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16. Abstract <p>An annual highway safety program is proposed each year for the State of 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. This report is the fourth in a series of annual reports which have been included as the problem identification portion of Kentucky's Annual Highway Safety Plan.</p> <p>The approach used in this study involved identifying problem areas related to the 18 highway safety program standards with added emphasis placed on selected areas. This resulted in the analysis of 19 problem identification areas. Recommendations were made for programs which could serve as countermeasures for the highway safety problems identified and for studies to develop and evaluate such programs.</p>					
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PROBLEM IDENTIFICATION FOR  
HIGHWAY SAFETY PLAN (FY 1983)

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## INTRODUCTION

An annual highway safety program is prepared each year for the state of Kentucky in order to comply with Section 02, Title 23 of the United States Code. This program includes the identification, programming, budgeting, and evaluation of safety projects with the objective of reducing the number and severity of traffic accidents. This is the fourth in a series of annual reports which have been included as the problem identification portion of Kentucky's Annual Highway Safety Plan (1, 2, 3).

In the past, the approach to problem identification has been to identify the problem areas in the 18 highway safety program areas (standards). While the search for problems in each of these standard areas will continue, certain program areas have been identified for emphasis. Currently, those areas include:

1. Alcohol,
2. Police Traffic Services,
3. Traffic Records,
4. Emergency Medical Services, and
5. Occupant Protection.

In order to identify problems in these "program emphasis" areas as well as any of the other "highway standard" areas, 9 problem identification areas were investigated. The areas included the following:

1. County Accident Statistics,
2. City Accident Statistics,
3. Total Accidents by Reporting Agency,
4. General Accident Statistics,
5. Fatal Accident Statistics,
6. Driver Records,
7. Speed-Related Accidents,
8. Alcohol-Related Accidents,
9. Drug-Related Accidents,
10. Seatbelt Usage,
11. Child Restraints,
12. 55-Mph Speed Limit,
13. Pedestrian Accidents,
14. Bicycle Accidents,
15. Motorcycle Accidents,
16. School Bus Accidents,
17. Emergency Vehicle Accidents,
18. Vehicle Defects, and

## 19. Police Response Times.

The "Records Analysis for Problem Identification and Definition (RAPID)" computer software package was used for analyses. Except where noted otherwise, all the accident analyses were for a three-year period (1978-1980).

In this report, problems which have contributed to the number and severity of traffic accidents were identified. Problem areas associated with any of the 18 "highway standard" areas were investigated, with the "program emphasis" areas receiving particular attention. Recommendations were made for programs which could serve as countermeasures for the highway safety problems which were identified. Recommendations were also made for studies with the objectives of developing and evaluating such programs.

## PROBLEM AREAS INVESTIGATED

### County Accident Statistics

As in previous problem identification reports, average accident rates were calculated for each county (Table 1). The exposure measures used were population, vehicle-miles travelled, licensed drivers, and registered vehicles; however, vehicle-miles was the exposure measure used in most analyses. These rates were used to identify the counties, by population category, having the highest accident rates. The rates were also used, together with other statistics, in analyses of other problem identification areas.

Rates, in terms of accidents per 100 million vehicle-miles, were calculated for total accidents, fatal accidents only, and injury-or-fatal accidents only. Vehicle-miles-travelled data were for a three-year period (1978-1980). Miles travelled in 1980 were determined from the statewide mileage tape and added to the 1978-1979 total presented in a previous report (3). This figure represents total miles driven in each county. It was obtained by adding the known miles driven on the state maintained highway system and the estimated miles driven on the remaining streets and highways.

Average and critical accident rates were calculated for each county population category (Table 2). The critical accident rate was calculated using the following formula:

$$A_c = A_a + K(\text{SQRT}(A_a/m)) + 1/(2m)$$

in which  $A_c$  = critical rate,

$A_a$  = average rate,

$K$  = constant related to level of statistical significance selected (for  $P=0.995$ ,  $K=2.576$ ),

$\text{SQRT}$  = square root, and

$m$  = annual mileage driven per county.

Critical rates (in terms of accidents per 100 million vehicle-miles) were calculated for total accidents, fatal accidents only, and injury-or-fatal accidents only. The numbers of counties having rates above critical in each population category were determined. The total number was 37 for total accidents, 29 for injury-or-fatal accidents, and four for fatal accidents.

A list of counties having total accident rates above critical is given in Table 3. Counties having the highest rates in the various population ranges were Carroll, Mason, Franklin, Campbell, and Kenton. The highest accident rate in the state was in Campbell County, followed by Kenton County. The counties identified in this report were very similar to those in the last report (3). There were five new counties identified and two counties that were previously identified are not listed in Table 3. It is anticipated that, as the accident data base increases, only counties with a long-term accident problem will continue to be identified.

An alternative to using total accidents is to exclude property-damage-only accidents and use only injury-or-fatal accidents. Counties, by population category, with injury-or-fatal accident rates above critical are given in Table 4. Counties with the highest rates for their population categories were Spencer, Bourbon, Henderson, Campbell, and Kenton. As shown in Table 5, 20 counties had both total and injury-or-fatal accident rates above critical. A comparison with the counties identified in the last report shows there were four new counties and

four counties previously identified which were not identified in this analysis (3). Campbell and Kenton Counties had the highest accident rates for their population categories considering both total and injury-or-fatal accidents. As noted in Table 5, only Perry County had total, injury-or-fatal, and fatal accident rates above critical.

#### City Accident Statistics

Accident statistics were analyzed for cities using 1978 through 1980 accident data. The cities included in the analysis were those listed in the 1980 census. This requirement meant the city had to be incorporated. Some incorporated cities were eliminated because they were listed in the census but were not included in the list of cities coded by the Kentucky State Police. Some cities, such as St. Matthews and Shively, were not included individually but were grouped with Louisville because some accidents in those areas were coded as occurring in Louisville. Also, these cities were all part of the Louisville metropolitan area. A total of 330 cities were included.

A separate and more detailed analysis was made for cities having populations of 1,000 or more (186 cities). Rates were calculated in terms of accidents per 1,000 population, since the total number of vehicle-miles travelled in each city was not known. Rates were calculated for all accidents as well as fatal, pedestrian, bicycle, and motorcycle accidents (Table 6). The percentages of accidents involving speeding and alcohol were also determined. A listing of accident rates for all 330 cities is given in Table 7.

Average and critical accident rates by population category were calculated (Table 8). Rates were calculated for both total and fatal accidents. The only exception was that fatal-accident statistics were not determined for cities having populations under 1,000 due to the limited number of fatal accidents in those very small cities.

Cities having rates above critical are listed in Table 9. Sixty-five cities were identified as having total accident



rates above critical. No cities were identified as having fatal accident rates above critical. Louisville, Bowling Green, Newport, Florence, Maysville, Pikeville, Crescent Springs, Hindman, Wilder, Allen, and Booneville had the highest rates in their respective population ranges. However, Louisville was not identified as having a rate above critical, since its rate was only slightly higher than that of Lexington, which was the only other city in that population category. Wilder had the highest rate in the state, and Crescent Springs had the highest rate for cities having populations of 1,000 or more. The distribution of cities having rates above critical shows the largest concentration was in the northern Kentucky counties around Cincinnati, Ohio. The county containing the largest number of cities having accident rates above critical was Kenton County. As was found in the county accident analysis, many of the same cities were identified as having critical rates both in this report and the last report (3).

A separate accident analysis was performed for the three large cities, Jeffersontown, St. Matthews, and Shively, which were included with Louisville in the previous analysis. An accident rate was also calculated for the city of Louisville (including only the area within the city limits). The 1980 census gave the following populations for these cities: Jeffersontown - 15,795, St. Matthews - 13,354, Shively - 16,819, and Louisville - 298,451. The average number of accidents occurring per year in 1978 through 1980 was 686 in Jeffersontown, 910 in St. Matthews, 1,233 in Shively, 18,979 in Louisville (accidents reported by the Louisville city police). These data give accident rates, in terms of accidents per 1,000 population, of 43.4 in Jeffersontown, 68.1 in St. Matthews, 73.3 in Shively, and 63.6 in Louisville. Accident rates for the cities of St. Matthews and Shively were above the critical rates determined for cities of their size. Louisville would also have a accident rate slightly above critical if

the accident rate which considered only accidents within the city limits was considered.

A potential improvement in calculating rates for cities would be the use of vehicle-miles as the measure of exposure. However, vehicle-miles travelled are only available for a limited mileage of state maintained streets. The 1980 report on accident exposure in Kentucky contained rates for cities that were calculated using the limited amount of vehicle-mileage data (4). Using such data for several years could result in a sufficient amount of data which could be used in the problem identification process.

#### Total Accidents by Reporting Agency

A listing of numbers of accidents reported by various police agencies is presented in Table 10. For each agency listed, the numbers of accidents reported in 1978, 1979, 1980, and 1981 are listed. An average-per-year for 1978 through 1980 is listed, as well as the percent change of the 1981 total from this average. Agencies are listed in descending order of the three-year average, and only the top 134 agencies are listed. Those 134 agencies account for 95 percent of the total accidents reported in Kentucky. The highest number of accidents was reported by the Kentucky State Police, followed by the Louisville Police Department, the Jefferson County Police Department, and the Lexington-Fayette County Police Department.

There was a substantial decrease in number of reported accidents in 1980 and 1981 when compared to 1978 and 1979. There was a 12.2 percent decrease in total reported accidents in 1981 compared to the average for 1978 through 1980. Also, of the 134 agencies listed in Table 10, 96 (72 percent) showed a decrease in accidents in 1981 compared to the 1978 through 1980 average. There were some large changes in reported accidents which may be attributed to changes in reporting responsibility.

## General Accident Statistics

Several types of general statistics were developed for use in analyses of specific problem areas. Rates, using population as the exposure measure, were calculated by county for several accident types (Table 11). The accident types included pedestrian, bicycle, school bus, emergency vehicle, and motorcycle.

A summary of other miscellaneous accident data used in the problem identification process is given by county in Table 12. This table includes percentages of accidents involving speeding, alcohol, and drugs; percentage of drivers using safety equipment; percentage of fatal accidents; percentage injury-or-fatal accidents; number of accidents by county by year; percent change in the 1980 accident total from the three-year average; and lapsed times from the time when police were notified of an accident until they arrived at the scene. Analysis of contributing factors (human, vehicular, and roadway) given in Table 13 was also used in problem identification. The percentage of accidents in which a given factor was listed as a contributing factor was summarized for various accident types. A summary of accident severity for various types of accidents was also made (Table 14).

An accident trend analysis for various types of accident statistics is given in Table 15. The change in 1980 accidents was compared to an average of the preceding three years (1977-1979). It was shown there was a substantial reduction in total accidents as well as fatalities and injuries in 1980.

## Fatal Accident Statistics

A comparison of some characteristics of fatal accidents with all accidents is given in Table 16. Several differences are shown. Considering type of accident, the highest percentage of fatal accidents involved a single-vehicle collision with a fixed object. For all accidents, the highest percentage was for multi-vehicle accidents at intersections. Fatal accidents involved higher percentages of

head-on or opposite-direction collisions and pedestrian accidents, but lower percentages of rear-end, same-direction sideswipes, or angle collisions. A higher percentage of fatal accidents occurred at night and a lower percentage occurred during snow or ice conditions.

A comparison of contributing factors in fatal accidents with those for all accidents showed a few areas which were overrepresented in fatal accidents (Table 13). The most obvious differences occurred for categories of unsafe speed and alcohol involvement, which were much more prevalent in fatal accidents. Speeding was the leading contributing factor in fatal accidents, followed by alcohol involvement. There were other, less obvious, overrepresentations in fatal accidents. Other human factors in which the percentage was substantially higher for fatal accidents included; falling asleep, improper passing, and disregarding traffic controls. Considering vehicular factors, tire failure was overrepresented in fatal accidents, and defective shoulder was overrepresented in the roadway factors category.

Average and critical fatal accident rates, by county population category, were listed in Table 2. Counties with rates above critical are given in Table 17. Only four counties were listed. The highest rate was in Monroe County. The highest rates were generally located in the mountainous sections of Eastern Kentucky. More heavily populated urban counties had lower fatal accident rates. Warren and Pike Counties had the highest fatal rates for counties with populations of 50,000 or more.

No cities were found to have fatal accident rates above critical. A list of cities with the highest fatal accident rates in their population categories is given in Table 18. Cities having the highest fatal rates in the various population categories were; Lexington, Bowling Green, Henderson, Murray, Harrodsburg, Russell, and Muldraugh.

A comparison of overall fatal accident statistics in Kentucky with nationwide statistics is given in Table 19. The fatal accident rate in Kentucky

was slightly higher than the national rate. The percentage of fatal accidents in which alcohol was involved and the percentage of fatal accidents during non-daylight hours were slightly less in Kentucky when compared to the nation.

#### Driver Records

Driver violation records, obtained from the driver license file maintained by the Division of Driver Licensing, were used in this analysis. For this study, a violation was defined as a citation which resulted in a conviction. A summary of driver records by county for a four year period (1978-1981) is given in Table 20. Numbers of alcohol, speeding, and total violations formed the basis for most of the subsequent analysis. Also listed in this table are numbers of reckless driving and stop violations and total number of points accumulated.

Numbers listed in Table 20 were used to calculate violation rates by county as shown in Table 21. Rates, per 1,000 licensed drivers, were calculated for total points, alcohol violations, speed violations, and total violations. Those rates were determined using the four-year (1978-1981) data. Another type of rate, given in terms of number of violations per accident, was calculated using accident and violation data for a three-year period (1978-1980). That rate analysis was performed using total violations, alcohol violations, and speed violations. The purpose was to relate enforcement and accidents. Counties having the lowest "violations per accident" rates provide potential locations for increased enforcement.

The trend in the number of total, alcohol, and speeding violations issued by county is given in Table 22. The average number of violations issued in 1978 through 1980 was compared to the number issued in 1981. Analysis of total violations indicated 105 counties had a decrease in violations in 1981 and 15 counties had an increase. There was a 14 percent decrease in violations statewide in 1981.

A summary of statewide trends in

driving record statistics is given in Table 23. Statistics for a four-year period (1977-1980) were compared to 1981 driver record statistics. It was shown, in each instance, that the number of violations issued in 1981 was lower than the average of the previous four years. There was a decline in violations issued for 1979 through 1981. The reduction in speeding violations was high. When total violations per accident was considered, there was only a small difference between 1981 and the four-year average. This resulted from the combination of a decreased number of both accidents and violations in 1981. However, the 1981 rate of violations per accident was considerably less than that for 1979 and 1980.

Counties having highest and lowest violation rates are given in Tables 24 and 25, respectively. The summary is given by population category. Violation rates per 1,000 licensed drivers and number of accidents as exposure measures were used.

Violation rates were also calculated by county population group (Table 26). Rates for total points, speed violations, and total violations, per 1,000 licensed drivers, increased as county population increased, as did speed violations per speed-related accident. However, the alcohol violation rate (alcohol violations per alcohol-related accident) decreased as county population increased, as did the rate for total violations per accident. Percentages of accidents involving speeding and alcohol also decreased as county population increased. This table enabled rates for a given county to be compared to average rates for that county's population category. That analysis provides more reliable results than comparing individual county rates to the statewide average.

A listing of counties having total accident rates above critical (as given in Table 3) and total violation rates below averages for their population categories (as given in Table 26) is shown in Table 27. Both total violations per 1,000 drivers and violations per accident had to be below average for a county to be listed. More intense enforcement may be

warranted in those counties. Mason and Marion Counties had particularly high accident rates and low violation rates. Differences in violations issued in the counties identified in Table 27 in 1981 versus the average for 1978 through 1980 (as shown in Table 21) were compared to the statewide decline of 14 percent. In general, numbers of violations in those counties did not decline as much as the statewide average. Only Harrison, Boyle, and Montgomery Counties showed declines substantially greater than the statewide average.

A comparison between counties identified in Tables 27 and 25 reveals a few counties where existing enforcement is very low and overall accident rates are high. Mason, Marion, Perry, Boyd, and Kenton Counties were listed in both tables.

#### Speed-Related Accidents

For the period of 1978 through 1980, the percentage of accidents with unsafe speed given as a contributing factor was 8.8 percent. Unsafe speed was listed as the fourth most common contributing factor following driver inattention, failure to yield right-of-way, and slippery surface. Unsafe speed was the number one contributing factor in fatal accidents (listed in 37.2 percent of all fatal accidents). The accident trend analysis in Table 15 indicates total number of speed-related accidents has been declining in the past few years; however, the percentage of total speed-related accidents has remained nearly constant from 1978 through 1980. The number and percentage of speed-related fatal accidents have remained somewhat constant for the past several years. The number of speeding violations issued was shown to have dropped substantially in 1981 (Table 22).

A summary of the percentage of accidents involving speeding was prepared by county (Table 12) and by city (Table 6). These tables were used to identify counties and cities having large percentages of accidents involving speeding (Table 28). These analyses were

prepared by population category since the percentage of accidents involving speeding was found to decrease as population increased. Counties which also had speed violation rates (speed violations per 1,000 licensed drivers and speed violations per speed-related accident) below the average for their population categories and cities in those counties are noted in Table 28. Counties having large percentages of accidents involving speeding and violation rates below average are candidates for increased enforcement.

Counties having the low speed violation rates, by population category, were listed in Table 25. Counties listed in both Table 28 and Table 25 are prime candidates for increased enforcement. Counties appearing in both tables include: Menifee, Knott, Breathitt, Letcher, Pike, and Jefferson. Knott County had the lowest speed violation rate in the state. However, Knott County was the only one of those counties in which the number of speed violations issued increased in 1981 when compared to the average of the previous three years. None of the counties listed in Table 24 appeared in Table 28.

#### Alcohol-Related Accidents

The accident trend analysis presented in Table 15 shows the number of alcohol-related accidents increased by 13 percent in 1980 compared to the previous three-year average. That increase in alcohol-related accidents occurred even though total accidents decreased by 14 percent. This resulted in a large increase in the percentage of all accidents involving alcohol in 1980 (8.4 percent) compared to the previous three years (6.4 percent). The number and percentage of alcohol-related fatal accidents also increased in 1980, while the total number of fatal accidents decreased. This analysis indicates the problem of drinking and driving is becoming worse and remedial steps should be undertaken. The number of alcohol violations issued in 1981 was less than the 1977-1980 average (Table 22). Alcohol was second to unsafe speed as a contributing factor in fatal accidents and

was the fifth most common contributing factor in all accidents.

The percentage of accidents involving alcohol was given by county in Table 12 and by city (having populations of 1,000 or more) in Table 6. Average violation rates, by population category, were given in Table 26. Counties and cities having the highest percentages of accidents involving alcohol in their population categories are shown in Table 29. Any of those counties having alcohol violation rates below the averages for their population categories, as well as the cities which are in such counties, were identified. Both alcohol violations per 1,000 licensed drivers and alcohol violations per alcohol-related accidents had to be below average for a county or city to be so noted.

~~Counties having high percentages of alcohol-related accidents and low violation rates would be logical choices for increased enforcement. Counties having the lowest violation rates, by population category, were given in Table 25 and may be used in identifying potential locations. Meade County is an example of a county which had a high percentage of alcohol-related accidents as well as a very low violation rate in terms of alcohol violations per alcohol-related accident.~~

Using the information from these tables, a few locations may be identified as logical choices for alcohol enforcement and education programs. Fayette County and Lexington had high percentages of alcohol-related accidents and Fayette County had one of the lowest rates of alcohol violations per alcohol-related accidents in the state. The area around Kenton County in northern Kentucky had several cities identified as having high percentages of accidents involving alcohol. Those cities included Covington, Erlanger, Fort Thomas, Independence, and Dayton (Table 29). The violation rate was already high in this area. McCracken County and Paducah had high percentages of accidents involving alcohol and below average alcohol violation rates. Meade County was listed as such a county, as were the cities of Muldraugh in that

county and Radcliff and Vine Grove in adjoining Hardin County.

There are 25 counties in Kentucky where alcohol is sold and another 10 counties in which at least one city sells alcohol. A comparison of alcohol-related accidents and alcohol violations for wet (alcohol sold) and dry (alcohol not sold) counties was performed (Table 30). Comparisons were made by population category. There were wet and dry counties in each category except in the "over 100,000" population category, where all three counties were wet. The percentage of wet counties increased as county population increased. The percentage of all accidents involving alcohol was higher in the wet counties. However, alcohol violation rates, in terms of alcohol violations per alcohol-related accidents, were lower in wet counties, indicating increased alcohol-related enforcement may be warranted in the wet counties. The number of total violations per accident was generally lower in wet counties although the number of total violations per 1,000 drivers was higher in wet counties.

The conclusion that additional enforcement is generally needed in wet counties is supported by the locations listed in Table 29. Six of the eight counties and 12 of the 16 cities identified as having high percentages of alcohol accidents for their population categories allow the sale of alcohol.

#### Drug-Related Accidents

While drugs were listed as a contributing factor in only 0.3 percent (Table 13) of all accidents, the number of accidents involving drugs has increased dramatically (Table 15). There were 584 accidents in 1980 in which drugs were listed as a contributing factor compared to an average of 386 accidents per year for the 1977-1979 period. That represents a 51 percent increase. The percentage of total accidents involving drugs was 0.5 percent in 1980 compared to 0.3 percent in 1978 and 1979 and 0.2 percent in 1977. Twelve fatal accidents during the three-year period (1978-1980) were identified as

being drug-related. The highest percentage of fatal accidents in which drugs were involved occurred in 1980 (0.7 percent resulting from five accidents).

A listing of the percentage of accidents involving drugs in each county is given in Table 12. The percentage was not high in any county. The highest percentage was 1.3 percent in Spencer County, but this resulted from only five accidents. The largest number of drug-related accidents for the period was in Jefferson County, followed by Kenton and Fayette Counties. However, the highest number of drug-related accidents in 1980 was in Kenton County. Also, Kenton County had the largest increase in number of those accidents; from 42 in 1979 to 77 in 1980. The city having the largest number of drug-related accidents in 1980, as well as the greatest increase in the number of accidents involving drugs, was Lexington.

#### Seatbelt Usage

Seatbelts have been shown to be an effective -- possibly the most effective -- means of reducing accident severity. A summary of severity of accidents illustrates this point (Table 31). That table, which is based on 1979 and 1980 accident data, shows that for a driver involved in a traffic accident, the chance of being killed was reduced by a factor of three to four through use of a seatbelt; and the chance of being severely injured was reduced by a factor of almost two.

Comparison of accident severities of drivers using or not using seatbelts over the past few years shows that reduction in severity associated with seatbelt usage has decreased slightly. The percentage of unrestrained drivers sustaining a given injury divided by the percentage of restrained drivers sustaining the same injury is given in Table 32 for 1977-1978 and 1979-1980. The effectiveness of seatbelts in reducing the most severe injuries (fatal and incapacitating injuries) was slightly less in 1979-1980 than for 1977-1978.

The percentages of drivers involved in accidents who were using safety equipment, by county, are given in Table

12 for 1978 through 1980. There was a wide range in usage, from a low of 0.7 percent in Montgomery and Wayne Counties to a high of 9.9 percent in Fayette County. The counties having the lowest usage rates are listed in Table 33. The analysis was done by population category since seatbelt usage is greater in the more populated counties.

The trend in seatbelt usage over the past few years is given in Table 34. It was found that, according to accident records, seatbelt usage has actually declined slightly each year from 1976 through 1980. The decrease has been primarily due to a decline in seatbelt usage in the counties having largest populations. For example, seatbelt usage in Fayette County dropped from 14.4 percent in 1977 to 8.3 percent in 1980. A comparison of seatbelt usage in 1980 compared to 1977 through 1979 revealed usage had increased in 58 counties, decreased in 61 counties, and remained constant in one county. Decline in seatbelt usage in recent years has been noted elsewhere (5).

#### Child Restraints

A summary of usage and effectiveness of child restraints for children under the age of four who were involved in traffic accidents is given in Table 35. Data are for 1978 through 1980. Age categories given in the RAPID accident file determined the age category which was used. Most children of that age would be placed in a child restraint rather than a seatbelt or harness. However, many were coded as wearing a seatbelt, so the following categories of restraint used were: 1) none, 2) seatbelt or harness, 3) child restraint, and 4) any restraint.

