# KENTUCKY TRAFFIC ACCIDENT FACTS



1991 REPORT



BRERETON C. JONES
GOVERNOR

THE CAPITOL 700 CAPITAL AVENUE FRANKFORT 40601 (502) 564-2611

My Fellow Kentuckians:

This 1991 Traffic Accident Facts report serves to remind us that, while we rely upon motor vehicle travel in our daily lives, too often this travel results in death and injury to the citizens of our Commonwealth.

It is encouraging however, to see that the number of accidents reported in 1991 decreased by nine percent. During this same period the number of injuries and fatalities decreased as well. Even so, 828 deaths and 50,707 injuries are too many.



These deaths and injuries could be dramatically reduced if everyone would be attentive, observe speed limits, never drink and drive, and always buckle up. If we follow these simple and common-sense rules, safety on Kentucky's roads will continue to improve.

Sincerely,

Brereton C. Jones



# COMMONWEALTH OF KENTUCKY KENTUCKY STATE POLICE 919 VERSAILLES ROAD FRANKFORT 40601

BRERETON C ONES

BILLY G. WELLMAN COMMISSIONER AND SECRETARY OF JUSTICE

The Honorable Brereton C. Jones Governor of Kentucky The Capitol Frankfort, Kentucky 40601

Dear Governor Jones:

Chapter 189.635 of the Kentucky Revised Statutes requires that the Kentucky State Police collect and tabulate traffic accident reports submitted by all law enforcement agencies in the Commonwealth.

I am pleased to submit this 1991 Traffic Accident

Facts report pursuant to that statute. This report contains

statistical information based upon comprehensive analyses of fatal, injury, and property damage accidents.

It is our hope that the data contained within this report will benefit law enforcement agencies, national, state, and local organizations, and citizens concerned with highway safety throughout Kentucky.

Respectfully submitted,

Billy G. Wellman

Secretary, Justice Cabinet

Commissioner, Kentucky State Police

AN EQUAL OPPORTUNITY EMPLOYER M/F/H

# DEDICATION

This 1991 Accident Facts Report

is appropriately

dedicated

to

THE EIGHT HUNDRED-TWENTY EIGHT CITIZENS

Who were victims of Fatal Traffic Accidents

During 1991

AND TO

THEIR FAMILIES

All citizens of the Commonwealth of Kentucky share the sorrow brought about by senseless tragedies on our streets and highways

# KENTUCKY

TRAFFIC ACCIDENT FACTS
1991

Prepared by:

Records Section Information Services Branch Kentucky State Police 1250 Louisville Road Frankfort, Kentucky 40601

(502) 227-8700

## TABLE OF CONTENTS

Message from the Governor, Commonwealth of Kentucky

Transmittal Letter, Commissioner, Kentucky State Police

### Dedication

Introduction

Accidents Summary	1
Deaths and Injuries Summary	2
Fatalities By Age and Sex	3
Injury Severity By Accident Type	4
Accidents By Type	5
Type of Collisions	6
Vehicular Action	7
Rural vs. Urban	7
Accidents By Roadway Surface	8
Location of Accidents	9
Interstates and Parkways	9
Type Vehicles Involved	10
Driver Involvement	11
Age of Drive - All Accidents	12
Age of Driver - Fatal Accidents	13
Accidents Involving Teenage Drivers	14
Accidents By Hour of Occurrence	15
Accidents By Day and Month	16
Holiday Accidents	17
Alcohol Involved Accidents	18

Safety Restraints	19
Road Conditions	20
Contributing Factors - All Accidents	20
Hit and Run Accidents	21
Truck Accidents	22
Pedestrian Accidents	23
Contributing Factors - Special Accident Types	25
Accidents By County	29
Accidents Involving Drinking Drivers By County	32
Drivers Under Influence of Drugs By County	35
Drug Involved Accidents By Area Development District	36
Fatal Accident Reporting System	37
Drivers In Fatal Accidents By Age and Alcohol Involvement	38
Alcohol Involved Drivers By Age and Test Results	39
Fatally Injured Pedestrians	39
Active Restraint and Ejection in Fatal Accidents	40
Child Restraints in Fatal Accidents	41
About Child Restraints	42
Cost of Accidents in Kentucky - inside back cover	

### INTRODUCTION

KENTUCKY'S TRAFFIC ACCIDENT FACTS report for 1991 is based on accident reports submitted to the Accident Unit housed in the Kentucky State Police Information Services Branch, Records Section. As required by Kentucky Revised Statutes 189.635, "every law enforcement agency whose officers investigate a vehicle accident of which a report must be made . . . shall file a report of the accident . . . within ten days after investigation of the accident upon forms supplied by the bureau." The stated purpose of this requirement is to utilize data on traffic accidents" for such purposes as will improve the traffic safety program in the Commonwealth." Data contained in this report are based solely on the observations and judgements of the state and local police officers who investigated each accident, entering the information on Kentucky's UNIFORM POLICE TRAFFIC ACCIDENT REPORT form. Upon receipt of each report, the Accident Unit carefully screen the reports for accuracy and reasonableness before coding each item. The reports are then forwarded to Data Entry. Computer tabulations and summaries are again checked for accuracy before information is released or disseminated.

In an effort to comply more fully with the statutory purpose of Kentucky's Accident Reporting System, the 1991 TRAFFIC ACCIDENT FACTS report contains more detailed information than previously provided. It is hoped that the detailed information presented in this report will, in fact, "improve the traffic safety program in the Commonwealth". **Definitions and Terms:** the National MANUAL ON CLASSIFICATION OF MOTOR VEHICLE TRAFFIC ACCIDENTS is used to ensure uniformity and compliance with federal requirements. Standard definitions and terms used in this booklet include the following:

Motor Vehicle Traffic Accident: any motor vehicle accident that occurs on a trafficway or that occurs after the motor vehicle runs off roadway but before events are stabilized.

Accident: an unintended event that produces death, injury or damage. The word "injury" includes "fatal injury."

**Trafficway:** the entire width between property lines or other boundary lines, of every way or place, of which any part is open to the public for purposes of vehicular travel as matter of right or custom.

Fatal Accident: is any motor vehicle accident that results in fatal injuries to one or more persons.

Fatality: a person or persons killed in a fatal accident (also referred to as "persons killed".)

**Nonfatal Injury Accident:** (also referred to as Personal Injury Accident) any motor vehicle accident that results in injury, other than fatal, to one or more persons.

Injured: a person or persons injured in an accident (also referred to as "persons injured.")

**Property Damage Accident:** any motor vehicle accident in which there is no injury to any person, but only damage to a motor vehicle or other property, including injury to domestic animals.

**Alcohol Involved Accident:** any accident in which an operator was observed to have been drinking by the officer investigating the accident.

**NOTE:** KRS 189.635 requires "any person operating a vehicle... who is involved in an accident resulting in any property damage exceeding \$500 in which an investigation is not conducted by a law enforcement officer shall file a written report of the accident with the state police within ten (10) days of occurrence of the accident..." Such reports are not included in the overall data presented in this report.

**NOTE:** Summary data on fatal accidents are included throughout this report. Additional data on fatal accidents can be found in the section titled "Kentucky's Fatal Accident Reporting System (FARS)," p.p. 38-41.

**NOTE:** Previous to 1985, Kentucky utilized a ninety day cut-off for deaths resulting from fatal accidents. As of 1986, persons who died as a result of injuries sustained in a motor vehicle accident are counted as fatalities only if death occurred within thirty days from the date of the accident. This change from ninety days to thirty days was made to be consistent with guidelines of the National Highway Traffic Safety Administration.

**NOTE:** Percentages are frequently used in this report and in the visual graphics. Due to rounding, aggregate percentages do not always equal 100.

**NOTE:** A graphically illustrated page of important information about child restraints is on page 42 of this report. This information is suitable for reproduction and can be used as informational "hand-outs" during presentations on traffic safety.



# ACCIDENTS SUMMARY

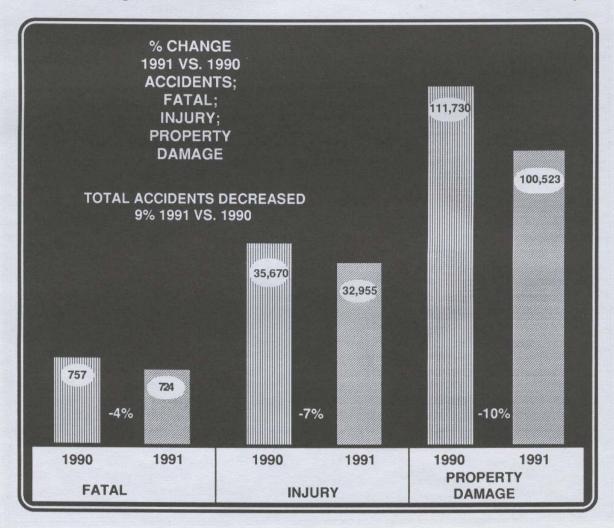
### 1991 ACCIDENTS SUMMARY

TYPE ACCIDENT REPORTED	1990	1991	% CHANGE
FATAL	757	724	- 4%
NON-FATAL INJURY	35,670	32,955	- 7%
PROPERTY DAMAGE ONLY	111,730	100,523	-10%
TOTAL NUMBER REPORTED	148,157	134,202	- 9%

724 fatal accidents were reported during 1991, a decrease of 4% over 1990.

There were 2,552 fewer non-fatal injury accidents, a decrease of 7%.

Property damage accidents showed a decrease of 10% with 11,207 less accidents reported.



