.2
Leslie	12	1.8	2	0.3	23	3.4	20	2.9	122	17.9
Letcher	18	1.3	4	0.3	37	2.7	33	2.4	369	27.3
Lewis	15	2.3	4	0.6	8	1.2	12	1.8	93	14.3
Lincoln	10	1.0	6	0.6	21	2.1	10	1.0	115	11.5
Livingston	6	1.3	2	0.4	10	2.2	6	1.3	67	14.8
Logan	18	1.5	13	1.1	23	1.9	27	2.2	313	25.6
Lyon	3	0.9	1	0.3	16	4.8	1	0.3	140	42.3
McCracken	75	2.4	51	1.6	106	3.4	67	2.1	761	24.2
McCreary	8	1.0	3	0.4	9	1.2	16	2.1	54	6.9
McLean	3	0.6	6	1.2	11	2.3	7	1.5	72	15.0
Madison	76	2.6	51	1.8	72	2.5	82	2.9	922	32.1
Magoffin	11	1.7	3	0.5	16	2.4	7	1.1	76	11.6
Marion	19	2.3	13	1.6	22	2.7	19	2.3	115	13.9
Marshall	10	0.7	8	0.6	33	2.4	10	0.7	269	19.8
Martin	5	0.8	0	0.0	12	1.9	6	1.0	124	19.8
Mason	22	2.6	11	1.3	20	2.4	23	2.8	264	31.7
Meade	13	1.1	6	0.5	20	1.7	11	0.9	102	8.4
Menifee	3	1.2	0	0.0	4	1.6	3	1.2	26	10.2
Mercer	20	2.1	8	0.8	25	2.6	20	2.1	182	19.0
Metcalfe	4	0.9	0	0.0	7	1.6	15	3.3	72	16.1
Monroe	8	1.4	2	0.4	9	1.6	6	1.1	32	5.6
Montgomery	23	2.4	6	0.6	15	1.5	39	4.0	211	21.6
Morgan	4	0.7	1	0.2	14	2.4	18	3.1	61	10.5
Muhlenberg	25	1.6	8	0.5	37	2.4	37	2.4	332	21.2
Nelson	29	2.0	23	1.5	34	2.3	36	2.4	251	16.9
Nicholas	4	1.2	0	0.0	4	1.2	5	1.5	25	7.4
Ohio	4	0.4	6	0.6	19	1.8	16	1.5	206	19.5
Oldham	23	1.4	12	0.7	22	1.3	39	2.3	332	20.0
Owen	8	1.8	0	0.0	11	2.4	5	1.1	71	15.7
Owsley	3	1.2	1	0.4	3	1.2	3	1.2	28	11.1
Pendleton	8	1.3	2	0.3	21	3.5	13	2.2	145	24.1
Perry	41	2.7	15	1.0	49	3.2	57	3.8	439	29.0
Pike	99	2.7	11	0.3	182	5.0	72	2.0	1280	35.3
Powell	9	1.5	6	1.0	11	1.9	11	1.9	97	16.6
Pulaski	43	1.7	18	0.7	42	1.7	50	2.0	449	18.1
Robertson	1	0.9	0	0.0	0	0.0	0	0.0	3	2.8
Rockcastle	12	1.6	2	0.3	11	1.5	21	2.8	231	31.2
Rowan	16	1.6	9	0.9	30	2.9	16	1.6	205	20.1
Russell	7	1.0	3	0.4	10	1.4	7	1.0	77	10.5
Scott	28	2.3	18	1.5	37	3.1	41	3.4	467	39.1
Shelby	38	3.1	16	1.3	28	2.3	34	2.7	392	31.6
Simpson	16	2.1	10	1.3	12	1.6	3	0.4	306	40.4
Spencer	5	1.5	3	0.9	11	3.2	18	5.3	39	11.5
Taylor	25	2.4	12	1.1	20	1.9	8	0.8	141	13.3
Todd	10	1.8	3	0.5	10	1.8	5	0.9	91	16.6
Trigg	4	0.8	2	0.4	16	3.1	5	1.0	115	22.2
Trimble	6	2.0	1	0.3	11	3.6	3	1.0	75	24.6
Union	16	1.9	13	1.6	19	2.3	13	1.6	169	20.4
Warren	111	2.9	71	1.9	134	3.5	89	2.3	1176	30.7
Washington	15	2.9	1	0.2	7	1.3	13	2.5	90	17.2
Wayne	17	1.9	11	1.3	12	1.4	22	2.5	66	7.6
Webster	6	0.9	6	0.9	9	1.3	10	1.4	222	31.8
Whitley	26	1.6	10	0.6	30	1.8	37	2.2	448	26.9
Wolfe	9	2.8	3	0.9	10	3.1	7	2.2	67	20.6
Woodford	26	2.6	8	0.8	26	2.6	23	2.3	268	26.9

* Five-Year (1995-1999) Total.

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

TABLE 43. PEDESTRIAN ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)(ALL ROADS)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Wolfe	9	2.8
Carroll	12	2.6
Fulton	10	2.4
Gallatin	6	2.2
Trimble	6	2.0
Crittenden	9	2.0
Elliott	6	1.9
Owen	8	1.8
Cumberland	5	1.5
Bracken	6	1.5
Spencer	5	1.5
Hickman	4	1.4
Bath	7	1.4
Ballard	5	1.3
Livingston	6	1.3
Lee	5	1.3
Nicholas	4	1.2
Owsley	3	1.2
Menifee	3	1.2
Lyon	3	0.9
Metcalfe	4	0.9
Clinton	4	0.9
Robertson	1	0.9
McLean	3	0.6
Hancock	2	0.5
Carlisle	1	0.4
POPULATION CATEGORY 10,000-14,999		
Washington	15	2.9
Lewis	15	2.3
Edmonson	11	2.1
Caldwell	14	2.1
Fleming	12	2.0
Anderson	13	1.8
Todd	10	1.8
Estill	13	1.8
Leslie	12	1.8
Lawrence	12	1.7
Magoffin	11	1.7
Green	9	1.7
Henry	10	1.6
Rockcastle	12	1.6
Larue	9	1.5
Powell	9	1.5
Garrard	8	1.4
Butler	8	1.4
Monroe	8	1.4
Pendleton	8	1.3
Hart	10	1.3
Jackson	7	1.2
Allen	8	1.1
Russell	7	1.0
Webster	6	0.9
Martin	5	0.8
Trigg	4	0.8
Morgan	4	0.7
Casey	5	0.7
POPULATION CATEGORY 15,000-24,999		
Grant	32	4.1
Shelby	38	3.1
Breathitt	21	2.7
Bourbon	26	2.7
Mason	22	2.6
Woodford	26	2.6
Montgomery	23	2.4
Taylor	25	2.4
Marion	19	2.3
Scott	28	2.3
Simpson	16	2.1
Harrison	17	2.1
Mercer	20	2.1
Wayne	17	1.9
Johnson	22	1.9
Union	16	1.9
Rowan	16	1.6
Logan	18	1.5
Grayson	15	1.4
Knott	12	1.3
Carter	16	1.3
Clay	14	1.3
Meade	13	1.1
Lincoln	10	1.0
McCreary	8	1.0
Breckinridge	7	0.9
Adair	7	0.9
Ohio	4	0.4
POPULATION CATEGORY 25,000-50,000		
Henderson	80	3.7
Jessamine	50	3.3
Clark	44	3.0
Perry	41	2.7
Harlan	50	2.7
Knox	34	2.3
Floyd	45	2.1
Boyle	27	2.1
Graves	36	2.1
Bell	33	2.1
Nelson	29	2.0
Franklin	43	2.0
Laurel	37	1.7
Hopkins	40	1.7
Pulaski	43	1.7
Muhlenberg	25	1.6
Calloway	24	1.6
Whitley	26	1.6
Greenup	27	1.5
Bullitt	36	1.5
Barren	25	1.5
Oldham	23	1.4
Letcher	18	1.3
Marshall	10	0.7
POPULATION CATEGORY OVER 50,000		
Kenton	438	6.2
Fayette	644	5.7
Campbell	238	5.7
Jefferson	1,877	5.6
Boone	97	3.4
Boyd	77	3.0
Warren	111	2.9
Christian	98	2.8
Daviess	118	2.7
Pike	99	2.7
Madison	76	2.6
McCracken	75	2.4
Hardin	66	1.5

TABLE 44. PEDESTRIAN ACCIDENT RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	1,353	10.1
Lexington	635	5.6
POPULATION CATEGORY 20,000-55,000		
Covington	316	14.6
Hopkinsville	78	5.2
Henderson	67	5.2
Ashland	59	5.0
Richmond	47	4.4
Bowling Green	90	4.4
Paducah	51	3.7
Owensboro	94	3.5
Frankfort	39	3.0
Jeffersontown	26	2.2
POPULATION CATEGORY 10,000-19,999		
Newport	129	13.7
Shively	53	6.8
Nicholasville	44	6.5
Florence	52	5.6
Winchester	31	3.9
Danville	24	3.9
Independence	20	3.8
Somerset	19	3.5
Madisonville	28	3.5
Saint Matthews	26	3.3
Georgetown	18	3.2
Glasgow	20	3.2
Erlanger	24	3.0
Elizabethtown	24	2.6
Middlesboro	13	2.3
Radcliff	23	2.3
Fort Thomas	15	1.9
Murray	12	1.7
POPULATION CATEGORY 5,000-9,999		
Shelbyville	23	7.4
Dayton	24	7.3
Pikeville	22	7.0
Bellevue	23	6.6
Mount Sterling	17	6.3
Maysville	21	5.9
Paris	23	5.3
Bardstown	18	5.3
Hazard	14	5.2
Monticello	14	5.2
Harrodsburg	19	5.2
Versailles	19	5.2
Lebanon	13	4.6
Cynthiana	14	4.3
Fort Wright	14	4.3
London	12	4.2
Campbellsville	19	4.0
Mayfield	20	4.0
Alexandria	10	3.6
Russellville	13	3.5
Princeton	11	3.2
Fort Mitchell	12	3.2
Morehead	13	3.1
Mount Washington	8	3.1
Corbin	11	3.0
Elsmere	10	2.9
Franklin	11	2.9
Berea	13	2.8
Flatwoods	11	2.8
Lawrenceburg	8	2.7
Taylor Mill	6	2.2
Edgewood	4	1.0
Williamsburg	2	0.7
POPULATION CATEGORY 2,500-4,999		
Springfield	12	8.3
Harlan	9	6.7
Barbourville	11	6.0
Prestonsburg	10	5.6
Ludlow	12	5.1
Paintsville	11	5.1
Shepherdsville	12	5.0
Morganfield	9	4.8
Williamstown	7	4.6
Mount Vernon	6	4.5
Southgate	7	4.3
Irvine	6	4.2
Lagrange	8	4.2
Marion	7	4.2
Cold Springs	6	4.2
Lancaster	7	4.1
Flemingsburg	6	3.9
Hodgenville	5	3.7
Jenkins	5	3.6
Tompkinsville	5	3.5
Greenville	8	3.4
Leitchfield	8	3.2
Fulton	5	3.2
Central City	8	3.2
Grayson	5	2.8
Carrollton	5	2.7
Columbia	5	2.6
Scottsville	5	2.3
Dawson Springs	3	1.9
Lakeside Park	3	1.9
Calvert City	2	1.6
Russell	3	1.5
Stanford	2	1.5
Hickman	2	1.5
Stanton	2	1.4
Highland Heights	3	1.4
Park Hills	2	1.2
Benton	2	1.0
Beaver Dam	1	0.7
Vine Grove	1	0.6
Providence	1	0.5
Wilmore	1	0.5