Of the 39 fatalities during the study period, only three involved use of a restraint. Also, of 280 incapacitating injuries, only 11 involved use of a restraint. However, since the reported usage of restraints in accidents is low, a better measure of effectiveness would be the percentage sustaining a specific injury. This analysis revealed the percentage of fatalities was the same for

restrained and unrestrained children. A detailed analysis of all accidents involving fatal or severe injuries to children using seatbelts or child restraints should be conducted.

The larger sample size of severe (incapacitating) injuries should provide more reliable results. It was determined that the percentage of restrained children receiving a severe injury was one-half that for unrestrained children. The percentage of restrained children receiving a non-incapacitating injury was also substantially lower than that for unrestrained children. The comparison of injuries did not show an advantage of child restraints over a seatbelt or harness. However, the percent ejected was lowest for the child restraint.

An analysis of injury by seat position indicated rear-seat restraints to be more effective. Of all fatalities involving restrained children, the children were sitting in the middle-front-seat position.

An analysis of the percentage of children in restraints revealed the percentage was highest for rear-seat locations. A comparison of percent usage by year indicated usage has been increasing. This is in contrast to a decline in total seatbelt usage in recent years.

A very limited observational survey of child restraint usage was conducted in Lexington. Of 200 children under the age of four, 41 percent were determined to be in child restraints. Usage was 69 percent for children under the age of one and 37 percent for children between one and four. This is a much higher percentage than indicated by the accident data. While usage in Lexington would be expected to be above the statewide average, usage in this small survey was surprising. The percentage was much higher than that determined in other surveys (6). An attempt was made to identify each type of child restraint and determine whether it was used correctly. Of those for which some judgment could be made, about 42 percent were ascertained as having been used improperly. Improper usage was computed to be 35 percent for children

under age one and 44 percent for children between one and four. Common mistakes included failure to tether the restraint when in the toddler position, not using a safety shield when provided, and failure to properly harness the child. If usage rates were adjusted to consider only children who were properly restrained in a child restraint, the overall usage rate would drop to 24 percent. That percentage would be 45 percent for children under the age of one and 21 percent for children between one and four. Results of that nominal survey indicate need for a comprehensive study of child restraint usage. Passage of a mandatory child restraint usage law by the 1982 legislature provides additional justification for such a study.

#### 55-mph Speed Limit

The relationship between speeds and accident rates was investigated in an earlier study (7). Accident rates were found to increase as speeds increased. The relationship was more pronounced for wet-surface accidents. It was concluded that continuation of the 55-mph speed limit on all rural highways was advisable.

The percentage of vehicles exceeding the 55-mph speed limit has been monitored and reported by the Kentucky Department of Transportation on a quarterly basis since 1978. A summary of 1981 data is given in Table 36. That summary shows 24,397 vehicles were monitored at 54 locations. The percentage of vehicles exceeding 55 mph on all roads was 25.3 percent. The average speed was highest on sections of rural interstate and lowest on urban arterials. Only 13 percent of the vehicles were exceeding the 55-mph limit on urban arterials compared to 68 percent on sections of rural interstate.

Another summary was prepared to show overall compliance with the 55-mph speed limit from 1979 through 1981 (Table 37). When considering statewide totals, the percentage of vehicles exceeding 55 mph was significantly less in 1981 compared to the two previous years. That same trend was also observed for rural interstates; however, an increase in percent drivers

disregarding the speed limit was noted for sections of urban interstate. It should be noted that some significant changes occurred in the data collection requirements which may have affected the reported speed data. The primary difference was a switch from monitoring the speed of the first vehicle in a queue to monitoring all vehicles in the traffic stream. This would probably result in lower average speeds being reported.

#### Pedestrian Accidents

Counties and cities that had high rates for motor-vehicle accidents involving pedestrians are listed, by population group, in Table 38. Rates in that table were taken from Tables 6 and 11. Kenton County had the highest rate statewide, while Kenton, Campbell, Henderson, Anderson, and Trigg Counties had the highest rates in their respective population categories. Among cities, Newport and Covington had the highest rates statewide and in respective population categories. Louisville, Florence, Bellevue, London, and Salyersville had the highest rates for remaining population categories.

A definite concentration of pedestrian accidents is evident in northern Kentucky. The three counties which make up the northernmost portion of Kentucky (Boone, Kenton, and Campbell Counties) are listed in Table 38. In addition, those counties contain five cities listed in Table 38. Four of the remaining seven high-rate cities are located in eastern Kentucky, although no high-rate counties are in eastern Kentucky. Two contiguous counties in western Kentucky were listed (Caldwell and Trigg).

The most common human contributing factors contributing to pedestrian accidents were driver inattention, failure to yield right-of-way, unsafe speed, and alcohol (Table 13). The most common vehicular contributing factor was defective brakes, and the most common roadway factors were slippery surface and view obstruction. Overall, the most frequently listed contributing factors for

pedestrian accidents were driver inattention and failure to yield right-of-way.

As can be noted from Table 14, pedestrian accidents tended to be very severe, with seven percent resulting in fatalities and 89 percent resulting in injuries. The accident trend analysis presented in Table 15 indicates the number of pedestrian accidents declined in 1980 compared to the previous three years.

#### Bicycle Accidents

Counties and cities which had high rates for motor-vehicle accidents involving bicycles are listed, by population category, in Table 39. Rates in that table were taken from Tables 6 and 11. Kenton, Daviess, Henderson, Marion, and Ballard Counties had the highest rates in their respective population categories, while Kenton and Daviess Counties also had the highest rates in Kentucky. Cities having the highest rates for their respective categories were Louisville, Owensboro, Newport, Fort Thomas, Bellevue, Ludlow, and Cold Springs. Bellevue and Owensboro had the highest rates statewide.

Extreme northern Kentucky has a high concentration of bicycle accidents, with five high-rate cities in Kenton and Campbell Counties. In addition, there appears to be a concentration of bicycle accidents in northwestern Kentucky, where the adjacent counties of Union, Henderson, and Daviess each contain a high-rate city.

The most common human factors contributing to motor-vehicle accidents involving bicycles were driver inattention and failure to yield right-of-way (Table 13). Those were also the most common contributing factors of any type. Among vehicular factors, defective brakes were the most common problem, while obstructed view was the most frequently listed roadway contributing factor.

Bicycle accidents tended to be severe, as shown in Table 14. Over 80 percent of motor-vehicle accidents involving bicycles resulted in injuries, while 1.3 percent resulted in fatalities. The accident trend analysis presented in Table 15 shows the annual number of



icycle accidents has remained constant or the past few years.

increase).

#### Motorcycle Accidents

Information on motorcycle accidents is contained in Table 40, which lists, by population category, counties and cities which had high accident rates for motorcycles. Rates in that table were obtained from Tables 6 and 11. Boone and McCracken Counties had the highest rates statewide, as well as for their respective population categories. Other counties having highest rates in their respective population categories were Kenton, Rowan, and Gallatin Counties. Marion and Puldrough had the highest rates of all cities; Louisville, Bowling Green, Paducah, Radcliff, and Williamsburg had the highest rates in their respective population categories.

The high-rate counties are primarily concentrated in northern and western Kentucky. Gallatin, Boone, and Kenton counties are in northern Kentucky, and McCracken, Caldwell, Trigg, and Calloway counties are in western Kentucky. The high-rate cities are distributed more evenly throughout the state, although concentrations are apparent in northern Kentucky, as well as the Meade, Hardin, Jefferson County area.

Additional information on motorcycle accidents may be obtained from Table 13, which lists contributing factors, and Table 14, which contains severity data. The most frequently listed factors contributing to motorcycle accidents were failure to yield right-of-way, driver inattention, and unsafe speed, all of which are human factors. Alcohol was the next most common human factor. The principal vehicular factor was defective brakes, and the major roadway factors were obstruction of view and slippery surface. Motorcycle accidents tended to be severe, with three percent resulting in fatalities and 73 percent resulting in injuries. The number of motorcycle accidents increased slightly in 1980 (Table 15). There were 1,873 motorcycle accidents reported in 1980 compared to an average of 1,842 for 1977 through 1979 (a 1.7 percent

#### School Bus Accidents

Counties having high rates, for their respective population categories, of accidents involving school buses are listed in Table 41. Rates listed there were obtained from Table 11. Table 41 is divided into two parts. The first part is for accident rates per 10,000 population, and the second part presents accidents per 100 MVM travelled by school buses in the county. Using miles travelled as the measure of exposure should provide more reliable results. Estimates of vehicle miles driven were determined from official daily mileage figures tabulated by the Kentucky Department of Education. Those daily mileages were multiplied by the number of school days (175) to obtain annual mileages. That total would not include miles travelled by school buses for activities other than transporting pupils to and from schools. An example would be travelling to and from athletic events.

Looking first at accidents per 10,000 population, Gallatin County had the highest rate in the state, as well as in the under-10,000 population category. Marion and Union counties tied for the highest rate in the next category, while Clark, Boyd, and Fayette Counties had the highest rates in their respective population categories. Three contiguous counties (Clark, Jessamine, and Fayette) in central Kentucky are listed in that part of the table. The remaining six counties are dispersed throughout the state.

The second part of the table, which lists rates in terms of accidents per 100 MVM, shows average rates for population categories increase dramatically as population increases. Boyd County had, by far, the highest rate. Fayette, Franklin, Anderson, and Gallatin Counties had the highest rates in the other population categories. Counties listed in that part of the table are fairly well dispersed throughout the state, with a slight concentration in central Kentucky.

Counties appearing in both parts of Table 41 are Gallatin, Lee, Union, Boyd, and Fayette Counties. Anderson, Mason, Caldwell, Franklin, and Greenup Counties did not appear in the first part of the table, but were shown to have high rates when vehicle-miles were considered.

The total, statewide accident rate for school buses was calculated to be 1,035 accidents per 100 MVM. That is approximately twice the total, statewide accident rate for all vehicles (4), indicating an accident problem exists for school buses.

Additional information concerning school bus accidents may be found in Tables 13, 14, and 15. Table 13 contains information on contributing factors. Two columns in that table relate to school bus accidents. The first column summarizes contributing factors coded for any driver or vehicle in a school bus accident. The succeeding column includes only those factors coded specifically for the school bus or its driver. When either of those columns is used, the leading human contributing factors, and the leading factors overall, were driver inattention and failure to yield right-of-way. The leading vehicular factors were defective brakes and tire failure, and the leading roadway factors were slippery surface and view obstruction.

By comparing, for a given contributing factor, the percentages in those two columns, it is possible to generally determine whether that factor is coded more frequently for the school bus and its driver or for the other vehicle and its driver (if any). If a given factor is usually coded only for the other vehicle and its driver, the percentage in the first of those columns (all drivers and vehicles) will be much greater (more than twice as great) than the percentage in the second column (bus and bus driver only). If the factor is usually coded only for the bus or its driver or if it is usually coded for both vehicles, then the two percentages will be more nearly equal. It should be noted the second of those columns uses only 1980 accidents, so the two percentages are not precisely comparable. However, general observations

may be made. Such a comparison shows the contributing factors which were generally attributed to the bus driver or bus (or to both vehicles) were improper turn, driver inattention, defective shoulders, and improperly parked vehicle. Factors usually attributed to the other vehicle were unsafe speed, improper passing, disregard of traffic controls, alcohol, and oversized load.

School bus accidents tended not to be severe, as shown in Table 14. Only 15 percent of those accidents resulted in injuries, while 0.27 percent resulted in fatalities. Those figures may be misleading, however, because of the potential of many injuries or fatalities resulting from a single injury or fatal accident when a school bus is involved.

The trend information contained in Table 15 shows school bus accidents increased in number from 1977 to 1978, and again in 1979. However, the 1980 total was lower than either 1978 or 1979 and was just slightly lower than the three-year average for 1977 to 1979.

#### Emergency Vehicle Accidents

The accident trend analysis shown in Table 15 indicates a very large increase (28.6 percent) in accidents involving emergency vehicles for 1980 as compared to the average of the past three years. There has been a steady increase in that type of accident for the past several years.

Counties having high accident rates (accidents per 10,000 population) of emergency vehicle accidents for their population categories are listed in Table 42. Kenton, Madison, Franklin, Grant, and Ballard Counties had the highest rates in their respective population categories. Kenton County had a rate substantially above the other two counties.

The severity of that type of accident was similar to that of all accidents (Table 14). The percentage of fatal accidents was below that for all accidents.

Contributing factors listed for accidents involving emergency vehicles were summarized in Table 13. Also, the

contributing factors for the emergency vehicle driver or the vehicle itself are listed. The major contributing factors for the emergency vehicle driver were driver inattention followed by unsafe speed. A comparison of those columns shows factors which were assigned more often to the other driver than to the driver of the emergency vehicle. Those factors included failure to yield right-of-way, improper passing, disregard of traffic controls, and alcohol. The driver of the other vehicle was listed more frequently as contributing to the accident. Defective brakes was listed as the most common vehicular contributing factor. A defective tow hitch was given as the second most common vehicular factor but was only listed in four accidents. The most common environmental factor was a slippery surface followed by an obstructed or limited view.

An analysis by type of accident (directional analysis) revealed emergency vehicle accidents were generally similar to total accidents. Thirty-one percent of emergency vehicle accidents occurred at intersections, compared to 29 percent of all accidents. In both instances, 59 percent occurred on roadway sections or mid-blocks. Also, the most common accident type in both instances was collision with a fixed object on a roadway section or mid-block (11 percent).

#### 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 given in Table 43. The last report compared a 20-month "before" period and a 19-month "after" period and indicated the percentage of accidents involving vehicle defects had increased from 5.86 percent in the "before" period to 7.09 percent in the "after" period (3). Accident data for 1980 show that percentage to be slightly higher (7.37 percent). That percentage is almost identical to that for calendar year 1979 (7.41 percent).

Based on 1979 and 1980 data, the

percentage of accidents involving vehicle defects after repeal of the vehicle inspection law is approximately 7.4 percent. That compares to approximately 5.9 percent before repeal of the law. Applying both of those percentages to total accidents in 1980 indicates repeal of the vehicle inspection law may have potentially contributed to nearly 2,000 additional accidents. It should be determined whether defects which contributed to the accidents would have been detected by the vehicle inspection program.

#### Police Response Times

Times at which police were notified, police arrived at the accident scene, and the scene was cleared are noted on the accident report. "Notification-to-arrival" time was used to measure efficiency of response of police to a reported traffic accident. Response times for arrival of emergency medical services are not entered on the accident report and, therefore, are not available from the RAPID file. The percentage of accidents in which police response time was over 10 minutes was given by county in Table 12. Considering the entire state, response time was over 10 minutes in 24 percent of all accidents. That percentage varied from 7 percent in Campbell County to 85 percent in Menifee County. In 25 counties, that percentage was over 50 while in 18 counties it was under 20. Response times were observed to have remained fairly constant over the study period (1978-1980). There was a slight decrease in percentage of response times over 10 minutes; from 24.9 percent in 1978 to 24.2 percent in 1980.

As expected, response times were longer in the rural counties. The overall percentage of accidents having response times over 10 minutes was 44 percent for counties having populations under 10,000, 35 percent for counties having populations of 10,000 to 19,999, 29 percent for counties having populations of 20,000 to 49,999, 17 percent for counties having populations of 50,000 to 100,000, and 20 percent for counties having populations

over 100,000. As may be noted, response time increased slightly in heavily populated, congested counties.

Counties having the shortest and longest police response times are listed in Table 44 by population category. Most of the counties with longest response times were in the southeastern region of the state. Counties having the longest response times in various population categories were: Menifee, Leslie, Letcher, Pike, and Fayette. Pike County had a particularly high percentage of response times over 10 minutes compared to other counties in its population group. Part of that long response time is probably related to the large size and relatively low population density of Pike County.

highways) where increased enforcement should be implemented must be identified. Impacts of alcohol programs for specific locations should then be evaluated.

The 1982 Kentucky Legislature attempted to pass a law increasing the penalty for alcohol violations. Publicity generated by the legislative debate concerning traffic accidents involving alcohol violations was significant. It appears to be an appropriate time to consider additional programs to help solve some of the problems associated with impaired driving ability and resultant accidents due to the influence of alcohol. Effective alcohol education programs have a potential for lessening the alcohol-related accident problem. Current public education programs and the education program for drivers convicted of driving while intoxicated should be expanded.

## RECOMMENDATIONS

### Alcohol-Related Accidents

Alcohol is second to unsafe speed as a contributing factor in fatal accidents and is the fifth most common contributing factor to all accidents. An accident trend analysis revealed the number of alcohol-related accidents has increased in recent years. In 1980, the total number of accidents decreased while the number of alcohol-related accidents increased. The analysis showed the problem of drinking and driving has worsened, indicating a need for alcohol education and enforcement programs. However, the number of alcohol violations issued was observed to have decreased in 1981, compared to the 1977-1980 average.

Locations where increased enforcement could be beneficial are listed in Table 29. Recommended locations for alcohol programs include; Fayette County (Lexington), northern Kentucky (Kenton and Campbell Counties), McCracken County (Paducah), and Meade County (the area around Fort Knox). Violation rates are already high in northern Kentucky. Several cities in that area still reported high percentages of alcohol-related accidents. For locations selected, times and locations (specific streets and

### Child Restraints

Even though use of child restraints has increased over the past few years, it still remains low. Passage of a law requiring children under a certain age or weight or height to use a child restraint is the most effective means known of increasing usage. A law requiring children less than 40 inches tall to wear a restraint was enacted in the 1982 Kentucky Legislature. Surveys of restraint usage should be conducted before and after that law becomes effective in order to evaluate effectiveness in increasing usage. A very limited observational survey conducted in Lexington points to the need for a comprehensive statewide survey before and after the effective date for the law. Anticipated increase in usage of child restraints magnifies the importance of insuring that approved restraints are being used correctly. Along with publicity concerning enactment of the law, public information concerning use and benefits of child restraints should be continued and increased.

Increasing child restraint usage is only one factor for obtaining maximum protection. To obtain full benefit of child restraints, safe restraints must be

used in a proper manner. Observational surveys have been noted to be an important element in an effort to increase use of infant and child restraint devices (8). It is recommended that such surveys be conducted to determine how many children are not protected by any restraint, how many are riding in unsafe restraints, and how many are in restraints which are not properly utilized. Information is available which identifies approved restraints, proper methods of installation, and common mistakes parents make with child restraints (9, 10).

In addition to observational surveys, detailed accident analyses are recommended for accidents involving deaths or severe injuries to children in child restraints. The objective would be to determine what factors led to deaths or severe injuries.

#### Seatbelt Usage

Seatbelt usage has been shown, using Kentucky accident data, to be an effective means of reducing accident severity. However, effectiveness of seatbelts in reducing severe injuries appears to have decreased slightly. A more detailed analysis of accidents involving occupants who were wearing restraints and were severely injured or killed should be performed. Factors which contributed to severity of those injuries should be examined.

Seatbelt usage rates have remained low and, according to accident records, have declined in recent years. Decline in seatbelt usage was particularly pronounced in more populous counties. This disturbing finding should be correlated with field observations. A survey of seatbelt usage was performed in Kentucky in 1976 using field observations. Results of a new survey could be compared to data from that study. Such an observational survey could be performed concurrently with a child restraint usage survey.

Low usage rates certainly warrant efforts to increase seatbelt usage. Safety belt programs such as those described by the National Highway Traffic Safety Administration (NHTSA) should be implemented, with the objectives of

increasing awareness of risk of traffic accidents, increasing understanding of benefits of seatbelt usage, and providing assistance to organizations willing to promote seatbelt usage. Emphasis could first be placed in a few trial counties. A candidate county from each population category is listed in Table 33. Those counties were selected by use of a combination of low seatbelt usage and high accident rates. Fayette County has experienced a substantial decline in seatbelt usage in recent years and also should be considered.

A mandatory seatbelt usage law would provide the greatest potential for increasing seatbelt usage but would be difficult to enact. However, a law only requiring drivers of certain types of vehicles, such as school buses and emergency vehicles, to wear seatbelts might have a possibility of being enacted. While such a law would only affect a limited number of drivers, it would serve to publicize the need for wearing seatbelts, and it could have an effect on overall usage rates. A survey of public opinion on various types of seatbelt legislation would provide valuable input to the Legislature.

#### Speed-Related Accidents

Unsafe speed has continued to be the primary contributing factor in fatal accidents and the fourth most frequent contributing factor in all accidents. Increased enforcement is warranted in counties and cities having high percentages of speed-related accidents but low speed violation rates. A list of such locations is given in Table 28. Menifee, Knott, Letcher, Pike, and Jefferson Counties were found to be prime candidates for increased speed enforcement. For the counties and cities selected for increased enforcement, specific streets, highways, and times where increased enforcement should be implemented should be identified. It is extremely important to select sections of streets and highways where increased enforcement would have significant potential for reducing speed-related accidents. Speed enforcement

programs should be an alternative countermeasure for consideration at high-accident locations where speed is determined to be a frequent contributing factor.

The impact of a speed enforcement program should be evaluated in detail. Speed data in increased enforcement areas could be obtained before, during, and after enforcement and compared to speed data collected on control streets. Speed data should be obtained by use of a speed classifier or by some other means which would avoid motorist detection. "Before" and "after" accident statistics in enforcement and control areas could also be compared.

#### Accident Records

An effective accident records system should provide necessary data to identify specific high-accident locations as well as general problem areas. The RAPID computer software package was used in this study and provided sufficient data. However, one area in need of improvement was a comprehensive accident locator system. The RAPID system allows for location of counties and cities having specific problems. It would be beneficial in many cases to identify streets or highways where problems exist. For example, in a city identified as having a high percentage of speed-related accidents, police should know specific locations in order to efficiently implement an enforcement program.

The only currently available accident locator system is the mileposts entered on accident reports for accidents occurring on state-maintained roads which have documented milepost systems. However, a study which calculated accident rates in Kentucky for 1980 revealed that almost one-half of all accidents did not have the necessary location information for inclusion in the analysis (4). A method of locating all accidents should be developed. That would provide potential for inclusion of all accidents in the accident rate calculation. Implementation of a location system, such as a link-node

system, would provide valuable input into the high-accident location program. In a recent study, an accident locator system was investigated in Jefferson and Shelby Counties and was determined to be very costly. It may be possible to develop a more cost-effective means of locating accidents having accuracy required to perform effective problem identification and implement high-accident location programs.

Another necessary element in those programs is a measure of exposure, preferably vehicle-miles travelled. Traffic volumes data would be required. Currently, volume information is available only for streets and highways for which accident location information is available. Those represent between 35 and 40 percent of total statewide mileage. There is a need to determine or estimate vehicle miles driven on remaining streets and highways.

An analysis of total reported accidents for the past several years shows number of reported accidents has decreased substantially; from approximately 150,000 for 1977 through 1979 to approximately 125,000 for 1980 and 1981. The reason for that reduction is unknown and should be investigated.

#### School Bus Accidents

The accident rate associated with school buses is approximately twice the statewide rate for all vehicles. That indicates school buses are involved in a disproportionate number of accidents. School-bus driver training programs would be a countermeasure which might alleviate the problem. Another method of reducing the number of accidents involving school buses is to decrease exposure through more efficient routing and scheduling. Optimization techniques have been developed for use in bus routing and scheduling. In some cases, a 10 percent reduction in miles travelled has been realized through more efficient routing and scheduling. Reduced travel should lead to reduced accident rates and transportation costs.

## Emergency Medical Services

"Notification-to-arrival" time was available from the RAPID file and was used to measure efficiency of response of police to reported traffic accidents. However, response times for arrival of emergency medical services were not available from the RAPID file. An analysis of response times and related injury severity would provide valuable input for use in determining where additional manpower and training would be needed. That type analysis could also be used to evaluate impact of training programs.

## Drug-Related Accidents

There has been a continual increase in number of drug-related accidents in recent years, with a substantial increase occurring in 1980. While total number of accidents of that type remains low, the dramatic increase indicates a need for more detailed investigation. Accidents in which drugs were listed as a contributing factor should be studied in detail in order to determine what kinds of drugs are involved and if there are any possible countermeasures. Possible target areas would be Kenton County or Lexington; the county and city having the largest increases in number of drug-related accidents.

## Vehicle Defects

The percentage of accidents involving vehicle defects has increased since repeal of the vehicle inspection law. It may be concluded that repeal of that law resulted in additional accidents involving vehicle defects. However, before that conclusion can be reached, a detailed study of defects involved should be conducted. There is a need for such a study to determine whether the defects which have contributed to accidents since repeal of the vehicle inspection law were of the type which might have been detected under the previous inspection program. That

study could also reveal types of inspection necessary to detect defects contributing to accidents.