### **DEATHS AND INJURIES** SUMMARY

	1991	1990	% Change
PERSONS KILLED	828	850	-3%
PERSONS INJURED	50,707	54,834	-8%

FACTS: IN KENTUCKY, ONE OF EVERY 4,468 CITIZENS DIED AS A RESULT OF A FATAL TRAFFIC ACCIDENT **DURING 1991.\*** 

IN KENTUCKY, ONE OF EVERY 11 LICENSED DRIVERS WAS INVOLVED IN A TRAFFIC ACCIDENT: ONE IN 2,348 DRIVERS WAS INVOLVED IN A FATAL ACCIDENT.\*\*

IN KENTUCKY, ONE IN 73 CITIZENS WAS INJURED IN A TRAFFIC ACCIDENT.

828 persons were killed during 1991. The number of traffic fatalities decreased 3%, with 22 fewer fatalities than during 1990.

50,707 persons were injured during 1991, a decrease of 8% over 1990, or 4,127 fewer persons injured.

The right-hand chart compares Death Rates for Kentucky vs. national death rates computed by the National Safety Council.

The bottom chart plots persons injured by severity of injury. An incapacitating injury includes those injuries which required transport to a hospital.

TYPE INJURY	NUMBER	%
INCAPACITATING		
INJURY	9,887	20%
NON-INCAPACITATING		
INJURY	18,432	36%
POSSIBLE		
INJURY	22,388	44%
TOTAL	50,707	100%

#### Basis: deaths per 100 million miles travelled.\* RATE YEAR **KILLED** KY U.S. 1976 874 3.3 3.4 1977 958 3.5 3.3 3.2 1978 893 3.4 3.3 1979 905 3.5 825 3.1 1980 3.5 1981 830 3.3 3.3 1982 836 3.3 3.0 1983 790 3.0 2.7 1984 767 2.8 2.7 1985 715 2.6 2.8 1986 808 2.8 2.6 1987 849 2.9 2.6 1988 940 2.5 2.5 1989 782 2.4

850

828

**DEATH RATES 1976-1991** 

2.6

2.6

2.3

2.2

2.0

1990

1991

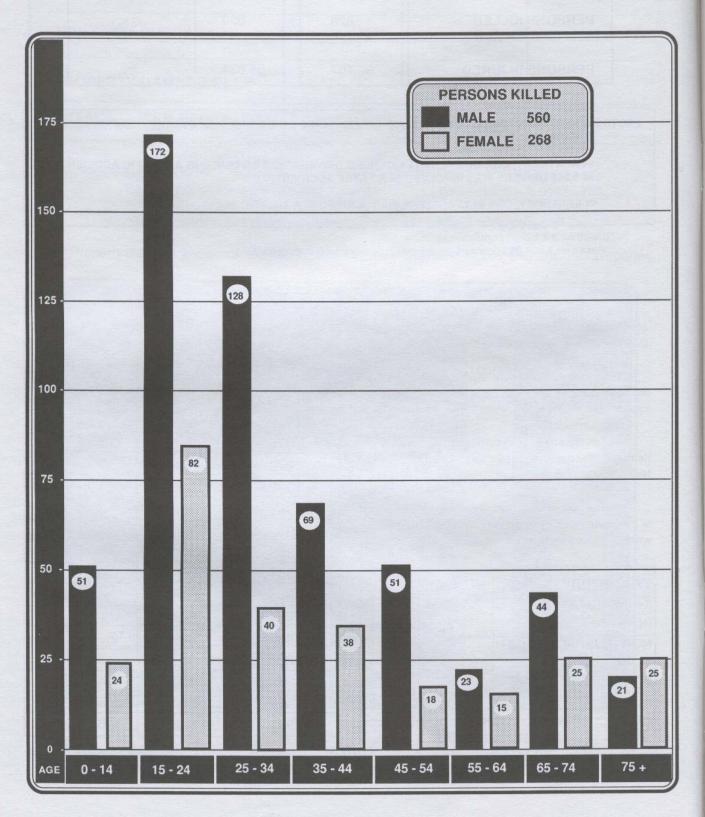
<sup>\*</sup>Based on 3.7 million population estimate

<sup>\*\*</sup>Based on 2,496,252 licensed drivers currently registered in Kentucky

<sup>\*1991</sup> miles travelled = 32 billion.

### **FATALITIES BY AGE AND SEX**

The number of persons killed in 1991 fatal accidents is shown by age and sex in the chart below 560 males versus 268 females were killed. 31% of all persons killed in traffic accidents were in the fifteen to twenty-four year old age group. 57 of all persons killed were pedestrians, and 9 were pedalcyclists.



# SEVERITY OF INJURY BY TYPE OF ACCIDENT

The chart below depicts the number of persons killed and injured, by severity of injury, within eleven categories of accidents. As shown in the right-hand percentage column, collisions with moving motor vehicles (67%) and collisions with fixed objects (22%) account for 89% of the crashes in which persons were killed or injured during 1991.

			TYPE OF INJURY		
TYPE OF ACCIDENT	Killed	Incapacitating Injury	Non-Incapacitating Injury	Possible Injury	% Killed
Non-Collision Overturning	34	279	473	305	2%
Other Non-Collision	37	363	500	604	3%
Collision With Pedestrian	59	474	586	462	3%
Collision With Motor Vehicle (Moving) In Transport	374	5,745	11,631	16,749	67%
Collision With Parked Motor Vehicle	0	0	3	0	less than
Collision With Railway Train	8	21	24	14	less than one %
Collision With Pedalcyclist	9	135	290	183	1%
Collision With Deer	0	8	55	74	less than
Collision With Other Animal	1	24	47	70	less than one %
Collision With Fixed Object	294	2,732	4,618	3,697	22%
Collision With Other Object	12	106	205	230	1%
TOTAL	828	9,887	18,432	22,388	
% Of All Injuries	2%	19%	36%	43%	

# OCCURRENCE OF ACCIDENTS BY TYPE

76% of all accidents reported during 1991 involved moving vehicles.

14% of all accidents involved collisions with fixed objects.

10% of all accidents were other types of collisions (one vehicle with train, pedestrian, animal, etc).

In the "All Other" category are included 1,207 non-collision accidents (1%) resulting from the vehicle overturning and 3,013 other non-collision type accidents (2%).

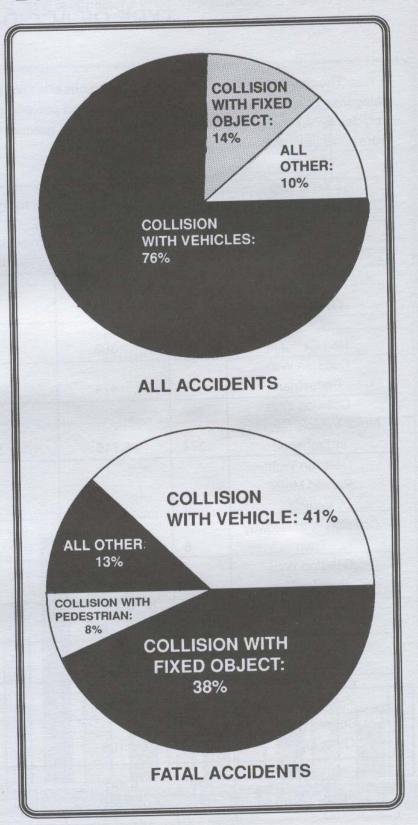
When looking at fatal accidents by themselves, the ratio between types of occurrences is different. 41% of all fatal accidents involved a collision with another vehicle.

38% of the fatal accidents reported during 1991 involved collisions with fixed objects.

8% of the 1991 fatal accidents involved collisions with pedestrians. 13% of the fatal accidents were other type accidents.

Specific types of collisions and the ratio of persons killed in each type of collision are shown on the following page.

In the "All Other" category are included 29 fatal non-collisions resulting from the vehicle overturning (4%) and 36 other non-collision accidents (5%).



### TYPE OF COLLISIONS

Collisions with other motor vehicles were responsible for 76% of all accidents reported during 1991, and accounted for 45% of all fatalities (persons killed). Collisions with fixed objects accounted for 14% of all accidents, but 36% of fatalities. Types of collisions are depicted below.

## COLLISION WITH ANIMALS (excluding deer):

Total Accidents: 576
% of Total: .4%
Persons Killed: 1
% of Total: .1%





## COLLISION WITH MOTOR VEHICLE:

Total Accidents: 102,470
% Of Total: 76%
Persons Killed: 374
% of Total: 45%

### COLLISION WITH DEER:

Total Accidents: 2,746
% of Total: 2%
Persons Killed: 0
% of Total: 0%





## COLLISION WITH FIXED OBJECT:

Total Accidents: 19,361 % of Total: 14% Persons Killed: 294 % of Total: 36%

# COLLISION WITH PEDALCYCLIST:

Total Accidents: 706
% of Total: .5%
Persons Killed: 9
% of Total: 1%





## COLLISION WITH OTHER OBJECT:

Total Accidents: 2,481
% of Total: 2%
Persons Killed: 12
% of Total: 2%

#### **OVERTURNING:**

Total Accidents: 1,207 % of Total: .9% Persons Killed: 34 % of Total: 4%





#### OTHER (NON-COLLISION):

Total Accidents: 3,013
% of Total: 2%
Persons Killed: 37
% of Total: 4%

## COLLISION WITH RAILWAY TRAIN:

Total Accidents: 106
% of Total: .08%
Persons Killed: 8
% of Total: 1%





## COLLISION WITH PEDESTRIAN:

Total Accidents: 1,452
% of Total: 1%
Persons Killed: 59
% of Total: 7%

## COLLISION WITH PARKED VEHICLE:

Total Accidents: 84
% of Total: .06%
Persons Killed: 0
% of Total: 0



### COLLISIONS

(Vehicular Action)

102,470 traffic accidents reported during 1991 involved "two-car" collisions. This represents 76% of all accidents and 41% of all fatal accidents reported.