TABLE 45. BICYCLE ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Carroll	11	2.4
Fulton	10	2.4
Gallatin	5	1.9
McLean	6	1.2
Hancock	4	1.0
Spencer	3	0.9
Wolfe	3	0.9
Carlisle	2	0.8
Ballard	2	0.5
Bracken	2	0.5
Hickman	1	0.4
Owsley	1	0.4
Livingston	2	0.4
Bath	2	0.4
Trimble	1	0.3
Lyon	1	0.3
Lee	1	0.3
Clinton	1	0.2
Crittenden	1	0.2
Nicholas	0	0.0
Metcalfe	0	0.0
Owen	0	0.0
Elliott	0	0.0
Menifee	0	0.0
Cumberland	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Caldwell	14	2.1
Anderson	9	1.2
Henry	8	1.2
Powell	6	1.0
Estill	7	1.0
Garrard	6	1.0
Webster	6	0.9
Allen	6	0.8
Lewis	4	0.6
Todd	3	0.5
Hart	4	0.5
Magoffin	3	0.5
Fleming	3	0.5
Casey	3	0.4
Russell	3	0.4
Lawrence	3	0.4
Monroe	2	0.4
Trigg	2	0.4
Edmonson	2	0.4
Green	2	0.4
Butler	2	0.4
Larue	2	0.3
Leslie	2	0.3
Pendleton	2	0.3
Rockcastle	2	0.3
Washington	1	0.2
Morgan	1	0.2
Jackson	1	0.2
Martin	0	0.0
POPULATION CATEGORY 15,000-24,999		
Marion	13	1.6
Union	13	1.6
Bourbon	15	1.6
Scott	18	1.5
Shelby	16	1.3
Simpson	10	1.3
Mason	11	1.3
Wayne	11	1.3
Harrison	10	1.2
Logan	13	1.1
Taylor	12	1.1
Adair	7	0.9
Rowan	9	0.9
Grant	6	0.8
Woodford	8	0.8
Mercer	8	0.8
Breckinridge	6	0.7
Lincoln	6	0.6
Ohio	6	0.6
Clay	6	0.6
Montgomery	6	0.6
Meade	6	0.5
Carter	5	0.4
Johnson	5	0.4
Breathitt	3	0.4
McCreary	3	0.4
Grayson	4	0.4
Knott	4	0.4
POPULATION CATEGORY 25,000-50,000		
Henderson	75	3.5
Hopkins	43	1.9
Clark	26	1.8
Jessamine	26	1.7
Nelson	23	1.5
Barren	25	1.5
Boyle	15	1.2
Greenup	22	1.2
Bell	19	1.2
Knox	15	1.0
Franklin	21	1.0
Perry	15	1.0
Laurel	19	0.9
Graves	15	0.9
Harlan	16	0.9
Calloway	13	0.8
Oldham	12	0.7
Pulaski	18	0.7
Floyd	14	0.6
Marshall	8	0.6
Whitley	10	0.6
Muhlenberg	8	0.5
Bullitt	11	0.5
Letcher	4	0.3
POPULATION CATEGORY OVER 50,000		
Fayette	439	3.9
Campbell	135	3.2
Jefferson	1,031	3.1
Kenton	208	2.9
Daviess	125	2.9
Boone	60	2.1
Warren	71	1.9
Christian	61	1.8
Madison	51	1.8
Boyd	44	1.7
McCracken	51	1.6
Hardin	48	1.1
Pike	11	0.3

TABLE 46. BICYCLE ACCIDENT RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	750	5.6
Lexington	436	3.9
POPULATION CATEGORY 20,000-55,000		
Covington	128	5.9
Henderson	65	5.0
Owensboro	108	4.0
Paducah	45	3.3
Bowling Green	63	3.1
Hopkinsville	42	2.8
Ashland	33	2.8
Richmond	29	2.7
Frankfort	19	1.5
Jeffersontown	16	1.4
POPULATION CATEGORY 10,000-19,999		
Newport	89	9.4
Shively	32	4.1
Florence	36	3.9
Madisonville	31	3.8
Erlanger	26	3.3
Glasgow	20	3.2
Nicholasville	21	3.1
Winchester	22	2.8
Elizabethtown	24	2.6
Middlesboro	14	2.5
Georgetown	14	2.5
Danville	14	2.3
Saint Matthews	15	1.9
Somerset	8	1.5
Murray	10	1.4
Radcliff	12	1.2
Independence	5	1.0
Fort Thomas	7	0.9
POPULATION CATEGORY 5,000-9,999		
Bardstown	16	4.7
Bellevue	15	4.3
Princeton	14	4.0
Lebanon	11	3.9
Shelbyville	12	3.8
Elsmere	12	3.5
Monticello	9	3.4
Berea	14	3.1
Paris	13	3.0
Cynthiana	9	2.8
Maysville	10	2.8
Dayton	9	2.7
Russellville	10	2.7
Franklin	10	2.6
Corbin	9	2.4
London	6	2.1
Mayfield	10	2.0
Versailles	7	1.9
Harrodsburg	7	1.9
Campbellsville	9	1.9
Morehead	8	1.9
Flatwoods	7	1.8
Lawrenceburg	5	1.7
Edgewood	7	1.7
Mount Sterling	4	1.5
Fort Mitchell	5	1.3
Alexandria	3	1.1
Williamsburg	3	1.1
Hazard	3	1.1
Fort Wright	3	0.9
Pikeville	2	0.6
Villa Hills	2	0.5
Mount Washington	1	0.4
POPULATION CATEGORY 2,500-4,999		
Carrollton	8	4.3
Ludlow	9	3.8
Fulton	5	3.2
Morganfield	6	3.2
Dawson Springs	5	3.2
Hickman	4	3.0
Providence	6	2.9
Highland Heights	5	2.4
Lancaster	4	2.3
Irvine	3	2.1
Central City	5	2.0
Columbia	3	1.6
Russell	3	1.5
Cold Springs	2	1.4
Tompkinsville	2	1.4
Stanton	2	1.4
Greenville	3	1.3
Southgate	2	1.2
Grayson	2	1.1
Wilmore	2	0.9
Paintsville	2	0.9
Scottsville	2	0.9
Calvert City	1	0.8
Hartford	1	0.8
Mount Vernon	1	0.8
Shepherdsville	2	0.8
Beaver Dam	1	0.7
Williamstown	1	0.7
Harlan	1	0.7
Hodgenville	1	0.7
Marion	1	0.6
Cumberland	1	0.6
Lakeside Park	1	0.6
Prestonsburg	1	0.6
Park Hills	1	0.6
Vine Grove	1	0.6
Barbourville	1	0.5
Lagrange	1	0.5
Benton	1	0.5
Leitchfield	1	0.4

TABLE 47. MOTORCYCLE ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Lyon	16	4.8
Gallatin	12	4.5
Carroll	19	4.1
Elliott	13	4.0
Trimble	11	3.6
Spencer	11	3.2
Wolfe	10	3.1
Bracken	11	2.8
Bath	12	2.5
Owen	11	2.4
McLean	11	2.3
Livingston	10	2.2
Ballard	8	2.0
Crittenden	9	2.0
Hickman	5	1.8
Metcalfe	7	1.6
Menifee	4	1.6
Fulton	6	1.5
Hancock	5	1.3
Lee	5	1.3
Nicholas	4	1.2
Owsley	3	1.2
Carlisle	3	1.1
Clinton	1	0.2
Cumberland	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Pendleton	21	3.5
Leslie	23	3.4
Trigg	16	3.1
Garrard	16	2.8
Anderson	18	2.5
Morgan	14	2.4
Magoffin	16	2.4
Edmonson	12	2.3
Fleming	14	2.3
Estill	16	2.2
Allen	16	2.2
Jackson	12	2.0
Caldwell	13	2.0
Martin	12	1.9
Green	10	1.9
Powell	11	1.9
Todd	10	1.8
Henry	11	1.7
Lawrence	12	1.7
Monroe	9	1.6
Hart	11	1.5
Rockcastle	11	1.5
Russell	10	1.4
Casey	9	1.3
Washington	7	1.3
Webster	9	1.3
Butler	7	1.2
Lewis	8	1.2
Larue	5	0.9
POPULATION CATEGORY 15,000-24,999		
Breathitt	34	4.3
Grant	29	3.7
Scott	37	3.1
Carter	37	3.0
Rowan	30	2.9
Marion	22	2.7
Mercer	25	2.6
Woodford	26	2.6
Mason	20	2.4
Knott	21	2.3
Shelby	28	2.3
Union	19	2.3
Johnson	25	2.2
Lincoln	21	2.1
Logan	23	1.9
Taylor	20	1.9
Adair	14	1.8
Ohio	19	1.8
Grayson	18	1.7
Clay	18	1.7
Meade	20	1.7
Harrison	14	1.7
Bourbon	15	1.6
Simpson	12	1.6
Montgomery	15	1.5
Wayne	12	1.4
Breckinridge	10	1.2
McCreary	9	1.2
POPULATION CATEGORY 25,000-50,000		
Floyd	81	3.7
Barren	62	3.6
Hopkins	79	3.4
Henderson	74	3.4
Perry	49	3.2
Knox	41	2.8
Letcher	37	2.7
Clark	37	2.5
Marshall	33	2.4
Muhlenberg	37	2.4
Nelson	34	2.3
Calloway	35	2.3
Graves	37	2.2
Bullitt	47	2.0
Jessamine	31	2.0
Franklin	41	1.9
Laurel	42	1.9
Whitley	30	1.8
Pulaski	42	1.7
Boyle	18	1.4
Oldham	22	1.3
Greenup	23	1.3
Harlan	22	1.2
Bell	18	1.1
POPULATION CATEGORY OVER 50,000		
Pike	182	5.0
Warren	134	3.5
McCracken	106	3.4
Boone	92	3.2
Boyd	79	3.1
Daviess	113	2.6
Madison	72	2.5
Campbell	93	2.2
Fayette	249	2.2
Jefferson	666	2.0
Kenton	137	1.9
Hardin	87	1.9
Christian	62	1.8

TABLE 48. MOTORCYCLE ACCIDENT RATES BY CITY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	385	2.9
Lexington	246	2.2
POPULATION CATEGORY 20,000-55,000		
Bowling Green	86	4.2
Paducah	54	4.0
Ashland	43	3.6
Henderson	43	3.3
Richmond	34	3.2
Owensboro	68	2.5
Covington	52	2.4
Frankfort	22	1.7
Hopkinsville	26	1.7
Jeffersontown	14	1.2
POPULATION CATEGORY 10,000-19,999		
Madisonville	37	4.6
Glasgow	25	4.0
Elizabethtown	31	3.4
Georgetown	18	3.2
Florence	29	3.1
Shively	23	3.0
Erlanger	23	2.9
Newport	22	2.3
Winchester	18	2.3
Independence	10	1.9
Somerset	10	1.9
Murray	13	1.8
Radcliff	18	1.8
Danville	10	1.6
Nicholasville	10	1.5
Saint Matthews	8	1.0
Fort Thomas	7	0.9
Middlesboro	5	0.9
POPULATION CATEGORY 5,000-9,999		
Pikeville	20	6.3
Russellville	15	4.0
Lawrenceburg	10	3.4
Hazard	9	3.3
Shelbyville	10	3.2
Corbin	11	3.0
London	8	2.8
Fort Mitchell	10	2.7
Princeton	9	2.6
Bardstown	9	2.6
Versailles	9	2.5
Harrodsburg	8	2.2
Franklin	8	2.1
Campbellsville	10	2.1
Maysville	7	2.0
Bellevue	7	2.0
Mount Sterling	4	1.5
Monticello	4	1.5
Fort Wright	5	1.5
Cynthiana	5	1.5
Alexandria	4	1.4
Morehead	6	1.4
Paris	6	1.4
Lebanon	4	1.4
Berea	6	1.3
Villa Hills	5	1.3
Dayton	4	1.2
Mayfield	6	1.2
Mount Washington	3	1.1
Taylor Mill	2	0.7
Williamsburg	2	0.7
Elsmere	2	0.6
Edgewood	2	0.5
Flatwoods	1	0.3
POPULATION CATEGORY 2,500-4,999		
Prestonsburg	10	5.6
Cold Springs	7	4.9
Shepherdsville	9	3.7
Paintsville	7	3.2
Mount Vernon	4	3.0
Beaver Dam	4	2.8
Highland Heights	6	2.8
Tompkinsville	4	2.8
Carrollton	5	2.7
Russell	5	2.5
Calvert City	3	2.4
Scottsville	5	2.3
Hodgenville	3	2.2
Harlan	3	2.2
Columbia	4	2.1
Irvine	3	2.1
Central City	5	2.0
Williamstown	3	2.0
Fulton	3	1.9
Dawson Springs	3	1.9
Lancaster	3	1.8
Stanford	2	1.5
Jenkins	2	1.5
Springfield	2	1.4
Lakeside Park	2	1.3
Flemingsburg	2	1.3
Cumberland	2	1.3
Greenville	3	1.3
Southgate	2	1.2
Marion	2	1.2
Providence	2	1.0
Benton	2	1.0
Wilmore	2	0.9
Hartford	1	0.8
Leitchfield	2	0.8
Stanton	1	0.7
Vine Grove	1	0.6
Lagrange	1	0.5
Barbourville	1	0.5
Ludlow	1	0.4