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TABLE 2. AVERAGE AND CRITICAL ACCIDENT RATES BY COUNTY POPULATION CATEGORY (1978 - 1980 DATA).

POPULATION CATEGORY	NUMBER OF COUNTIES IN CATEGORY*	TOTAL POPULATION	TOTAL MILEAGE DRIVEN (100 MVM)
UNDER 10,000	26	191,993	42.9658
10,000 - 19,999	46	659,943	144.3054
20,000 - 49,999	36	1,127,559	250.4522
50,000 - 100,000	9	648,187	129.8357
OVER 100,000	3	996,016	192.2661

POPULATION CATEGORY	TOTAL ACCIDENTS	ACCIDENTS PER 100 MVM	ANNUAL ACCIDENTS PER 1,000 POPULATION	CRITICAL ACCIDENT RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	13,223	308	23.0	343	4
10,000 - 19,999	52,105	361	26.3	389	15
20,000 - 49,999	112,131	448	33.1	469	13
50,000 - 100,000	84,457	650	43.4	667	4
OVER 100,000	165,758	862	55.5	871	1

POPULATION CATEGORY	TOTAL FATAL ACCIDENTS	FATAL ACCIDENTS PER 100 MVM	ANNUAL FATAL ACCIDENTS PER 10,000 POPULATION	CRITICAL FATAL ACCIDENT RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	169	3.93	2.93	8.21	0
10,000 - 19,999	565	3.92	2.85	6.96	3
20,000 - 49,999	848	3.39	2.51	5.26	1
50,000 - 100,000	321	2.47	1.65	3.57	0
OVER 100,000	437	2.27	1.46	2.76	0

POPULATION CATEGORY	TOTAL NUMBER OF FATAL AND INJURY ACCIDENTS	FATAL AND INJURY ACCIDENTS PER 100 MVM	ANNUAL FATAL AND INJURY ACCIDENTS PER 1,000 POPULATION	CRITICAL FATAL AND INJURY ACCIDENT RATE (ACC/100 MVM)	NUMBER OF COUNTIES AT OR ABOVE CRITICAL RATE
UNDER 10,000	3,773	87.8	6.55	106.9	2
10,000 - 19,999	13,153	91.1	6.64	105.1	11
20,000 - 49,999	26,574	106.1	7.86	116.2	13
50,000 - 100,000	21,487	165.5	11.05	174.3	1
OVER 100,000	29,437	153.1	9.85	157.1	2

\*FOR A LIST OF COUNTIES IN EACH POPULATION CATEGORY, SEE APPENDIX.

TABLE 3. COUNTIES WITH TOTAL ACCIDENT RATES ABOVE CRITICAL (1978 - 1980 ACCIDENTS).

POPULATION CATEGORY	COUNTIES WITH ACCIDENT RATES ABOVE CRITICAL	NUMBER OF ACCIDENTS	ACCIDENT RATE (ACCIDENTS PER 100 MVM)
UNDER 10,000	CARROLL	1,505	522
	FULTON	859	407
	TRIGG	1,070	362
	ELLIOTT	385	361
10,000-19,999	MASON	3,135	846
	MARION	1,926	771
	ROWAN	2,399	646
	HARRISON	1,484	582
	BOURBON	2,238	575
	UNION	1,818	505
	MERCER	1,928	481
	WAYNE	1,236	480
	LEWIS	954	442
	ESTILL	908	436
	PENDLETON	768	436
	ANDERSON	1,227	435
	GARRARD	949	418
	MORGAN	901	395
WOODFORD	2,031	389	
20,000-49,999	FRANKLIN	5,911	791
	HENDERSON	7,017	715
	CLARK	3,916	675
	BOYLE	3,134	647
	BOONE	8,393	626
	PERRY	3,474	591
	TAYLOR	1,965	585
	JESSAMINE	2,472	564
	CALLOWAY	2,966	541
	MONTGOMERY	2,034	540
	HARLAN	3,174	515
	HOPKINS	5,593	475
	GREENUP	3,016	471
50,000-100,000	CAMPBELL	12,507	1,135
	DAVIESS	13,860	904
	WARREN	12,792	784
	BOYD	8,508	722
OVER 100,000	KENTON	22,959	1,012

TABLE 4. COUNTIES WITH INJURY-OR-FATAL ACCIDENT RATES ABOVE CRITICAL.

POPULATION CATEGORY	COUNTY	NUMBER OF INJURY-OR-FATAL ACCIDENTS	ACCIDENT RATE
UNDER 10,000	SPENCER	152	126.3
	CARROLL	332	115.2
10,000- 19,999	BOURBON	607	155.9
	MARION	383	153.3
	ROWAN	513	138.1
	MASON	504	135.9
	UNION	459	127.6
	MAGOFFIN	290	124.8
	LEWIS	269	124.7
	GARRARD	263	115.8
	PENDLETON	201	114.0
	KNOTT	330	113.1
	MORGAN	254	111.5
20,000- 49,999	HENDERSON	1,504	153.4
	FRANKLIN	1,058	141.6
	PERRY	821	139.6
	CLARK	793	136.7
	CALLOWAY	737	134.3
	HARLAN	814	132.0
	BOONE	1,768	131.9
	MEADE	549	131.9
	OLDHAM	596	127.0
	LOGAN	619	122.5
	TAYLOR	411	122.3
	FLOYD	960	121.4
	BARREN	962	117.8
50,000- 100,000	CAMPBELL	2,122	192.6
OVER 100,000	KENTON	4,257	187.6
	FAYETTE	6,968	167.2

TABLE 5. COUNTIES WITH BOTH TOTAL AND INJURY-OR-FATAL ACCIDENT RATES ABOVE CRITICAL.

POPULATION CATEGORY	COUNTY	TOTAL ACCIDENT RATE	INJURY-OR-FATAL ACCIDENT RATE
UNDER 10,000	CARROLL	522	115.2
10,000- 19,999	MASON	846	135.9
	MARION	771	153.3
	ROWAN	646	138.1
	BOURBON	575	155.9
	UNION	505	127.6
	LEWIS	442	124.7
	PENDLETON	436	114.0
	GARRARD	418	115.8
	MORGAN	395	111.5
20,000- 49,999	FRANKLIN	791	141.6
	HENDERSON	715	153.4
	CLARK	675	136.7
	BOONE	626	131.9
	PERRY*	591	139.6
	TAYLOR	585	122.3
	CALLOWAY	541	134.3
	HARLAN	515	132.0
50,000- 100,000	CAMPBELL	1,135	192.6
OVER 100,000	KENTON	1,012	187.6

\* ALSO HAS FATAL ACCIDENT RATE ABOVE CRITICAL.

TABLE 6. ACCIDENT DATA FOR CITIES WITH POPULATIONS OVER 1,000.

CITY	POPULATION	NUMBER OF ACCIDENTS (1978-1980)	ANNUAL ACCIDENTS PER 1,000 POPULATION	NUMBER OF FATAL ACCIDENTS (1978-1980)	ANNUAL FATAL ACCIDENTS PER 10,000 POPULATION	NUMBER OF PEDESTRIAN ACCIDENTS (1978-1980)	ANNUAL PEDESTRIAN ACCIDENTS PER 10,000 POPULATION	NUMBER OF MOTOR VEHICLE ACCIDENTS (1978-1980)	ANNUAL MOTOR VEHICLE ACCIDENTS PER 10,000 POPULATION	NUMBER OF BICYCLE-RELATED ACCIDENTS (1978-1980)	ANNUAL BICYCLE-RELATED ACCIDENTS PER 10,000 POPULATION	NUMBER OF MOTORCYCLE ACCIDENTS	ANNUAL MOTORCYCLE ACCIDENTS PER 10,000 POPULATION	PERCENT OF ACCIDENTS INVOLVING SPEEDING	PERCENT OF ACCIDENTS INVOLVING ALCOHOL
LOUISVILLE	490,095	86,993	60.5	208	1.4	1375	9.4	615	4.2	1063*	7.2	5.7*	4.6*		
LEXINGTON	204,165	36,960	57.4	89	1.5	518	2.5	254	4.1	426	7.0	4.8	7.8		
ONEHSBORO	54,480	10,737	65.7	10	0.6	299	1.1	120	6.5	86	5.3	1.7	5.7		
COVINGTON	49,013	11,309	76.9	15	1.0	264	18.0	102	6.9	105	7.1	1.9	8.0		
BOWLING GREEN	40,450	10,637	87.7	22	1.8	71	5.9	47	3.9	120	9.9	3.5	7.1		
PADUCAH	29,758	6,312	70.7	10	1.1	56	6.3	32	3.6	93	10.4	3.6	7.6		
ASHLAND	27,064	5,850	72.1	7	0.9	69	8.5	23	2.8	76	8.6	2.7	3.5		
HOPKINSVILLE	27,012	4,875	59.5	13	1.6	62	7.6	30	3.7	40	5.6	4.0	5.9		
FRANKFORT	25,973	4,175	53.6	6	0.8	55	7.1	19	2.4	30	3.9	2.9	4.6		
HENDERSON	24,834	5,323	71.4	16	2.1	74	9.9	45	6.0	52	7.0	2.6	5.6		
RICHMOND	21,705	4,127	63.4	7	1.1	49	7.5	18	2.8	33	5.1	3.0	7.0		
NEWPORT	21,587	5,170	79.8	3	0.5	164	25.3	43	6.6	49	7.6	1.8	4.6		
HADSBORVILLE	16,979	2,088	56.7	6	1.2	31	6.1	18	3.5	41	6.0	2.5	4.3		
FORT THOMAS	16,012	1,832	39.0	3	0.5	14	2.9	21	4.4	14	2.9	2.2	8.0		
FLORENCE	15,586	4,646	99.3	8	1.7	43	9.2	19	4.1	55	11.8	5.0	5.1		
ELIZABETHTOWN	15,380	2,723	59.1	5	1.1	28	6.1	17	3.7	51	11.1	3.7	4.6		
WINCHESTER	15,216	2,623	57.5	2	0.4	35	7.7	12	2.6	18	3.9	2.0	5.5		
RACLIFF	14,519	1,912	43.9	7	1.6	27	6.2	10	2.3	57	11.9	6.2	7.7		
ERLANGER	14,433	3,182	73.5	2	0.5	36	8.3	17	3.9	23	5.3	4.6	7.1		
MURRAY	14,246	2,116	49.6	5	2.1	14	3.3	9	2.1	40	9.4	3.8	4.7		
GLASBORO	12,958	2,240	97.6	4	1.5	15	3.9	12	3.9	12	5.1	2.5	3.3		
DANVILLE	12,942	2,100	54.1	1	0.3	24	6.2	17	4.4	24	6.2	1.2	3.0		
MIDDLESBORO	12,251	1,294	35.2	2	0.5	15	4.1	8	2.2	6	1.6	1.9	4.5		
GEORGETOWN	10,972	1,402	42.6	1	0.3	10	3.0	7	2.1	10	3.0	2.9	4.1		
HAYFIELD	10,705	2,117	65.9	2	0.6	18	5.6	8	2.5	21	6.5	1.4	2.4		
SOMERSET	10,649	2,324	72.7	3	1.6	25	7.6	6	1.9	18	5.6	4.3	2.0		
NICHOLASVILLE	10,400	1,252	41.1	2	0.6	10	2.2	2	0.6	17	5.4	4.4	5.2		
CAMPBELLVILLE	8,715	1,400	53.5	4	1.5	9	3.4	4	1.5	17	6.5	3.6	3.6		
BEREA	8,226	811	32.9	2	0.8	5	2.0	0	3.2	4	1.6	3.8	3.9		
FLATWOODS	8,354	737	29.4	1	0.4	6	2.4	2	0.8	12	4.8	3.5	1.3		
CORBIN	8,975	1,392	57.5	3	1.2	13	5.4	4	1.7	14	5.0	2.3	4.2		
INDEPENDENCE	7,998	927	37.6	6	2.5	10	4.2	8	3.3	12	5.0	19.8	8.5		
PARIS	7,935	1,051	44.2	3	1.3	3	1.2	2	0.5	10	3.6	3.6	8.5		
HAYSVILLE	7,982	2,155	90.0	2	0.8	11	4.6	7	2.9	9	4.2	1.6	4.5		
MOREHEAD	7,789	1,333	57.9	1	0.4	11	4.7	6	2.6	11	4.7	3.2	5.0		
FRANKLIN	7,738	965	39.0	2	0.9	6	2.6	2	0.9	9	3.9	2.1	3.5		
BELLEUE	7,678	1,169	50.8	0	0.0	24	10.4	19	8.7	7	3.0	1.6	4.6		
RUSSELLVILLE	7,550	1,181	52.3	2	0.9	16	7.1	4	1.8	13	5.8	4.1	4.7		
EDGEWOOD	7,239	33	71.7	0	0.0	0	4.6	10	4.6	8	3.7	5.2	5.9		
HARRISBURG	7,245	1,213	65.2	6	2.6	12	5.5	2	0.8	14	6.4	3.7	3.7		
ELSHERE	7,203	768	35.5	3	1.4	13	6.0	3	1.4	12	5.6	6.1	5.7		
FORT MITCHELL	7,297	1,023	46.6	1	0.5	10	4.6	9	4.1	13	5.6	8.6	6.7		
PRINCETON	7,073	1,107	52.2	6	2.8	17	8.0	6	2.8	12	5.7	3.4	5.4		
DAYTON	6,979	929	27.7	1	0.5	11	5.3	10	4.8	6	2.9	2.9	10.5		
LEBANON	6,898	1,050	65.6	1	0.5	12	6.1	8	4.0	7	3.5	3.4	7.8		
VERMILION	6,427	957	51.7	4	2.1	11	8.7	6	3.6	6	3.1	3.4	4.1		
BARSTOWN	6,155	1,328	71.9	2	1.1	13	7.0	8	4.3	12	6.5	2.6	6.6		
CYNTHIANA	5,881	814	46.1	1	0.6	12	6.8	4	2.3	11	4.2	3.8	5.2		
MOUNT STERLING	5,820	1,275	73.0	1	0.6	17	9.7	1	0.6	6	3.4	2.4	6.4		
MONTICELLO	5,667	877	52.7	1	0.6	3	1.8	5	2.9	2	1.2	4.2	5.0		
HILLMANSBURG	5,500	454	39.2	2	0.4	7	4.2	3	1.8	20	12.0	5.3	3.8		
HAZARD	5,429	1,435	88.1	1	1.2	9	5.1	1	0.6	14	6.6	3.6	4.8		
SHELBYVILLE	5,308	1,132	71.1	2	1.3	16	10.1	9	5.7	5	3.1	2.1	4.2		
CENTRAL CITY	5,214	920	58.8	3	1.9	11	7.0	3	1.9	7	4.5	2.5	5.0		
LAWRENCEBURG	5,167	618	40.0	3	1.9	11	7.1	4	2.6	6	3.9	2.8	4.0		
LUDLOW	4,959	556	37.4	0	0.0	14	9.4	9	6.0	4	2.7	4.9	8.5		
ALEXANDRIA	4,735	358	35.8	2	0.7	5	2.1	1	0.7	3	2.1	7.7	4.1		
PIKEVILLE	4,756	1,504	105.9	2	1.4	12	6.1	4	2.8	11	7.7	3.6	4.1		
GREENVILLE	4,631	535	42.6	2	1.4	2	1.4	5	1.4	5	3.6	3.6	3.2		
LEITCHFIELD	4,533	916	67.4	1	0.7	11	8.1	2	1.5	8	5.9	5.1	3.8		
SHEPHERDSVILLE	4,454	497	74.6	2	1.5	6	4.5	2	1.5	12	9.0	7.0	5.6		
HIGHLAND HEIGHTS	4,435	526	47.1	1	0.8	5	3.3	1	0.8	4	3.0	2.2	2.2		
PROVIDENCE	4,434	307	30.1	3	1.7	5	5.3	2	1.5	5	3.8	1.2	2.4		
TAYLOR HILL	4,509	372	27.5	1	0.7	5	11.7	1	0.8	8	5.8	10.5	5.6		
VILLA HILLS	4,402	87	6.6	0	0.0	0	0.0	0	0.0	0	0.0	11.5	9.2		
TOMKINSVILLE	4,366	447	34.1	6	4.6	3	2.3	0	0.0	8	6.1	7.8	4.5		
SCOTTSDALE	4,276	392	30.5	4	3.1	6	4.7	0	0.0	6	4.7	13.5	4.1		
FORT WRIGHT	4,481	1,055	78.5	3	2.2	7	5.2	6	4.5	15	11.2	4.3	7.9		
MOUNT WASHINGTON	3,997	232	23.2	1	1.7	6	5.0	1	0.8	3	2.5	4.0	4.0		
LONDON	4,002	1,168	92.3	3	2.5	14	11.7	13	1.7	13	10.7	1.5	3.1		
CARROLTON	3,967	589	57.9	3	2.5	4	3.4	2	1.7	8	6.7	2.2	7.3		
PRESTONSBURG	4,011	396	74.5	2	1.7	8	6.6	3	2.5	3	2.5	3.1	2.0		
RUSSELL	3,824	369	75.7	0	5.2	2	1.7	0	0.0	5	4.4	2.1	3.2		
PAINTSVILLE	3,815	1,057	92.4	1	0.9	5	4.4	0	0.0	8	7.0	2.0	3.2		
HILMORE	3,787	78	15.9	0	0.0	0	0.0	1	0.4	1	0.9	6.4	5.1		
MORGANFIELD	3,781	631	55.6	0	0.0	11	9.7	9	5.7	9	7.1	5.7	6.0		
COLUMBIA	3,710	541	48.6	1	0.0	4	3.6	0	0.0	2	1.8	4.1	5.4		
CUMBERLAND	3,712	55	4.9	2	1.8	1	0.9	0	0.0	2	1.0	14.5	9.1		
BENTON	3,700	563	50.3	0	0.0	3	2.7	2	1.3	9	8.1	1.8	1.8		
VINE GROVE	3,583	246	32.9	0	0.0	3	2.8	1	0.9	9	8.4	8.1	12.2		
PARK HILLS	3,500	358	34.1	1	1.6	6	9.7	4	3.8	3	2.9	3.9	6.4		
GRAYSON	3,423	359	59.9	1	1.9	5	5.8	0	0.0	5	4.9	4.7	5.0		
HARRISON	3,392	473	46.5	1	1.0	8	8.0	2	2.0	18	17.7	3.4	2.5		
LANCASTER	3,365	391	38.7	1	1.0	7	6.9	3	3.0	2	2.0	2.6	2.0		
BARBOURVILLE	3,233	565	53.3	2	2.1	6	6.2	2	2.0	6	6.2	3.5	3.7		
DANSON SPRINGS	3,275	374	38.1	0	0.0	6	6.1	2	2.0	5	5.1	1.6	3.5		
JENKINS	3,271	39	4.0	2	2.0	0	0.0	0	0.0	0	0.0	38.5	10.3		
BEAVER DAM	3,186	430	45.0	1	1.0	1	1.0	1	1.0	7	7.3	3.5	5.6		
SPRINGFIELD	3,179	394	41.3	3	3.1	6	6.3	0	0.0	2	2.1	3.0	2.8		
FULTON	3,137	442	47.0	1	1.1	3	3.2	4	4.3	1	4.3	1.8	6.3		
HILLIAMSTON	2,509	243	32.3	0	0.0	2	2.7	1	1.3	1	1.3	15.6	5.3		
LAKESIDE PARK	3,026	277	30.5	0	0.0	2	2.2	1	1.1	2	2.2	5.1	6.1		
HARLAN	3,024	708	78.4	2	2.2	9	9.9	4	4.4	6	6.6	4.1	4.4		
CATLETTSBURG	3,005	591	65.4	1	1.1	10	1.1	2	2.2	9	10.0	3.9	5.8		
HICKMAN	2,894	226	25.0	0	0.0	1	1.2	0	0.0	4	4.6	3.1	5.3		
IRVINE	2,889	491	56.7	2	2.3	7	8.1	0	0.0	6	6.9	7.5	1.4		
FLEMINGSBURG	2,835	374	44.0	1	1.2	1	1.2	1	1.2	5	5.9	4.0	4.0		
SOUTHGATE	2,833	420	49.4	1	1.2	4	4.7	4	4.7	5	5.9	5.5	8.8		
STANFORD	2,764	617	50.3	2	2.4	0	0.0	3	3.6	3	3.6	2.2	3.4		
LAGRANGE	2,571	32	35.1	1	1.1	2	2.2	2	2.2	2	2.2	1.1	3.5		
STANTON	2,491	177	21.9	0	0.0	0	0.0	0	0.0	4	5.0	0.0	3.4		
JACKSON	2,651	112	14.1	1	1.3	1	1.3	1	1.3	1	1.3	17.0	9.8		
HARTFORD	2,512	67	8.9	1	1.3	0	0.0	0	0.0	1	1.3	10.4	1.5		
PINEVILLE	2,599	454	58.2	2	2.0	5	6.4	1	1.3	7	9.0	5.5	4		

TABLE 6. ACCIDENT DATA FOR CITIES WITH POPULATIONS OVER 1,000.