The right-hand chart depicts the manner of collision for these crashes, where known.

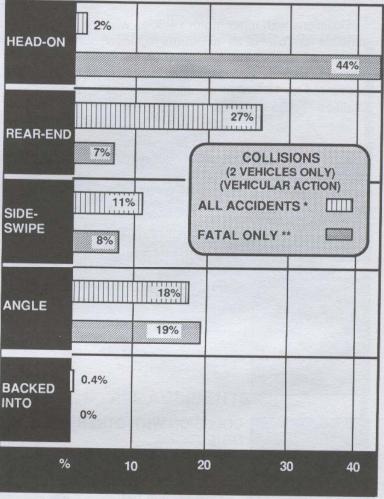
Head-on collisions accounted for 44% of the fatal crashes involving more than one vehicle, but only 2% of all accidents.

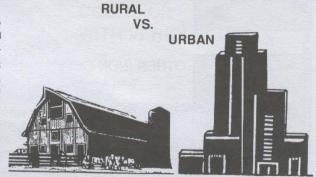
Rear-end collisions reflect 27% of all collisions, but only 7% of the fatal crashes.

Sideswipe collisions (both meeting and passing) reflect 11% of all crashes and 8% of the fatal crashes.

#### ACCIDENT LOCATIONS-RURAL VS. URBAN

For the purpose of tabulating accident locations, an urban area is an area including and adjacent to a municipality or other known place of 5,000 or more population. Rural areas are those places which do not meet this specification. As shown in the chart below, most accidents (62%) occurred in urban areas. However, the majority of fatal accidents (80%) took place in rural areas of Kentucky during 1991. Although non-fatal injury accidents were fairly evenly divided between urban and rural areas, nearly twice as many property damage accidents were reported in urban areas.





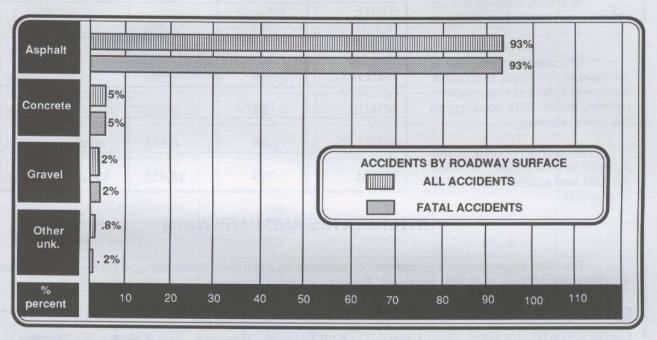
AREA	Number of Accidents	% Total	Fatal	% Total	NonFatal Injury	% Total	Prop. Damage	% Total	Killed	% Total	Injured	% Total
RURAL	50,364	38%	562	78%	16,118	49%	33,684	34%	652	79%	25,884	51%
URBAN	83,838	62%	162	22%	16,837	51%	66,839	66%	176	21%	24,823	49%
TOTAL	134,202	100%	724	100%	32,955	100%	100,523	100%	828	100%	50,707	100%

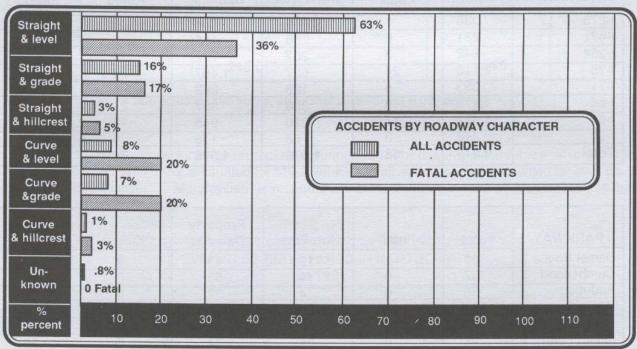
### **ACCIDENTS BY ROADWAY SURFACE**

The charts below depict percentages of all accidents and fatal accidents according to the surface and character of the roadway on which the accident occurred.

While 93% of all accidents occurred on asphalt surfaced roadways, it should be noted that most of Kentucky's high-volume-traffic roadways are asphalt surfaced roads.

As depicted in the bottom chart, 82% of all accidents occurred on straight roads and 16% on curved roads. 43% of the fatal accidents during 1991 occurred on curved roads.





### LOCATION OF ACCIDENTS

The chart at right shows the number of accidents during 1991 by type of roadway, with percentages of all accidents.

As shown, relatively few accidents were reported on Interstate Highways (5%).

28% of all accidents occurred on Kentucky's "State Numbered" roads, with 47% of all fatal accidents reported during 1991 occurring on this type of roadway.

Although 36% of all accidents occurred on local streets, only 6% of the 1991 fatal accidents occurred on local streets.

TYPE OF ROADWAY	Fatal Accidents	Non-Fatal Accidents	Property Accidents	% Tota
INTERSTATE	68	1,876	4,975	5%
U.S. ROUTE	198	9,403	23,121	24%
STATE				
ROUTE	344	12,720	24,872	28%
OTHER				
MAJOR				
ARTERIAL	19	286	782	2%
COUNTY				
ROADS	51	2,025	5,137	5%
CITY				
STREETS	44	6,645	41,636	36%
TOTAL	724	32,955	100,523	100%

### **INTERSTATES AND PARKWAYS**

The chart below depicts the incidence of accidents on Kentucky's Interstates and Parkways. Interstate accidents represent 5% of all 1991 accidents. Parkway accidents represent .7% of 1991 accidents.

INTERSTATE	Total	Fatal	Non-Fatal	Property Damage	Killed	Injured
1-275	338	1	106	231	1	168
1-471	231	0	66	165	0	103
1-264	942	3	207	732	4	291
1-75	2,118	24	627	1,467	26	995
I-71	393	5	126	262	5	203
1-65	1,373	18	358	997	21	622
I-64	1,282	17	320	945	19	468
1-24	242	0	66	176	0	90
Total	6,919	68	1,876	4,975	76	2,940

PARKWAY	Total	Fatal	Non-Fatal	Property Damage	Killed	Injured
Daniel Boone	64	2	19	43	3	34
Cumberland	67	0	14	53	0	19
Audubon	36	0	4	32	0	7
Pennyrile	252	6	58	188	6	77
Purchase	73	0	25	48	0	46
Green River	95	0	21	74	0	32
Western Kentucky	251	4	58	189	4	84
Bluegrass	129	0	37	92	0	49
Total	967	12	236	719	13	348

## TYPE VEHICLES INVOLVED IN ACCIDENTS

VEHICLE TYPE	NUMBER ACCIDENTS	PERCENT OF TOTAL	NUMBER FATAL ACCIDENTS	PERCENT OF TOTAL
Passenger Cars	222,627	90.85	952	86.54
Taxicabs	33	0.01	0	0.00
Trucks	10,039	4.10	94	8.54
Motorcycles	1,053	0.43	27	2.45
Motor Scooters/ Motor Bikes	119	0.05	2	0.18
School Buses	855	0.35	3	0.27
Other Buses	454	0.18	1	0.09
Farm Tractors/ Equipment	194	0.08	6	0.54
Emergency & Military	607	0.25	3	0.27
Other Public Owned	331	0.14	2	0.18
Go-Carts	2	0.00	0	0.00
Other	534	0.22	6	0.54
Not Stated	8,195	3.34	4	0.36
TOTAL	245,043		1,100	

<sup>\*</sup> Passenger cars include autos, pickup trucks, and panel trucks under 6,000 pounds.

245,043 vehicles were involved in accidents during 1991. The majority of the vehicles involved were passenger cars-91%. Trucks accounted for 4% of vehicles in all accidents, but accounted for over 8% of vehicles in fatal accidents. Motorcycles represented 2% of the vehicles in fatal accidents, but less than 1% of vehicles in all accidents.

VEHICLES REGISTERS IN 199	
PASSENGER CARS	1,882,665
TRUCKS	895,714
MOTORCYCLES	31,362

### DRIVER INVOLVEMENT



# OF DRIVER



221,842 drivers were involved in accidents during 1991. 1,063 drivers were involved in fatal accidents. The chart below tabulates driver involvement by residence and shows that most driver (84%) were residents of the locality where the accident occurred. Many drivers in the unknown category are the result of Hit and Run accidents where the drivers' identities remain unknown.

#### **INVOLVEMENT BY RESIDENCE**

RESIDENCE OF DRIVER	# Involved In Accidents	% of Total	# Involved In Fatal Accidents	% of Total
Local Resident	186,789	84	852	80
Residing Elsewhere in State	6,973	3	72	7
Non-Resident	17,893	8	129	12
Unknown	10,187	5	10	1
TOTAL	221,842	100	1,063	100



SEX OF



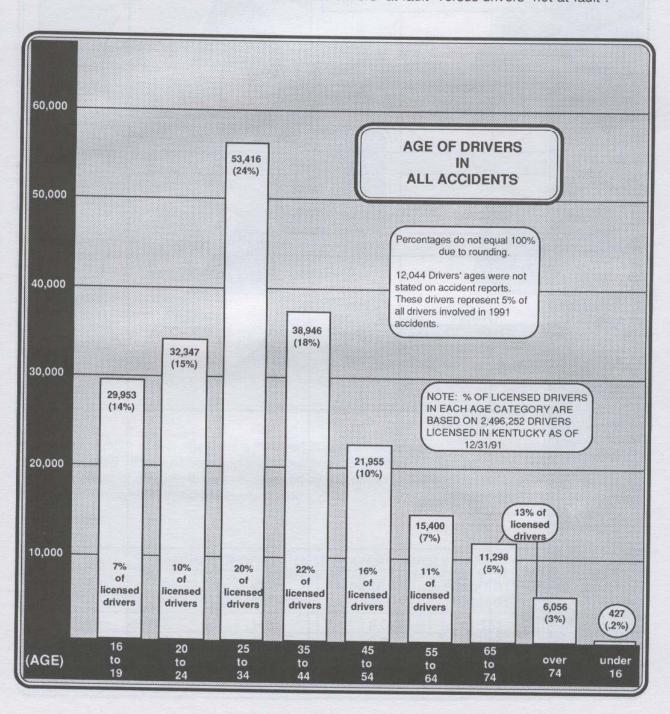
As shown in the chart below, 57% of the drivers involved in accidents during 1991 were male; 38% were female. In fatal accidents 74% of the drivers were male; 25% female.