TABLE 49. SCHOOL BUS ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Spencer	18	5.3
Metcalfe	15	3.3
Carroll	12	2.6
Wolfe	7	2.2
Crittenden	9	2.0
Lee	7	1.9
Bracken	7	1.8
Bath	8	1.7
Nicholas	5	1.5
McLean	7	1.5
Hickman	4	1.4
Hancock	5	1.3
Livingston	6	1.3
Menifee	3	1.2
Owsley	3	1.2
Gallatin	3	1.1
Owen	5	1.1
Clinton	5	1.1
Fulton	4	1.0
Trimble	3	1.0
Cumberland	2	0.6
Ballard	2	0.5
Carlisle	1	0.4
Lyon	1	0.3
Elliott	0	0.0
Robertson	0	0.0
POPULATION CATEGORY 10,000-14,999		
Anderson	27	3.7
Henry	20	3.1
Morgan	18	3.1
Leslie	20	2.9
Rockcastle	21	2.8
Jackson	17	2.8
Washington	13	2.5
Edmonson	13	2.5
Hart	17	2.3
Pendleton	13	2.2
Green	11	2.1
Powell	11	1.9
Garrard	11	1.9
Lewis	12	1.8
Allen	13	1.8
Estill	13	1.8
Fleming	10	1.6
Butler	9	1.6
Webster	10	1.4
Lawrence	9	1.3
Larue	7	1.2
Magoffin	7	1.1
Monroe	6	1.1
Caldwell	7	1.1
Casey	7	1.0
Russell	7	1.0
Trigg	5	1.0
Martin	6	1.0
Todd	5	0.9
POPULATION CATEGORY 15,000-24,999		
Montgomery	39	4.0
Grant	27	3.4
Scott	41	3.4
Mason	23	2.8
Shelby	34	2.7
Knott	23	2.6
Bourbon	25	2.6
Clay	27	2.5
Wayne	22	2.5
Marion	19	2.3
Carter	28	2.3
Woodford	23	2.3
Logan	27	2.2
McCreary	16	2.1
Mercer	20	2.1
Johnson	22	1.9
Breathitt	15	1.9
Harrison	15	1.8
Adair	14	1.8
Union	13	1.6
Rowan	16	1.6
Ohio	16	1.5
Grayson	13	1.2
Lincoln	10	1.0
Meade	11	0.9
Taylor	8	0.8
Breckinridge	6	0.7
Simpson	3	0.4
POPULATION CATEGORY 25,000-50,000		
Jessamine	70	4.6
Perry	57	3.8
Clark	47	3.2
Bullitt	65	2.7
Floyd	59	2.7
Laurel	55	2.5
Muhlenberg	37	2.4
Letcher	33	2.4
Nelson	36	2.4
Oldham	39	2.3
Whitley	37	2.2
Franklin	45	2.1
Pulaski	50	2.0
Knox	29	2.0
Graves	32	1.9
Bell	26	1.7
Henderson	36	1.7
Hopkins	34	1.5
Barren	23	1.4
Calloway	21	1.4
Boyle	17	1.3
Greenup	19	1.0
Harlan	18	1.0
Marshall	10	0.7
POPULATION CATEGORY OVER 50,000		
Madison	82	2.9
Boone	83	2.9
Fayette	290	2.6
Jefferson	754	2.3
Warren	89	2.3
Christian	81	2.3
Kenton	149	2.1
McCracken	67	2.1
Pike	72	2.0
Boyd	47	1.8
Hardin	65	1.5
Daviess	66	1.5
Campbell	60	1.4

TABLE 50. SCHOOL BUS ACCIDENT RATES BY CITY AND POPULATION CATEGORY
(IN ORDER OF DECREASING PERCENTAGES)(1995-1999 DATA)

CITY	NUMBER OF ACCIDENTS (1995-1999)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
POPULATION CATEGORY OVER 200,000		
Louisville	460	3.4
Lexington	288	2.6
POPULATION CATEGORY 20,000-55,000		
Hopkinsville	62	4.2
Richmond	38	3.6
Bowling Green	57	2.8
Ashland	32	2.7
Covington	55	2.5
Paducah	32	2.3
Frankfort	26	2.0
Henderson	24	1.9
Owensboro	41	1.5
Jeffersontown	15	1.3
POPULATION CATEGORY 10,000-19,999		
Nicholasville	44	6.5
Independence	32	6.1
Shively	34	4.4
Somerset	22	4.1
Winchester	29	3.7
Georgetown	20	3.5
Florence	27	2.9
Madisonville	21	2.6
Danville	14	2.3
Elizabethtown	17	1.9
Radcliff	18	1.8
Middlesboro	10	1.8
Newport	13	1.4
Saint Matthews	10	1.3
Erlanger	10	1.3
Murray	8	1.1
Glasgow	7	1.1
Fort Thomas	1	0.1
POPULATION CATEGORY 5,000-9,999		
London	21	7.3
Hazard	19	7.0
Mount Sterling	18	6.7
Monticello	15	5.6
Taylor Mill	14	5.1
Alexandria	14	5.0
Shelbyville	14	4.5
Bardstown	15	4.4
Versailles	15	4.1
Maysville	13	3.6
Paris	15	3.4
Russellville	12	3.2
Mayfield	16	3.2
Harrodsburg	11	3.0
Mount Washington	7	2.7
Pikeville	8	2.5
Lawrenceburg	7	2.4
Corbin	8	2.2
Lebanon	6	2.1
Edgewood	8	2.0
Cynthiana	6	1.8
Villa Hills	6	1.6
Campbellsville	7	1.5
Williamsburg	4	1.5
Morehead	6	1.4
Berea	5	1.1
Dayton	3	0.9
Bellevue	2	0.6
Flatwoods	2	0.5
Franklin	1	0.3
Fort Wright	1	0.3
Fort Mitchell	1	0.3
Elsmere	1	0.3
Princeton	1	0.3
POPULATION CATEGORY 2,500-4,999		
Shepherdsville	14	5.8
Irvine	6	4.2
Columbia	8	4.2
Lancaster	7	4.1
Tompkinsville	5	3.5
Grayson	6	3.4
Scottsville	7	3.3
Carrollton	6	3.2
Highland Heights	6	2.8
Wilmore	6	2.8
Prestonsburg	5	2.8
Barbourville	5	2.7
Lakeside Park	4	2.6
Morganfield	5	2.6
Paintsville	5	2.3
Vine Grove	4	2.2
Central City	5	2.0
Williamstown	3	2.0
Greenville	4	1.7
Lagrange	3	1.6
Harlan	2	1.5
Stanford	2	1.5
Hickman	2	1.5
Jenkins	2	1.5
Beaver Dam	2	1.4
Springfield	2	1.4
Flemingsburg	2	1.3
Providence	2	1.0
Ludlow	2	0.8
Stanton	1	0.7
Fulton	1	0.6
Park Hills	1	0.6
Marion	1	0.6
Cumberland	1	0.6
Dawson Springs	1	0.6
Benton	1	0.5
Leitchfield	1	0.4

TABLE 51. TRUCK ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Gallatin	167	61.9
Carroll	222	47.8
Lyon	140	42.3
Ballard	115	29.1
Trimble	75	24.6
Bath	109	22.5
Hancock	86	21.9
Wolfe	67	20.6
Fulton	81	19.6
Bracken	65	16.7
Metcalfe	72	16.1
Owen	71	15.7
McLean	72	15.0
Livingston	67	14.8
Hickman	35	12.6
Crittenden	55	12.0
Spencer	39	11.5
Owsley	28	11.1
Clinton	48	10.5
Menifee	26	10.2
Elliott	31	9.6
Carlisle	25	9.5
Lee	34	9.2
Nicholas	25	7.4
Cumberland	23	6.8
Robertson	3	2.8
POPULATION CATEGORY 10,000-14,999		
Hart	245	32.9
Henry	204	31.8
Webster	222	31.8
Rockcastle	231	31.2
Pendleton	145	24.1
Trigg	115	22.2
Martin	124	19.8
Larue	111	19.0
Anderson	137	18.8
Lawrence	129	18.4
Leslie	122	17.9
Caldwell	116	17.5
Washington	90	17.2
Todd	91	16.6
Powell	97	16.6
Fleming	95	15.5
Garrard	84	14.5
Lewis	93	14.3
Allen	103	14.1
Edmonson	62	12.0
Magoffin	76	11.6
Green	59	11.4
Butler	60	10.7
Morgan	61	10.5
Russell	77	10.5
Jackson	58	9.7
Estill	54	7.4
Casey	52	7.3
Monroe	32	5.6
POPULATION CATEGORY 15,000-24,999		
Grant	375	47.7
Simpson	306	40.4
Scott	467	39.1
Mason	264	31.7
Shelby	392	31.6
Woodford	268	26.9
Logan	313	25.6
Carter	269	22.1
Montgomery	211	21.6
Bourbon	206	21.4
Union	169	20.4
Rowan	205	20.1
Ohio	206	19.5
Harrison	154	19.0
Mercer	182	19.0
Knott	151	16.9
Breathitt	133	16.9
Grayson	154	14.6
Adair	109	14.2
Marion	115	13.9
Johnson	158	13.6
Taylor	141	13.3
Lincoln	115	11.5
Clay	120	11.0
Breckinridge	78	9.6
Meade	102	8.4
Wayne	66	7.6
McCreary	54	6.9
POPULATION CATEGORY 25,000-50,000		
Laurel	684	31.5
Perry	439	29.0
Henderson	596	27.7
Letcher	369	27.3
Whitley	448	26.9
Barren	428	25.2
Clark	360	24.4
Hopkins	557	24.2
Jessamine	333	21.8
Muhlenberg	332	21.2
Floyd	448	20.6
Bullitt	489	20.6
Boyle	261	20.4
Oldham	332	20.0
Marshall	269	19.8
Franklin	413	18.9
Bell	286	18.2
Pulaski	449	18.1
Graves	296	17.6
Nelson	251	16.9
Harlan	275	15.0
Calloway	183	11.9
Knox	169	11.4
Greenup	192	10.5
POPULATION CATEGORY OVER 50,000		
Boone	1,598	55.5
Pike	1,280	35.3
Madison	922	32.1
Warren	1,176	30.7
Fayette	3,098	27.5
Kenton	1,923	27.1
Boyd	693	27.1
Jefferson	8,682	26.1
McCracken	761	24.2
Daviess	896	20.6
Campbell	832	19.8
Christian	681	19.8
Hardin	781	17.5

TABLE 52. MOTOR VEHICLE-TRAIN ACCIDENT RATES BY COUNTY AND POPULATION CATEGORY (IN ORDER OF DECREASING PERCENTAGES) (1995-1999 DATA)

COUNTY	NUMBER OF ACCIDENTS	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
POPULATION CATEGORY UNDER 10,000		
Lee	3	0.81
McLean	3	0.62
Carroll	2	0.43
Hickman	1	0.36
Lyon	1	0.30
Cumberland	1	0.29
Hancock	1	0.25
Ballard	1	0.25
Fulton	1	0.24
Bracken	0	0.00
Bath	0	0.00
Carlisle	0	0.00
Clinton	0	0.00
Livingston	0	0.00
Elliott	0	0.00
Gallatin	0	0.00
Spencer	0	0.00
Menifee	0	0.00
Crittenden	0	0.00
Nicholas	0	0.00
Metcalfe	0	0.00
Robertson	0	0.00
Owsley	0	0.00
Trimble	0	0.00
Owen	0	0.00
Wolfe	0	0.00
POPULATION CATEGORY 10,000-14,999		
Todd	6	1.10
Lewis	7	1.07
Magoffin	4	0.61
Hart	4	0.54
Lawrence	3	0.43
Anderson	3	0.41
Rockcastle	3	0.41
Pendleton	2	0.33
Webster	2	0.29
Estill	2	0.27
Henry	2	0.22
Allen	0	0.00
Butler	0	0.00
Caldwell	0	0.00
Jackson	0	0.00
Edmonson	0	0.00
Fleming	0	0.00
Garrard	0	0.00
Green	0	0.00
Powell	0	0.00
Casey	0	0.00
Leslie	0	0.00
Trigg	0	0.00
Russell	0	0.00
Morgan	0	0.00
Monroe	0	0.00
Martin	0	0.00
Larue	0	0.00
Washington	0	0.00
POPULATION CATEGORY 15,000-24,999		
Grant	13	1.65
Mercer	6	0.63
Lincoln	4	0.40
Simpson	3	0.40
Shelby	4	0.32
POPULATION CATEGORY 15,000-24,999 (cont.)		
Woodford	3	0.30
Ohio	3	0.28
Breathitt	2	0.25
Scott	3	0.25
Grayson	2	0.19
Johnson	2	0.17
McCreary	1	0.13
Harrison	1	0.12
Knott	1	0.11
Logan	1	0.08
Mason	0	0.00
Marion	0	0.00
Adair	0	0.00
Bourbon	0	0.00
Breckinridge	0	0.00
Clay	0	0.00
Montgomery	0	0.00
Carter	0	0.00
Rowan	0	0.00
Taylor	0	0.00
Union	0	0.00
Meade	0	0.00
Wayne	0	0.00
POPULATION CATEGORY 25,000-50,000		
Oldham	14	0.84
Floyd	13	0.60
Hopkins	12	0.52
Muhlenberg	8	0.51
Marshall	5	0.37
Whitley	6	0.36
Knox	5	0.34
Nelson	5	0.34
Harlan	6	0.33
Bell	5	0.32
Letcher	4	0.30
Perry	4	0.26
Bullitt	6	0.25
Pulaski	5	0.20
Henderson	4	0.19
Barren	3	0.18
Clark	2	0.14
Calloway	2	0.13
Laurel	2	0.09
Jessamine	1	0.07
Graves	1	0.06
Greenup	0	0.00
Franklin	0	0.00
Boyle	0	0.00
POPULATION CATEGORY OVER 50,000		
Pike	14	0.39
Boyd	9	0.35
Warren	8	0.21
Madison	6	0.21
Jefferson	64	0.19
Christian	6	0.17
Boone	5	0.17
Daviess	6	0.14
Hardin	6	0.13
Kenton	7	0.10
McCracken	3	0.10
Fayette	9	0.08
Campbell	2	0.05