CITY	POPULATION	NUMBER OF ACCIDENTS (1978-1989)	ANNUAL ACCIDENTS PER 1,000 POPULATION	NUMBER OF FATAL ACCIDENTS (1978-1990)	ANNUAL FATAL ACCIDENTS PER 10,000 POPULATION	NUMBER OF PEDESTRIAN MOTOR VEHICLE ACCIDENTS (1978-1989)	ANNUAL PEDESTRIAN ACCIDENTS PER 10,000 POPULATION	NUMBER OF BICYCLE-RELATED MOTOR VEHICLE ACCIDENTS (1978-1989)	ANNUAL BICYCLE ACCIDENTS PER 10,000 POPULATION	NUMBER OF MOTORCYCLE ACCIDENTS	ANNUAL MOTORCYCLE ACCIDENTS PER 10,000 POPULATION	PERCENT OF ACCIDENTS INVOLVING SPEEDING	PERCENT OF ACCIDENTS INVOLVING ALCOHOL
RACELAND	1,970	121	20.5	1	1.7	1	1.7	0	0.0	1	1.7	5.8	6.6
BRANDENBURG	1,831	353	64.3	2	3.6	4	7.3	0	0.0	6	10.9	7.6	5.1
LOUISA	1,832	423	77.0	0	0.0	3	5.5	0	0.0	4	7.3	4.3	3.5
MANCHESTER	1,836	332	60.2	0	0.0	3	5.4	0	0.0	0	0.0	8.4	2.7
LEWISPORT	1,832	45	7.5	1	1.8	0	0.0	0	0.0	0	0.0	7.3	2.4
ELKTON	1,815	226	41.5	3	5.5	0	0.0	1	1.8	7	12.9	2.2	2.7
RUSSELL SPRINGS	1,831	199	36.2	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
MUNFORDVILLE	1,783	242	45.2	1	1.9	0	0.0	1	1.9	0	0.0	10.3	7.9
MORGANTON	2,000	111	18.5	1	1.7	1	1.7	0	0.0	0	0.0	1.8	1.8
CARLISLE	1,757	29	5.5	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
MULDRAUGH	1,752	255	54.2	3	5.7	1	1.9	0	0.0	3	5.8	10.2	16.1
CLINTON	1,720	178	34.5	0	0.0	4	7.8	0	0.0	0	0.0	6.2	3.4
LIVERMORE	1,692	98	9.6	0	0.0	0	0.0	0	0.0	0	0.0	2.1	6.3
CADIZ	1,661	451	90.5	2	4.0	7	14.1	0	0.0	4	6.0	3.3	1.8
WALTON	1,651	313	63.2	0	0.0	5	10.1	1	2.0	2	4.0	11.8	6.4
LYNCH	1,614	18	3.7	0	0.0	0	0.0	0	0.0	0	0.0	5.6	0.0
CRESENT SPRINGS	1,951	646	110.4	1	1.7	2	3.4	1	1.7	5	8.5	3.8	4.6
LEBANON JUNCTION	1,551	43	13.6	0	0.0	0	0.0	1	2.1	0	0.0	15.1	8.6
SOUTH SHORE	1,525	88	19.2	1	2.2	2	4.4	0	0.0	0	0.0	5.7	5.7
JEFFERSONVILLE	1,528	57	12.4	0	0.0	0	0.0	0	0.0	0	0.0	12.3	3.5
SEBREE	1,516	98	21.5	0	0.0	1	2.2	0	0.0	2	4.4	9.2	10.2
WHITESBURG	1,555	230	50.3	1	2.2	5	10.9	0	0.0	0	0.0	7.0	3.0
ALBURN	1,467	73	16.6	0	0.0	1	2.3	0	0.0	0	0.0	11.0	4.1
CLOVERPORT	1,585	98	20.6	0	0.0	1	2.1	0	0.0	2	4.2	15.3	4.1
AUGUSTA	1,455	143	32.8	0	0.0	1	2.3	1	2.3	0	0.0	0.7	8.4
MIDWAY	1,443	87	20.1	0	0.0	2	4.6	0	0.0	0	0.0	1.1	3.4
ELKHORN CITY	1,416	84	19.8	0	0.0	1	2.4	1	2.4	0	0.0	9.5	9.4
JAHESSTON	1,441	48	11.1	1	2.3	1	2.3	1	2.3	2	4.6	14.6	4.3
OWINGSVILLE	1,419	139	32.7	0	0.0	4	9.4	0	0.0	3	7.1	5.8	5.0
IRVINGTON	1,407	77	18.2	0	0.0	1	2.4	0	0.0	1	2.4	3.9	1.3
EDMONTON	1,401	104	29.5	0	0.0	1	2.4	0	0.0	1	2.4	5.6	4.8
LOYAL	1,210	63	17.4	0	0.0	2	5.5	2	5.5	5	5.5	4.8	12.7
CRESTVIEW HILL	1,408	224	53.0	0	0.0	1	2.4	0	0.0	2	11.8	4.5	6.7
WEST LIBERTY	1,381	292	70.5	2	4.6	2	4.6	0	0.0	4	9.7	4.1	3.8
GREENUP	1,326	214	51.6	1	2.4	2	5.0	0	0.0	0	0.0	9.6	3.8
OHENTON	1,341	156	38.8	0	0.0	2	5.0	0	0.0	1	2.5	0.0	3.1
CLAY	1,356	97	23.8	0	0.0	0	0.0	0	0.0	0	0.0	23.3	8.3
GUTHRIE	1,351	12	3.0	0	0.0	2	5.0	0	0.0	0	0.0	7.5	9.4
NORTONVILLE	1,336	53	13.2	1	2.5	1	2.5	0	0.0	0	0.0	15.5	5.5
SALVERSVILLE	1,352	220	54.2	0	0.0	5	12.3	0	0.0	6	14.3	15.5	5.5
WEST POINT	1,339	138	34.4	1	2.5	2	5.0	1	2.5	0	0.0	15.9	10.1
HARSAW	1,323	123	30.9	0	0.0	0	0.0	1	2.5	2	5.0	9.8	7.3
HURLAND	1,303	84	21.5	0	0.0	1	2.6	0	0.0	1	2.6	3.6	6.0
CHARGO	1,301	16	4.1	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
CLAY CITY	1,275	104	27.2	1	2.6	0	0.0	0	0.0	0	0.0	9.6	9.6
SILVER GROVE	1,260	143	37.8	0	0.0	0	0.0	0	0.0	2	5.3	5.5	11.2
DRY RIDGE	1,250	269	71.7	1	2.7	2	5.3	0	0.0	1	2.7	13.0	5.2
EVARTS	1,234	114	30.6	0	0.0	2	5.4	1	2.7	0	0.0	19.3	12.3
HORTONS GAP	1,201	42	11.7	0	0.0	1	2.8	0	0.0	1	2.8	0.0	2.4
UNIONTOWN	1,189	34	9.7	0	0.0	1	2.9	0	0.0	1	3.0	5.9	17.6
FLEMING-NEON	1,195	33	10.6	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
PHELPS	1,126	54	17.6	1	3.0	0	0.0	0	0.0	0	0.0	0.0	0.0
ADAIRVILLE	1,105	45	13.6	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0
CALHOUN	1,080	102	31.5	0	0.0	0	0.0	0	0.0	0	0.0	7.4	3.2
BEATTYVILLE	1,068	109	29.0	0	0.0	1	3.1	0	0.0	1	3.1	6.9	4.9
WICKLIFFE	1,044	145	46.6	0	0.0	1	3.2	0	0.0	0	0.0	7.3	3.7
BARBOURHEAD	1,036	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	11.6	6.2
LACENTER	1,044	101	32.2	0	0.0	0	0.0	1	3.2	0	0.0	0.0	0.0
HANESVILLE	1,036	152	48.9	0	0.0	1	3.2	0	0.0	0	0.0	5.9	2.0
FERGUSON	1,009	37	12.2	0	0.0	0	0.0	0	0.0	1	3.2	6.4	3.9
BURGIN	1,008	59	22.8	1	3.3	1	3.3	0	0.0	0	0.0	0.0	2.9

TABLE 7. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES.

CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION
Adairville	1105	45	13.6	Eddyville	1949	119	20.4	Livermore	1672	48	9.6
Albany	2083	33.4	7.20	Edgewood	717	717	33.1	Livingston	334	7	7.0
Alexandria	4735	508	10.7	Edinon	1401	124	29.5	Lockport	84	2	7.9
Alton	338	126	124.3	Ekron	239	10	15.9	London	4002	1168	97.3
Allensville	170	6	11.8	Elizabethtown	15380	2723	59.0	Loretto	954	65	22.7
Arlington	511	32	20.9	Elkhorn City	1416	84	19.8	Louisia	1832	423	77.0
Ashland	27064	5050	72.1	Elkton	1815	226	41.5	Louisville	49095	89,300	40.5
Auburn	1467	73	16.6	Elmore	7203	783	35.5	Loyal	1210	63	17.4
Augusta	1455	145	32.8	Eminence	2450	108	15.9	Ludlow	4959	556	37.4
Barbourville	3233	565	58.3	Erlanger	14433	3182	73.5	Lynch	1614	11	2.3
Barstow	6155	1328	71.9	Eubank	207	18	29.0	McHenry	582	32	18.3
Barrow	988	82	27.7	Ewart	1234	114	30.8	McKee	759	108	47.3
Barlow	746	27	12.1	Fairfield	169	8	15.8	Mackville	229	10	14.6
Beattyville	1068	109	34.0	Fairview	198	36	60.6	Madisonville	16979	2838	56.7
Beaver Dam	3185	430	45.0	Falmouth	2422	247	33.2	Manchester	1838	332	60.2
Bedford	835	46	18.4	Ferguson	1009	37	12.2	Marion	3392	473	46.5
Bellefonte	908	34	12.5	Flat Wood	8354	737	29.4	Martin	827	141	56.8
Bellevue	7678	1169	50.8	Flemingsburg	2835	374	44.0	Mayfield	10785	2117	65.9
Bonham	936	55	19.6	Fleming-Neon	1195	37	10.3	Maysville	782	125	90.0
Benton	3700	560	50.5	Florhach	15886	4645	99.5	McBourne	628	50	26.5
Berea	8226	811	32.9	Fordsville	561	31	18.4	Mentor	169	12	23.7
Berry	287	12	13.9	Fort Mitchell	7297	1020	46.6	Middlesboro	12251	1294	35.2
Blaine	358	9	8.4	Fort Thomas	16012	1632	34.0	Midway	1443	87	20.1
Bloomfield	954	92	32.1	Fort Wright	4481	1055	78.5	Millersburg	987	42	14.2
Bonnieville	372	22	29.6	Foster	80	80	—	Millon	188	80	37.1
Booneville	191	58	118.7	Fountain Run	340	9	8.8	Monterey	718	5	9.0
Bowling Green	40450	10637	87.7	Frankfort	25973	6175	53.6	Monticello	5677	897	52.7
Bradfordville	331	22	22.2	Franklin	7738	905	39.0	Morehead	7789	1333	57.0
Brandenburg	1831	353	64.3	Fredonia	535	23	14.3	Morganfield	3781	631	55.6
Bremen	179	17	31.7	Fredrichsburg	550	45	27.3	Morgantown	2000	111	18.5
Broad Fields	295	0	0.0	Fulton	3137	442	47.0	Mortons Gap	1201	42	11.7
Brodhead	686	26	12.6	Ganssle	456	24	17.5	Mount Olivet	346	31	29.9
Bromley	844	40	15.8	Georgetown	10972	1402	42.6	Mt Sterling	5820	1275	73.0
Brooksville	680	16	7.8	Germanstown	347	10	9.6	Mount Vernon	2334	254	36.3
Brownsville	674	148	73.2	Ghent	439	20	15.2	Mt Washington	3997	278	23.2
Burgin	1008	69	22.8	Glasgow	12958	2240	57.6	Muldraugh	1752	285	54.2
Burkesville	2051	201	32.7	Glenoe	354	8	7.5	Munfordville	1783	242	45.2
Burnside	775	73	31.4	Grand Rivers	628	30	23.4	Murray	14268	2118	49.6
Butler	653	31	15.6	Gretz	124	3	18.1	Nebo	269	14	17.3
Buttitz	1641	451	90.5	Grayson	3423	559	54.4	New Castle	832	32	12.8
Calhoun	1080	102	31.5	Greensburg	2377	349	48.9	New Haven	926	82	29.5
California	135	*	---	Greenup	1386	214	51.5	Newport	21587	5170	79.8
Calvert City	2388	169	23.6	Greenville	4631	585	42.1	Nicholasville	10480	1282	41.1
Camargo	1301	16	4.1	Guthrie	1361	12	2.9	Niddleton	21	2	11.0
Campbellsburg	714	57	26.6	Hanson	485	24	15.5	Northfield	906	16	5.9
Campbellsville	8715	1406	53.5	Hardin	545	38	23.2	Nortonville	1336	53	13.2
Campton	486	129	88.5	Hardinsburg	2211	382	57.6	Oak Grove	2088	424	67.7
Caneyville	642	62	32.2	Harian	3024	708	78.0	Oakland	259	3	3.8
Carlisle	1757	29	5.5	Harrodsburg	7265	1218	55.9	Olive Hill	259	261	34.1
Carrollton	3967	689	57.9	Hartford	2512	67	8.9	Owensboro	54450	10737	65.7
Carrsville	99	3	10.1	Hausville	1036	152	48.9	Owenton	1361	156	38.8
Caseyville	63	*	---	Hazard	5429	1435	88.1	Owingsville	1419	139	32.7
Callettsburg	3005	591	65.6	Hazel	465	39	28.0	Paducah	29758	6312	70.7
Cavo City	2098	258	41.0	Henderson	24834	5323	71.4	Paintsville	3815	1057	92.4
Cedarville	81	0	0.0	Hickman	2894	226	26.0	Paris	7955	1058	44.4
Centertown	452	21	15.2	Highland Hts	4435	626	47.1	Park City	614	34	34.1
Central City	5214	920	58.8	Hindman	876	163	42.0	Park Hills	3500	358	34.1
Clarkson	666	51	25.5	Hiscoville	349	21	20.1	Pembroke	636	15	7.9
Clay	1356	97	23.8	Hodgenville	2459	300	40.7	Perryville	841	65	25.8
Clay City	1276	104	27.2	Hopkinsville	27318	4875	59.5	Pewee Valley	982	95	32.2
Clinton	1720	178	34.5	Horse Cave	2045	94	15.3	Phelps	1126	67	94.8
Cloverport	1585	98	20.6	Houstonville	339	23	22.6	Pikeville	4756	1504	105.4
Coal Run	348	6	5.7	Hyden	488	70	47.8	Pineville	2599	454	58.2
Cold Springs	2117	370	58.3	Independence	7998	927	38.6	Pleasant Val	342	1	1.0
Columbia	3712	541	48.6	Irvine	2889	491	56.7	Pleasureville	837	40	15.9
Columbus	296	17	19.1	Irvington	1409	77	13.2	Plum Springs	393	21	0.8
Corbin	8075	1392	57.3	Island	532	32	20.1	Powderly	848	54	21.2
Corinth	249	30	40.2	Jackson	251	112	14.1	Prestonburg	401	896	74.5
Corydon	874	58	22.1	Jameton	1441	48	11.1	Prestonville	205	7	11.4
Cowlington	49013	11309	76.9	Jeffersonville	1528	57	12.4	Princeton	7073	1107	52.2
Crab Orchard	843	42	16.6	Jenkins	3271	39	4.0	Providence	4434	507	38.1
Crescent Park	351	37	35.1	Junction City	2045	175	28.5	Raceland	1978	121	29.5
Crescent Spr	1951	646	110.4	Kenton Vale	145	3	6.9	Radcliff	14519	1912	63.9
Crestview	520	25	18.6	Kevil	382	29	25.3	Ravenna	793	24	18.1
Crestview Hts	1408	224	58.0	Kuttava	560	19	11.3	Richmond	21705	4127	63.4
Creswood	531	175	109.9	LaCenter	1044	101	32.2	Ridgeview Hts	729	31	14.2
Crittenden	597	98	54.7	LaFayette	160	3	6.3	Rochester	289	2	2.3
Crofton	823	56	22.7	LaGrange	2971	313	35.1	Rockport	511	192	7.8
Cumberland	3712	55	4.9	Lakeside Park	3026	277	50.5	Russell	3824	869	75.7
Cynthiana	5881	814	46.1	Lancaster	3365	391	38.7	Russell Sprgs	1831	39	36.0
Danville	12962	2100	54.1	Lansonia Lakes	396	27	22.7	Russellville	7520	1181	52.3
Dawson Springs	3275	374	38.1	Laurenceburg	5167	618	39.9	Ryland Hgts	252	*	---
Dayton	6979	580	27.7	Lebanon	6590	1080	54.6	Sacramento	538	40	24.8
Dixon	533	73	45.7	Lebanon Junc	1581	93	39.6	Sadieville	253	19	6.6
Dover	305	13	14.2	Leitchfield	4533	916	67.4	St Charles	405	15	15.6
Drakesboro	798	55	23.0	Levisa	972	72	24.7	Salem	833	52	20.8
Dry Ridge	1250	259	71.7	Lexington	1832	41	7.5	Salt Lick	347	19	18.3
Dycusburg	54	*	---	Lexington	204165	34960	57.1	Salyersville	1352	220	54.2
Earlington	2011	78	12.9	Liberty	2206	212	32.0	Sanders	332	5	5.0



TABLE 7. ACCIDENTS AND ACCIDENT RATES FOR ALL CITIES.

CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION	CITY	POPULATION	NUMBER OF ACCIDENTS (78-80)	ANNUAL ACCIDENTS PER 1000 POPULATION
Sandy Hook	627	111	59.8	Stanton	2691	177	21.9	Wayland	601	23	12.8
Sardis	203	7	11.5	Sturgis	2293	281	40.8	West Liberty	1381	292	70.5
Science Hill	655	37	18.8	Taylor Mill	4509	372	27.5	West Point	1339	138	34.4
Scottsville	4278	392	30.5	Taylorville	801	92	38.3	Wheatcroft	325	23	23.6
Sebreo	1516	98	21.5	Tolliesboro	808	76	31.4	Wheelwright	865	15	5.8
Sharpsburg	339	5	4.9	Tompkinsville	4366	447	34.1	White Plains	859	42	16.3
Shelbyville	5308	1132	71.1	Trenton	465	14	10.0	Whitesburg	1525	230	50.3
Shepherdsville	4454	997	74.6	Union	601	71	39.4	Whitesville	788	59	25.0
Silver Grove	1260	143	37.8	Uniontown	1169	34	9.7	Wickliffe	1044	146	46.6
Simpsonville	642	45	23.4	Upton	731	41	18.7	Wilder	633	375	197.5
Slaughters	269	19	23.5	Vanceburg	1939	225	38.7	Williamsburg	5560	655	39.3
Smithfield	137	3	7.5	Vanceburg	6429	997	51.7	Williamstown	2509	243	32.3
Smithland	512	62	40.4	Versailles	456	36	26.3	Willisburg	235	13	18.4
Smiths Grove	767	75	32.6	Vicco	4402	87	6.6	Wilmore	3787	78	6.9
Somerset	10649	2324	72.7	Village Hills	456	36	26.3	Winchester	15216	2623	57.5
Sonora	416	74	59.3	Vinegrove	3523	246	22.9	Wingo	606	30	16.5
S Carrollton	262	26	33.1	Visalia	198	15	25.3	Woodburn	330	17	17.2
Southgate	2833	420	49.4	Wallins Creek	459	43	31.2	Woodlawn	331	0	0.0
South Shore	1525	88	19.2	Walton	1651	313	65.2	Worthington	1948	67	11.5
Sparta	192	22	38.2	Warsaw	1328	123	30.9	Worthville	272	6	7.4
Springfield	3179	394	41.3	Washington	824	43	23.0	Wurtland	1303	84	21.5
Stamping Grnd	562	7	4.2	Water Valley	395	7	5.9	Yorktown	155	8	0.0
Stanford	2764	417	50.3	Waverly	434	44	33.8				

\* This city not included in the list of cities coded by the Kentucky State Police.

TABLE 8. AVERAGE AND CRITICAL ACCIDENT RATES BY CITY POPULATION CATEGORY.

POPULATION CATEGORY	NUMBER OF CITIES IN CATEGORY*	TOTAL POPULATION	AVERAGE POPULATION PER CITY	TOTAL ACCIDENTS (1978-1980)	ANNUAL AVERAGE ACCIDENTS PER CITY	ANNUAL ACCIDENTS PER 1,000 POP.	CRITICAL ACCIDENT RATE (ACCIDENTS PER 1,000 POPULATION)
UNDER 250	24	4,204	175	301	4.2	23.9	56.9
250 - 499	49	17,824	364	1,169	6.0	21.9	43.3
500 - 749	39	23,833	611	2,173	18.6	30.4	49.4
750 - 999	32	27,639	864	2,043	21.3	24.6	38.9
1,000 - 2,499	81	131,148	1,619	13,269	54.6	33.7	45.8
2,500 - 4,999	50	179,564	3,591	24,776	165.2	46.0	55.4
5,000 - 9,999	28	194,285	6,839	27,630	328.9	48.1	55.0
10,000 - 19,999	15	203,250	13,559	34,482	766.3	56.6	61.6
20,000 - 29,999	7	178,239	25,463	35,832	1,706.3	67.0	71.2
30,000 - 100,000	3	143,913	43,971	32,683	3,631.4	75.7	78.9
OVER 100,000	2	694,260	347,130	123,950	20,658.3	59.5	60.6

POPULATION CATEGORY	NUMBER OF CITIES AT OR ABOVE CRITICAL RATE	TOTAL FATAL ACCIDENTS (1978 - 1980)	ANNUAL AVERAGE FATAL ACCIDENTS PER CITY	ANNUAL FATAL ACCIDENTS PER 10,000 POP.	CRITICAL FATAL ACCIDENT RATE (FATAL ACCIDENTS PER 10,000 POP.)	NUMBER OF CITIES AT OR ABOVE CRITICAL RATE
UNDER 250	2	**	**	**	**	**
250 - 499	4	**	**	**	**	**
500 - 749	5	**	**	**	**	**
750 - 999	3	**	**	**	**	**
1,000 - 2,499	19	48	0.2	1.24	8.82	0
2,500 - 4,999	15	70	0.5	1.39	5.83	0
5,000 - 9,999	9	60	0.7	1.02	3.68	0
10,000 - 19,999	4	63	1.5	1.11	2.93	0
20,000 - 29,999	3	56	3.1	1.22	2.68	0
30,000 - 100,000	1	47	5.2	1.18	2.45	0
OVER 100,000	0	297	49.5	1.43	1.97	0

\*CITIES WITH POPULATIONS GREATER THAN 1,000 ARE LISTED IN TABLE 6.  
 \*\*FATAL ACCIDENT STATISTICS WERE ONLY CALCULATED FOR CITIES WITH POPULATIONS OF 1,000 OR ABOVE.

TABLE 9. CITIES WITH ACCIDENT RATES ABOVE CRITICAL.

POPULATION CATEGORY	CITIES WITH ACCIDENT RATES AT OR ABOVE CRITICAL	NUMBER OF ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 1000 POPULATION)	POPULATION CATEGORY	CITIES WITH ACCIDENT RATES AT OR ABOVE CRITICAL	NUMBER OF ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 1000 POPULATION)
OVER 100,000	NONE	DNA	DNA	1,000-2,499	CRESCENT SPRINGS	646	110.4
30,000-100,000	BOWLING GREEN	10,377	87.7		CADIZ	451	90.5
20,000-29,999	NEWPORT	5,170	79.8		LOUISA	423	77.0
	ASHLAND	5,850	72.1		DRY RIDGE	269	71.7
	HENDERSON	5,323	71.4		WEST LIBERTY	292	70.5
10,000-19,999	FLORENCE	4,645	99.3		OAK GROVE	424	67.7
	ERLANGER	3,182	73.5		BRANDENBURG	353	64.3
	SOHERSET	2,324	72.7		WALTON	313	63.2
	MAYFIELD	2,117	65.9		MANCHESTER	332	60.2
5,000-9,999	MAYSVILLE	2,155	90.0		COLD SPRINGS	370	58.3
	HAZARD	1,435	88.1		HARDINSBURG	382	57.6
	MOUNT STERLING	1,275	73.0		MULDRAUSH	285	54.2
	BARDSTOWN	1,328	71.9		SALYERSVILLE	220	54.2
	SHELBYVILLE	1,132	71.1		CRESTVIEW HILLS	224	53.0
	CENTRAL CITY	920	58.8		GREENUP	214	51.6
	CORBIN	1,392	57.5		WHITESBURG	230	50.3
	MOREHEAD	1,333	57.0	750-999	GREENSBURG	349	48.9
	HARRODSBURG	1,216	55.9		HAWESVILLE	152	48.9
2,500-4,999	PIKEVILLE	1,504	105.4		WICKLIFFE	146	46.6
	LONDON	1,168	97.3		HINDMAN	163	62.0
	PAINTSVILLE	1,057	92.4		MARTIN	141	56.8
	FORT WRIGHT	1,055	78.5		MC KEE	108	47.3
	HARLAN	708	78.4	500-749	WILDER	375	197.5
	RUSSELL	869	75.3		CRESTWOOD	175	109.9
	SHEPARDSVILLE	997	74.6		BROWNSVILLE	148	73.2
	PRESTONSBURG	896	74.5		SANDY HOOK	111	59.0
	LEITCHFIELD	916	67.4		CRITTENDEN	98	54.7
	CATLETTSBURG	591	65.6	250-499	ALLEN	126	124.3
	BARBOURVILLE	565	58.3		CAMPTON	129	88.5
	PINEVILLE	454	58.2		SONORA	74	59.3
	CARROLLTON	689	57.7		HYDEN	70	47.8
	IRVINE	491	56.7	UNDER 250	BOONEVILLE	68	118.7
	MORGANFIELD	631	55.6		FAIRVIEW	36	60.6

TABLE 10. NUMBER OF ACCIDENTS REPORTED BY REPORTING AGENCY.