TOTAL ACCIDENTS					
SEX	# IN ACCIDENTS	% IN ACCIDENTS			
MALE	126,519	57			
FEMALE	35,335	38			
NOT STATED	9,988	5			
TOTAL	221,842	100			

FATAL ACCIDENTS						
SEX	# IN ACCIDENTS	% IN ACCIDENTS				
MALE	788	74				
FEMALE	265	25				
NOT STATED	10	1				
TOTAL	1,063	100				

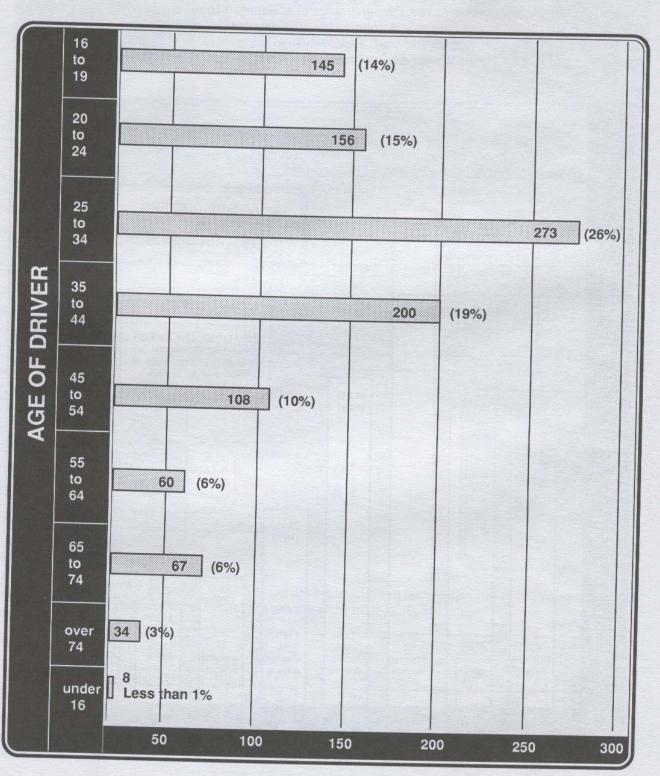
# AGE OF DRIVER (ALL ACCIDENTS)

The chart below groups the ages of 221,842 drivers involved in 1991 traffic accidents in Kentucky, showing the number of drivers involved, the percentage of accidents (in parenthesis), and the percentage of licensed drivers for each age category. A comparison of the two percentage factors indicates a relatively low accident rate for drivers age 35 and over. Relatively high accident rates are indicated for the drivers age 34 and under. This data does not differentiate drivers "at-fault" versus drivers "not-at-fault".



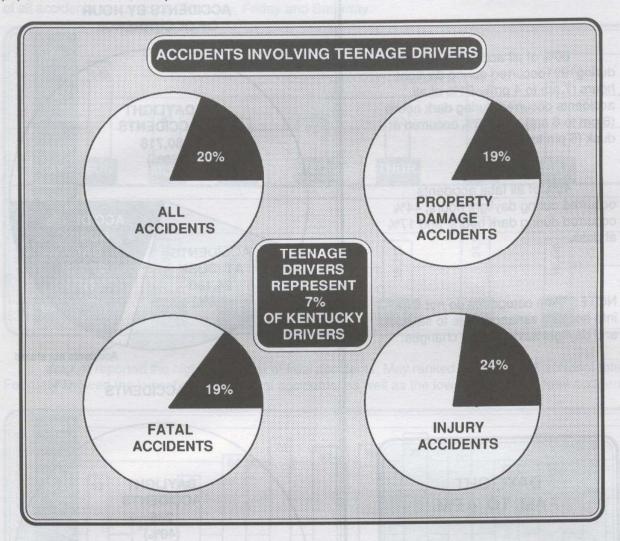
# AGE OF DRIVERS (Fatal Accidents)

The chart below groups the ages of 1,063 drivers involved in 1991 fatal accidents. Percentages are based on drivers involved in fatal accidents during 1991 and includes 12 drivers whose ages were not stated on the accident report.



### **ACCIDENTS INVOLVING TEENAGE DRIVERS**

The percentage of teenage drivers (versus other age groups) involved in 1991 accidents (by type) are shown below, irrespective of the driver at fault in the accidents reported.



The number of teenage drivers involved in accidents, together with alcohol related accidents, are shown below. It should be noted that tabulations for alcohol related accidents were derived from the total number of drinking drivers as reported by the officer at the scene. As shown 29,977 teenage drivers were involved in traffic accidents during 1991.

NUMBER OF TEENAGE DRIVERS INVOLVED IN								
YEAR	ALL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE	ALCOHOL RELATED			
1991	29,977	145	8,681	21,151	1,024			
1990	32,482	146	9,282	23,054	1,670			
1989	37,526	148	10,179	27,199	1,199			
1988	36,720	139	9,764	26,817	1,661			

# ACCIDENTS BY HOUR OF OCCURRENCE

60% of all accidents reported during 1991 occurred during daylight hours (7 am to 4 pm). 21% of all accidents occurred during dark hours (8 pm to 6 am), and 18% occurred at dusk (5 pm to 7 pm).

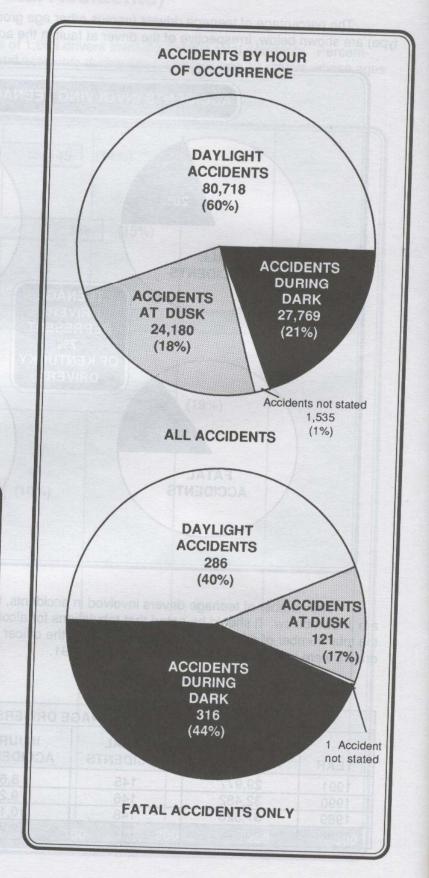
40% of all fatal accidents occurred during daylight hours; 44% occurred during dark hours; and 17% at dusk.

NOTE: Time categories do not take into account variances due to season and daylight savings time changes.

DAYLIGHT 7 AM TO 4 PM

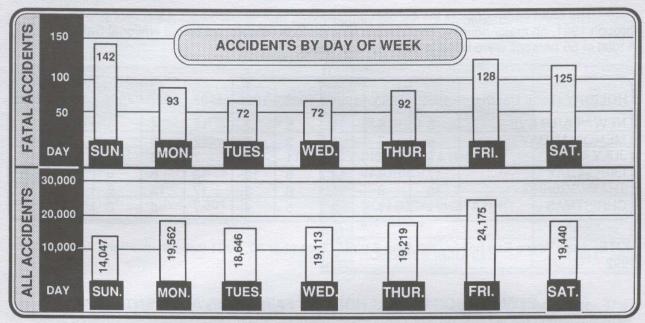
DUSK
5 PM TO 7 PM

DARK
8 PM TO 6 AM

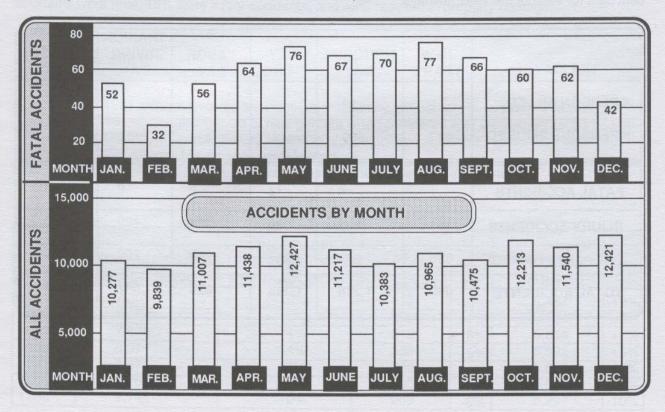


### **ACCIDENTS BY DAY AND MONTH**

The graph below shows fatal vs. all accidents by day of occurrence.
54% of all fatal accidents occurred on weekends (Friday, Saturday and Sunday combined). 47% of all accidents occurred on Thursday, Friday and Saturday.