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

TIME PERIOD	TOTAL NUMBER OF ACCIDENTS*	NUMBER OF ACCIDENTS INVOLVING VEHICLE DEFECTS	PERCENT OF ALL ACCIDENTS INVOLVING VEHICLE DEFECTS
October 1976 - May 1978 (19 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

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

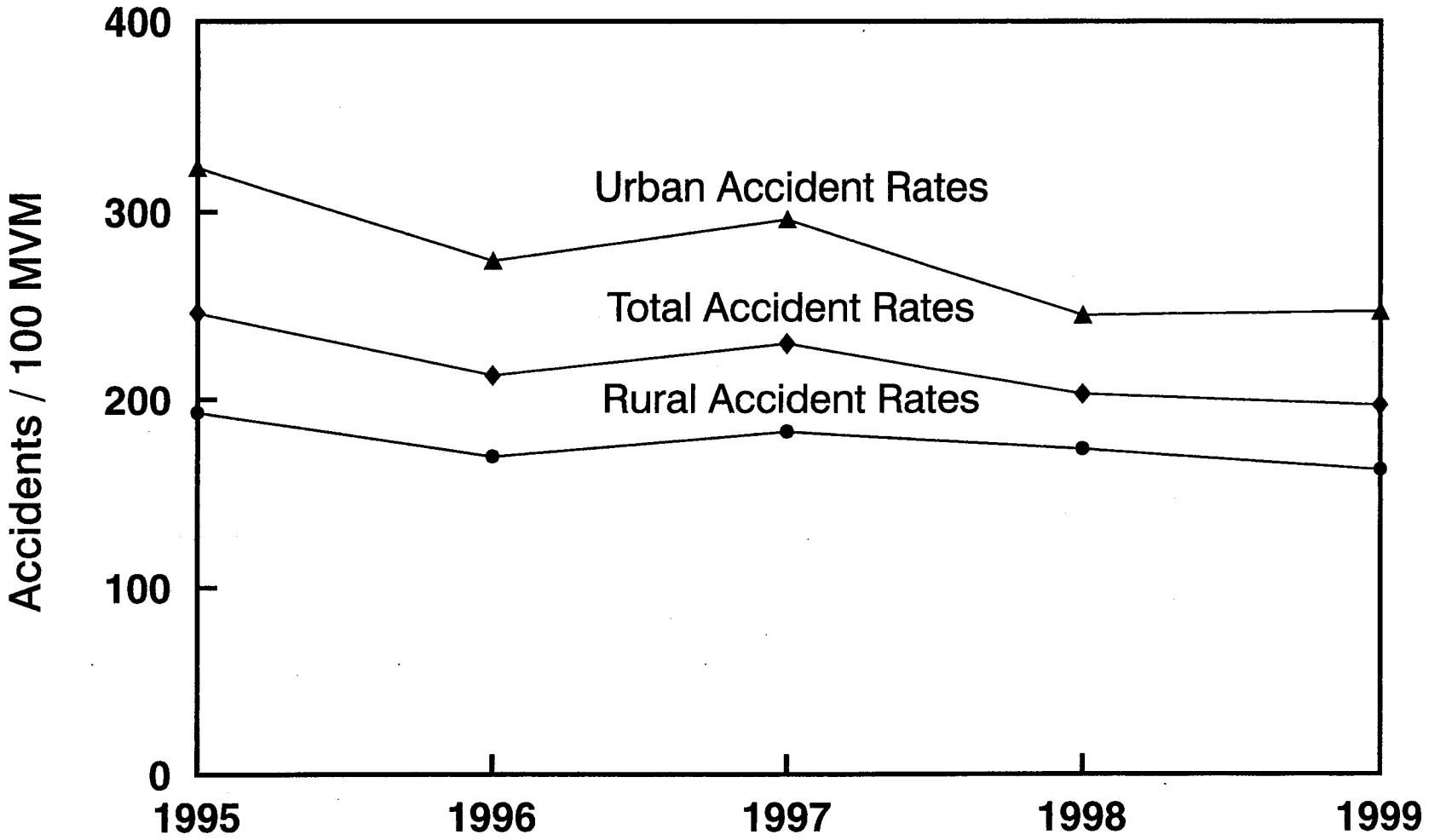

Figure 1. Trends in Accident Rates
(State Maintained Roads)

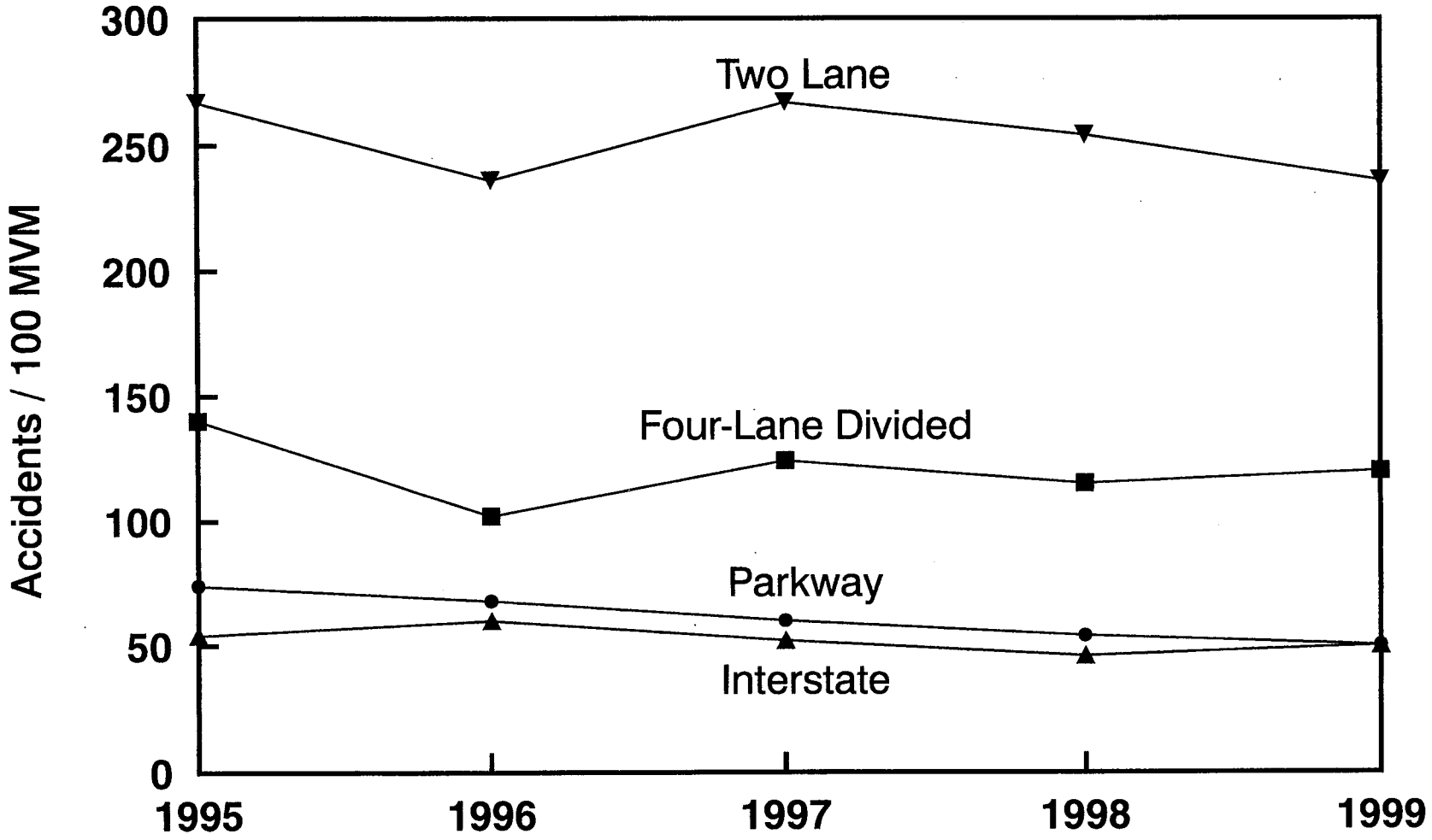

Figure 2. Trends in Rural Accident Rates
(State Maintained Roads)

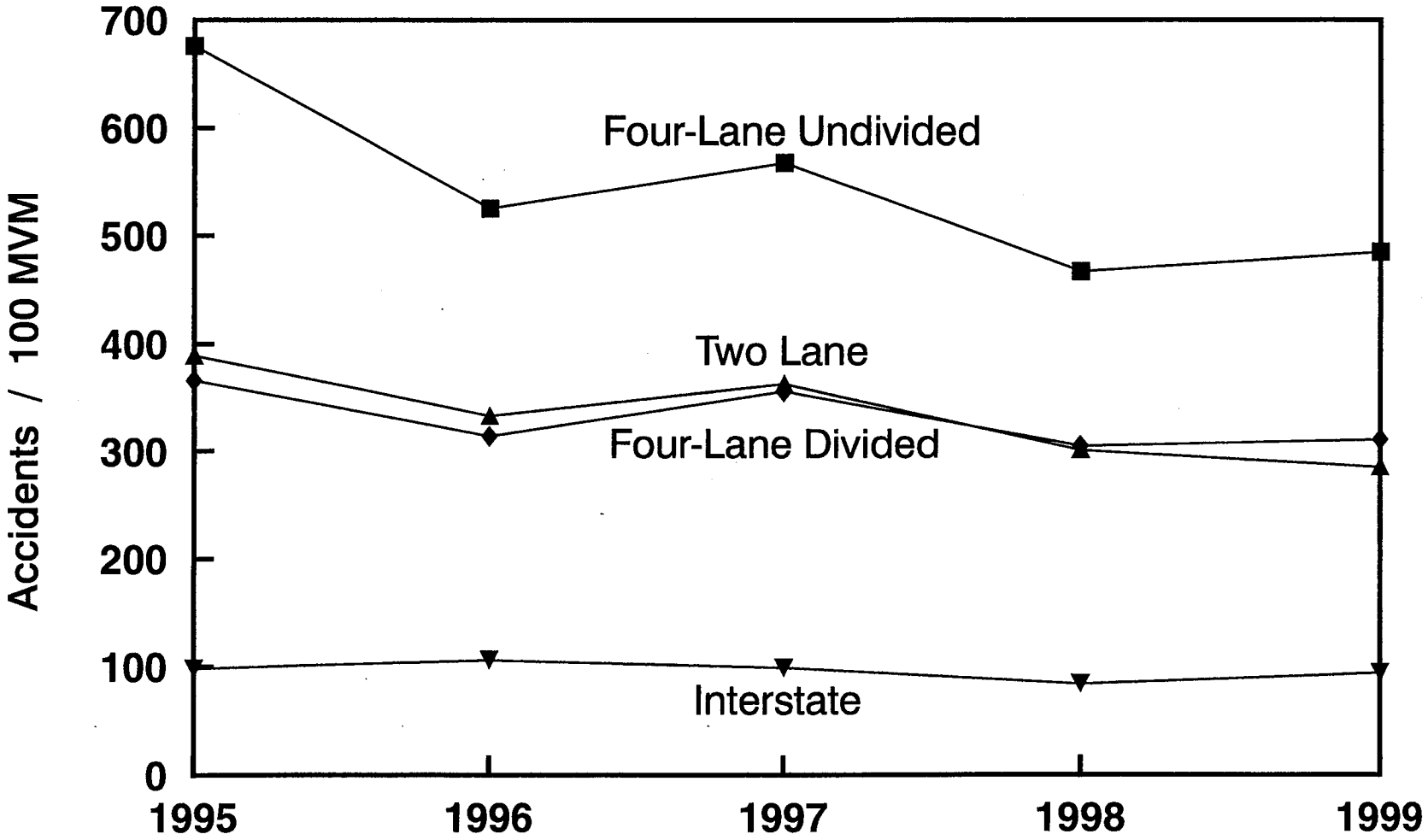

Figure 3. Trends in Urban Accident Rates (State Maintained Roads)

APPENDIX A

STATEWIDE ACCIDENT 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 accident rates were determined for each of those groupings. Following is a summary of the findings.