REPORTING AGENCY	1978 ACCIDENTS	1979 ACCIDENTS	1980 ACCIDENTS	3-YEAR TOTAL	78-80 AVG	1981 ACCIDENTS	1981 PERCENT CHANGE	REPORTING AGENCY	1978 ACCIDENTS	1979 ACCIDENTS	1980 ACCIDENTS	3-YEAR TOTAL	78-80 AVG	1981 ACCIDENTS	1981 PERCENT CHANGE	
KENTUCKY STATE POLICE																
POST 9	2,916	3,094	2,687	8,697	2,899	2,678	-9.7	WOODFORD CO. PD	255	335	299	889	296	294	+9.1	
POST 1	3,109	2,651	2,197	7,957	2,652	2,678	-9.7	RUSSELL PD	353	296	234	883	294	214	-27.2	
POST 11	2,668	2,557	2,373	7,598	2,533	2,551	-2.9	KISSELL CO. SO	126	350	393	869	290	361	+24.5	
POST 2	2,430	2,441	2,108	6,979	2,326	2,356	-9.9	LEITCHFIELD PD	276	330	259	865	288	292	+1.4	
POST 7	2,427	2,282	2,027	6,736	2,245	2,337	-11.0	MASON CLIFF PD	314	305	244	863	288	280	0.0	
POST 4	2,427	2,191	1,658	6,276	2,092	2,179	-18.3	MYRTICFIELD PD	297	292	240	829	276	223	-19.2	
POST 16	2,363	2,030	1,617	6,020	2,007	2,030	-21.9	MYRTICFIELD PD	270	254	277	801	267	260	-2.6	
POST 3	1,840	2,004	1,735	6,037	2,012	2,035	-20.3	ELMER PD	350	355	192	797	266	234	-12.0	
POST 12	1,839	1,775	1,465	5,155	1,719	1,668	-46.6	BREDA PD	231	303	252	786	262	216	-17.6	
POST 6	1,839	1,617	1,261	4,737	1,579	1,468	-14.6	FRANKLIN PD	295	261	237	793	262	234	-10.7	
POST 10	1,577	1,570	1,560	4,707	1,569	1,623	-35.2	SHEPHERDSDALE PD	547	257	250	780	260	286	+10.0	
POST 14	1,477	1,445	1,322	4,244	1,415	1,466	-47.6	FLATWOOD PD	276	243	216	745	249	254	+2.4	
POST 8	1,411	1,312	1,259	3,982	1,329	1,267	-10.5	SCOTT CO. PD	239	245	198	682	229	216	-9.7	
POST 5	1,237	1,258	1,078	3,573	1,191	1,034	-13.2	JEFFERSON CO. SO	163	281	259	663	221	276	+26.9	
KY DOT ENFORCEMENT*	18	98	214	330	110	307	+179.1	KU SECURITY	234	253	224	711	236	221	-6.6	
TOTALS	33,320	32,013	29,285	94,618	31,179	27,460	-12.0	CARROLLTON PD	244	224	220	719	236	208	-3.3	
LOUISVILLE PD	20,893	19,391	16,654	56,938	18,979	15,296	-19.4	UK SECURITY	223	217	100	644	215	208	-2.7	
JEFFERSON CO. PD	15,298	13,749	11,425	40,472	13,491	11,423	-17.6	INDEPENDENCE PD	169	210	227	642	214	207	-5.3	
LEX-FAYETTE CO. PD	11,618	12,210	10,709	34,537	11,512	10,421	-9.5	MILLIAMSBURG PD	236	207	153	620	209	203	-2.9	
COLUMBIA PD	3,971	3,786	3,454	11,211	3,737	3,052	-18.3	MORGANFIELD PD	205	231	183	619	206	210	+1.0	
OXFORD PD	3,713	3,603	3,113	10,429	3,476	2,892	-16.8	CRESSENT SPRINGS PD	235	203	203	641	206	160	-22.3	
SPRINGFIELD PD	2,278	2,426	2,194	7,198	2,326	2,817	-12.4	BOURBON CO. SO	217	170	170	609	209	194	-6.8	
ADAMS PD	2,164	2,077	1,767	5,998	1,996	1,906	-4.5	CLARK CO. SO	224	190	195	609	203	234	+18.3	
ADAMS PD	2,219	1,971	1,667	5,799	1,933	1,475	-23.7	CATLETTSBURG PD	215	229	148	592	194	164	-16.4	
HENDERSON PD	1,889	1,804	1,560	5,253	1,751	1,372	-21.6	LAURENCEBURG PD	207	203	173	583	194	164	-16.4	
HOPKINSVILLE PD	1,784	1,758	1,645	5,227	1,742	1,894	-8.5	DAYTON PD	170	212	185	567	189	181	-32.1	
FAYHURST PD	1,484	1,371	1,280	4,135	1,378	1,280	-7.1	HIGHLAND PD	162	204	198	564	188	169	-10.7	
FLORENCE PD	1,375	1,367	1,264	4,104	1,375	1,230	-10.5	LUIGLO PD	171	170	178	519	177	169	-6.6	
SHIPLEY PD	1,261	1,144	1,069	3,607	1,202	1,025	-14.7	GREENVILLE PD	211	170	178	559	188	166	-10.8	
ELMHURST PD	1,261	1,144	1,069	3,607	1,202	1,025	-14.7	SARBOURVILLE PD	194	202	163	559	168	168	-9.8	
ADAMS PD	1,076	1,015	835	2,947	982	810	-17.5	HUKU PD	224	168	155	536	179	165	-19.0	
ADAMS PD	1,000	989	2,197	5,953	2,000	1,906	-4.5	HARLAH PD	224	168	155	536	179	165	-19.0	
ADAMS PD	982	915	923	2,795	932	934	+0.2	MEADE CO. SO	152	159	179	530	177	196	+10.7	
ST. MATTHEWS PD	832	820	740	2,492	806	936	+45.6	GRAYSON PD	193	175	159	527	176	179	+1.7	
ELIZABETHTOWN PD	922	846	587	2,475	825	740	-10.3	PROVIDENCE PD	172	164	178	514	171	156	-8.8	
WINGHURST PD	728	728	707	2,256	742	663	-10.6	COLUMBIA PD	155	162	138	455	165	165	-0.0	
GLASSBORO PD	754	743	701	2,198	733	666	-9.1	OLDHAM CO. PD	117	192	194	493	164	158	-15.9	
HAYFIELD PD	767	728	594	2,089	696	505	-27.4	ALEXANDRIA PD	142	142	139	457	152	160	+5.3	
MAYSVILLE PD	722	719	649	2,090	696	505	-27.4	HARRISON CO. SO	182	185	111	448	149	150	+0.7	
JEFFERSONTOWN PD	781	654	604	2,039	679	592	-12.9	LAKESIDE PARK PD	163	166	172	443	148	163	+10.1	
MURRAY PD	770	641	600	2,011	674	517	-23.6	FULTON PD	151	156	131	438	146	155	+6.2	
DANVILLE PD	659	669	630	1,948	659	580	-11.6	POWELL CO. SO	145	135	143	423	141	125	-11.3	
RADCLIFFE PD	733	627	538	1,898	633	583	-8.8	OAK GROVE PD	134	161	185	420	140	81	-42.1	
KENTON CO. PD	591	585	486	1,662	553	468	-13.7	ZENEVILLE PD	146	146	136	418	138	162	+17.4	
FT. THOMAS PD	541	595	506	1,642	547	390	-28.7	HARRISON CO. SO	172	172	189	408	136	117	-14.0	
CAMPBELLVILLE PD	568	502	536	1,606	535	523	-2.2	MADISON PD	96	171	184	401	134	110	-17.9	
PIKEVILLE PD	509	478	475	1,462	460	465	-3.1	HARDIN PD	157	129	112	397	132	99	-25.0	
HAZARD PD	458	477	433	1,368	456	373	-19.0	SPRISON CO. SO	130	150	111	391	130	108	-16.9	
CORBIN PD	511	462	380	1,353	451	373	-17.4	TRUMBULL PD	143	130	118	391	130	140	+7.7	
MIDDLETOWN PD	495	442	397	1,341	447	337	-23.7	BEAVER DAM PD	112	159	136	387	159	128	-0.6	
GARDINER PD	442	379	396	1,217	402	367	-9.6	PARK HILLS PD	128	128	132	387	129	117	-9.3	
NICHOLASVILLE PD	366	453	388	1,207	400	389	-3.0	SCOTTSDALE PD	145	119	117	381	127	74	-41.7	
HARPODSBURG PD	429	401	369	1,199	400	389	-2.8	ROYLE CO. SO	113	144	121	378	126	135	+7.1	
BELLEUE PD	426	309	309	1,116	367	318	-17.8	DAKOTA PD	153	153	189	376	185	130	+4.0	
RUSSELLVILLE PD	411	405	318	1,134	378	362	-4.2	LANCASTER PD	123	98	98	372	124	101	-18.5	
LEAGAN PD	363	411	332	1,106	369	381	+3.3	HARDINSBURG PD	120	102	102	370	122	102	-16.4	
LONDON PD	409	383	309	1,101	367	289	-21.3	WILDER PD	157	101	106	364	121	61	-49.6	
SHELBYVILLE PD	381	378	339	1,098	366	300	+6.6	LANCASTER PD	135	135	105	363	121	115	-5.0	
PHIPPSBORO PD	344	394	344	1,082	361	294	-18.6	HENDERSON CO. SO	112	108	88	308	118	168	+42.4	
MT. STERLING PD	379	346	347	1,072	357	322	-8.8	COLD SPRINGS PD	96	112	88	296	117	110	-14.5	
TORREHEAD PD	353	362	344	1,059	353	322	-13.3	STANFORD PD	115	115	140	351	117	110	-6.0	
FT. WRIGHT PD	376	306	313	995	332	288	-13.3	FLEMINGSBURG PD	124	124	124	372	124	116	+8.6	
PARIS PD	289	354	350	992	331	351	+6.0	LEWIS CO. SO	166	166	166	498	166	166	-7.0	
PAINTSVILLE PD	334	318	335	987	329	340	+3.3	TAYLOR HILL PD	115	113	89	317	113	113	+15.9	
DARVASS CO. SO	349	331	304	984	328	325	-9.8	STATE & NATIONAL PARKS	113	113	69	333	108	70	-100.0	
VERMILION PD	366	368	342	1,076	352	325	+1.6	BULLITT CO. SO	160	108	77	325	108	91	-35.2	
FULTON CO. PD	331	318	312	961	320	239	-24.6	PULASKI CO. SO	133	107	82	322	107	91	-15.0	
WHEELING PD	355	337	260	952	312	239	-24.6	TOTAL**	152,303	147,547	128,130	427,680	142,540	125,116	-12.2	
ACRESBURG CO. SO	60	407	475	942	314	482	+53.5									
CENTRAL CITY PD	281	344	276	901	300	277	-22.3									

\*NOM A PART OF KENTUCKY STATE POLICE ENFORCEMENT.

\*\*TOTAL IS FOR ALL AGENCIES IN STATE, WHILE ONLY THE TOP 134 AGENCIES ARE LISTED HERE. THE 134 AGENCIES LISTED REPORTED 95% OF THE TOTAL ACCIDENTS REPORTED IN 1978-1980.

TABLE 11. ACCIDENTS AND ACCIDENT RATES BY ACCIDENT TYPE FOR EACH COUNTY.

COUNTY	PEDESTRIAN ACCIDENTS		BICYCLE ACCIDENTS		SCHOOL BUS ACCIDENTS		MOTORCYCLE ACCIDENTS		EMERGENCY VEHICLE ACCIDENTS		COUNTY	PEDESTRIAN ACCIDENTS		BICYCLE ACCIDENTS		SCHOOL BUS ACCIDENTS		MOTORCYCLE ACCIDENTS		EMERGENCY VEHICLE ACCIDENTS			
	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE**	NUMBER	RATE*	NUMBER	RATE*		NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE*	NUMBER	RATE**	NUMBER	RATE*	NUMBER	RATE*
ADAIR	6	1.3	1	0.2	7	1.5	612	7	1.5	5	1.1	KNOX	23	2.5	10	1.1	16	1.8	683	39	4.3	8	0.9
ALLEN	6	1.4	0	0.0	7	1.7	596	12	2.8	3	0.7	LARUE	7	1.9	6	1.7	6	1.7	813	13	3.6	3	0.8
ANDERSON	19	5.0	5	1.3	11	2.9	1617	15	4.0	4	1.1	LAUREL	40	3.9	10	1.0	32	3.1	1129	67	6.6	13	1.3
BALLARD	5	1.9	7	2.7	7	2.7	1173	13	4.9	10	3.8	LAWRENCE	14	3.3	0	0.0	6	1.4	496	11	2.6	7	1.7
BARREN	26	2.5	14	1.4	15	1.3	996	45	4.4	10	1.0	LEE	6	2.6	0	0.0	8	3.4	1462	2	0.9	6	2.6
BATH	11	3.7	1	0.3	2	0.7	258	8	2.7	4	1.3	LESLIE	15	3.4	0	0.0	8	1.8	426	12	2.7	2	0.4
BELL	36	3.5	14	1.4	7	0.7	518	35	3.4	20	1.9	LETCHER	22	2.4	7	0.8	9	1.0	529	27	2.9	13	1.4
BOONE	80	5.8	31	2.3	27	2.0	1062	121	8.8	32	2.3	LEWIS	10	2.3	6	1.4	4	0.9	310	11	2.5	7	1.6
BOURBON	21	3.6	9	1.5	15	2.6	1357	22	3.8	9	1.5	LINCOLN	7	1.2	3	0.5	9	1.6	666	15	2.6	3	0.5
BOYD	88	5.3	32	1.9	47	2.8	4047	112	6.7	30	1.8	LIVINGSTON	4	1.4	0	0.0	5	1.8	513	14	5.1	5	1.8
BOYLE	32	4.3	21	2.8	8	1.1	1008	42	5.6	11	1.5	LOGAN	23	3.2	7	1.0	15	2.1	1163	27	3.7	10	1.4
BRACKEN	1	0.4	3	1.3	0	0.0	0	3	1.3	1	0.4	LYON	2	1.0	2	1.0	0	0.0	0	10	5.1	0	0.0
BREATHITT	10	2.0	5	1.0	12	2.4	712	14	2.7	8	1.6	MCCRACKEN	87	4.7	42	2.3	38	2.1	1882	161	8.8	37	2.0
BRECKENRIDGE	10	2.0	2	0.4	10	2.0	612	18	3.6	7	1.4	MCCRERY	15	3.2	1	0.2	2	0.4	169	21	4.5	6	1.3
BULLITT	36	2.8	12	0.9	22	1.7	649	57	4.4	24	1.8	MCLEAN	5	1.7	3	1.0	5	1.7	656	10	3.3	1	0.3
BUTLER	5	1.5	0	0.0	0	0.0	0	9	2.7	3	0.9	MADISON	67	4.2	30	1.0	31	1.9	1151	72	4.5	50	3.1
CALDWELL	20	4.9	7	1.7	12	3.0	1466	20	4.9	4	1.0	MAGOFFIN	9	2.2	0	0.0	2	0.5	164	10	2.5	10	2.5
CALLOWAY	23	2.6	10	1.1	3	0.3	204	64	7.1	10	1.1	MARTIN	18	3.4	13	2.6	18	3.4	1414	16	3.0	8	1.5
CAMFBELL	236	9.4	111	4.4	40	1.6	2183	118	4.7	44	1.8	MARSHALL	15	2.0	8	1.0	8	1.0	408	40	5.2	7	0.9
CARLISLE	6	3.6	1	0.6	4	2.4	545	2	1.2	1	0.6	MARTIN	8	1.9	1	0.2	5	1.2	526	8	1.9	8	1.9
CARROLL	8	2.9	5	1.8	8	2.9	1283	15	5.4	5	1.8	MASON	15	2.8	7	1.3	14	2.6	1528	22	4.1	11	2.1
CARTER	19	2.5	2	0.3	17	2.3	628	24	3.2	8	1.1	MEADE	14	2.0	3	0.4	10	1.5	751	41	6.0	2	0.3
CASEY	4	0.9	0	0.0	4	0.9	516	6	1.3	4	0.9	MENIFEE	3	2.0	0	0.0	1	0.7	234	6	3.9	4	2.6
CHRISTIAN	86	4.3	33	1.6	30	1.5	1005	78	3.9	27	1.3	MERCER	17	3.0	7	1.2	3	0.5	351	26	4.6	2	0.4
CLARK	44	5.2	14	1.6	33	3.9	1416	61	7.2	14	1.6	METCALFE	1	0.4	1	0.4	4	1.4	450	8	2.8	4	1.4
CLAY	13	1.9	0	0.0	14	2.1	627	14	2.1	5	0.7	MONROE	6	1.6	0	0.0	3	0.8	322	15	4.0	1	0.3
CLINTON	4	1.4	0	0.0	3	1.1	177	8	2.9	1	0.4	MONTGOMERY	21	3.5	5	0.6	13	2.2	1009	14	2.3	9	1.5
CRITTEHDEN	10	3.6	3	1.1	4	1.4	508	5	1.8	5	1.8	MORGAN	9	2.5	3	0.8	7	1.9	473	10	2.8	4	1.1
CUMBERLAND	3	1.4	1	0.5	4	1.8	717	6	2.7	0	0.0	MUHLENBURG	24	2.5	7	0.7	8	0.8	529	29	3.0	9	0.9
DAVISS	117	4.5	129	5.0	59	2.3	1470	139	5.4	32	1.2	NELSON	27	3.3	12	1.5	10	1.2	953	9	4.7	8	1.0
EDMONSON	3	1.0	3	1.0	5	1.7	564	6	2.0	1	0.3	NICHOLAS	0	0.0	0	0.0	3	1.4	612	0	0.0	2	0.9
ELLIOTT	6	2.9	1	0.5	2	1.0	127	5	2.4	5	2.4	OHIO	10	1.5	3	0.5	16	2.5	970	24	3.7	11	1.7
ESTILL	11	2.5	0	0.0	5	1.1	414	13	3.0	5	1.2	OLDHAM	14	1.8	4	0.5	15	1.9	689	27	3.4	8	1.0
FAYETTE	525	8.6	255	4.2	181	3.0	2989	441	7.2	110	1.8	ONEN	4	1.5	1	0.4	8	3.0	1084	5	1.9	3	1.1
FLEMING	3	0.8	1	0.3	7	1.9	628	9	2.4	7	1.9	OSHELBY	5	2.9	0	0.0	3	1.8	616	4	2.3	4	2.3
FLOYD	36	2.5	11	0.8	32	2.2	1187	33	2.3	19	1.3	PENDLETON	3	0.9	3	0.9	3	0.9	229	6	1.8	2	0.6
FRANKLIN	67	5.3	20	1.6	33	2.6	1947	56	4.5	31	2.5	PERRY	28	2.8	8	0.8	21	2.1	1041	54	5.3	18	1.8
FULTON	4	1.5	5	1.9	1	0.4	264	9	3.3	2	0.7	PIKE	75	3.1	14	0.6	49	2.0	1115	92	3.8	36	1.5
GALLATIN	2	1.4	3	2.1	7	4.8	1481	10	6.9	1	0.7	POWELL	6	1.8	1	0.3	4	1.2	411	15	4.5	7	2.1
GARRARD	10	3.1	4	1.2	6	1.8	858	15	4.6	5	1.5	PULASKI	37	2.7	10	0.7	31	2.3	1353	50	3.6	10	0.7
GRANT	9	2.3	2	0.5	11	2.8	1232	16	4.0	11	2.8	ROBERTSON	1	1.5	0	0.0	1	1.5	531	1	1.5	0	0.0
GRAVES	29	2.8	14	1.4	4	0.4	151	53	5.2	13	1.5	ROCKCASTLE	12	2.9	2	0.5	5	1.2	367	13	3.1	8	1.9
GRAYSON	23	3.7	6	1.0	13	2.1	707	22	3.5	10	1.1	ROMAN	17	3.0	9	1.6	15	2.6	1112	30	5.2	4	0.7
GREEN	5	1.5	1	0.3	9	2.7	926	10	3.0	0	0.0	RUSSELL	4	1.0	3	0.7	0	0.0	0	13	3.2	3	0.7
GREENUP	21	1.8	5	0.4	26	2.2	1625	45	3.8	14	1.2	SCOTT	19	2.9	7	1.0	12	1.8	826	26	4.0	15	2.3
HANCOCK	2	0.9	0	0.0	4	1.7	560	3	1.3	3	1.3	SHELBY	26	3.7	17	2.4	16	2.3	880	34	4.9	11	1.6
HARDIN	76	2.8	35	1.3	40	1.5	1120	186	7.0	31	1.2	SIMPSON	9	2.0	2	0.5	5	1.1	579	17	3.9	1	0.2
HARLAN	47	3.7	18	1.4	20	1.6	1230	55	4.4	24	1.9	SPENCER	2	1.1	1	0.6	3	1.7	486	4	2.2	1	0.6
HARRISON	13	2.9	4	0.9	5	1.1	529	18	4.0	2	0.4	TAYLOR	13	2.0	4	0.6	9	1.4	807	28	4.4	6	0.9
HART	10	2.2	2	0.6	5	1.1	399	8	1.7	2	0.4	TODD	4	1.1	2	0.6	6	1.7	702	17	4.8	3	0.8
HENDERSON	94	7.7	50	4.1	22	1.8	1252	83	6.8	15	1.2	TRIGG	12	4.3	1	0.4	5	1.8	760	16	5.7	5	1.8
HENRY	15	3.9	3	0.8	8	2.1	765	8	2.1	4	1.0	TRIMBLE	3	1.6	4	2.1	0	0.0	0	7	3.7	0	0.0
HICKMAN	4	2.2	1	0.5	2	1.1	373	4	2.2	0	0.0	UNION	18	3.4	9	1.7	18	3.4	1489	24	4.5	10	1.9
HOPKINS	60	4.3	25	1.8	15	1.1	854	93	6.7	31	2.2	WARREN	92	4.3	55	2.6	38	1.8	1427	163	7.6	51	2.4
JACKSON	5	1.4	1	0.3	3	0.8	179	11	3.1	0	0.0	WASHINGTON	7	2.2	1	0.3	8	2.5	955	10	3.1	1	0.3
JEFFERSON	1590	7.7	743	3.6	583	2.8	2078	1329	6.5	400	1.9	WAYNE	6	1.2	5	1.0	2	0.4	105	6	1.2	3	0.6
JESSAMINE	15	1.9	5	0.6	25	3.1	1925	34	4.3	10	1.3	WEBSTER	17	3.8	5	1.1	3	0.7	351	19	4.3	9	2.0
JOHNSON	16	2.2	1	0.1	9	1.2	539	21	2.9	11	1.5	WHITLEY	32	3.2	10	1.0	19	1.9	917	63	6.3	12	1.2
KENTON	400	12.5	173	5.4	92	2.9	2619	238	7.4	90	2.8	WOLFE	3	1.5	1	0.5	5	2.5	865	8	4.0	4	2.0
KNOTT	14	2.6	3	0.6	13	2.4	599	14	2.6	8	1.5	WOODFORD	14	2.6	5	0.9	8	1.5	984	14	2.6	7	1.3

\* RATES ARE ANNUAL ACCIDENTS PER 10,000 POPULATION.  
 \*\* SCHOOL BUS ACCIDENTS PER 100 MILLION VEHICLE MILES DRIVEN BY SCHOOL BUSES.

TABLE 12. MISCELLANEOUS ACCIDENT DATA FOR EACH COUNTY.