August reported the highest number of fatal accidents; May ranked highest for all accident totals. February showed the lowest number of total accidents, as well as the lowest number of fatal accidents,



### **HOLIDAY ACCIDENTS**

#### HOLIDAY DEATH TOLL

The chart below depicts the number of deaths in fatal accidents for a ten year period, 1982 through 1991, on major holidays (inclusive of time periods established by the National Safety Council). A total of 55 persons were killed in 1991 holiday fatals.

HOLIDAY (Total Deaths)	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NEW YEAR'S EVE	5	5	9	5	7	11	4	4	2	2
MEMORIAL DAY	6	7	8	3	6	12	8	11	4	12
JULY 4TH	8	8	4	11	6	7	12	11	5	17
LABOR DAY	17	6	14	6	10	12	6	8	4	8
THANKSGIVING	10	9	12	6	9	17	12	6	12	9
CHRISTMAS	11	11	8	5	4	7	8	8	7	7

NOTE: New Year's Eve holiday ran from 6 p.m., December 30, 1991 through midnight, January 1, 1992

### **COMPARISON OF 1991 HOLIDAY FATALITIES/ACCIDENTS**

The July 4th holiday period registered the highest number of fatalities during 1991. The lowest number of holiday fatalities occurred over New Years holiday. The chart below shows relevant accident data for each of the 1991 holidays.

HOLIDAY	NEW YEAR'S	MEMORIAL DAY	JULY 4th	LABOR DAY	THANKS- GIVING DAY	CHRIST- MAS
# PERSON KILLED	2	12	17	8	9	7
# PERSONS INJURED	217	569	614	418	724	259
FATAL ACCIDENTS	1	9	14	8	9	5
INJURY ACCIDENTS	141	333	380	264	429	153
PROPERTY DAMAGE	398	872	951	648	1,209	465
TOTAL ACCIDENTS	540	1,214	1,345	920	1,647	623

### **ALCOHOL INVOLVED ACCIDENTS**

An alcohol related accident is any accident where a driver was determined to have been drinking. For injury and property damage accidents, this determination is made at the scene by the investigating officer. Information regarding drinking drivers in fatal accidents is obtained from FARS, which follows up on BAC results.

Alcohol involved accidents are broken out by county beginning on page 29.

15	FATAL	311
ACCIDENTS	INJURY	3,472
	PROPERTY DAMAGE	3,518
ALL	TOTAL	7,301

JURED	KILLED	365
	INJURED	5,467
KILLED/	INCAPACITATING INJURIES	1,712
PERSONS N	NON-INCAPACITATING INJURIES	2,264
PER	POSSIBLE INJURIES	1,491

The total number of alcohol involved accidents are depicted in the left-hand chart above. The number of persons killed and injured in alcohol involved accidents are depicted in the right-hand chart.

7,301 alcohol involved accidents were reported during 1991. 4% of the alcohol involved accidents were fatal, 48% were injury accidents, and 48% resulted in property damage.

### Comparison with previous years

During 1991 alcohol involved accidents decreased by ten percent over 1990. The 365 persons killed in 1991 reflect an increase of nine percent when compared with the 336 persons killed in 1990. During 1991, 5,467 persons were injured in alcohol related accidents, a decrease of twelve percent over 1990 when 6,181 persons were injured.

Fatal accident data has been adjusted to reflect follow-up studies of drivers.

YEAR	TOTAL ACCIDENTS (Alcohol Involved)	% INCREASE/ DECREASE OVER PREVIOUS YEAR	TOTAL KILLED	(%) +/-	TOTAL INJURED	(%)
1991	7,301	-10%	365	+9%	5,467	-12%
1990	8,159	-6%	336	+7%	6,181	-3%
1989	7,670	-4%	319	-18%	5,814	+2%
1988	8,014	+4%	389	+9%	5,992	+5%
1987	7,671	-1%	358	+4%	5,879	+6%
1986	7,761	+.2%	343	+19%	5,606	-11%
1985	7,744	-10%	289	-9%	5,297	-10%

## SAFETY RESTRAINTS

The chart below compares vehicle occupants with and without safety restraint devices over a five year period. Clearly, more vehicle occupants are using restraints from 25% in 1987 to 50% in 1991. (Safety restraint devices include lap belt, harness, child safety seat, air bag, and other passive restraint.)

YEAR	RESTRAI	NED	NOT RES	TRAINED	UNKNOWN	
	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL	NUMBER	% OF
1991	159,082	50%	146,583	46%	14,730	4%
1990	145,449	41%	192,397	54%	16,787	5%
1989	125,734	35%	218,603	60%	17,405	5%
1988	105,418	30%	224,029	65%	17,095	5%
1987	84,797	25%	237,274	70%	16,980	5%

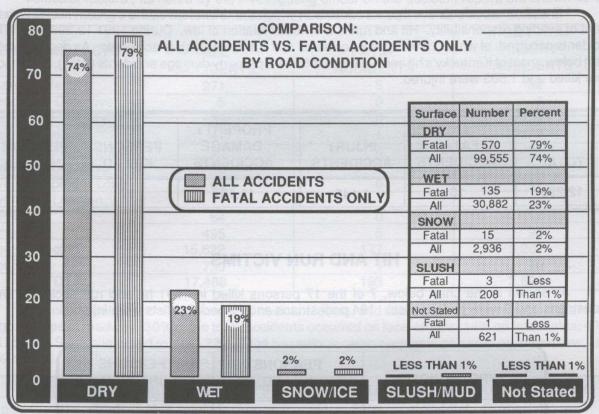
The chart below shows 1991 vehicle occupants by their injury status, and separates the occupants into categories of restraint used and restraint not used.

Overall, 16% of all vehicle occupants were killed or injured. A breakdown into restraint usage shows only 12% of those restrained were killed or injured, compared to 20% of those not restrained.

INJURY STATUS	ALL OCCUPANTS		RESTR		RESTRAINT NOT USED	
	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL	NUMBER	% OF
KILLED	725 m	0.24%	10/ box 101s r	0.06%	624	0.43%
INJURED	47,365	15.50%	18,857	11.85%	28,508	19.45%
NOT INJURED	257,433	84.22%	140,069	88.05%	117,364	80.07%
UNKNOWN	142	0.05%	55	0.03%	87	0.06%
TOTAL	305,665	100%	159,082	100%	146,583	100%

(Figures do not include 14,730 occupants where restraint use was unknown.)

### ROAD CONDITIONS



The chart above compares fatal with all accidents for differing road conditions identified by the officer who completed the accident investigation and report.

#### **CONTRIBUTING FACTORS**

A variety of factors and conditions can contribute to an accident. Police officers may indicate up to three driver factors for <u>each</u> driver, up to two vehicular factors for <u>each</u> vehicle, and up to two environmental factors for <u>each</u> accident. The chart below shows the most frequently noted factors.

DRIVER FACTORS	ALL	FATAL
DRIVER INATTENTION	48,370	116
FAILURE TO YIELD	21,366	00 100 1100 116
UNSAFE SPEED	9,637	261
ALCOHOL INVOLVEMENT	7,244	199
FOLLOWING TOO CLOSE	6,642	2
VEHICULAR FACTORS	ALL	FATAL
BRAKES DEFECTIVE	2,356	8
TIRE FAILURE/INADEQUATE	1,129	22
ENVIRONMENTAL FACTORS	ALL	FATAL
SLIPPERY SURFACE	14,883	86
VIEW OBSTRUCTED/LIMITED	6,115	46
ANIMAL ACTION	3,935	8
WATER POOLING	1,438	19
GLARE	970	6

### HIT AND RUN ACCIDENTS

Hit and run accidents are those accidents in which the driver leaves the collision scene with the intent of evading responsibility. Hit and run is a serious violation of law. During 1991 12,298 hit and run accidents occurred, of which 16 were fatal accidents and 1,145 were injury accidents. As depicted in the chart below, most of Kentucky's hit and run accidents were property damage accidents (91%). 17 persons were killed and 1,503 were injured.

TOTAL	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY DAMAGE ACCIDENTS	PERSONS KILLED	PERSONS INJURED
12,298	16	1,145	11,137	17	1,503

### HIT AND RUN VICTIMS

As shown in the chart below, 7 of the 17 persons killed in 1991 hit and run accidents were pedestrians and 2 were pedalcyclists. 194 pedestrians and 77 pedalcyclists were injured.

TYPE OF VICTIM	PERSONS KILLED	PERSONS INJURED
Pedestrian	7	194
Pedalcyclist	2	77
Other	8	1,232
TOTAL	CONTRIB <b>71</b> ING FACT	1503

### HIT AND RUN LOCATION

The location of hit and run accidents are shown in the chart below. The majority of hit and run accidents (65%) occur on local streets.

CLASS OF TRAFFIC WAY	ALL HIT & RUN ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PROPERTY
INTERSTATE	420	2	69	349
U.S. ROUTE	1,443	5	258	1,180
STATE ROUTE	1,859	6	351	1,502
OTHER MAJOR ARTERIAL	25	0	2	23
COUNTY ROADS	535	0	54	481
LOCAL STREETS	8,016	3	411	7,602
TOTAL	12,298	16	1,145	11,137

### TRUCK ACCIDENTS

Vehicular factors, as noted by the investigating officer on the accident report, are shown below for accidents involving trucks. Up to two factors may be noted for each vehicle in the accident.