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

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

Statewide accident rates by administrative classification are listed in Table A-3. The rate for the primary system was lowest with the rate for the secondary system highest. Rates for the rural secondary and unclassified systems were between these two levels and were almost identical.

The benefits of providing a median and increasing the median width are shown in Table A-4. The accident rate for rural highways having four or more lanes which are divided and have a median width of less than 30 feet is less than that for an undivided highway. The accident 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 accident rate for highways having full control of access compared to those with partial or no access control is shown. However, the accident rate for partial control of access is closer to no access control than to full access control.

An analysis of accident 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 were similar with the rate for mountainous terrain substantially higher.

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

The summary of accident 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 accident rate.

The relationship between accident 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 accident rate was 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 was 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 accidents may increase the rate substantially. Lower volume roads also are constructed to less stringent design guidelines, which could contribute to a higher accident rate.

The percentage of accidents 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 accidents occurring during wet pavement conditions was 23 percent on both rural and urban roadways. This percentage tended to be lowest on interstates. There were large variations in the percentage of accidents 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 (5.4 percent) was substantially higher than that on urban roads (3.0 percent). The highest percentages were on interstates and parkways with the highest being about 10 percent. There were also large variations in the percentage of accidents occurring during darkness. The percentage was higher on rural roads (31 percent) than urban roads (22 percent). The highest percentages were on rural interstates and parkways with the highest being 41 percent. This would be expected given the amount of nighttime driving on these types of roadways.

TABLE A-1. STATEWIDE ACCIDENT RATES BY FUNCTIONAL CLASSIFICATION (1995-1999 DATA)

LOCATION	FUNCTIONAL CLASSIFICATION	AVERAGE TOTAL MILAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM) ALL	INJURY	FATAL
Rural	Principal Arterial, Interstate	536	26,847	53	15	0.7
	Principal Arterial, Other Freeway	1,940	7,595	131	44	1.8
	Minor Arterial	1,636	4,097	234	81	3.0
	Major Collector	7,018	2,166	267	95	3.2
	Minor Collector	9,403	715	272	104	3.3
	Local System	4,575	509	203	72	2.1
Urban	Principal Arterial, Interstate	217	62,739	99	24	0.5
	Principal Arterial, Other Freeway	92	22,226	107	26	0.4
	Other Principal Arterial	609	18,684	454	118	0.9
	Minor Arterial	982	9,433	420	112	1.1
	Collector	613	3,846	284	80	0.8
	Local System	120	2,129	264	62	1.3

TABLE A-2. STATEWIDE ACCIDENT RATES BY FEDERAL-AID SYSTEM (1995-1999 DATA)

FEDERAL-AID SYSTEM	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Interstate	39,684	753	39,127	75
Federal-Aid Primary (other than Interstate)	130,882	3,967	8,027	201
Federal-Aid Urban	112,748	1,908	8,682	373
Federal-Aid Secondary (Rural Only)	78,279	7,118	2,228	275
Non-Federal Aid	34,062	9,508	715	279

TABLE A-3. STATEWIDE ACCIDENT RATES BY ADMINISTRATIVE CLASSIFICATION (1995-1999 DATA)

ADMINISTRATIVE CLASSIFICATION	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Primary	164,359	4,640	13,504	144
Secondary	164,935	6,715	3,981	338
Rural Secondary	47,935	12,155	762	284
Unclassified	8,516	2,269	712	289

TABLE A-4. STATEWIDE ACCIDENT RATES BY MEDIAN TYPE (RURAL ROADS) (WITH FOUR OR MORE LANES (1995-1999 DATA)

MEDIAN TYPE	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Undivided	2,983	61	17,862	151
Divided, Median Less Than 30 Feet, No Barrier	3,990	197	10,571	105
Divided, Median Greater Th: 30 Feet, No Barrier	25,404	1,284	17,186	63

TABLE A-5. STATEWIDE ACCIDENT RATES BY ACCESS CONTROL (1995-1999 DATA)

ACCESS CONTROL	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Full Control	49,575	1,446	25,274	74
Partial Control	26,902	771	8,736	219
No Control	328,296	25,336	2,273	312

TABLE A-6. STATEWIDE ACCIDENT RATES FOR RURAL HIGHWAYS BY FEDERAL-AID SYSTEM AND TERRAIN (1995-1999 DATA)

FEDERAL-AID SYSTEM	ACCIDENT RATES (ACC/100MVM) BY TERRAIN CLASSIFICATION		
	FLAT	ROLLING	MOUNTAINOUS
Interstate	58	60	52
Federal-Aid Primary	169	158	470
Federal-Aid Secondary	228	226	322
Non Federal-Aid	225	280	283
All	210	174	350

TABLE A-7. STATEWIDE ACCIDENT RATES BY RURAL-URBAN DESIGNATION (1995-1999 DATA)

AREA TYPE	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Rural	193,940	24,170	2,526	174
Small Urban Area	64,725	1,168	10,211	297
Urbanized Area	136,768	1,262	21,435	277

TABLE A-8. STATEWIDE ACCIDENT RATES BY ROUTE SIGNING IDENTIFER (1995-1999 DATA)

ROUTE SIGNING IDENTIFIER	ACCIDENTS	TOTAL MILEAGE	AVERAGE AADT	ACCIDENT RATES (ACC PER 100 MVM)
Interstate	39,684	753	39,127	74
US	155,479	3,536	7,615	316
State	208,771	22,123	1,926	268

TABLE A-9. RELATIONSHIP BETWEEN ACCIDENT RATE AND TRAFFIC VOLUME (1995-1999 DATA)

VOLUME RANGE (AADT)	ACCIDENT RATES (ACC PER 100 MVM) INTERSTATE	FEDERAL-AID PRIMARY	FEDERAL-AID URBAN	FEDERAL-AID SECONDARY	NON-FEDERAL AID
0-999	*	664	1,020	353	281
1,000-2,499	*	306	398	289	250
2,500-4,999	*	219	418	268	201
5,000-9,999	83	158	312	231	141
10,000-19,999	55	206	408	195	77
20,000-29,999	46	342	489	304	68
30,000-39,999	26	482	494	*	*
40,000 or more	113	347	464	*	*

* No data in this volume range.

TABLE A-10. PERCENTAGE OF ACCIDENTS OCCURING DURING WET OR SNOW OR ICE PAVEMENT CONDITIONS OR DURING DARKNESS BY RURAL AND URBAN HIGHWAY TYPE CLASSIFICATION (1995-1999 DATA)

LOCATION	HIGHWAY TYPE	PERCENT OF ALL ACCIDENTS		
		WET	SNOW OR ICE	DARKNESS
Rural	One-Lane	22	0.8	21
	Two-Lane	23	5.0	30
	Three-Lane	21	2.8	24
	Four-Lane Divided (Non-Interstate or Parkway)	20	4.3	27
	Four-Lane Undivided	22	2.4	21
	Interstate	18	10.3	39
	Parkway	20	9.3	41
	All Rural	23	5.4	31
Urban	Two-Lane	24	3.0	22
	Three-Lane	24	2.3	24
	Four-Lane Divided (Non-Interstate or Parkway)	22	2.4	21
	Four-Lane Undivided	24	1.7	19
	Interstate	20	6.3	29
	Parkway	19	8.4	31
	All Urban	23	3.0	22

APPENDIX B

ACCIDENT DATA FOR THREE-YEAR PERIOD (1997-1999)

Table B-1. Statewide Rural Accident Rates By Highway Type Classification (1997-1999)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	ACCIDENTS RATES (ACCIDENTS PER 100 MVM) ALL	INJURY	FATAL
One-Lane	55	910	93	29	1.8
Two-Lane	21,915	1,620	252	88	3.1
Three-Lane	30	5,310	297	99	1.7
Four-Lane Divided (Non-Interstate or Parkway)	484	11,270	120	42	1.7
Four-Lane Undivided	48	15,630	240	68	1.5
Interstate	528	30,120	49	13	0.7
Parkway	566	9,070	55	15	0.8
All	23,627	2,670	173	59	2.1

* Average for the three years.

Table B-2. Statewide Urban Accident Rates By Highway Type Classification (1997-1999)

HIGHWAY TYPE	TOTAL MILEAGE*	AADT	ACCIDENTS RATES (ACCIDENTS PER 100 MVM) ALL	INJURY	FATAL
Two-Lane	1,822	6,980	316	82	0.9
Three-Lane	31	12,380	494	115	1.2
Four-Lane Divided (Non-Interstate or Parkway)	370	23,470	324	85	0.9
Four-Lane Undivided	254	19,280	507	129	0.9
Interstate	231	66,090	92	22	0.4
Parkway	51	11,960	103	27	1.2
All	2,784	15,600	262	67	0.8

* Average for the three years.

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

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Table B-3. Statewide Accident Rates for "SPOTS" by Highway Type Classification (1997-1999)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF ACCIDENTS	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	ACCIDENTS PER MILLION VEHICLES PER SPOT
Rural	One-Lane	51	183	0.33	0.28
	Two-Lane	98,100	73,050	0.59	0.76
	Three-Lane	518	100	1.94	0.89
	Four-Lane Divided (Non-Interstate or Parkway)	7,148	1,613	4.11	0.36
	Four-Lane Undivided	1,955	159	5.71	0.72
	Interstate	8,584	1,760	10.99	0.15
	Parkway	3,067	1,888	3.31	0.16
	All Rural	119,423	78,757	0.97	0.52
Urban	Two-Lane	44,005	6,072	2.55	0.95
	Three-Lane	2,098	104	4.52	1.48
	Four-Lane Divided	30,778	1,234	8.57	0.97
	Four-Lane Undivided	27,197	848	7.04	1.52
	Interstate	15,452	771	24.12	0.28
	Parkway	691	171	4.37	0.31
	All Urban**	124,679	9,281	5.69	0.79

* 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 Accidents for "SPOTS" and One-Mile Sections by Highway Type Classification (1997-1999)*

RURAL OR URBAN	HIGHWAY TYPE	ACCIDENTS PER SPOT		ACCIDENTS PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.28	2	0.93	4
	Two-Lane	1.34	5	4.48	10
	Three-Lane	5.18	12	17.27	28
	Four-Lane Divided (Non-Interstate or Parkway)	4.43	10	14.77	25
	Four-Lane Undivided	12.30	22	41.01	58
	Interstate	4.88	11	16.26	27
	Parkway	1.62	5	5.42	12
	All Rural	1.52	5	5.05	11
Urban	Two-Lane	7.25	15	24.16	37
	Three-Lane	20.08	32	66.93	89
	Four-Lane Divided	24.94	38	83.14	107
	Four-Lane Undivided	32.08	47	106.95	134
	Interstate	20.03	32	66.78	88
	Parkway	4.03	10	13.44	23
	All Urban**	13.43	23	44.78	63

* 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 Accident Rates for 0.1 Mile "SPOTS" by Highway Type Classification (1997-1999)

RURAL OR URBAN	HIGHWAY TYPE	NUMBER OF ACCIDENTS	NUMBER OF SPOTS*	MILLION VEHICLES PER YEAR	ACCIDENTS PER MILLION VEHICLES PER SPOT
Rural	One-Lane	51	550	0.33	0.09
	Two-Lane	98,100	219,150	0.59	0.25
	Three-Lane	518	300	1.94	0.30
	Four-Lane Divided (Non-Interstate or Parkway)	7,148	4,840	4.11	0.12
	Four-Lane Undivided	1,955	477	5.71	0.24
	Interstate	8,584	5,280	10.99	0.05
	Parkway	3,067	5,663	3.31	0.05
	All Rural	119,423	236,270	0.97	0.17
Urban	Two-Lane	44,005	18,216	2.55	0.32
	Three-Lane	2,098	313	4.52	0.49
	Four-Lane Divided	30,778	3,702	8.57	0.32
	Four-Lane Undivided	27,197	2,543	7.04	0.51
	Interstate	15,452	2,314	24.12	0.09
	Parkway	691	514	4.37	0.10
	All Urban**	124,679	27,842	5.69	0.26