COUNTY	PERCENT OF ACCIDENTS INVOLVING SPEEDING	PERCENT OF ACCIDENTS INVOLVING ALCOHOL	PERCENT OF ACCIDENTS INVOLVING DRUGS	PERCENT OF DRIVERS USING SAFETY EQUIPMENT	PERCENT FATAL ACCIDENTS	PERCENT INJURY OR FATAL ACCIDENTS	NUMBER OF ACCIDENTS BY YEAR			THREE YEAR AVERAGE	1980 PERCENT CHANGE	LAPSED TIME NOTIFIED TO ARRIVED GREATER THAN 10 MINUTES
							1976	1979	1980			
ADAIR	9.2	10.2	0.3	0.9	0.60	23	306	366	333	333	-2.1	27
ALLEN	13.1	7.5	0.1	2.0	1.52	30	292	286	275	285	-3.5	27
ANDERSON	13.0	7.9	0.1	0.8	0.81	24	422	426	379	409	-7.3	25
BALLARD	20.4	8.6	0.1	2.0	1.51	33	275	230	224	243	-7.5	62
BADREN	8.2	5.9	0.1	4.0	0.72	26	1,295	1,299	1,153	1,246	-7.5	24
BATH	20.9	15.6	0.4	4.6	1.51	27	162	169	123	151	-18.3	55
BELL	9.8	7.1	0.3	4.0	0.92	25	937	933	856	909	-5.8	23
BEHRE	10.1	8.2	0.5	7.6	0.44	21	3,018	2,847	2,528	2,798	-9.6	28
BOURBON	12.8	10.8	0.6	2.0	0.94	27	764	783	691	746	-7.4	25
BOYD	6.0	4.7	0.3	3.0	0.27	18	3,246	2,889	2,373	2,836	-16.3	16
BOYLE	6.4	4.9	0.4	2.7	0.45	18	1,104	1,119	911	1,045	-12.8	19
BRACKEN	10.6	9.2	0.7	5.2	0.47	18	97	106	89	97	-8.5	35
BREATHITT	29.7	9.4	0.1	1.5	1.50	37	324	364	312	333	-6.4	68
BRECKENRIDGE	10.3	6.0	0.1	1.1	0.99	25	419	449	349	406	-15.9	39
BULLITT	10.3	7.9	0.4	4.0	0.88	29	1,182	1,143	931	1,102	-10.9	23
BUTLER	6.7	6.9	0.0	2.4	2.46	34	268	226	197	230	-14.5	56
CALDWELL	6.3	6.1	0.5	1.3	0.86	23	501	535	481	506	-4.9	19
CALLOWAY	3.4	6.4	0.1	1.3	0.78	25	1,095	985	836	989	-10.4	16
CAMPBELL	3.4	6.1	0.7	4.4	0.19	17	9,429	4,259	3,819	4,169	-8.4	7
CARLISLE	20.2	10.1	1.2	1.1	2.45	36	105	120	101	109	-7.0	71
CARROLL	12.8	8.4	0.4	4.6	1.20	22	539	522	444	502	-11.5	26
CARTER	17.2	8.3	0.3	2.1	1.32	27	637	605	558	604	-4.0	39
CASEY	14.6	9.9	0.0	1.2	1.70	28	284	223	139	215	-35.5	48
CHRISTIAN	9.3	8.0	0.2	4.0	0.54	20	2,506	2,362	1,949	2,272	-14.2	17
CLARK	9.9	7.5	0.5	2.3	0.38	20	1,446	1,349	1,121	1,305	-14.1	17
CLAY	16.6	8.1	0.1	1.6	1.15	25	468	482	438	463	-5.3	45
CLINTON	7.6	8.3	0.7	1.7	1.35	30	160	153	133	149	-10.5	34
CRITTENDEN	7.4	5.4	0.3	1.4	1.44	30	235	273	258	259	+1.0	20
CUMBERLAND	10.6	6.7	0.8	1.0	1.03	21	151	135	102	125	-21.2	30
DAVIESS	5.2	6.8	0.4	3.7	0.28	18	5,045	4,758	4,067	4,820	-11.9	9
EDMONSON	23.8	8.2	0.3	2.2	1.61	35	209	200	213	207	+2.7	52
ELLIOTT	26.0	9.4	0.3	3.6	1.04	27	109	144	132	128	+2.8	72
ESTILL	13.7	6.7	0.3	1.1	0.88	21	283	333	287	303	-5.2	33
FAYETTE	5.0	7.3	0.4	9.9	0.27	20	12,051	12,662	11,015	11,899	-7.3	26
FLEMING	12.5	7.3	0.3	2.1	1.82	27	269	300	288	285	-1.6	29
FLOYD	17.2	7.6	0.2	4.1	0.55	27	1,077	1,233	1,160	1,173	-1.1	54
FRANKLIN	9.5	6.6	0.2	4.9	0.29	18	2,108	2,010	1,793	1,970	-9.0	18
FULTON	6.5	7.8	0.5	0.8	0.47	21	291	288	236	272	-2.2	15
GALLATIN	23.3	12.8	0.8	6.5	1.19	31	164	218	201	164	+2.7	48
GARRARD	21.0	6.8	0.0	1.6	1.48	28	327	351	271	316	-14.3	38
GRANT	24.2	8.4	0.6	9.7	0.48	30	620	569	470	553	-15.0	43
GRAVES	7.3	5.3	0.2	4.4	0.83	23	1,310	1,198	968	1,159	-16.4	28
GRAYSON	10.7	6.6	0.3	4.1	0.87	25	670	687	589	642	-11.4	36
GREEN	7.1	5.4	0.0	4.0	0.60	24	283	284	256	288	-4.3	34
GREENUP	9.1	6.0	0.2	4.0	0.46	24	1,137	1,015	864	1,009	-14.1	23
HANCOCK	8.1	5.6	0.2	3.1	0.93	26	189	141	154	161	-6.5	29
HARDIN	12.5	7.0	0.2	5.5	0.48	25	2,745	2,602	2,135	2,494	-14.4	23
HARLAN	12.9	9.8	0.5	2.9	1.01	26	1,081	1,050	1,033	1,058	-2.4	47
HARTESON	10.6	6.9	0.2	1.3	0.40	17	595	489	400	495	-19.1	26
HART	13.4	10.7	0.1	4.7	1.40	31	383	405	319	369	-13.5	42
HENDERSON	7.0	7.1	0.3	2.6	1.50	21	2,478	2,381	2,158	2,339	-7.7	18
HENRY	29.0	10.9	0.2	4.7	0.81	28	350	327	314	330	-4.9	58
HICKMAN	15.7	9.3	1.2	2.7	1.17	33	143	168	125	143	-12.4	49
HOPKINS	9.1	6.6	0.2	2.8	0.50	23	1,944	1,948	1,699	1,864	-8.9	28
JACKSON	15.7	8.9	0.5	1.9	2.22	25	167	192	182	180	+1.8	58
JEFFERSON	5.9	5.3	0.2	9.6	0.27	17	39,738	36,343	31,049	35,710	-13.1	21
JONESBORO	9.7	6.5	0.1	1.4	0.81	20	815	773	724	824	-6.2	20
JONES	8.9	7.6	0.3	3.3	1.01	23	726	747	693	724	-3.5	37
KENTON	5.7	8.1	0.7	4.9	0.21	19	8,163	7,833	6,964	7,653	-9.0	8
KNOX	14.9	8.0	0.2	3.4	1.71	35	292	329	315	312	+1.0	70
KYBURG	19.2	7.1	0.0	2.7	1.46	33	645	721	623	663	-6.0	40
LAUREL	12.1	6.7	0.3	3.7	1.27	27	360	332	273	305	-13.3	34
LAURENCE	12.0	8.3	0.5	3.9	0.89	27	1,358	1,301	1,150	1,270	-9.4	35
LEE	19.4	8.9	0.9	1.0	0.82	23	408	427	259	365	-28.9	46
LESLIE	33.3	11.4	0.2	2.5	1.54	38	131	103	91	108	-16.0	51
LETCHER	13.2	7.0	0.1	3.2	3.21	38	202	194	228	208	+9.6	75
LEWIS	15.0	6.5	0.1	1.9	1.91	33	370	470	469	436	+7.5	65
LINCOLN	9.7	6.0	0.3	2.9	1.05	28	512	359	283	318	-11.0	49
LIVINGSTON	18.9	10.4	0.9	2.0	1.05	33	401	402	369	391	-5.5	41
LOGAN	8.5	7.1	0.4	1.8	0.69	26	227	219	220	222	-0.9	69
LYON	9.2	7.1	0.0	2.5	0.44	21	807	819	616	797	-17.6	61
MADISON	6.7	8.4	0.6	2.2	1.12	31	132	176	140	149	-6.1	49
MAGUIRE	20.7	10.6	0.1	4.6	0.33	18	3,111	3,077	2,698	2,968	-9.1	16
MAGEE	9.1	7.9	0.3	3.1	2.48	31	263	234	237	245	-3.1	39
MAHON	11.3	8.5	0.3	3.1	0.25	29	221	191	171	194	-11.9	62
MADOFFIN	29.5	10.8	0.3	5.1	0.48	18	2,599	2,425	2,201	2,379	-7.5	22
MARION	10.3	12.4	0.7	5.5	1.59	38	248	277	251	258	-2.7	55
MARSHALL	13.4	7.8	0.6	2.6	0.85	29	856	787	586	642	-8.7	29
MARTIN	27.7	9.1	1.1	3.9	1.33	27	212	167	148	178	-15.9	33
MASON	4.1	5.8	0.2	1.3	0.51	16	1,095	1,090	950	1,045	-9.1	23
MEADE	12.2	13.9	0.3	3.3	1.16	36	642	596	490	576	-14.9	41
MENEFEE	38.1	15.8	0.0	3.6	1.92	32	68	102	90	67	+3.4	85
MERCER	9.7	7.4	0.3	1.7	0.62	19	693	661	574	643	-10.7	19
METCALFE	16.7	11.2	0.5	2.3	1.16	32	113	161	156	143	+9.1	60
MONROE	15.3	10.7	0.2	1.3	2.57	24	221	294	223	246	-9.3	26
MONTGOMERY	7.0	7.1	0.2	0.7	0.44	21	659	679	606	678	-2.7	54
MORGAN	19.0	9.0	0.2	1.7	1.11	23	349	299	253	300	-15.7	52
MURKIN	13.7	7.7	0.3	1.3	0.68	25	1,013	1,138	926	1,025	-9.7	32
NELSON	11.5	9.7	0.3	3.2	0.66	24	1,020	917	845	927	-8.8	31
NICHOLAS	17.8	9.4	0.5	1.4	1.38	25	91	79	43	71	-39.4	48
OHIO	16.5	7.1	0.3	2.7	1.38	31	544	481	493	506	-2.6	45
OLDHAM	20.4	9.3	0.5	8.0	1.04	31	696	657	565	639	-11.6	33
ONEIDA	17.4	4.8	0.8	2.5	0.80	28	170	155	165	167	-1.2	50
OSLEY	22.0	5.7	0.0	2.1	2.04	36	94	70	82	82	-13.4	44
PENDLETON	20.2	6.9	0.0	3.8	0.91	26	267	244	237	256	-7.4	46
PERRY	17.5	8.2	0.4	1.1	1.09	24	1,163	1,248	1,063	1,155	-6.2	41
PIKE	15.5	7.6	0.2	2.4	0.73	28	2,019	2,230	2,207	2,152	+2.6	54
POWELL	9.5	8.7	0.3	1.3	1.52	29	299	241	184	241	-23.7	35
PULASKI	9.5	4.8	0.4	2.5	1.01	22	1,444	1,347	1,235	1,342	-8.0	25
ROBERTSON	29.5	7.7	0.0	3.8	1.23	31	25	36	17	26	-34.6	45
ROCKCASTLE	23.9	7.4	0.2	9.5	1.77	27	359	391	325	358	-9.3	49
ROSS	12.3	8.4	1.0	3.3	0.50	21	834	808	776	806	-7.9	42
RUSSELL	14.6	12.8	0.3	5.4	1.55	29	177	213	225	205	+9.7	28
SCOTT	8.5	7.2	0.6	4.0	0.55	22	974	906	783	883	-11.6	22
SHELBY	15.4	8.4	0.5	3.3	0.90	26	940	931	795	889	-10.5	29
SIMPSON	9.2	4.2	0.0	1.9	0.90	26	489	515	436	460	-9.2	22
SPIVACK	25.1	11.5	1.3	4.1	1.87	41	159	109	107	125	-14.4	56
TAYLOR	6.8	5.8	0.2	2.1	0.87	31	677	643	645	655	-1.5	16
TODD	22.1	9.2	0.6	2.1	2.22	31	234	253	188	225	-16.4	4

TABLE 13. ACCIDENT CONTRIBUTING FACTORS FOR VARIOUS ACCIDENT TYPES.

CONTRIBUTING FACTOR	PERCENT OF ACCIDENTS INVOLVING GIVEN FACTOR								
	ALL ACCIDENTS	PEDESTRIAN ACCIDENTS	BICYCLE ACCIDENTS	MOTORCYCLE ACCIDENTS	FATAL ACCIDENTS	SCHOOL BUS ACCIDENTS	SCHOOL BUS OR DRIVER (1980 ONLY)	EMERGENCY VEHICLE ACCIDENTS	EMERGENCY VEHICLE OR DRIVER (1980 ONLY)
UNSAFE SPEED	8.8	4.9	2.0	15.3	37.2	7.6	1.0	16.6	6.9
FAILURE TO YIELD RIGHT-OF-WAY	16.5	5.8	7.2	22.8	15.5	17.0	7.6	23.8	4.4
FOLLOWING TOO CLOSELY	4.7	0.2	0.1	3.9	0.6	5.3	2.6	2.8	1.2
IMPROPER PASSING	1.4	0.6	0.3	3.2	2.5	2.2	0.7	1.8	0.3
DISREGARD TRAFFIC CONTROLS	2.4	0.9	1.1	2.0	3.6	1.8	0.6	3.6	0.8
IMPROPER TURN	2.7	0.4	0.6	3.6	0.6	3.7	3.4	3.7	1.8
ALCOHOL	7.0	4.1	1.9	6.9	24.9	1.2	0.0	8.9	0.5
DRUGS	0.3	0.2	0.0	0.3	0.5	0.1	0.0	0.4	0.0
SICK	0.1	0.0	0.0	0.0	0.4	0.2	0.0	0.1	0.2
FELL ASLEEP	1.0	0.2	0.1	0.3	2.8	0.2	0.0	0.4	0.0
LOST CONSCIOUSNESS	0.2	0.1	0.0	0.1	0.4	0.1	0.0	0.0	0.0
DRIVER INATTENTION	23.1	10.2	8.6	18.2	10.1	23.9	18.2	23.7	8.2
DISTRACTION	1.7	1.3	0.7	1.1	1.3	2.4	1.3	2.3	1.5
PHYSICAL DISABILITY	0.3	0.2	0.2	0.1	0.3	0.1	0.0	0.1	0.0
OTHER (HUMAN)	11.8	10.9	6.9	12.6	11.9	18.3	11.3	24.3	14.2
DEFECTIVE BRAKES	2.1	1.1	0.4	1.4	1.6	5.7	2.7	2.6	1.1
HEADLIGHTS	0.1	0.2	0.0	0.4	0.1	0.0	0.0	0.1	0.2
OTHER LIGHTS	0.3	0.1	0.1	0.5	0.1	0.4	0.1	0.5	0.0
STEERING FAILURE	0.4	0.0	0.0	0.7	0.3	0.2	0.0	0.5	0.2
TIRE FAILURE-INADEQUATE	1.0	0.1	0.0	1.3	3.7	0.5	0.3	1.5	0.3
TOW HITCH DEFECTIVE	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.6	0.6
OVER OR IMPROPER LOAD	0.1	0.1	0.0	0.1	0.5	0.3	0.0	0.4	0.2
OVER SIZED LOAD	0.1	0.0	0.0	0.1	0.2	0.3	0.0	0.4	0.3
OTHER (VEHICULAR)	2.9	2.6	0.7	3.9	3.6	2.8	2.8	3.8	1.6
ANIMAL ACTION	1.0	0.3	0.1	1.2	0.3	0.1	0.0	1.3	1.0
GLARE	0.7	2.0	0.7	0.5	0.9	0.8	0.4	1.1	0.5
VIEW OBSTRUCTED-LIMITED	3.3	4.7	4.1	4.0	3.4	5.1	3.4	5.1	3.2
DEBRIS IN ROADWAY	0.4	0.1	0.1	2.1	0.6	0.3	0.0	0.9	1.1
IMPROPER-NON WORK TRAFFIC CONTROLS	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.1	0.0
SHOULDERS DEFECTIVE	0.5	0.1	0.1	0.3	1.5	1.0	1.0	0.8	0.6
HOLES-DEEP RUTS-GUMPS	0.4	0.1	0.2	1.2	0.7	0.4	0.0	0.8	0.5
ROAD UNDER CONSTRUCTION	0.4	0.5	0.1	0.5	0.5	0.5	0.4	0.7	0.3
IMPROPERLY PARKED VEHICLES	0.6	0.8	0.1	0.4	0.4	1.5	1.3	0.9	0.2
FIXED OBJECT	0.3	0.1	0.1	0.4	0.1	0.4	0.3	0.7	0.6
SLIPPERY SURFACE	12.0	5.2	0.8	2.8	8.0	13.4	6.0	19.1	7.3
WATER POOLING	0.5	0.2	0.0	0.3	0.7	0.2	0.0	1.0	0.8
OTHER (ROADWAY)	2.1	2.1	1.3	2.5	2.2	4.4	4.7	3.8	2.2

TABLE 14. ACCIDENT SEVERITY FOR VARIOUS ACCIDENT TYPES.

VARIABLE	ALL ACCIDENTS	PEDESTRIAN ACCIDENTS	BICYCLE ACCIDENTS	MOTORCYCLE ACCIDENTS	SCHOOL BUS ACCIDENTS	EMERGENCY VEHICLE ACCIDENTS
PERCENT FATAL ACCIDENTS	0.55	6.67	1.29	2.91	0.27	0.40
PERCENT INJURY ACCIDENTS	20.0	88.9	80.7	73.3	15.1	19.5

TABLE 15. ACCIDENT TREND ANALYSIS.

ACCIDENT STATISTIC	NUMBER IN GIVEN YEAR			3-YEAR AVERAGE (77-79)	1980	PERCENT CHANGE
	1977	1978	1979			
TOTAL ACCIDENTS	147,647	152,303	147,247	149,066	128,130	-14.0
FATAL ACCIDENTS	810	785	801	799	750	-6.1
FATALITIES	958	893	905	919	825	-10.2
INJURY ACCIDENTS	28,679	29,019	29,447	29,048	27,028	-7.0
INJURIES	43,957	44,403	44,814	44,391	40,786	-8.1
FATAL AND INJURY ACCIDENTS	29,489	29,804	30,248	29,847	27,778	-6.9
SPEED-RELATED ACCIDENTS	14,034	13,497	12,994	13,508	11,214	-17.0
SPEED-RELATED FATAL ACCIDENTS	288	297	282	289	291	+0.7
ALCOHOL-RELATED ACCIDENTS	9,245	9,117	10,140	9,500	10,708	+12.7
ALCOHOL-RELATED FATAL ACCIDENTS	178	190	196	188	196	+4.1
DRUG-RELATED ACCIDENTS	323	383	452	386	584	+51.3
PEDESTRIAN ACCIDENTS	1,778	1,741	1,779	1,766	1,607	-9.0
BICYCLE ACCIDENTS	731	747	756	745	749	+0.5
MOTORCYCLE ACCIDENTS	1,870	1,811	1,844	1,842	1,873	+1.7
SCHOOL BUS ACCIDENTS	537	737	823	699	693	-0.9
EMERGENCY VEHICLE ACCIDENTS	451	535	545	510	656	+28.6

TABLE 16. COMPARISON OF FATAL ACCIDENTS WITH ALL ACCIDENTS.

VARIABLE	ALL ACCIDENTS	FATAL ACCIDENTS
MONTH WITH HIGHEST PERCENTAGE	JANUARY	JULY
DAY WITH HIGHEST PERCENTAGE	FRIDAY	SATURDAY*
HOOR WITH HIGHEST PERCENTAGE	4-5 PM	11PM-12AM
PERCENT INVOLVING FIXED OBJECT	13.9	33.6
PERCENT REAR-END COLLISIONS OR SAME DIRECTION SIDESWIPE	21.0*	3.9*
PERCENT ANGLE COLLISIONS	13.5*	6.9*
PERCENT HEAD-ON OR OPPOSITE DIRECTION COLLISIONS	7.0*	17.9*
PERCENT PEDESTRIAN ACCIDENTS	1.2*	14.4*
PERCENT INTERSECTION ACCIDENTS	28.6*	15.1*
PERCENT ON WET SURFACE	17.8	14.7
PERCENT ON SNOW OR ICE	10.5	3.6
PERCENT NIGHTTIME ACCIDENTS	30.0	48.4

\* ONLY 1980 DATA WERE AVAILABLE.



TABLE 17. COUNTIES WITH FATAL ACCIDENT RATES ABOVE CRITICAL.

POPULATION CATEGORY	COUNTIES WITH FATAL ACCIDENT RATES ABOVE CRITICAL	NUMBER OF FATAL ACCIDENTS (1978-1980)	FATAL ACCIDENT RATE (ACCIDENTS PER 100 MVH)
UNDER 10,000	NONE	--	----
10,000-19,999	MONROE	19	9.34
	LESLIE	20	8.03
	MCCREARY	18	6.96
20,000-49,999	PERRY	38	6.46
50,000-100,000	NONE	--	----
OVER 100,000	NONE	--	----

TABLE 18. CITIES WITH HIGH FATAL ACCIDENT RATES.\*

POPULATION CATEGORY	CITY	NUMBER OF FATAL ACCIDENTS (1978-1980)	ANNUAL FATAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP.)
OVER 100,000	LEXINGTON	89	1.5
30,000-99,999	BOWLING GREEN	22	1.8
20,000-29,999	HENDERSON	16	2.1
	HOPKINSVILLE	13	1.6
10,000-19,999	MURRAY	9	2.1
	FORT THOMAS	8	1.7
	SOMERSET	5	1.6
5,000-9,999	HARPODSBURG	6	2.8
	PRINCETON	6	2.8
	INDEPENDENCE	6	2.5
	VERSAILLES	4	2.1
2,500-4,999	RUSSELL	6	5.2
	TOMKINSVILLE	6	4.6
1,000-2,499	MULDRAUGH	3	5.7
	ELKTON	3	5.5
	WEST LIBERTY	2	4.8

\* THERE WERE NO CITIES WITH FATAL ACCIDENT RATES ABOVE CRITICAL.

TABLE 19. COMPARISON OF NATIONWIDE AND KENTUCKY FATAL ACCIDENT STATISTICS.\*

VARIABLE	NATIONWIDE	KENTUCKY
FATAL ACCIDENTS PER 100 MVH	2.91	3.07
FATALITIES PER 100 MVH	3.34	3.44
FATALITIES PER FATAL ACCIDENT	1.15	1.08
PERCENT ALCOHOL INVOLVED	29	25
PERCENT DURING NON-DAYLIGHT HOURS	59	54

\*KENTUCKY FATAL ACCIDENT RATES FROM 1978-1980 STATISTICS. NATIONWIDE STATISTICS OBTAINED FROM NATIONAL FATAL ACCIDENT REPORTING SYSTEM (FARS).

TABLE 20. SUMMARY OF DRIVER RECORDS BY COUNTY (1/1/78 THROUGH 12/31/81).