VEHICULAR FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS	NON-FATAL INJURY ACCIDENTS
Brakes Defective	271	5	82
Headlights Defective	5	0	1
Other Lighting Defects	39	0	15
Steering Failure	41	1	19
Tire Failure/Inadequate	96	4	35
Tow Hitch Defective	25	0	4
Over or Improper Load	91	0	11
Oversized Load on Vehicle	64	0	7
Other	495	5	93
None Detected	15,622	177	3,287
Not Stated	739	1	70
TOTAL	17,488	193	3,624

The charts below show the number of truck accidents, and those truck accidents with hazardous cargo, by type of roadway. 30% of the truck accidents occurred on local streets; 14% on Interstates; 49% on U.S. and State numbered routes. 22% of the hazardous cargo accidents occurred on Interstates, and 56% on U.S. and State numbered routes.

	ALL.	TRUCK ACC	TRUCKS WITH HAZARDOUS CARGO					
Type of Roadway	Fatal Accidents	Non-fatal Accidents	Property Damage	TOTAL	Fatal Accidents	Non-fatal Accidents		TOTAL
Interstate	21	312	950	1,283	2	12	26	40
U.S. Route	34	547	1,671	2,252	2	10	37	49
State Route	31	675	1,625	2,331	0	23	31	54
Other Major								
Arterial	3	56	118	177	0	1	2	3
County	1	67	476	544	0	1	4	5
Local	0	234	2,544	2,778	0	4	26	30
TOTAL	90	1,891	7,384	9.365	4	51	126	181

The residence of drivers involved in truck accidents are shown below. 24% of the drivers were non-residents of Kentucky, with 23% of the drivers involved in fatal accidents non-residents and 20% of the drivers involved in injury accidents non-residents.

RESIDENCE OF DRIVERS IN TRUCK ACCIDENTS	ALL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS
Local Resident	10,556	118	2,578
Other Kentucky Driver	934	25	182
Non-Resident Driver (out of state)	3,764	43	704
Not Stated	343	0	21
TOTAL	15,597	186	3,485

## **PEDESTRIAN ACCIDENTS**

		PED	ESTR	IANS	KILLE	D AN	D INJ	URED	BY A	ele	
PEDESTRIAN ACTION	Pedestrians Killed	Killed and/or injured	0 -4	5 -9	10 -14	15 -19	20 -24	25 -44	45 -64	65 -Up	Not Stated
At Intersection	2	93	2	9	8	8	6	32	16	10	0
Crossing With Signal	1	38	2	1	3	1	6	12		12	0
Crossing Against Signal	0	49	1	8	9	9		7		17.0	2
Not at Intersection	5	190	9	20	35	18	Flore	34	24	28	7
Getting On or Off Vehicle	4	64	1	5	11	9		19		4	-
Emerging From Parked Vehicle	2	50	2	7	2	5	5	15	_	5	0
Walking in Roadway	14	221	5	11	26	29	31	58	25	30	1
Playing in Roadway	3	42	10	16	6	7	2	0	0	0	6
Working in Roadway	2	45	0	0	0	1	9	21	13	0	1
Not in Roadway	3	173	4	4	12	20	15	70	28	16	4
Laying in Roadway	4	14	0	2	1	0	5	4	1	1	0
Darting into Roadway	14	379	45	123	104	33	17	33	9	9	
Pedestrian Drinking	2	40	0	0	0	4	5	22	6	0	6
Pedestrian Drug Related	0	4	0	0	1	1	0	2	0	0	
Pedestrian Jogging	0	12	0	0	1	2	1	6	2	0	0
Physical Impariment	0	5	0	0	0	0	1	1	0	3	0
Dark Clothing/Not Visible	1	13	0	3	0	1	1	4	2	2	-
n Crosswalk	0	41	1	3	5	4	6	10	7	4	0
Totals	57	1,473	82	212	224	152	135	352	160	123	33

DEDECTRIAN A CONTRACT	VEHICLE ACTION								
PEDESTRIAN ACTION	Straight	Over- Taking	Right Turn	Left Turn	U-Turn	Backing	Other	Total	
At Intersection	40	0	14						
Crossing With Signal	9	0	9	22	0	3	21	100	
Crossing Against Signal	38	0	3	18	0	1	3	40	
Not at Intersection	131	1	4	4	0	0	4	49	
Getting On or Off Vehicle	27			6	0	21	43	206	
Emerging From Parked Vehicle	24	2	2	1	0	9	31	72	
Walking in Roadway	149	1	0		0	6	34	66	
Playing in Roadway	22		6	6	0	35	46	243	
Working in Roadway	-	1	2	0	0	12	7	44	
Not in Roadway	30	2		2	0	6	28	69	
Laying in Roadway	8	0	4	6	0	44	99	232	
Darting into Roadway		0	0	0	0	1	5	14	
Pedestrian Drinking	352	0	6	6	0	4	21	390	
Pedestrian Drug Related	25	0	1	2	1	5	8	41	
Pedestrian Jogging	4	0	0	0	0	0	1	5	
Physical Impariment	6	0	0	3	0	1	1	11	
Dark Clothing/Not Visible	3	0	0	0	0	2	0	5	
n Crosswalk	1	0	0	1	0	3	2	13	
Totals	21	0	5	4	0	1	9	40	
	975	8	57	82	1	154	363	1,640	

<sup>57</sup> Pedestrians were killed and 1,416 were injured in 1991 traffic accidents. The charts above depict ages of pedestrian accident victims and the actions of the pedestrian vs. the vehicle at the time of the accident. 35% of the pedestrians killed or injured were 14 years of age or younger, 8% were age 65 and older.

CONSTRUCTION OF THE PROCESS OF THE P



# CONTRIBUTING FACTORS

### **CONTRIBUTING FACTORS**

ACC	CIDEN	ITS II	VVO	LVII	٧G
	PED	ESTF	IIAN	S	

FATAL ACCIDENTS: 57

INJURY ACCIDENTS: 1,374

TOTAL KILLED: 59

TOTAL INJURED: 1,521

(2 of the persons killed and 105 of the persons injured in pedestrian accidents were someone other than the pedestrian themselves.)

	ENTS	
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	41	4
Failed to Yield Right of Way	72	2
Following Too Close	2	0
Improper Passing	11	1
Disregard of Traffic Controls	12	0
Turning Improperly	2	0
Alcohol Involvement	78	7
Drug Involvement	4	0
Sick	2	0
Fell Asleep	3	
Lost Consciousness	3	0
Driver Inattention	252	10
Distraction	28	2
Physical Disability	6	0
Other	208	5
None Detected	821	32
Not Stated	168	11
TOTALS	1,713	75

### ACCIDENTS INVOLVING SCHOOL AGE CHILDREN

FATAL ACCIDENTS: 91

INJURY ACCIDENTS: 3,383

TOTAL KILLED: 126

TOTAL INJURED:

8,086

3

3

SCHOOL AGE CHILDREN ACCIDENTS						
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS				
Unsafe Speed	413	35				
Failed to Yield Right of Way	667	21				
Following Too Close	121	0				
Improper Passing	32	0				
Disregard of Traffic Controls	162	8				
Turning Improperly	35	0				
Alcohol Involvement	167	14				
Drug Involvement	14	1				
Sick	6	1				
Fell Asleep	31	1				
Lost Consciousness	12					
Driver Inattention	951	16				
Distraction	94	5				
Physical Disability	7	0				
Other	378	10				
None Detected	3,104	74				
Not Stated	150	7				
TOTALS	6 345	404				

# ACCIDENTS INVOLVING SCHOOL BUSES

FATAL ACCIDENTS:

INJURY ACCIDENTS: 119

• • •

TOTAL KILLED:

TOTAL INJURED: 344

	SCHOOL BUS ACCID	ENTS
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	48	2
Failed to Yield Right of Way	131	1
Following Too Close	31	0
Improper Passing	10	0
Disregard of Traffic Controls	9	1
Turning Improperly	39	0
Alcohol Involvement	5	0
Drug Involvement	1	0
Sick	1	0
Fell Asleep	1	0
Lost Consciousness	1	0
Driver Inattention	347	0
Distraction	25	0
Physical Disability	Breadles 1 serves	0
Other	154	0
None Detected	810	3
Not Stated	78	0
TOTALS	1,692	7

NOTE: Driver contributing factors are based upon officers' observations at the scene. Up to three driver factors may be noted for each driver involved.

# CONTRIBUTING FACTORS (CONT'D)

ACCIDENTS INVOLVING TRAINS	
FATAL ACCIDENTS:	6
INJURY ACCIDENTS:	40
TOTAL KILLED:	8
TOTAL INJURED:	60

	TRAIN ACCIDENTS	
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	4	1
Failed to Yield Right of Way	25	2
Following Too Close	0	0
Improper Passing	0	0
Disregard of Traffic Controls	14	2
Turning Improperly	2	0
Alcohol Involvement	6	2
Drug Involvement	2	1
Sick	0	0
Fell Asleep	1	0
Lost Consciousness	0	0
Driver Inattention	36	2
Distraction	3	0
Physical Disability	0	0
Other	14	0
None Detected	17	0
Not Stated	5	0
TOTALS	129	10

ACCIDENTS INVOLV	ING
BICYCLES	
FATAL ACCIDENTS:	9
INJURY ACCIDENTS:	593
TOTAL KILLED:	9
TOTAL INJURED:	608

DRIVER CONTRIBUTING FACTORS	BICYCLE ACCIDENTS	
	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	11	2
Failed to Yield Right of Way	56	0
Following Too Close	1	0
Improper Passing	2	0
Disregard of Traffic Controls	5	0
Turning Improperly	5	0
Alcohol Involvement	8	2
Drug Involvement	0	0
Sick	0	0
Fell Asleep	0	0
Lost Consciousness	0	0
Driver Inattention	71	2
Distraction	7	1
Physical Disability	0	0
Other	56	0
None Detected	453	5
Not Stated	50	0
TOTALS	725	12