* 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 Accidents for 0.1 Mile "SPOTS" and One-Mile Sections by Highway Type Classification (1997-1999)*

RURAL OR URBAN	HIGHWAY TYPE	ACCIDENTS PER SPOT		ACCIDENTS PER ONE MILE SECTION	
		AVERAGE	CRITICAL NUMBER	AVERAGE	CRITICAL NUMBER
Rural	One-Lane	0.09	1	0.93	4
	Two-Lane	0.45	3	4.48	10
	Three-Lane	1.73	6	17.27	28
	Four-Lane Divided (Non-Interstate or Parkway)	1.48	5	14.77	25
	Four-Lane Undivided	4.10	10	41.01	58
	Interstate	1.63	5	16.26	27
	Parkway	0.54	3	5.42	12
	All Rural	0.51	3	5.05	11
Urban	Two-Lane	2.42	7	24.16	37
	Three-Lane	6.69	14	66.93	89
	Four-Lane Divided	8.31	16	83.14	107
	Four-Lane Undivided	10.69	20	106.95	134
	Interstate	6.68	14	66.78	88
	Parkway	1.34	5	13.44	23
	All Urban**	4.48	10	44.78	63

* 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 ACCIDENT RATES FOR 0.1 MILE "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(1997-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE		
	ONE-LANE	TWO-LANE	THREE-LANE
100	6.99	8.71	9.13
500	2.05	2.90	3.12
1,000	1.29	1.94	2.10
2,500	0.74	1.21	1.34
5,000	0.51	0.89	0.99
7,500	0.42	0.76	0.85
10,000	0.37	0.68	0.77
15,000	0.31	0.60	0.68
20,000	0.28	0.55	0.62

TABLE B-8. CRITICAL ACCIDENT RATES FOR 0.1 MILE "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(1997-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.24	2.86	1.74	1.74
1,000	1.43	1.90	1.06	1.06
2,500	0.84	1.19	0.58	0.58
5,000	0.59	0.87	0.39	0.39
10,000	0.44	0.67	0.27	0.27
15,000	0.37	0.58	0.22	0.22
20,000	0.33	0.53	0.20	0.20
30,000	0.29	0.48	0.17	0.17
40,000	0.27	0.44	0.15	0.15
50,000	0.25	0.42	0.14	0.14

TABLE B-9. CRITICAL ACCIDENT RATES FOR 0.1 MILE "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (THREE-YEAR PERIOD)(1997-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE	
	TWO-LANE	THREE-LANE
500	3.20	3.84
1,000	2.17	2.67
2,500	1.38	1.76
5,000	1.03	1.35
7,500	0.89	1.18
10,000	0.81	1.08
15,000	0.71	0.97
20,000	0.65	0.90
30,000	0.59	0.82
40,000	0.55	0.77

TABLE B-10. CRITICAL ACCIDENT RATES FOR 0.1 MILE "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (THREE-YEAR PERIOD)(1997-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	2.17	2.72	1.29	1.38
5,000	1.03	1.39	0.51	0.57
10,000	0.81	1.11	0.37	0.41
15,000	0.71	0.99	0.31	0.35
20,000	0.65	0.93	0.28	0.32
30,000	0.59	0.85	0.24	0.27
40,000	0.55	0.80	0.22	0.25
50,000	0.53	0.77	0.20	0.23
60,000	0.51	0.74	0.19	0.22
70,000	0.49	0.73	0.18	0.21
80,000	0.48	0.71	0.18	0.21
90,000	0.47	0.70	0.17	0.20
100,000	0.46	0.69	0.17	0.20

APPENDIX C

CRITICAL "NUMBERS OF ACCIDENTS" TABLES

TABLE C-1. CRITICAL NUMBERS OF ACCIDENT RATES ON RURAL HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (1995-1999)

	CRITICAL NUMBERS OF ACCIDENT FOR THE GIVEN SECTION LENGTH (MILES)						
HIGHWAY TYPE	0.4	1	2	5	10	15	20
One-Lane	4	6	10	19	33	46	58
Two-Lane	8	15	24	52	94	134	174
Three-Lane	20	41	74	167	316	462	606
Four-Lane Divided (Non-Interstate and Parkway)	18	37	67	149	281	411	538
Four-Lane Undivided	39	85	158	368	708	1,043	1,376
InterState	20	41	73	165	312	456	598
Parkway	9	18	30	64	118	170	221

TABLE C-2. CRITICAL NUMBERS OF ACCIDENT RATES ON URBAN HIGHWAYS BY HIGHWAY TYPE AND SECTION LENGTH (1995-1999)

	CRITICAL NUMBERS OF ACCIDENT FOR THE GIVEN SECTION LENGTH (MILES)					
HIGHWAY TYPE	0.4	1	2	5	8	10
Two-Lane	28	59	107	245	379	467
Three-Lane (Non-Interstate and Parkway)	66	147	277	655	1,027	1,273
Four-Lane Divided	75	170	321	763	1,197	1,485
Four-Lane Undivided	98	224	428	1,022	1,609	1,998
InterState	62	138	260	613	961	1,191
Parkway	17	34	61	136	209	256

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APPENDIX D

CRITICAL ACCIDENT RATE TABLES FOR HIGHWAY SECTIONS

TABLE D-1. CRITICAL ACCIDENT RATES FOR RURAL ONE-LANE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
100	1,706	1,135	787	518	397
200	1,135	787	570	397	316
300	911	648	481	346	282
400	787	570	430	316	263
500	706	518	397	297	249
700	604	453	354	271	232
1,000	518	397	316	249	217
1,500	441	346	282	229	203
2,000	397	316	263	217	194
2,500	367	297	249	208	189
3,000	346	282	239	203	184

TABLE D-2. CRITICAL ACCIDENT RATES FOR RURAL TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
100	2,153	1,482	1,065	734	582	479
300	1,215	895	688	517	435	380
500	966	734	582	454	392	350
1,000	734	582	479	392	350	321
1,500	638	517	435	366	332	308
2,000	582	479	410	350	321	300
3,000	517	435	380	332	308	291
4,000	479	410	362	321	300	286
5,000	454	392	350	313	295	282
7,000	421	370	335	304	288	277
8,000	410	362	329	300	286	276
9,000	400	356	325	297	284	274
10,000	392	350	321	295	282	273

TABLE D-3. CRITICAL ACCIDENT RATES FOR RURAL THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	3	5
100	2,218	1,534	1,107	933	768
300	1,261	933	720	630	544
500	1,006	768	610	544	479
1,000	768	610	505	460	415
1,500	668	544	460	424	388
2,000	610	505	433	402	372
3,000	544	460	402	377	353
4,000	505	433	384	363	341
5,000	479	415	372	353	334
6,000	460	402	363	345	328
7,000	445	392	355	339	324
8,000	433	384	350	335	320
9,000	424	377	345	331	317
10,000	415	372	341	328	315

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TABLE D-4. CRITICAL ACCIDENT RATES FOR RURAL FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	646	469	355	262	218
1,000	469	355	281	218	188
2,500	328	262	218	181	162
5,000	262	218	188	162	149
7,500	234	199	175	154	144
10,000	218	188	167	149	141
15,000	199	175	158	144	137
20,000	188	167	153	141	134
30,000	175	158	147	137	132
40,000	167	153	143	134	130
50,000	162	149	141	133	129

TABLE D-5. CRITICAL ACCIDENT RATES FOR RURAL FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	910	687	541	419	360
1,000	687	541	443	360	320
2,500	505	419	360	310	285
5,000	419	360	320	285	267
7,500	382	335	302	274	260
10,000	360	320	292	267	255
20,000	320	292	272	255	247
30,000	302	280	264	250	243
40,000	292	272	259	247	241
50,000	285	267	255	245	239

TABLE D-6. CRITICAL ACCIDENT RATES FOR RURAL INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	437	302	217	150	119	98
1,000	302	217	163	119	98	84
2,500	197	150	119	93	81	72
5,000	150	119	98	81	72	66
7,500	130	106	89	75	68	64
10,000	119	98	84	72	66	62
20,000	98	84	75	66	62	59
30,000	89	78	70	64	60	58
40,000	84	75	68	62	59	57
50,000	81	72	66	61	58	56

TABLE D-7. CRITICAL ACCIDENT RATES FOR RURAL PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
400	528	363	260	179	141	116
700	389	276	205	147	120	102
1,000	324	236	179	132	110	95
1,500	268	199	155	118	100	88
2,000	236	179	141	110	95	84
3,000	199	155	125	100	88	80
4,000	179	141	116	95	84	77
5,000	165	132	110	91	82	75
7,000	147	120	102	86	78	73
10,000	132	110	95	82	75	71
20,000	110	95	84	75	71	68
40,000	95	84	77	71	68	65

TABLE D-8. CRITICAL ACCIDENT RATES FOR URBAN TWO-LANE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,139	881	709	565	495
1,000	881	709	593	495	446
2,500	667	565	495	434	404
5,000	565	495	446	404	383
7,500	520	464	425	391	374
10,000	495	446	413	383	368
15,000	464	425	398	374	362
20,000	446	413	389	368	358
30,000	425	398	379	362	354
40,000	413	389	373	358	351
50,000	404	383	368	355	349

TABLE D-9. CRITICAL ACCIDENT RATES FOR URBAN THREE-LANE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
500	1,520	1,208	998	820	733
1,000	1,208	998	856	733	673
2,500	946	820	733	658	620
5,000	820	733	673	620	594
7,500	765	695	647	604	582
10,000	733	673	631	594	575
15,000	695	647	612	582	567
20,000	673	631	601	575	562
30,000	647	612	588	567	557
40,000	631	601	581	562	553
50,000	620	594	575	559	551

TABLE D-10. CRITICAL ACCIDENT RATES FOR URBAN FOUR-LANE DIVIDED SECTIONS (NON-INTERSTATE AND PARKWAY) (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	874	703	588	490	442
2,500	661	560	490	430	400
5,000	560	490	442	400	379
10,000	490	442	408	379	365
15,000	460	421	394	370	358
20,000	442	408	385	365	354
25,000	430	400	379	361	352
30,000	421	394	375	358	350
40,000	408	385	369	354	347
50,000	400	379	365	352	345
60,000	394	375	362	350	344

TABLE D-11. CRITICAL ACCIDENT RATES FOR URBAN FOUR-LANE UNDIVIDED SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	1,222	1,011	868	744	684
2,500	959	832	744	668	630
5,000	832	744	684	630	604
10,000	744	684	641	604	585
15,000	706	657	623	592	577
20,000	684	641	611	585	572
25,000	668	630	604	581	569
30,000	657	623	598	577	566
40,000	641	611	591	572	563
50,000	630	604	585	569	561
60,000	623	598	581	566	559

TABLE D-12. CRITICAL ACCIDENT RATES FOR URBAN INTERSTATE SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)				
AADT	0.5	1	2	5	10
1,000	415	310	242	185	158
5,000	225	185	158	134	123
10,000	185	158	139	123	115
20,000	158	139	126	115	109
30,000	146	131	120	111	107
40,000	139	126	117	109	105
50,000	134	123	115	108	104
60,000	131	120	113	107	104
70,000	128	119	112	106	103
80,000	126	117	111	105	103
90,000	124	116	110	105	102
100,000	123	115	109	104	102

TABLE D-13. CRITICAL ACCIDENT RATES FOR URBAN PARKWAY SECTIONS (FIVE-YEAR PERIOD)(1995-1999)

	CRITICAL ACCIDENT RATE (ACC/100 MVM) FOR THE GIVEN SECTION LENGTH (MILES)					
AADT	0.5	1	2	5	10	20
500	604	435	327	239	197	169
1,000	435	327	256	197	169	150
2,500	301	239	197	162	145	133
5,000	239	197	169	145	133	124
7,500	213	180	157	137	128	121
10,000	197	169	150	133	124	119
15,000	180	157	141	128	121	116
20,000	169	150	136	124	119	115
30,000	157	141	130	121	116	113
40,000	150	136	127	119	115	112
90,000	134	126	119	114	111	109
50,000	145	133	124	117	113	111

APPENDIX E

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

TABLE E-1. CRITICAL ACCIDENT RATES FOR "SPOTS" ON RURAL ONE-LANE, TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(1995-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE		
	ONE-LANE	TWO-LANE	THREE-LANE
100	7.12	8.76	8.98
500	2.75	3.66	3.78
1,000	1.95	2.70	2.80
2,500	1.33	1.92	2.00
5,000	1.04	1.56	1.63
7,500	0.92	1.40	1.47
10,000	0.85	1.31	1.38
15,000	0.77	1.21	1.27
20,000	0.72	1.15	1.21