COUNTY	NUMBER OF SPEEDING VIOLATIONS	NUMBER OF RECKLESS DRIVING VIOLATIONS	NUMBER OF STOP VIOLATIONS	NUMBER OF ALCOHOL VIOLATIONS	TOTAL NUMBER OF VIOLATIONS	TOTAL NUMBER OF POINTS ACCUMULATED	COUNTY	NUMBER OF SPEEDING VIOLATIONS	NUMBER OF RECKLESS DRIVING VIOLATIONS	NUMBER OF STOP VIOLATIONS	NUMBER OF ALCOHOL VIOLATIONS	TOTAL NUMBER OF VIOLATIONS	TOTAL NUMBER OF POINTS ACCUMULATED
ADAIR	1,162	186	65	151	2,217	4,668	KNOX	3,138	279	168	313	5,424	12,017
ALLEN	748	101	79	117	1,334	3,390	LARUE	921	115	83	105	1,571	3,650
ANDERSON	1,374	205	128	178	2,437	5,681	LAUREL	3,645	350	272	477	6,933	13,055
BALLARD	970	115	135	123	1,643	4,536	LAURENCE	1,146	176	107	155	2,182	5,369
BARREN	3,076	454	222	639	5,735	11,281	LEE	491	71	68	151	1,195	2,182
BATH	756	207	61	106	1,426	2,938	LESLIE	969	165	81	85	1,908	3,355
BEALL	3,022	222	279	396	5,940	12,945	LETCHER	1,907	270	125	301	3,823	8,250
BOONE	8,083	741	1,107	725	12,826	33,082	LEWIS	1,036	159	74	103	1,804	4,910
BOURBON	2,296	368	377	297	4,175	10,700	LINCOLN	1,625	205	144	237	3,024	7,024
BOYD	6,046	571	1,464	606	10,701	28,453	LIVINGSTON	1,400	182	92	134	2,356	6,062
BOYLE	2,933	231	344	403	5,078	12,396	LOGAN	1,719	647	155	176	3,286	9,106
BRACKEN	670	137	68	61	1,162	3,082	LYON	622	132	49	60	1,056	2,614
BREATHITT	954	106	65	96	1,737	3,332	MCCRACKEN	7,944	906	1,760	769	14,468	34,735
BRECKINRIDGE	1,368	224	134	179	2,396	6,307	MCCRARY	1,274	135	80	191	2,431	4,811
BULLITT	3,238	592	1,327	302	6,240	15,842	MCLEAN	1,673	109	111	141	2,364	6,367
BUTLER	1,107	241	63	147	1,938	4,260	MADISON	5,530	636	988	819	10,682	22,933
CALDWELL	1,525	170	167	209	2,677	5,893	MAGOFFIN	1,118	235	42	90	2,438	4,626
CALLOWAY	3,537	558	412	181	5,870	15,424	MARION	1,265	537	149	107	2,431	6,679
CAMPBELL	12,941	1,318	2,825	1,301	21,788	55,129	MARSHALL	3,645	415	295	249	5,884	14,042
CARLISLE	491	63	60	46	778	2,248	MARTIN	832	201	74	149	1,702	4,242
CARROLL	476	112	155	90	1,819	4,125	MASON	1,339	273	160	113	2,465	6,715
CARTER	2,274	237	226	236	4,351	9,132	MEADE	1,205	203	219	159	2,353	5,959
CASEY	1,103	193	78	204	2,315	5,186	MEHIFEE	263	90	24	64	653	1,404
CHRISTIAN	7,389	841	1,311	605	12,423	30,186	MERCER	2,367	235	233	372	4,114	9,428
CLARK	3,304	431	426	472	5,992	14,185	METCALFE	695	107	37	120	1,301	2,574
CLAY	1,619	336	121	153	3,203	5,754	MONROE	544	186	34	107	1,137	2,581
CLINTON	902	125	35	196	1,597	3,649	MONTGOMERY	1,843	449	174	283	3,602	7,941
CRITTENDEN	1,405	138	102	133	2,211	5,906	MORGAN	680	147	54	93	1,473	2,949
CUMBERLAND	696	129	29	70	1,161	2,842	MUHLENBURG	3,222	397	217	286	5,336	12,873
DAVIESS	13,323	1,046	2,183	1,443	21,087	49,021	NELSON	2,780	408	399	330	4,803	12,263
EDMONDS	657	116	70	100	1,228	2,940	NICHOLAS	680	98	49	123	1,244	3,081
ELLIOTT	524	85	42	52	1,034	2,252	OHIO	2,259	254	176	257	3,669	8,367
ESTILL	1,143	165	151	192	2,170	4,895	OLDHAM	3,216	217	485	159	4,922	11,298
FAYETTE	37,063	3,483	9,432	1,867	67,433	166,054	OWEN	675	89	84	106	1,253	2,939
FLEMING	1,162	189	113	124	1,976	5,389	OWSLEY	237	60	34	109	770	1,375
FLOYD	2,865	272	133	362	5,562	10,517	PENDLETON	1,511	227	185	127	2,384	6,466
FRANKLIN	5,798	777	924	504	10,825	24,039	PERRY	2,740	337	191	292	4,902	9,868
FULTON	706	88	109	123	2,089	3,484	PIKE	3,673	709	479	403	9,963	24,255
GALLATIN	564	42	45	56	890	2,786	POWELL	694	154	63	108	1,655	3,001
GARRARD	895	133	128	146	1,756	4,032	PULASKI	5,098	513	548	679	8,803	20,810
GRANT	1,597	187	133	174	2,639	5,922	ROBERTSON	137	28	13	23	256	639
GRAVES	2,975	669	396	280	5,393	13,605	ROCKCASTLE	1,170	168	118	220	2,226	4,407
GRAYSON	1,680	346	145	278	3,160	7,587	ROWAN	1,958	201	237	273	3,731	7,620
GREEN	822	189	47	56	1,368	3,566	RUSSELL	1,050	136	79	169	1,909	5,992
GREENUP	4,587	524	700	291	7,430	20,797	SCOTT	2,420	418	495	273	4,817	10,965
HAMMOCK	853	71	79	95	1,314	3,352	SHELBY	2,075	373	391	314	5,055	11,101
HARDIN	7,654	703	1,276	757	13,454	33,744	SIMPSON	1,477	173	158	133	2,366	6,406
HARLAN	4,263	518	318	420	8,035	20,314	SPENCER	524	102	114	82	1,057	2,671
HARRISON	1,404	186	178	202	2,426	6,001	TAYLOR	2,072	495	146	82	3,362	8,818
HART	1,079	167	85	207	2,049	4,213	TODD	1,069	266	96	70	1,831	5,172
HENDERSON	5,626	701	1,094	653	10,068	22,467	TRIGG	1,129	112	76	111	1,751	4,451
HENRY	1,201	138	144	117	2,029	4,438	TRIMBLE	474	31	52	36	730	1,829
HICKMAN	660	62	58	80	1,010	2,699	UNION	2,136	274	289	189	3,879	10,193
HOPKINS	7,200	682	700	601	11,958	25,571	WARREN	6,684	1,507	1,112	735	15,104	34,860
JACKSON	530	202	88	89	1,354	2,798	WASHINGTON	1,109	220	108	79	1,602	4,912
JEFFERSON	86,327	15,325	31,793	5,300	181,063	454,142	WAYNE	1,371	182	66	185	2,288	5,591
JESSAMINE	3,022	310	620	299	5,138	12,297	WEBSTER	2,103	228	183	163	3,386	7,519
JOHNSON	2,091	284	149	225	4,125	9,089	WHITLEY	2,204	179	139	322	4,104	8,035
KENTON	17,035	2,231	4,383	2,120	31,752	78,482	WOLFE	560	88	28	58	716	1,810
KNOTT	639	87	47	78	1,349	2,831	WOODFORD	2,304	260	342	249	4,007	9,973

TABLE 28. COUNTIES AND CITIES WITH LARGE PERCENTAGES OF ACCIDENTS INVOLVING SPEEDING.

POPULATION CATEGORY	COUNTIES AND CITIES WITH HIGH PERCENTAGES	NUMBER OF SPEED-RELATED ACCIDENTS (1978-1980)	PERCENTAGE OF ACCIDENTS INVOLVING SPEEDING
<u>COUNTIES</u>			
UNDER 10,000	MENIFEE*	99	38
	ROBERTSON*	23	30
10,000-19,999	LESLIE*	208	33
	BREATHITT*	297	30
	KNOTT*	277	30
	MAGOFFIN	228	30
20,000-49,999	LETCHER*	435	33
	OLDHAM	392	20
50,000-100,000	PIKE*	998	16
	MADISON	946	13
	HARDIN	936	13
OVER 100,000	JEFFERSON*	6,305	5.9
	KENTON*	1,318	5.7
	FAYETTE	1,778	5.0
<u>CITIES</u>			
1,000-2,499	GUTHRIE	4	33
	EVARTS	22	19
2,500-4,999	JENKINS*	15	38
	JACKSON*	19	17
5,000-9,999	INDEPENDENCE*	137	15
	FT. MITCHELL*	88	8.6
10,000-19,999	RADCLIFF	156	8.2
	FLORENCE	232	5.0
20,000-29,999	HOPKINSVILLE	236	4.8
	PADUCAH*	227	3.6
30,000-100,000	COVINGTON	441	3.9
	BOWLING GREEN	375	3.5
	OWENSBORO	180	1.7
OVER 100,000	LOUISVILLE*	5,068	5.7
	LEXINGTON	1,778	5.0

\* THIS COUNTY HAD SPEED VIOLATION RATES BELOW THE AVERAGES FOR ITS POPULATION CATEGORY (SPEED VIOLATIONS PER 1,000 LICENSED DRIVERS AND SPEED VIOLATIONS PER SPEED-RELATED ACCIDENT AS GIVEN IN TABLE 21), OR THIS CITY IS IN SUCH A COUNTY.

TABLE 29. COUNTIES AND CITIES WITH LARGE PERCENTAGES OF ACCIDENTS INVOLVING ALCOHOL\*

POPULATION CATEGORY	COUNTIES WITH HIGH PERCENTAGES	NUMBER OF ALCOHOL-RELATED ACCIDENTS (1978-1980)	PERCENTAGE OF ACCIDENTS INVOLVING ALCOHOL
<u>COUNTIES</u>			
UNDER 10,000	MENIFEE	41	16
	GALLATIN*	75	13
10,000-19,999	BATH	71	16
	MAGOFFIN*	99	13
	RUSSELL	79	13
20,000-49,999	MEADE*	241	14
	HARLAN	310	10
	NELSON*	269	10
50,000-100,000	MADISON	605	8.5
	MCCRACKEN*	745	8.4
OVER 100,000	KENTON	1,856	8.1
	FAYETTE	2,785	7.8
	JEFFERSON	5,686	5.3
<u>CITIES</u>			
POPULATION CATEGORY	CITIES WITH HIGH PERCENTAGES	NUMBER OF ALCOHOL-RELATED ACCIDENTS (1978-1980)	PERCENTAGE OF ACCIDENTS INVOLVING ALCOHOL
1,000-2,499	UNIONTOWN*	6	18
	MULDRAUGH*	46	16
	WORTHINGTON*	11	16
2,500-4,999	VINE GROVE	30	12
	JACKSON	11	10
	JENKINS	4	10
5,000-9,999	DAYTON	61	11
	INDEPENDENCE*	79	8.5
	PARIS	89	8.5
10,000-19,999	FORT THOMAS	143	8.8
	RADCLIFF	147	7.7
	ERLANGER	226	7.1
20,000-29,999	PADUCAH*	483	7.6
	RICHMOND	290	7.0
30,000-100,000	COVINGTON	996	8.8
	BOWLING GREEN	754	7.1
	OWENSBORO	613	5.7
OVER 100,000	LEXINGTON	2,785	7.8
	LOUISVILLE	4,076	4.6

\* THIS COUNTY HAD AN ALCOHOL VIOLATION RATE BELOW THE AVERAGE FOR ITS POPULATION CATEGORY (ALCOHOL VIOLATIONS PER 1,000 LICENSED DRIVERS AND ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT AS GIVEN IN TABLE 21), OR THIS CITY IS IN SUCH A COUNTY.



TABLE 22. TRENDS IN VIOLATIONS ISSUED BY COUNTY.

COUNTY	ANNUAL AVERAGE NUMBER OF TOTAL VIOLATIONS ISSUED (1978 - 1980)	TOTAL VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE	ANNUAL AVERAGE NUMBER OF ALCOHOL VIOLATIONS ISSUED (1978-1980)	ALCOHOL VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE	ANNUAL AVERAGE NUMBER OF SPEED VIOLATIONS ISSUED (1978-1980)	SPEED VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE
ADAIR	528	634	+20	36	42	+17	293	284	-3
ALLEN	354	273	-23	34	16	-53	197	157	-20
ANDERSON	659	459	-30	46	40	-13	387	212	-45
BALLARD	466	244	-48	34	21	-38	285	116	-59
BARREN	1,535	1,130	-26	163	150	-8	856	508	-41
BATH	384	273	-29	32	11	-66	214	113	-47
BELL	1,506	1,422	-6	98	103	+5	816	573	-30
BOONE	3,200	3,226	+1	176	198	+13	2,111	1,750	-17
BOURBON	1,116	826	-26	73	79	+8	645	361	-44
BOYD	2,759	2,424	-12	150	156	+4	1,629	1,160	-29
BOYLE	1,360	997	-27	105	89	-15	826	456	-45
BRACKEN	294	279	-5	17	9	-47	170	160	-6
BREATHITT	446	398	-11	27	12	-56	253	194	-23
BRECKINRIDGE	630	506	-20	42	52	+24	383	220	-43
BULLITT	1,605	1,424	-11	78	67	-14	857	667	-22
BUTLER	526	360	-32	40	28	-30	303	198	-35
CALDWELL	704	564	-20	52	53	+2	412	289	-30
CALLOWAY	1,558	1,195	-23	46	44	-4	964	644	-33
CAMPBELL	5,733	4,588	-20	316	353	+12	3,505	2,427	-31
CARLISLE	216	130	-40	13	7	-46	141	67	-52
CARROLL	489	343	-28	14	48	+243	278	143	-49
CARTER	1,144	920	-20	58	63	+9	622	407	-35
CASEY	612	478	-22	57	32	-44	296	216	-27
CHRISTIAN	3,325	2,448	-26	157	134	-15	2,037	1,278	-37
CLARK	1,533	1,392	-9	109	146	+34	890	633	-29
CLAY	837	692	-17	45	19	-58	427	339	-21
CLINTON	413	359	-13	55	31	-44	232	205	-12
CRITTENDEN	596	422	-29	35	28	-20	389	238	-39
CUMBERLAND	305	265	-13	20	10	-50	173	177	+2
DAVIESS	5,380	4,948	-8	388	280	-28	3,473	2,903	-16
EDMONSON	320	268	-16	29	12	-59	171	144	-16
ELLIOTT	268	231	-14	14	11	-21	139	108	-22
ESTILL	607	349	-43	55	28	-49	330	145	-56
FAYETTE	17,169	15,925	-7	453	509	+12	9,846	7,524	-24
FLEMING	497	486	-2	36	16	-56	299	266	-11
FLOYD	1,310	1,631	+25	72	145	+96	740	645	-13
FRANKLIN	2,891	2,152	-26	224	225	0	1,652	841	-49
FULTON	377	251	-33	33	24	-27	202	99	-51
GALLATIN	226	211	-7	12	19	+58	147	123	-16
GARRARD	457	386	-16	37	35	-5	249	147	-41
GRANT	442	713	+11	39	57	+46	397	406	+2
GRAVES	1,489	927	-38	73	62	-15	848	431	-49
GRAYSON	832	663	-20	74	55	-26	453	322	-29
GREEN	348	324	-7	14	13	-7	217	164	-24
GREENUP	1,973	1,512	-23	70	60	-14	1,259	809	-36
HAMCOCK	350	265	-24	26	18	-31	233	164	-30
HARDIN	3,595	2,670	-26	209	131	-37	2,126	1,319	-38
HARLAN	2,230	1,346	-40	129	43	-67	1,223	583	-52
HARRISON	650	477	-27	52	47	-10	397	213	-46
HART	567	348	-39	59	31	-47	308	155	-50
HENDERSON	2,810	1,637	-42	181	144	-20	1,630	738	-55
HENRY	523	461	-12	28	33	+18	330	212	-36
HICKMAN	271	196	-28	21	17	-19	169	94	-44
HOPKINS	3,145	2,524	-20	164	102	-39	1,903	1,492	-22
JACKSON	357	283	-21	25	14	-44	148	87	-41
JEFFERSON	46,317	42,113	-9	1,309	1,373	+5	23,596	15,538	-34
JESSAMINE	1,334	1,135	-15	76	72	-5	847	482	-43
JOHNSON	1,045	990	-5	51	73	+43	572	374	-35
KENTON	8,025	7,675	-4	499	622	+25	4,451	3,683	-17
KNOTT	307	428	+39	19	22	+16	152	133	+20
KNOX	1,516	877	-42	93	33	-65	909	410	-55
LARUE	430	281	-35	31	12	-61	280	140	-46
LAUREL	1,785	1,579	-12	124	104	-16	980	704	-28
LAURENCE	558	508	-9	37	45	+22	311	213	-32
LEE	332	199	-40	46	13	-72	142	66	-54
LESLIE	468	504	+8	25	9	-64	245	234	-4
LETCHER	942	996	+6	76	74	-3	509	379	-26
LENIS	459	426	-7	31	10	-68	264	244	-8
LINCOLN	815	580	-29	66	40	-39	459	247	-46
LIVINGSTON	654	395	-40	35	29	-17	400	199	-50
LOGAN	883	636	-28	45	41	-9	479	282	-41
LYON	282	209	-26	15	15	0	171	103	-37
MCCRACKEN	3,825	2,994	-22	196	180	-8	2,159	1,468	-32
MCCREARY	616	583	-5	50	42	-16	335	268	-20
MCLEAN	618	511	-17	36	33	-8	440	352	-20
MADISON	2,801	2,279	-19	210	187	-11	1,543	951	-38
MAGOFFIN	612	602	-2	20	30	+50	310	189	-39
MARION	616	564	-9	29	21	-28	338	271	-20
MARSHALL	1,557	1,213	-22	64	58	-9	1,007	625	-38
MARTIN	446	363	-19	41	25	-39	228	149	-35
MASON	628	582	-9	31	20	-35	356	272	-24
MEADE	618	498	-2	40	38	-5	326	227	-30
MENIFEE	175	129	-26	18	9	-50	74	41	-45
MERCER	1,079	877	-19	100	72	-28	647	427	-34
METCALFE	323	332	+3	26	41	+58	179	158	-12
MONROE	293	289	-1	29	19	-34	141	120	-15
MONTGOMERY	955	737	-23	82	37	-55	511	310	-39
MORGAN	367	372	+1	23	25	+9	178	145	-19
MUHLENBURG	1,392	1,160	-17	78	52	-33	861	640	-26
NELSON	1,312	866	-34	95	45	-53	795	394	-50
NICHOLAS	334	242	-28	34	22	-35	188	117	-38
OHIO	987	707	-28	68	54	-21	625	385	-38
OLDHAM	1,251	1,170	-6	28	74	+192	873	596	-32
OWEN	337	243	-28	29	18	-38	191	103	-46
OHSLEY	203	160	-21	31	15	-52	82	40	-51
PENDLETON	615	538	-13	29	41	+41	395	327	-17
PERRY	1,238	1,196	-3	90	23	-74	710	609	-14
PIKE	2,429	2,677	+10	104	90	-13	779	1,337	+72
POWELL	440	335	-24	30	17	-43	258	145	-42

TABLE 23. STATEWIDE TRENDS IN DRIVING RECORD STATISTICS.

DRIVING RECORD STATISTIC	1977	1978	1979	1980	4-YEAR AVERAGE (1977-1980)	1981	1981 PERCENT CHANGE
TOTAL VIOLATIONS	170,561	149,809	221,735	215,361	189,366	167,884	-11.3
ALCOHOL VIOLATIONS	7,166	9,044	10,874	10,117	9,300	8,988	-3.3
SPEEDING VIOLATIONS	98,708	90,031	124,719	112,836	106,574	76,773	-28.0
POINTS ACCUMULATED	468,622	434,762	533,736	488,574	481,424	357,552	-25.7
RECKLESS DRIVING VIOLATIONS	14,765	13,824	15,972	14,375	14,734	12,001	-18.5
STOP VIOLATIONS	18,305	16,571	23,617	22,988	20,370	17,527	-14.0
VIOLATIONS PER ACCIDENT (ALL)	1.16	0.98	1.51	1.68	1.32	1.31*	-0.8
ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT	0.78	0.99	1.07	0.94	0.95	**	**
SPEED VIOLATIONS PER SPEED-RELATED ACCIDENT	7.0	6.7	9.6	10.1	9.0	**	**

\* BASED ON PRELIMINARY ACCIDENT DATA FOR 1981.  
 \*\* ACCIDENT DATA NOT AVAILABLE FOR 1981.

TABLE 22. TRENDS IN VIOLATIONS ISSUED BY COUNTY.

COUNTY	ANNUAL AVERAGE NUMBER OF TOTAL VIOLATIONS ISSUED (1978 - 1980)	TOTAL VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE	ANNUAL AVERAGE NUMBER OF ALCOHOL VIOLATIONS ISSUED (1978-1980)	ALCOHOL VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE	ANNUAL AVERAGE NUMBER OF SPEED VIOLATIONS ISSUED (1978-1980)	SPEED VIOLATIONS ISSUED IN 1981	1981 PERCENT CHANGE
PULASKI	2,268	2,000	-12	175	154	-12	1,335	1,092	-18
ROBERTSON	65	61	-6	5	6	+60	35	32	-9
ROCKCASTLE	593	448	-24	59	44	-25	332	175	-47
ROHAN	999	733	-27	84	22	-74	533	359	-33
RUSSELL	496	422	-15	52	13	-75	265	236	-11
SCOTT	1,196	1,224	+2	59	97	+64	661	438	-34
SHELBY	1,278	1,223	-4	70	103	+47	765	561	-24
SIMPSON	619	508	-18	39	17	-56	394	296	-25
SPENCER	280	218	-22	20	22	+10	144	92	-36
TAYLOR	833	864	+4	22	16	-27	536	453	-14
TODD	509	303	-40	19	14	-26	306	151	-51
TRIGG	452	395	-13	29	25	-14	297	238	-20
TRIMBLE	193	150	-22	10	7	-30	131	82	-37
UNION	1,035	775	-25	53	31	-42	588	371	-37
WARREN	4,049	2,956	-27	202	129	-36	2,384	1,533	-36
WASHINGTON	466	405	-13	21	17	-19	298	215	-28
WAYNE	588	523	-11	53	25	-53	349	323	-7
WEBSTER	903	676	-25	45	27	-40	561	421	-25
WHITLEY	1,002	1,097	+9	81	79	-2	562	518	-8
WOLFE	166	218	+31	15	14	-7	159	83	-48
WOODFORD	976	1,080	+11	63	59	-6	574	582	+1
ALL	195,635	167,884	-14	10,012	8,968	-10	109,195	76,773	-30



TABLE 24. COUNTIES WITH HIGHEST VIOLATION RATES (BY POPULATION CATEGORY).

POPULATION CATEGORY	TOTAL POINTS PER 1,000 LICENSED DRIVERS*	ALCOHOL VIOLATIONS PER 1,000 LICENSED DRIVERS*	SPEED VIOLATIONS PER 1,000 LICENSED DRIVERS*	TOTAL VIOLATIONS PER 1,000 LICENSED DRIVERS*	TOTAL VIOLATIONS PER ACCIDENT**	ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT	SPEED VIOLATIONS PER SPEED-RELATED ACCIDENT
UNDER 10,000	LIVINGSTON 1125	ONSLEY 43.4	LIVINGSTON 260	LIVINGSTON 437	NICHOLAS 4.70	ONSLEY 6.71	CLINTON 20.5
	GALLATIN 1069	LEE 41.2	CRITTENDEN 250	CRITTENDEN 394	LEE 3.06	NICHOLAS 5.05	CRITTENDEN 20.5
	CRITTENDEN 1052	CLINTON 41.1		CUMBERLAND 309	BRACKEN 3.02	LEE 4.76	HANCOCK 17.9
10,000-19,999	PENDLETON 1064	ROWAN 33.5	MCLEAN 268	ROWAN 458	MCLEAN 3.18	CASEY 2.70	MCLEAN 24.9
	MCLEAN 1018	MERCER 33.1	PENDLETON 248	MAGOFFIN 423	CASEY 2.64	ESTILL 2.69	BUTLER 19.8
	BOURBON 995	ROCKCASTLE 31.4	WEBSTER 239			BUTLER 2.48	
20,000-49,999	BOONE 1332	FRANKLIN 37.4	BOONE 325	BOONE 516	KNOX 2.29	PULASKI 2.71	HARLAN 15.6
	HARLAN 1025	BARREN 33.9	HOPKINS 273	HOPKINS 453	LETCHER 2.16	LETCHER 2.47	GREENUP 13.7
50,000-100,000	CAMPBELL 1203	MADISON 34.6	CAMPBELL 282	CAMPBELL 476	CHRISTIAN 1.46	CAMPBELL 1.24	CAMPBELL 24.5
	CHRISTIAN 1073	CAMPBELL 28.4	CHRISTIAN 263	MADISON 451	HARDIN 1.44	DAVISS 1.24	DAVISS 14.5
OVER 100,000	FAYETTE 1620	KENTON 29.7	FAYETTE 362	FAYETTE 658	FAYETTE 1.44	KENTON 0.81	FAYETTE 16.6

\* 1978 THROUGH 1981 DATA.  
\*\* 1978 THROUGH 1980 DATA.

TABLE 25. COUNTIES WITH LOWEST VIOLATION RATES (BY POPULATION CATEGORY).

POPULATION CATEGORY	TOTAL POINTS PER 1,000 LICENSED DRIVERS*	ALCOHOL VIOLATIONS PER 1,000 LICENSED DRIVERS*	SPEED VIOLATIONS PER 1,000 LICENSED DRIVERS*	TOTAL VIOLATIONS PER 1,000 LICENSED DRIVERS*	TOTAL VIOLATIONS PER ACCIDENT**	ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT**	SPEED VIOLATIONS PER SPEED-RELATED ACCIDENT**
UNDER 10,000	TRIMBLE 494	TRIMBLE 9.7	MENIFEE 102	TRIMBLE 197	CARROLL 0.97	CARROLL 0.33	MENIFEE 2.2
	ROBERTSON 498	CARLISLE 12.8	ROBERTSON 107	ROBERTSON 199	WOLFE 1.06	GALLATIN 0.49	GALLATIN 3.2
10,000-19,999	KNOTT 370	GREEN 9.1	KNOTT 83	ALLEN 173	MASON 0.60	MARION 0.36	KNOTT 1.6
	MONROE 395	KNOTT 10.2	MONROE 83	MONROE 174	MARION 0.96	KNOTT 0.48	BREATHITT 2.6
20,000-49,999	FLOYD 515	TAYLOR 7.1	LOGAN 127	LOGAN 243	WHITLEY 1.02	OLDHAM 0.48	LETCHER 3.5
	WHITLEY 576	CALLGHAY 10.9	LETCHER 135	LETCHER 270	HEADE 1.07	HEADE 0.50	PERRY 3.9
50,000-100,000	PIKE 665	PIKE 11.1	PIKE 101	PIKE 273	WARREN 0.97	WARREN 0.60	PIKE 2.3
			BOYD 184	BOYD 325	BOYD 0.95	PIKE 0.64	MADISON 4.9
OVER 100,000	KENTON 1101	JEFFERSON 14.1	JEFFERSON 229	KENTON 445	KENTON 1.05	FAYETTE 0.49	KENTON 10.1

\* 1978 THROUGH 1981 DATA.  
\*\* 1978 THROUGH 1980 DATA.

TABLE 26. VIOLATION RATES BY COUNTY POPULATION CATEGORY.