ACCIDENTS INVOLVING MOPEDS	
FATAL ACCIDENTS:	2
INJURY ACCIDENTS:	77
TOTAL KILLED:	3
TOTAL INJURED:	87

	MOPED ACCIDENTS	
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	5	0
Failed to Yield Right of Way	17	0
Following Too Close	2	0
Improper Passing	2	0
Disregard of Traffic Controls	6	1
Turning Improperly	5	0
Alcohol Involvement	6	0
Drug Involvement	1	0
Sick	0	0
Fell Asleep	0	0
Lost Consciousness	0	0
Driver Inattention	32	0
Distraction	1	0
Physical Disability	0	0
Other	12	0
None Detected	55	2
Not Stated	6	0
TOTALS	150	3

# CONTRIBUTING FACTORS (CONT'D)

# ACCIDENTS INVOLVING MOTORCYCLES

FATAL ACCIDENTS: 27

INJURY ACCIDENTS: 805

TOTAL KILLED: 30

TOTAL INJURED: 978

	MOTORCYCLE ACCIDENTS	
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	206	17
Failed to Yield Right of Way	197	7
Following Too Close	19	0
Improper Passing	23	1
Disregard of Traffic Controls	24	1
Turning Improperly	20	1
Alcohol Involvement	130	8
Drug Involvement	6	0
Sick	0	0
Fell Asleep	5	0
Lost Consciousness	4	1
Driver Inattention	278	4
Distraction	16	0
Physical Disability	2	0
Other	146	6
None Detected	692	14
Not Stated	73	2
TOTALS	1,841	62

# ACCIDENTS INVOLVING MULTIPLE FATALS

FATAL ACCIDENTS: 81

TOTAL KILLED: 185

TOTAL INJURED: 119

MULTIPLE FATAL ACCIDENTS		
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	39	39
Failed to Yield Right of Way	23	23
Following Too Close	0	0
Improper Passing	1	1
Disregard of Traffic Controls	5	5
Turning Improperly	0	0
Alcohol Involvement	26	26
Drug Involvement	3	3
Sick	0	0
Fell Asleep	2	2
Lost Consciousness	0	0
Driver Inattention	15	15
Distraction	6	6
Physical Disability	0	0
Other	14	14
None Detected	65	65
Not Stated	5	5
TOTALS	204	204

### ACCIDENTS INVOLVING TRUCKS

FATAL ACCIDENTS: 90

INJURY ACCIDENTS: 1,891

TOTAL KILLED: 104

TOTAL INJURED: 2,753

	TRUCK ACCID	ENTS
DRIVER CONTRIBUTING FACTORS	ALL ACCIDENTS	FATAL ACCIDENTS
Unsafe Speed	479	23
Failed to Yield Right of Way	1,195	24
Following Too Close	362	1
Improper Passing	166	2
Disregard of Traffic Controls	220	9
Turning Improperly	333	1
Alcohol Involvement	235	7
Drug Involvement	9	0
Sick	8	0
Fell Asleep	136	6
Lost Consciousness	14	1
Driver Inattention	3,663	18
Distraction	174	5
Physical Disability	21	0
Other	1,723	17
None Detected	8,363	98
Not Stated	979	3
TOTALS	18,087	216



# ACCIDENTS BY COUNTY

## **ACCIDENTS BY COUNTY**

### 1990 vs. 1991

				ACCI	DENTS					PERS	SONS	
COUNTY	тот	AL	FA	TAL	NON-F		PROP DAM		KIL	LED	INJU	JRED
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991
Adair	532	467	4	2	115	116	413	349	4	2	189	188
Allen	532	452	5	3	138	136	389	313	5	3	212	23
Anderson	531	497	3	2	168	146	368	349	4	2	250	232
Ballard	212	173	2	1	70	61	140	111	3		117	10
Barren	1,345	1,243	9	5	375	332	961	906	10	5	566	52
Bath	336	332	4	3	103	95	229	234	5	4	141	16
Bell	925	896	8	10	246	296	671	590	8	13	408	45
Boone	3,282	3,204	11	5	786	746	2,485	2,453	11	5	1,248	1,09
Bourbon	798	785	6	5	227	195	565	585	6	7	327	28
Boyd	2,593	2,311	6	6	529	483	2,058	1,822	6	7	817	69
Boyle	1,157	1,140	3	4	274	277	880	859	4	4	412	45
Bracken	211	172	1	2	49	48	161	122	1	2	73	7
Breathitt	441	380	11	11	203	146	227	223	13	13	369	26
Breckinridge	360	327	2	5	108	114	250	208	2	7	200	17
Bullitt	1,317	1,195	14	5	404	344	899	846	16	6	654	54
Butler	362	281	1	4	92	70	269	207	1	5	139	11
Caldwell	488	401	7	3	128	90	353	308	7	6	237	13
Calloway	833	332	10	11	212	118	611	203	11	12	320	19
Campbell	3,320	3,221	7	8	723	698	2,590	2,515	7	9	1,060	1,00
Carlisle	105	62	1		39	16	65	45	1	2	52	2
Carroll	496	362	3	5	127	108	366	249	3	5	203	16
Carter	770	685	5	8	213	197	552	480	6	9	332	30
Casey	244	206	3	1	68	69	173	136	3	1	100	11
Christian	2,274	2,113	13	13	530	491	1,731	1,609	18	13	803	71
Clark	1,173	1,057	7	9	262	255	904	793	7	15	397	36
Clay	531	449	3	12	165	143	363	294	3	12	274	23
Clinton	199	263	4	1	48	73	147	189	5	1	89	13
Crittenden	252	198	4	3	74	62	174	133	4	3	106	11
Cumberland	137	157	2		33	28	102	128	3	1	58	4
Daviess	4,202	3.804	16	8	984	863	3,202	2,933	19	8	1,482	1,30
Edmonson	263	242	2	2	78	85	183	155	2	2	126	12
Elliott	120	98	1	3	61	49	58	46	1	3	96	9
Estill	396	276	5	2	123	85	268	189	6	2	199	14
Fayette	12,757	000000000000000000000000000000000000000	24	22	2,262	2,314	10,471	9,632	28	28	3,213	3,24
Fleming	345	338	4	1	110	102	231	235	4	1	154	17
Floyd	1,470	1,320	12	18	525	507	933	795	13	21	807	82
Franklin	1,945	1,828	7	7	391	353	1,547	1,468	9	7	584	55
Fulton	339	261	1	2	78	67	260	192	1	2	127	10
Gallatin	232	187	4	3	72	60	156	124	4	4	125	10
Garrard	247	267	1	3	58	91	188	173	1	3	82	16

## **ACCIDENTS BY COUNTY**

### 1990 vs. 1991

				ACCI	DENTS				PERSONS				
COUNTY	то	TAL	FA	TAL	INON-I			PERTY	KIL	LED	INJ	JRED	
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	
Grant	688	735	4	5	201	182	483	548	4	6	342	27:	
Graves	1,207	1,056	9	5	296	284	902	767	9	5	431	429	
Grayson	748	580	6	11	223	169	519	400	6	11	328	243	
Green	312	223	3	4	91	59	218	160	3	8	174	93	
Greenup	1,064	947	5	2	281	247	778	698	6	2	420	375	
Hancock	212	168	1	0	61	45	150	123	1	0	87	63	
Hardin	3,252	2,739	24	9	661	591	2,567	2,139	28	12	1,014	979	
Harlan	1,032	926	5	7	279	268	748	651	5	7	423	418	
Harrison	633	582	3	5	134	141	496	436	4	6	181	209	
Hart	417	387	4	6	134	117	279	264	4	6	208	205	
Henderson	2,451	2,271	6	9	616	535	1,829	1,727	7	11	960	850	
Henry	487	433	6		148	106	333	326	7	1	234	157	
Hickman	85	78	2		31	31	52	46	3	1	46	46	
Hopkins	2,369	2,044	7	19	530	411	1,832	1,614	7	25	838	623	
Jackson	183	190	3	6	49	56	131	128	4	6	78	93	
Jefferson	31,559	28,911	69	64	6,697	6,106	24,793	22,741	74	69	9,848	9,039	
Jessamine	1,137	1,103	6	11	253	248	878	844	8	13	372	387	
Johnson	659	569	6	3	199	186	454	380	6	4	320	297	
Kenton	6,418	5,756	9	19	1,351	1,275	5,058	4,462	9	19	1,927	1,812	
Knott	378	307	4	6	152	150	222	151	4	6	257	286	
Knox	772	689	7	8	239	248	526	430	11	9	391	422	
Larue	371	302	2	2	105	96	264	204	4	2	163	143	
Laurel	1,431	1,263	11	10	404	368	1,016	885	12	15	724	598	
Lawrence	287	267	11	7	73	68	203	192	14	7	127	110	
Lee	149	134	2	1	31	36	116	97	2	1	45	60	
Leslie	151	127	4	4	52	56	95	67	4	5	79	76	
Letcher	681	599	9	7	243	186	429	406	10	8	380	308	
Lewis	335	296	4	7	122	107	209	182	4	8	213	183	
Lincoln	536	456	6	4	166	153	364	299	6	5	285	248	
Livingston	226	167	2	5	62	54	162	108	2	5	92	77	
Logan	804	694	1	8	185	192	618	494	1	11	306	311	
Lyon	203	120	0	1	61	39	142	80	0	1	96	57	
McCracken	3,272	3,283	19	9	823	728	2,430	2,546	19	10	1,282	1,129	
McCreary	269	253	5	7	90	88	174	158	6	7	150	157	
McLean	248	230	0	1	91	90	157	139	0	1	134	148	
Madison	2,706	2,527	10	14	543	550	2,153	1,963	10	14	866	854	
Magoffin	285	292	6	2	130	144	149	1,903	9	2	226	239	
Marion	578	490	5	4	147	146	426	340	5	6	240	230	
Marshall	862	681	8	2	276	225	578	454	13	2	491	356	
Martin	368	350	3	2	137	133	228	215	3	2	222	216	