TABLE E-2. CRITICAL ACCIDENT RATES FOR "SPOTS" ON RURAL FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1995-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
500	2.53	3.45	1.79	1.87
1,000	1.78	2.53	1.20	1.26
2,500	1.19	1.78	0.75	0.80
5,000	0.93	1.44	0.56	0.60
10,000	0.75	1.20	0.43	0.46
15,000	0.67	1.10	0.38	0.41
20,000	0.63	1.05	0.34	0.37
30,000	0.58	0.98	0.31	0.34
40,000	0.55	0.94	0.29	0.31
50,000	0.53	0.91	0.27	0.30

TABLE E-3. CRITICAL ACCIDENT RATES FOR "SPOTS" ON URBAN TWO-LANE AND THREE-LANE HIGHWAYS (FIVE-YEAR PERIOD)(1995-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE	
	TWO-LANE	THREE-LANE
500	4.24	5.54
1,000	3.18	4.27
2,500	2.32	3.22
5,000	1.91	2.72
7,500	1.73	2.50
10,000	1.63	2.38
15,000	1.51	2.23
20,000	1.44	2.14
30,000	1.36	2.04
40,000	1.31	1.98

TABLE E-4. CRITICAL ACCIDENT RATES FOR "SPOTS" ON URBAN FOUR-LANE HIGHWAYS, INTERSTATES, AND PARKWAYS (FIVE-YEAR PERIOD)(1995-1999)

AADT	CRITICAL ACCIDENT RATE (ACC/MV) BY HIGHWAY TYPE			
	FOUR-LANE DIVIDED (NON-INTERSTATE AND PARKWAY)	FOUR-LANE UNDIVIDED	INTERSTATE	PARKWAY
1,000	3.16	4.32	1.59	1.65
5,000	1.89	2.76	0.80	0.84
10,000	1.62	2.41	0.64	0.67
15,000	1.50	2.26	0.57	0.60
20,000	1.43	2.18	0.53	0.56
30,000	1.35	2.07	0.49	0.51
40,000	1.30	2.01	0.46	0.48
50,000	1.26	1.97	0.44	0.47
60,000	1.24	1.94	0.43	0.45
70,000	1.22	1.91	0.42	0.44
80,000	1.21	1.89	0.41	0.43
90,000	1.19	1.88	0.40	0.42
100,000	1.18	1.87	0.40	0.42

APPENDIX F

TOTAL ACCIDENT RATES FOR ALL INCORPORATED CITIES

TABLE F-1. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES LISTED IN THE 1990 CENSUS (1995-1999 DATA)

CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ACCIDENTS PER 1000 POPULATION
Adairville	906	39	9	Burnside	695	75	22
Albany	2,062	528	51	Butler	625	98	31
Alexandria	5,592	1,306	47	Cadiz	2,148	582	54
Allen	229	151	132	Calhoun	854	101	24
Anchorage	2,082	118	11	California	130	*	*
Annville	470	*	*	Calvert City	2,531	316	25
Arlington	449	10	5	Camargo	1,022	42	8
Ashland	23,622	6,134	52	Cambridge	193	*	*
Auburn	1,273	123	19	Campbellsburg	604	73	24
Audubon Park	1,520	58	8	Campbellsville	9,577	2,617	55
Augusta	1,336	140	21	Campton	484	450	186
Bancroft	582	*	*	Caneyville	549	97	35
Barbourmeade	1,402	*	*	Carlisle	1,639	311	38
Barbourville	3,658	823	45	Carrollton	3,715	802	43
Bardstown	6,801	2,526	74	Carrsville	98	4	8
Bardwell	819	71	17	Catlettsburg	2,231	570	51
Barlow	706	52	15	Cave City	1,953	490	50
Beattyville	1,131	228	40	Centertown	383	28	15
Beaver Dam	2,904	562	39	Central City	4,979	1,038	42
Bedford	761	183	48	Cherrywood Village	340	3	2
Beechwood Village	1,263	*	*	Clarkson	611	126	41
Bellefonte	838	99	24	Clay	1,173	98	17
Bellemeade	927	*	*	Clay City	1,276	*	*
Bellevue	6,997	1,119	32	Clinton	1,720	*	*
Bellewood	329	*	*	Cloverport	1,207	37	6
Benham	717	39	11	Coal Run	262	377	288
Benton	3,899	847	43	Cold Springs	2,880	1,048	73
Berea	9,126	1,674	37	Coldstream	862	*	*
Berry	240	21	18	Columbia	3,845	918	48
Blaine	271	14	10	Columbus	252	13	10
Blandville	95	*	*	Concord	65	3	9
Bloomfield	845	102	24	Corbin	7,419	2,225	60
Blue Ridge Manor	565	*	*	Corinth	137	132	193
Bonnieville	300	56	37	Corydon	790	101	26
Booneville	232	196	169	Covington	43,264	11,087	51
Bowling Green	40,641	14,908	73	Crab Orchard	825	121	29
Bradfordsville	199	37	37	Creekside	323	*	*
Brandenburg	1,857	584	63	Crescent Park	364	110	60
Bremen	267	79	59	Crescent Springs	2,179	840	77
Briarwood	658	*	*	Crestview	356	6	3
Broadfields	273	*	*	Crestview Hills	2,546	1,009	79
Brodhead	1,140	8	1	Crestwood	1,435	473	66
Broeck Point	325	*	*	Crittenden	731	429	117
Bromley	1,137	113	20	Crofton	699	92	26
Brooksville	670	186	56	Crossgate	261	*	*
Brownsboro Farm	670	*	*	Cumberland	3,112	294	19
Brownsboro Village	361	*	*	Cynthiana	6,497	1,347	42
Brownsville	897	295	66	Danville	12,420	3,524	57
Burgin	1,009	31	6	Dawson Springs	3,129	287	18
Burkesville	1,815	329	36	Dayton	6,576	553	17

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TABLE F-1. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES LISTED IN THE 1990 CENSUS (1995-1999 DATA)(Continued)

CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ACCIDENTS PER 1000 POPULATION
Dixon	552	165	60	Glenview Hills	353	*	*
Douglass Hills	5,549	*	*	Glenview Manor	197	3	3
Dover	297	24	16	Goose Creek	321	*	*
Drakesboro	565	71	25	Grand Rivers	351	36	21
Druid Hills	305	*	*	Gratz	65	12	37
Dry Ridge	1,601	941	118	Graymoor	2,911	82	6
Earlington	1,833	192	21	Grayson	3,510	991	57
Eddyville	1,889	184	20	Green Spring	768	*	*
Edgewood	8,143	895	22	Greensburg	1,990	556	56
Edmonton	1,477	375	51	Greenup	1,158	236	41
Ekron	110	10	18	Greenville	4,689	907	39
Elizabethtown	18,167	6,220	69	Guthrie	1,504	149	20
Elkhorn City	813	144	35	Hanson	450	66	29
Elkton	1,789	300	34	Hardin	595	59	20
Elsmere	6,847	829	24	Hardinsburg	1,906	263	28
Eminence	2,055	103	10	Harlan	2,686	810	60
Erlanger	15,979	3,786	47	Harrodsburg	7,335	1,752	48
Eubank	354	39	22	Hartford	2,532	122	10
Evarts	1,063	163	31	Hawesville	998	180	36
Ewing	268	20	15	Hazard	5,416	2,262	84
Fairfield	142	13	18	Hazel	460	35	15
Fairmeade	280	*	*	Hebron Estates	930	*	*
Fairview	119	41	69	Henderson	25,945	6,706	52
Falmouth	2,378	430	36	Hickman	2,689	173	13
Ferguson	934	34	7	Hickory Hill	152	17	22
Fincastle	838	*	*	Highland Heights	4,223	930	44
Flatwoods	7,799	658	17	Hills And Dales	154	*	*
Fleming-neon	759	*	*	Hillview	6,119	*	*
Flemingsburg	3,071	428	28	Hindman	798	236	59
Florence	18,624	8,262	89	Hiseville	220	19	17
Fordsville	522	67	26	Hodgenville	2,721	711	52
Forest Hills	454	21	9	Hollow Creek	991	*	*
Fort Mitchell	7,438	1,501	40	Hollyvilla	649	*	*
Fort Thomas	16,032	1,223	15	Hopkinsville	29,809	6,300	42
Fort Wright	6,570	2,000	61	Horse Cave	2,284	192	17
Foster	65	*	*	Houston Acres	496	*	*
Fountain Run	259	29	22	Hunters Hollow	286	*	*
Fox Chase	528	*	*	Hurstbourne	4,420	*	*
Frankfort	25,968	5,016	39	Hurstbourne Acres	1,072	10	2
Franklin	7,607	1,339	35	Hustonville	313	38	24
Fredonia	490	54	22	Hyden	375	189	101
Frenchburg	625	122	39	Independence	10,444	1,683	32
Fulton	3,078	478	31	Indian Hills	1,074	40	7
Gamaliel	462	21	9	Indian Hills Ch. Sec.	1,005	*	*
Georgetown	11,414	3,336	59	Inez	511	174	68
Germantown	213	51	48	Irvine	2,836	676	48
Ghent	365	45	25	Irvington	1,180	59	10
Glasgow	12,351	3,369	55	Island	446	47	21
Glencoe	257	41	32	Jackson	2,466	817	66
Glenview	653	*	*	Jamestown	1,641	173	21

TABLE F-1. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES LISTED IN THE 1990 CENSUS (1995-1999 DATA)(Continued)

CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ACCIDENTS PER 1000 POPULATION
Jeffersontown	23,221	4,615	40	Meadowvale	798	62	16
Jeffersonville	1,854	128	14	Meadowview Estates	259	3	2
Jenkins	2,751	393	29	Melbourne	660	36	11
Junction City	1,983	125	13	Mentor	169	12	14
Keeneland	393	*	*	Middlesboro	11,328	1,770	31
Kenton Vale	358	12	7	Middletown	5,016	218	9
Kevil	337	62	37	Midway	1,290	122	19
Kingsley	399	5	3	Millersburg	937	96	21
Kuttawa	535	72	27	Milton	563	236	84
Lacenter	1,040	144	28	Minor Lane Heights	1,675	29	4
Lafayette	106	6	11	Mockingbird Valley	177	23	26
Lagrange	3,853	916	48	Monterey	164	23	28
Lakeside Park	3,131	444	28	Monticello	5,357	1,313	49
Lakeview Heights	252	*	*	Moorland	467	13	6
Lancaster	3,421	641	38	Morehead	8,357	1,720	41
Langdon Place	874	*	*	Morganfield	3,776	689	37
Latonia Lakes	410	27	13	Morgantown	2,284	548	48
Lawrenceburg	5,911	851	29	Mortons Gap	987	76	15
Lebanon	5,695	1,261	44	Mount Olivet	384	11	6
Lebanon Junction	1,741	227	26	Mount Sterling	5,362	1,790	67
Leitchfield	4,965	272	11	Mount Vernon	2,654	707	53
Lewisburg	772	73	19	Mount Washington	5,226	937	36
Lewisport	1,778	110	12	Muldraugh	1,376	262	38
Lexington	225,366	59,895	53	Munfordville	1,556	432	56
Liberty	1,937	300	31	Murray	14,439	1,567	22
Lincolnshire	125	*	*	Murray Hill	619	*	*
Livermore	1,534	151	20	Nebo	227	32	28
Livingston	241	10	8	New Castle	893	94	21
London	5,757	3,230	112	New Haven	796	74	19
Lone Oak	465	242	104	Newport	18,871	4,608	49
Loretto	820	86	21	Nicholasville	13,603	3,247	48
Louisa	1,990	603	61	Norbourne Estates	461	4	2
Louisville	269,063	79,946	59	North Middletown	602	37	12
Loyall	1,100	57	10	Northfield	898	96	21
Ludlow	4,736	451	19	Nortonville	1,209	142	24
Lynch	1,166	54	9	Norwood	372	*	*
Lyndon	8,037	80	2	Oak Grove	2,863	1,119	78
Lynnview	1,017	50	10	Oakland	202	10	10
Mackville	200	29	29	Old Brownboro Place	348	*	*
Madisonville	16,200	4,382	54	Olive Hill	1,809	392	43
Manchester	1,634	692	85	Orchard Grass Hills	1,058	*	*
Manor Creek	179	*	*	Owensboro	53,549	12,161	45
Marion	3,320	538	32	Owenton	1,306	282	43
Martin	694	222	64	Owingsville	1,491	286	38
Maryhill Estates	177	*	*	Paducah	27,256	9,446	69
Mayfield	9,935	2,323	47	Paintsville	4,354	1,230	57
Maysville	7,169	2,576	72	Paris	8,730	1,813	42
Mchenry	414	48	23	Park City	549	60	22
Mckee	870	234	54	Park Hills	3,321	237	14
Meadowbrook Farm	163	*	*	Park Lake	263	*	*