POPULATION GROUP	LICENSED DRIVERS	TOTAL POINTS PER 1,000 LICENSED DRIVERS*	ALCOHOL VIOLATIONS PER 1,000 LICENSED DRIVERS*	SPEED VIOLATIONS PER 1,000 LICENSED DRIVERS*	TOTAL VIOLATIONS PER 1,000 LICENSED DRIVERS*
UNDER 10,000	105,937	732	22.7	170	305
10,000 - 19,999	332,990	712	20.5	168	299
20,000 - 49,999	579,659	829	22.1	202	359
50,000 - 100,000	331,398	945	22.4	221	391
OVER 100,000	550,698	1,269	16.9	255	509

POPULATION GROUP	VIOLATIONS (ALL) PER ACCIDENT (ALL)**	ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT**	SPEED VIOLATIONS PER SPEED-RELATED ACCIDENT**	PERCENT OF ACCIDENTS INVOLVING SPEEDING**	PERCENT OF ACCIDENTS INVOLVING ALCOHOL**
UNDER 10,000	1.90	1.66	6.9	16.1	8.5
10,000-19,999	1.56	1.30	4.4	13.9	3.3
20,000-49,999	1.45	1.22	7.8	11.1	7.2
50,000-100,000	1.23	0.96	9.0	7.8	7.2
OVER 100,000	1.29	0.65	12.1	5.7	6.2

\* 1978 THROUGH 1981 DATA.  
\*\* 1978 THROUGH 1980 DATA.

TABLE 27. COUNTIES WITH TOTAL ACCIDENT RATES ABOVE CRITICAL AND TOTAL VIOLATION RATES BELOW AVERAGE.\*

POPULATION CATEGORY	COUNTY	NUMBER OF ACCIDENTS (1978-1980)	ACCIDENT RATE (ACCIDENTS PER 100 MVM)	TOTAL VIOLATIONS PER 1,000 LICENSED DRIVERS	VIOLATIONS PER ACCIDENT
UNDER 10,000	TRIGG	1,070	362	301	1.27
10,000-19,999	MASON	3,125	846	256	0.60
	MARION	1,926	771	258	0.96
	HARRISON	1,484	582	264	1.31
	WAYNE	1,236	480	273	1.43
	LEWIS	954	442	259	1.40
	GARRARD	949	418	287	1.44
	MORGAN	901	395	260	1.22
20,000-49,999	BOYLE	3,134	647	356	1.30
	PERRY	3,474	591	326	1.07
	TAYLOR	1,965	585	292	1.27
	MONTGOMERY	2,034	540	356	1.41
50,000-100,000	BOYD	8,508	722	325	0.97
OVER 100,000	KENTON	22,959	1,012	445	1.05

\* AVERAGE TOTAL VIOLATION RATES BY POPULATION CATEGORY ARE GIVEN IN TABLE 26. BOTH TOTAL VIOLATIONS PER 1,000 DRIVERS AND VIOLATIONS PER ACCIDENT HAD TO BE BELOW AVERAGE.

TABLE 30. COMPARISON OF ALCOHOL-RELATED ACCIDENTS AND ALCOHOL VIOLATIONS FOR WET AND DRY COUNTIES.

COUNTY POPULATION CATEGORY	PERCENT ALCOHOL-RELATED ACCIDENTS (1978 - 1980)		ALCOHOL VIOLATIONS PER 1,000 DRIVERS (1978-1981)	
	WET COUNTIES*	DRY COUNTIES	WET COUNTIES	DRY COUNTIES
UNDER 10,000	9.1	8.3	18.8	23.5
10,000 - 19,999	8.6	8.2	18.2	21.4
20,000 - 49,999	8.0	6.6	25.5	20.3
50,000 - 100,000	7.4	6.6	25.0	17.0
OVER 100,000	6.2	**	16.9	**

  

COUNTY POPULATION CATEGORY	ALCOHOL VIOLATIONS PER ALCOHOL-RELATED ACCIDENT (1978-1980)		TOTAL VIOLATIONS PER 1,000 DRIVERS (1978-1981)		TOTAL VIOLATIONS PER ACCIDENT (1978-1981)	
	WET COUNTIES	DRY COUNTIES	WET COUNTIES	DRY COUNTIES	WET COUNTIES	DRY COUNTIES
UNDER 10,000	0.93	1.93	332	299	1.31	2.10
10,000 - 19,999	0.90	1.52	308	295	1.28	1.72
20,000 - 49,999	1.08	1.34	391	341	1.34	1.53
50,000 - 100,000	0.96	0.94	421	327	1.21	1.17
OVER 100,000	0.81	**	509	**	1.29	**

\* INCLUDES 26 COUNTIES IN WHICH ALCOHOL IS SOLD AND 10 COUNTIES WHICH EACH CONTAIN A CITY IN WHICH ALCOHOL IS SOLD.

\*\* ALL THREE COUNTIES IN THIS POPULATION CATEGORY ALLOW THE SALE OF ALCOHOL.

TABLE 31. ACCIDENT SEVERITY AND SEATBELT USAGE (DRIVERS ONLY).\*

TYPE OF INJURY	PERCENTAGE SUSTAINING A GIVEN INJURY	
	NOT WEARING SEATBELT	WEARING SEATBELT
FATAL	0.21	0.06
INCAPACITATING	2.26	1.26
NON-INCAPACITATING	4.42	4.01
POSSIBLE	4.50	4.26

\*BASED ON 1979 AND 1980 ACCIDENT DATA.

TABLE 32. CHANGE IN EFFECTIVENESS OF SEATBELTS.

TYPE OF INJURY	PERCENTAGE OF UNRESTRAINED DRIVERS WITH A GIVEN INJURY DIVIDED BY THE PERCENTAGE OF RESTRAINED DRIVERS WITH SAME INJURY	
	1977-1978	1979-1980
FATAL	4.60	3.50
INCAPACITATING	2.07	1.79
NON-INCAPACITATING	1.24	1.10
POSSIBLE INJURY	0.95	1.06
ALL	1.20	1.19

TABLE 33. SEATBELT USAGE SUMMARY BY COUNTY POPULATION GROUPS.

POPULATION CATEGORY	AVERAGE USAGE (PERCENT)	COUNTIES WITH LOWEST USAGE RATES	RATE (PERCENT DRIVERS USING SEATBELTS)	COUNTIES RECOMMENDED FOR TRIAL PROMOTION CAMPAIGNS
UNDER 10,000	2.8	CUMBERLAND	1.0	CRITTENDEN
		LEE	1.0	
		CARLISLE	1.3	
		CRITTENDEN	1.4	
		NICHOLAS	1.4	
10,000-19,999	2.6	WAYNE	0.7	WAYNE
		ADAIR	0.9	
		GREEN	1.0	
		JACKSON	1.0	
20,000-49,999	3.4	MONTGOMERY	0.7	PERRY
		PERRY	1.1	
		LETCHER	1.2	
		MUHLENBURG	1.3	
		JESSAMINE	1.4	
50,000-100,000	3.4	MCCRACKEN	2.2	WARREN
		PIKE	2.4	
		WARREN	2.6	
OVER 100,000	9.1	KENTON	4.9	KENTON

TABLE 36. SUMMARY OF SPEED MONITORING PROGRAM FOR 1981.

HIGHWAY TYPE	MILES	NUMBER OF MONITOR LOCATIONS	NUMBER OF VEHICLES MEASURED	DURATION OF MEASUREMENT (HOURS)
URBAN, INTERSTATE	135	7	7,395	21.0
URBAN, ARTERIALS	1,376	11	2,696	33.0
RURAL, INTERSTATE	573	10	8,298	30.0
RURAL, ARTERIALS	3,313	13	5,237	39.0
RURAL, MAJOR COLLECTOR	7,302	13	771	39.0
STATE TOTAL	12,699	54	24,397	162.0

HIGHWAY TYPE	AVERAGE SPEED (MPH)	MEDIAN SPEED (MPH)	85TH PERCENTILE SPEED (MPH)	PERCENT OF MOTORISTS EXCEEDING		
				55 MPH	60 MPH	65 MPH
URBAN, INTERSTATE	55.4	55.4	60.5	50.3	15.9	2.9
URBAN, ARTERIALS	48.8	49.1	54.7	13.3	3.8	0.9
RURAL, INTERSTATE	57.8	57.6	62.9	68.1	30.6	7.7
RURAL, ARTERIALS	54.1	54.1	59.5	39.5	12.5	2.8
RURAL, MAJOR COLLECTOR	49.2	49.4	55.4	17.2	5.2	1.8
STATE TOTAL	50.9	51.0	56.8	25.3	8.3	2.2

TABLE 37. COMPLIANCE WITH 55-MPH SPEED LIMIT (COMPARISON OF 1979, 1980, AND 1981 DATA).

HIGHWAY TYPE	MEDIAN SPEED			85TH PERCENTILE SPEED			PERCENT OF MOTORISTS EXCEEDING 55 MPH		
	1979	1980	1981	1979	1980	1981	1979	1980	1981
INTERSTATE, URBAN	54.8	54.9	55.4	60.1	59.9	60.5	45.0	45.2	50.3
INTERSTATE, RURAL	59.2	58.7	57.6	64.5	64.1	62.9	76.1	73.9	68.1
STATE TOTAL	52.7	52.7	51.0	58.6	58.3	56.8	31.9	30.8	25.3

TABLE 38. COUNTIES AND CITIES WITH HIGH RATES OF MOTOR-VEHICLE ACCIDENTS INVOLVING PEDESTRIANS.

POPULATION CATEGORY	COUNTIES AND CITIES WITH HIGH RATES	NUMBER OF PEDESTRIAN ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POP)
<b>COUNTIES</b>			
UNDER 10,000	TRIGG	12	4.3
	CARLISLE	6	3.6
	CRITTENDEN	10	3.6
10,000-19,999	ANDERSON	19	5.0
	CALDWELL	20	4.9
20,000-49,999	HENDERSON	94	7.7
	BOONE	80	5.8
50,000-100,000	CAMPBELL	236	9.4
	BOYD	88	5.3
OVER 100,000	KENTON	400	12.5
	FAYETTE	525	8.6
	JEFFERSON	1,590	7.7
<b>CITIES</b>			
1,000-2,499	CADIZ	7	14.0
	SALYERSVILLE	5	12.3
	WHITESBURG	5	10.9
2,500-4,999	LONDON	14	11.7
	HARLAN	9	9.9
5,000-9,999	BELLEVUE	24	10.4
	SHELBYVILLE	16	10.1
	MOUNT STERLING	17	9.7
10,000-19,999	FLORENCE	43	9.2
	ERLANGER	36	8.3
20,000-29,999	NEWPORT	164	25.3
	HENDERSON	74	9.9
30,000-99,999	COVINGTON	264	18.0
	OWENSBORO	99	6.1
	BOWLING GREEN	71	5.9
OVER 200,000	LOUISVILLE	1,375	9.4
	LEXINGTON	518	8.5

TABLE 34. CHANGE IN SEATBELT USAGE FOR 1977-1980 (DRIVERS INVOLVED IN ACCIDENTS) BY POPULATION CATEGORY.\*

YEAR	PERCENT USAGE					
	POPULATION CATEGORY					
	UNDER 10,000	10,000- 20,000	20,000- 50,000	50,000 100,000	OVER 100,000	ALL
1977	2.8	3.0	4.4	4.6	12.8	7.8
1978	2.6	2.6	3.5	3.4	10.8	6.3
1979	3.0	2.5	3.2	3.3	8.7	5.3
1980	2.8	2.9	3.3	3.6	7.5	5.0

\*A 1976 STUDY FOUND THAT 9.0 PERCENT OF ALL DRIVERS INVOLVED IN ACCIDENTS WERE REPORTED AS WEARING THEIR SEATBELTS.

TABLE 35. USAGE AND EFFECTIVENESS OF CHILD RESTRAINTS (1978 - 1980 ACCIDENT DATA FOR CHILDREN UNDER FOUR YEARS OF AGE).

VARIABLE	CATEGORY	RESTRAINT USED			
		NONE	SEATBELT OR HARNESS	CHILD RESTRAINT	ANY RESTRAINT
NUMBER WITH GIVEN INJURY	FATAL	36	1	2	3
	INCAPACITATING	269	3	8	11
	NON-INCAPACITATING	992	23	36	59
	POSSIBLE INJURY	1,192	49	60	109
	NONE	17,173	563	899	1,462
PERCENT WITH GIVEN INJURY	FATAL	.18	.16	.20	.18
	INCAPACITATING	1.37	0.47	0.80	0.67
	NON-INCAPACITATING	5.05	3.60	3.58	3.59
	POSSIBLE INJURY	6.06	7.67	5.97	6.63
	NONE	87.34	88.10	89.45	88.93
EJECTION	YES	151	8	5	13
	NO	19,514	625	998	1,623
	PERCENT EJECTED	0.77	1.26	0.50	0.79
PERCENT USAGE BY SEAT POSITION	MIDDLE FRONT	93.0	2.3	4.7	7.0
	RIGHT FRONT	92.6	3.3	4.0	7.4
	LEFT REAR	90.8	3.9	5.2	9.2
	MIDDLE REAR	93.2	2.7	4.1	6.8
	RIGHT REAR	88.6	4.3	7.1	11.4
	TOTAL	92.3	3.0	4.7	7.7
PERCENT WITH GIVEN INJURY BY SEAT POSITION (MIDDLE FRONT)	FATAL	.14	.53	.52	.52
	INCAPACITATING	1.32	0.53	1.55	1.22
	NON-INCAPACITATING	6.75	1.60	4.92	3.83
	POSSIBLE INJURY	6.51	12.23	6.74	8.54
(RIGHT FRONT)	FATAL	.22	0	0	0
	INCAPACITATING	1.57	.44	.36	.40
	NON-INCAPACITATING	5.99	5.31	2.55	3.79
	POSSIBLE INJURY	6.55	6.64	8.00	7.39
(LEFT REAR)	FATAL	.29	0	0	0
	INCAPACITATING	1.26	0	.97	.56
	NON-INCAPACITATING	3.49	5.19	2.91	3.89
	POSSIBLE INJURY	4.46	1.30	2.91	2.22
(MIDDLE REAR)	FATAL	.25	0	0	0
	INCAPACITATING	1.39	0	0	0
	NON-INCAPACITATING	3.38	0	4.44	2.70
	POSSIBLE INJURY	5.87	8.62	1.11	4.05
(RIGHT REAR)	FATAL	.05	0	0	0
	INCAPACITATING	.93	1.14	0	.43
	NON-INCAPACITATING	3.01	2.27	2.05	2.14
	POSSIBLE INJURY	3.83	5.68	5.48	5.56
PERCENT USAGE BY YEAR	1978	92.9	3.0	4.1	7.1
	1979	92.4	2.9	4.7	7.6
	1980	91.4	3.2	5.5	8.6



TABLE 39. COUNTIES AND CITIES WITH HIGH RATES OF MOTOR-VEHICLE ACCIDENTS INVOLVING BICYCLES.

POPULATION CATEGORY	COUNTIES AND CITIES WITH HIGH RATES	NUMBER OF BICYCLE ACCIDENTS (1977-1979)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
<u>COUNTIES</u>			
UNDER 10,000	BALLARD	7	2.7
	GALLATIN	3	2.1
	TRIMBLE	4	2.1
10,000-19,999	MARION	14	2.6
	CALDWELL	7	1.7
	LARUE	6	1.7
	UNION	9	1.7
20,000-49,999	HENDERSON	50	4.1
	BOYD	32	2.8
50,000-100,000	DAVIESS	129	5.0
	CAMPBELL	111	4.4
OVER 100,000	KENTON	173	5.4
	FAYETTE	255	4.2
	JEFFERSON	743	3.6
<u>CITIES</u>			
1,000-2,499	COLD SPRINGS	4	6.3
	LOYALL	2	5.5
2,500-4,999	LUDLOW	9	6.0
	MORGANFIELD	6	5.3
5,000-9,999	BELLEVUE	19	8.2
	SHELBYVILLE	9	5.7
10,000-19,999	FORT THOMAS	21	4.4
	DANVILLE	17	4.4
20,000-29,999	NEWPORT	43	6.6
	HENDERSON	45	6.0
30,000-99,999	OWENSBORO	120	7.3
	COVINGTON	102	6.9
	BOWLING GREEN	47	3.9
OVER 100,000	LOUISVILLE	615	4.2
	LEXINGTON	254	4.1

TABLE 40. COUNTIES AND CITIES WITH HIGH ACCIDENT RATES FOR MOTORCYCLES.

POPULATION CATEGORY	COUNTIES AND CITIES WITH HIGH RATES	NUMBER OF MOTORCYCLE ACCIDENTS (1977-1979)	ANNUAL ACCIDENT RATE (ACCIDENTS PER 10,000 POPULATION)
<u>COUNTIES</u>			
UNDER 10,000	GALLATIN	10	6.9
	TRIGG	16	5.7
10,000-19,999	ROWAN	30	5.2
	CALDWELL	20	4.9
20,000-49,999	BOONE	121	8.8
	CLARK	61	7.2
	CALLOWAY	64	7.1
50,000-100,000	MCCRACKEN	161	8.8
	WARREN	163	7.6
OVER 100,000	KENTON	238	7.4
	FAYETTE	441	7.2
	JEFFERSON	1,329	6.5
<u>CITIES</u>			
1,000-2,499	MULDRAUGH	8	15.2
	SALYERSVILLE	6	14.8
	ELKTON	7	12.9
2,500-4,999	MARION	18	17.7
	FORT WRIGHT	15	11.2
	LONDON	13	10.8
5,000-9,999	WILLIAMSBURG	20	12.0
10,000-19,999	RADCLIFF	52	11.9
	FLORENCE	55	11.8
	ELIZABETHTOWN	51	11.1
20,000-29,999	PADUCAH	93	10.4
	NEWPORT	49	7.6
30,000-99,999	BOWLING GREEN	120	9.9
	COVINGTON	105	7.1
	OWENSSORO	86	5.3
OVER 100,000	LOUISVILLE	1,063	7.2
	LEXINGTON	427	7.0

TABLE 41. COUNTIES WITH HIGH ACCIDENT RATES FOR SCHOOL BUSES.

ACCIDENTS PER 10,000 POPULATION			
POPULATION CATEGORY	COUNTIES WITH HIGH RATES	NUMBER OF SCHOOL BUS ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE
UNDER 10,000	GALLATIN	7	4.8
	LEE	8	3.4
10,000-19,999	MARION	18	3.4
	UNION	18	3.4
20,000-49,999	CLARK	33	3.9
	JESSAMINE	25	3.1
	LAUREL	32	3.1
50,000-100,000	BOYD	47	2.8
	DAVISS	59	2.3
OVER 100,000	FAYETTE	181	3.0
	KENTON	92	2.9
	JEFFERSON	583	2.8

ACCIDENTS PER 100 MVM				
POPULATION CATEGORY	COUNTIES WITH HIGH RATES	NUMBER OF SCHOOL BUS ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE	AVERAGE RATE FOR POPULATION CATEGORY
UNDER 10,000	GALLATIN	7	1481	544
	LEE	8	1462	
10,000-19,999	ANDERSON	11	1617	611
	MASON	14	1528	
	UNION	18	1489	
	CALDWELL	12	1466	
20,000-49,999	FRANKLIN	33	1947	895
	GREENUP	26	1625	
50,000-100,000	BOYD	47	4047	1468
	CAMPBELL	40	2183	
OVER 100,000	FAYETTE	181	2989	2275
	KENTON	92	2619	
	JEFFERSON	583	2078	

TABLE 42. COUNTIES WITH HIGH ACCIDENT RATES FOR EMERGENCY VEHICLES.

POPULATION CATEGORY	COUNTIES WITH HIGH ACCIDENT RATES	NUMBER OF ACCIDENTS (1978-1980)	ANNUAL ACCIDENT RATE (PER 10,000) POPULATION
UNDER 10,000	BALLARD	10	3.8
10,000-19,999	GRANT	11	2.8
	MAGOFFIN	10	2.5
20,000-49,999	FRANKLIN	31	2.5
	BOCNE	32	2.3
	SCOTT	15	2.3
50,000-100,000	HADISON	50	3.1
	WARREN	51	2.4
OVER 100,000	KENTON	90	2.8
	JEFFERSON	400	1.9
	FAYETTE	110	1.8

TABLE 43. 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 (20 MONTHS BEFORE REPEAL OF LAW)	246,500	14,440	5.86
JUNE 1978 - DECEMBER 1979 (19 MONTHS AFTER REPEAL OF LAW)	233,155	16,527	7.09
JANUARY 1980 - DECEMBER 1980	124,503	9,176	7.37

TABLE 44. COUNTIES WITH SHORTEST AND LONGEST POLICE RESPONSE TIMES.\*

COUNTIES WITH SHORTEST RESPONSE TIMES			COUNTIES WITH LONGEST RESPONSE TIMES		
POPULATION CATEGORY	COUNTY	PERCENT OVER 10 MINUTES	POPULATION CATEGORY	COUNTY	PERCENT OVER 10 MINUTES
UNDER 10,000	FULTON	13	UNDER 10,000	MENIFEE	85
	CRITTENDEN	20		ELLIOTT	72
10,000-19,999	WOODFORD	11	10,000-19,999	LESLIE	75
	WAYNE	18		KHOTT	70
20,000-49,999	CALLOWAY	16	20,000-49,999	LETCHER	65
	TAYLOR	16		FLOYD	54
50,000-100,000	CAMPBELL	7	50,000-100,000	PIKE	54
	DAVISS	9		HARDIN	23
OVER 100,000	KENTON	8	OVER 100,000	FAYETTE	26
				JEFFERSON	21

\* TIME USED IS TIME FROM NOTIFICATION TO ARRIVAL AT SCENE.

APPENDIX. COUNTY POPULATIONS (IN DESCENDING ORDER)

COUNTY	POPULATION	COUNTY	POPULATION	COUNTY	POPULATION
Jefferson	684,793	Shelby	23,328	Monroe	12,353
Fayette	204,165	Meade	22,854	Fleming	12,323
Kenton	107,058	Clay	22,752	Morgan	12,103
Hardin	88,917	Scott	21,813	Jackson	11,996
Daviess	85,949	Ohio	21,765	Larue	11,983
Campbell	83,317	Taylor	21,178	Todd	11,784
Pike	81,123	Grayson	20,854	Powell	11,101
Warren	71,828	Montgomery	20,046	Butler	11,064
Christian	66,878	Bourbon	19,405	Green	11,043
McCracken	61,310	Lincoln	19,053	Pendleton	10,909
Boyd	55,513	Rowan	19,049	Garrard	10,853
Madison	53,352	Mercer	19,011	Washington	10,764
Floyd	48,764	Knott	17,940	McLean	10,090
Hopkins	46,174	Marion	17,910	Bath	10,025
Boone	45,842	Union	17,821	Edmonson	9,962
Pulaski	45,803	Woodford	17,773	Metcalfe	9,484
Bullitt	43,346	Mason	17,760	Trigg	9,384
Harlan	41,889	Wayne	17,022	Clinton	9,321
Franklin	41,830	Breathitt	17,004	Carroll	9,270
Henderson	40,849	Breckenridge	16,861	Livingston	9,219
Greenup	39,132	McCreary	15,434	Crittenden	9,207
Bell	34,330	Hart	15,402	Fulton	8,971
Graves	34,049	Adair	15,233	Owen	8,924
Barren	34,009	Harrison	15,166	Ballard	8,798
Laurel	33,982	Leslie	14,862	Lee	7,754
Perry	33,763	Webster	14,832	Hancock	7,742
Whitley	33,396	Casey	14,818	Bracken	7,738
Muhlenberg	32,328	Simpson	14,673	Cumberland	7,289
Letcher	30,687	Lewis	14,545	Nicholas	7,157
Knox	30,229	Estill	14,495	Elliott	6,908
Calloway	30,031	Allen	14,128	Wolfe	6,698
Clark	28,322	Lawrence	14,121	Lyon	6,490
Nelson	27,584	Rockcastle	13,973	Trimble	6,253
Jessamine	26,653	Martin	13,925	Hickman	6,065
Oldham	26,094	Russell	13,708	Spencer	5,929
Marshall	25,637	Magoffin	13,515	Owsley	5,709
Boyle	25,066	Caldwell	13,473	Carlisle	5,487
Carter	25,060	Grant	13,308	Menifee	5,117
Johnson	24,432	Anderson	12,740	Gallatin	4,842
Logan	24,138	Henry	12,567	Robertson	2,270