TABLE F-1. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES LISTED IN THE 1990 CENSUS (1995-1999 DATA)(Continued)

CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ACCIDENTS PER 1000 POPULATION
Parkway Village	707	18	5	Seneca Gardens	684	5	2
Pembroke	640	49	15	Sharpsburg	315	55	35
Perryville	815	58	14	Shelbyville	6,238	2,065	66
Pewee Valley	1,283	172	27	Shepherdsville	4,805	1,710	71
Pikeville	6,324	2,011	64	Shively	15,535	4,742	61
Pineville	2,198	504	46	Silver Grove	1,102	137	25
Pioneer Village	1,130	*	*	Simpsonville	907	125	28
Pippa Passes	195	78	80	Slaughters	235	14	12
Plantation	830	2	1	Smithfield	115	11	19
Pleasureville	761	39	10	Smithland	384	71	37
Plum Springs	361	4	2	Smiths Grove	703	84	24
Plymouth Village	162	*	*	Somerset	10,733	4,123	77
Poplar Hills	377	*	*	Sonora	295	90	61
Powderly	748	93	25	South Carrollton	202	67	66
Prestonsburg	3,558	1,221	69	South Parkview	214	*	*
Prestonville	205	33	32	South Shore	1,318	132	20
Princeton	6,940	1,090	31	Southgate	3,266	483	30
Prospect	2,788	*	*	Sparta	133	30	45
Providence	4,123	349	17	Spring Mill	342	*	*
Raceland	2,256	198	18	Spring Valley	400	*	*
Radcliff	19,772	2,897	29	Springfield	2,875	571	40
Ravenna	804	47	12	Springlee	451	*	*
Raywick	157	*	*	Stamping Ground	698	50	14
Richlawn	435	*	*	Stanford	2,686	297	22
Richmond	21,155	6,389	60	Stanton	2,795	517	37
River Bluff	452	*	*	Strathmoor Gardens	300	*	*
Riverwood	506	*	*	Strathmoor Manor	391	*	*
Robinswood	250	*	*	Strathmoor Village	361	*	*
Rochester	191	*	*	Sturgis	2,184	226	21
Rockport	385	14	7	Sycamore	70	*	*
Rolling Fields	593	*	*	Taylor Mill	5,530	1,269	46
Rolling Hills	1,135	29	5	Taylorsville	774	153	40
Russell	4,014	856	43	Ten Broeck	128	*	*
Russell Springs	2,363	735	62	Thornhill	146	*	*
Russellville	7,454	1,730	46	Tompkinsville	2,861	544	38
Ryland Heights	279	*	*	Trenton	378	16	9
Sacramento	563	58	21	Union	1,001	341	68
Sadieville	255	36	28	Uniontown	1,008	92	18
Saint Charles	316	27	17	Upton	719	57	16
Saint Matthews	15,800	4,517	57	Vanceburg	1,713	277	32
Saint Regis Park	1,756	5	1	Versailles	7,269	1,476	41
Salem	770	58	15	Vicco	244	79	65
Salt Lick	342	96	56	Villa Hills	7,739	347	9
Salyersville	1,917	351	37	Vine Grove	3,586	372	21
Sanders	231	16	14	Visalia	190	48	51
Sandy Hook	548	106	39	Wallins Creek	261	131	100
Sardis	171	28	33	Walton	2,034	493	49
Science Hill	628	23	7	Warfield	364	91	50
Scottsville	4,278	1,135	53	Warsaw	1,202	146	24
Sebree	1,510	190	25	Washington	795	*	*

TABLE F-1. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES LISTED IN THE 1990 CENSUS (1995-1999 DATA)(Continued)

CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (93-97)	ACCIDENTS PER 1000 POPULATION
Water Valley	321	19	12	Williamsburg	5,493	969	35
Waterson Park	1,542	*	*	Williamstown	3,023	675	45
Waverly	345	39	23	Willisburg	223	35	31
Wayland	359	29	16	Wilmore	4,215	248	12
Wellington	593	*	*	Winchester	15,799	3,696	47
West Buechel	1,587	622	78	Winding Falls	657	*	*
West Liberty	1,887	440	47	Windy Hills	2,452	*	*
West Point	1,216	210	35	Wingo	568	57	20
Westwood	734	140	38	Woodburg	117	*	*
Wheatcroft	206	10	10	Woodburn	343	26	15
Wheelwright	721	46	13	Woodland Hills	714	*	*
Whipps Millgate	454	*	*	Woodlawn	308	14	9
White Plains	598	59	20	Woodlawn Park	1,099	*	*
Whitesburg	1,636	510	62	Worthington	1,751	52	6
Whitesville	682	103	30	Worthington Hills	973	*	*
Wickliffe	851	204	48	Worthville	191	19	20
Wilder	691	673	195	Wurtland	1,221	82	13
Wildwood	266	*	*				

* Data Not Available

APPENDIX G

SAFETY BELT SUMMARY DATA

A comparison of the accident severity, in terms of the percentage of drivers sustaining a given injury, and the type of accident is presented in Table G-1. The use of a safety belt was shown to be effective in all types of accidents. As would be expected, some of the largest reductions occurred as a result of wearing a safety belt in the most severe accident types. For example, non-intersection "fixed object", "ran off road", and "overturned in road" accidents were some of the most severe accident types, and there was a large reduction in severity when a safety belt was used when those types of accidents occurred. Reduction in severity was also noted in the less severe accident types. For example, while the severity of rear-end accidents at intersections was relatively low, there was a substantial reduction in the percentage of incapacitating and non-incapacitating injuries related to wearing a safety belt.

Accident severity versus safety belt usage by speed was analyzed and tabulated in Table G-2. It was shown that safety belts are effective in reducing serious injuries for speed limits in the range of 25 to 55 mph. Accident severity was less for the 25-mph speed limit, as would be expected.

The severity of injury versus ejection from the vehicle was investigated, as shown in Table G-3, since a major benefit associated with wearing a safety belt is greatly reducing the chances of ejection from the vehicle. The serious consequences of ejection are shown with the percent of fatalities involving ejection being 55 times that if not ejected. The percent of incapacitating injuries involving ejection was 9 times that if not ejected.

Safety belt usage by age and sex of the driver, as reported in traffic accidents, is shown in Table G-4. Usage for females was above that for males. When age was considered, usage was lowest for the range of 16 through 19 years of age with similar usage rates for the other age ranges. An increase in 1999 compared to 1995 through 1999 is shown. As previously noted, the usage rates reported in the accident data is substantially higher than that found in observational surveys.

TABLE G-1. ACCIDENT SEVERITY VERSUS SAFETY BELT USAGE BY ACCIDENT TYPE (DRIVERS OF PASSENGER CARS) (1995-1999 DATA)

ACCIDENT TYPE	TYPE OF INJURY	NUMBER SUSTAINING A GIVEN INJURY		PERCENTAGE SUSTAINING A GIVEN INJURY		
		NOT WEARING SAFETY BELT	WEARING SAFETY BELT	NOT WEARING SAFETY BELT	WEARING SAFETY BELT	PERCENT REDUCTION
Intersection Angle	Fatal	119	124	0.65	0.07	90
	Incapacitating	1264	4004	6.89	2.13	69
	Non-Incapacitating	2578	10661	14.05	5.66	60
	Possible	2135	14829	11.63	7.88	32
Intersection Rear End	Fatal	10	6	0.12	0.00	96
	Incapacitating	260	1111	3.07	0.85	72
	Non-Incapacitating	617	3365	7.29	2.59	65
	Possible	787	8872	9.30	6.82	27
Intersection Left Turn	Fatal	8	6	0.68	0.06	91
	Incapacitating	105	250	8.89	2.47	72
	Non-Incapacitating	183	647	15.50	6.40	59
	Possible	138	908	11.69	8.99	23
Intersection Fixed Object	Fatal	8	1	0.53	0.02	96
	Incapacitating	186	188	12.29	3.51	71
	Non-Incapacitating	375	526	24.77	9.83	60
	Possible	227	572	14.99	10.69	29
Intersection Side Swipe	Fatal	5	3	0.29	0.01	95
	Incapacitating	84	205	4.82	1.02	79
	Non-Incapacitating	141	513	8.09	2.55	68
	Possible	135	924	7.75	4.60	41
Non-Intersection Rear End	Fatal	67	43	0.44	0.02	95
	Incapacitating	543	2110	3.60	1.02	72
	Non-Incapacitating	1192	6175	7.91	2.97	62
	Possible	1556	15668	10.32	7.55	27
Non-Intersection Head On	Fatal	193	91	12.25	1.47	88
	Incapacitating	343	503	21.78	8.13	63
	Non-Incapacitating	322	761	20.44	12.30	40
	Possible	220	855	13.97	13.82	1
Non-Intersection Side Swipe	Fatal	195	119	1.55	0.11	93
	Incapacitating	1059	2103	8.43	1.96	77
	Non-Incapacitating	1368	4562	10.89	4.25	61
	Possible	1121	6386	8.92	5.95	33
Non-Intersection Vehicle Parked	Fatal	23	3	0.44	0.01	98
	Incapacitating	191	208	3.69	0.74	80
	Non-Incapacitating	413	549	7.99	1.96	75
	Possible	297	804	5.74	2.87	50
Non-Intersection Fixed Object	Fatal	530	136	4.11	0.31	92
	Incapacitating	2214	1949	17.17	4.45	74
	Non-Incapacitating	3309	5496	25.67	12.54	51
	Possible	1864	5697	14.46	13.00	10
Non-Intersection Run Off Road	Fatal	289	70	3.66	0.26	93
	Incapacitating	1369	1476	17.36	5.44	69
	Non-Incapacitating	2156	4007	27.33	14.78	46
	Possible	1464	4732	18.56	17.45	6
Non-Intersection Overturned in Road	Fatal	77	15	6.54	0.45	93
	Incapacitating	225	252	19.12	7.61	60
	Non-Incapacitating	328	725	27.87	21.90	21
	Possible	222	620	18.86	18.73	1

TABLE G-2. ACCIDENT SEVERITY VERSUS SAFETY BELT USAGE BY SPEED LIMIT (DRIVERS OF PASSENGER CARS)*

SPEED LIMIT (MPH)	TYPE OF INJURY	PERCENT SUSTAINING A GIVEN INJURY		
		NOT WEARING SAFETY BELT	WEARING SAFETY BELT	PERCENT REDUCTION
25	FATAL	0.15	0.01	90
	INCAPACITATING	3.08	0.69	77
	NON-INCAPACITATING	8.21	2.17	74
	POSSIBLE	8.19	4.66	43
35	FATAL	0.48	0.03	95
	INCAPACITATING	6.12	1.25	80
	NON-INCAPACITATING	12.37	3.75	70
	POSSIBLE	10.49	6.50	38
45	FATAL	0.78	0.05	94
	INCAPACITATING	7.52	1.74	77
	NON-INCAPACITATING	13.11	4.42	66
	POSSIBLE	12.00	7.89	34
55	FATAL	3.54	0.26	93
	INCAPACITATING	13.89	3.37	76
	NON-INCAPACITATING	19.10	7.82	59
	POSSIBLE	12.73	9.77	23

* Based on 1995-1999 accident data.

TABLE G-3. SEVERITY OF INJURY VERSUS EJECTION
(DRIVERS OF PASSENGER CARS)*

TYPE OF INJURY	PERCENT WITH GIVEN INJURY: EJECTED	NOT EJECTED	PERCENT EJECTED/ PERCENT NOT EJECTED
FATAL	9.55	0.17	55
INCAPACITATING	20.64	2.36	9
NON-INCAPACITATING	11.77	5.65	2
POSSIBLE	9.54	7.97	1

* Based on 1995-1999 accident data.

TABLE G-4. SAFETY BELT USAGE BY AGE AND SEX
(DRIVERS OF PASSENGER CARS)

VARIABLE	CATEGORY	PERCENT USAGE: 1995-1999	1999
AGE	16-19	83.9	85.3
	20-24	87.9	89.2
	25-34	89.7	90.9
	35-44	91.2	92.4
	45-54	92.5	93.7
	55-64	92.3	93.4
	65 or older	91.7	92.8
SEX	Male	88.2	89.6
	Female	92.5	93.5