# **ACCIDENTS BY COUNTY**

### 1990 vs. 1991

				ACCIE	ENTS					PERS	SNC	
COUNTY	тота	AL	FA'	ΓAL	NON-FA		PROPE		KILI	LED	INJU	RED
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991
Mason	949	944	3	4	199	194	747	746	5	5	327	304
Meade	591	510	4	5	180	164	407	341	6	8	295	283
Menifee	109	80	1	0	50	39	58	41	1	0	83	59
Mercer	742	644	8	8	193	188	541	448	9	8	282	310
Metcalfe	225	187	3		72	72	150	114	4	2	114	116
Monroe	219	197	0	2	62	57	157	138	0	2	99	95
Montgomery	843	689	8	7	208	192	627	490	10	7	339	338
Morgan	336	292	4	3	130	126	202	163	5	3	205	216
Muhlenberg	1,219	991	10	3	328	286	881	702	12	3	475	447
Nelson	1,135	959	15	4	264	228	856	727	17	4	430	348
Nicholas	131	147	0		41	42	90	104	0	2	64	64
Ohio	645	568	12	3	204	190	429	375	13	3	340	291
Oldham	927	832	3	0	218	233	706	599	3	0	325	352
Owen	249	247	3	6	78	78	168	163	3	6	128	137
Owsley	125	97	0	2	48	30	77	65	0	2	75	53
Pendleton	360	283	4	4	111	86	245	193	4	7	206	160
Perry	1,194	1,066	10	8	334	343	850	715	10	9	520	559
Pike	2,651	2,651	23	22	817	908	1,811	1,721	25	27	1,320	1,434
Powell	313	296	3	2	95	88	215	206	3	2	166	143
Pulaski	1,823	1,575	8	16	449	376	1,366	1,183	8	18	711	616
Robertson	14	1,373	0	0	6	8	8	4	0	0	9	13
Rockcastle	508	438	6	7	155	141	347	290	8	8	271	260
Rowan	1,016	936	7	4	253	234	756	698	7	4	393	37
	499	385	3	5	127	110	369	270	3	5	199	186
Russell	1,146	1,111	4	7	268	265	874	839	5	8	428	40
Scott	1,194	1,029	8	10	267	246	919	773	9	11	419	398
Shelby	599	507	5	4		126	466	377	5	5	215	200
Simpson	119		0	500000000000000000000000000000000000000	128	53	74	80	0	1	78	84
Spencer	735	134 762	5	1 8	45	143	598	611	6	8	191	23
Taylor	284	600000000000000000000000000000000000000			132	85	191	164	4	7	126	12
Todd	358	255	2	6 3	89	77	249	221	2	3	164	12
Trigg	160		2	4	107	50	103	96	3	4	78	8
Trimble	525		3	100000000000000000000000000000000000000	55	129	368	339		2	264	22
Union	4,669	900000000000000000000000000000000000000		1 00	154	1,185	3,410	3,225		23	1,902	1,78
Warren		956000000000000000000000000000000000000	18	22	1,241	54	233	201	4	6	114	8
Washington	308 548	000000000000000000	4	5	71	102	424	307	6	4	181	16
Wayne			5	4	119	87	367	276		3	197	11
Webster	511	60000000000000000	*	2	141	E 000000000000000000	792	601	12	10	541	43
Whitley	1,145	800000000000000000000000000000000000000	N	9	342	256	137	135		2	121	10
Wolfe	215			2	76	71		***************************************		1	289	22
Woodford TOTALS (State	921			724	195	170 32,955	716	571 100,523		828	54,832	50,70

### 1990 vs. 1991 ACCIDENTS INVOLVING DRINKING DRIVERS

7,301 accidents in which a driver was known to have been drinking were reported during 1991. A breakdown of accidents (fatal, non-fatal injury, and property damage), by county, for 1990 vs. 1991, is shown below and on the following pages. The number of persons killed and injured in these accidents is also shown. Please note that figures for non-fatal injury accidents, property damage accidents, and persons injured are tabulated based on the investigating officer's determination that a driver was drinking. Information regarding drinking drivers in fatal accidents is obtained from FARS; which follows up on BAC test results.

				ACCI	DENTS					PERS	ONS	SNC	
COUNTY	то	TAL	FA	TAL	NON-F			PERTY	KIL	LED	INJ	JRED	
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	
Adair	36	24	1	1	13	14	22	9	1	1	17	23	
Allen	32	37	1	2	18	18	13	17	1	2	24	29	
Anderson	37	28	0	0	23	17	14	11	0	0	31	25	
Ballard	15	15	1	0	10	11	4	4	1	0	21	15	
Barren	58	62	4	4	25	30	29	28	5	4	48	49	
Bath	29	28	2	2	18	14	9	12	2	3	23	31	
Bell	71	66	5	7	34	35	32	24	5	9	54	66	
Boone	165	148	2	1	75	71	88	76	2	1	133	106	
Bourbon	58	49	4	3	23	27	31	19	4	5	35	37	
Boyd	124	84	1	1	57	26	66	57	1	2	80	41	
Boyle	38	34	1	2	22	19	15	13	1	2	29	38	
Bracken	25	9	0	1	11	5	14	3	0		15	11	
Breathitt	46	40	5	5	29	24	12	11	5	6	55	44	
Breckinridge	20	17	1	2	11	10	8	5	1	4	17	22	
Bullitt	84	59	6	0	44	29	34	30	8	0	73	44	
Butler	9	10	0	2	6	5	3	3	0	3	9	12	
Caldwell	33	18	2	1	16	8	15	9	2	4	33	12	
Calloway	32	35	3	4	18	18	11	13	3	5	27	30	
Campbell	178	158	4	3	91	55	83	100	4	4	139	77	
Carlisle	8	1	1	0	6	0	1	- 1	1	0	7	С	
Carroll	38	31	2	3	16	15	20	13	2	3	28	28	
Carter	55	55	4	4	33	24	18	27	5	4	53	42	
Casey	19	12	2	0	13	10	4	2	2	0	17	19	
Christian	159	147	4	8	79	70	76	69	6	8	131	98	
Clark	82	77	3	3	35	35	44	39	3	8	47	64	
Clay	35	45	2	6	21	24	12	15	2	6	29	39	
Clinton	12	15	4	1	4	8	4	6	5		14	13	
Crittenden	7	11	2	1	2	7	3	3	2		6	14	
Cumberland	10	5	1	0	4	2	5	3	2	0	7	2	
Daviess	224	208	6	3	104	94	114	111	6	3	170	143	
Edmonson	18	19	0	2	7	8	11	9	0	2	10	11	
Elliott	22	17	1	3	16	9	5	5	1	3	23	20	
Estill	33	25	3	1	17	14	13	10	3	1	25	23	
Fayette	662	571	13	9	237	209	412	353	16	11	354	290	
Fleming	16	21	1	0	6	12	9	9	1	Ö	7	18	
Floyd	121	103	6	4	83	69	32	30	7	4	137	119	
Franklin	105	98	2	3	49	45	54	50	4	3	70	79	
Fulton	19	11	0	0	8	4	11	7	0	0	14		
Gallatin	25	21	1	1	12	10	12	10	1	T.	18		
Garrard	13	20	0	0	8	13	5	7	0	0	9	22	

# 1990 vs. 1991 ACCIDENTS INVOLVING DRINKING DRIVERS

				ACCII	DENTS				PERSONS			
COUNTY	тот	AL	FA	TAL	NON-F		PROP DAM	ERTY AGE	KIL	LED	INJU	IRED
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	.1990	199
Grant	41	28	1	1	24	12	16	15	1	1	36	2
Graves	70	56	7	1	35	27	28	28	7		53	4
Grayson	33	50	1	7	24	27	8	16	1	7	31	3
Green	13	5	3	2	9	3	1	0	3	5	21	
Greenup	51	51	- 1		29	26	21	24	2		36	3
Hancock	17	6	0	0	14	2	3	4	0	0	22	
Hardin	129	106	11	2	53	47	65	57	11	4	100	8
Harlan	56	74	0	3	25	39	31	32	0	3	40	5
Harrison	34	35	0	3	19	21	15	11	0	4	24	3
Hart	22	20	1	2	12	10	9	8	1	2	18	1
Henderson	116	109	5	3	49	43	62	63	6	4	90	6
Henry	42	33	2	0	23	17	17	16	2	0	36	1
Hickman	7	7	1		5	6	1	0	1	1	7	1
Hopkins	103	87	2	6	42	46	59	35	2	7	58	7
Jackson	10	12	2	2	3	8	5	2	3	2	3	1
Jefferson	1,404	1,289	26	31	640	567	738	691	27	34	1,008	89
Jessamine	54	53	3	7	22	21	29	25	5	9	40	3
Johnson	40	22	2	3	18	13	20	6	2	4	23	1
Kenton	330	338	0	6	141	139	189	193	0	6	211	19
Knott	36	27	1	4	20	15	15	8	1	4	34	2
Knox	63	36	1	3	32	23	30	10	1	3	46	4
Larue	22	17	0	2	15	9	7	6	0	2	21	1
Laurel	97	88	6	3	48	46	43	39	6	5	93	8
Lawrence	28	20	6	5	14	10	8	5	7	5	24	2
Lee	13	9	1	1	4	2	8	6	1	1	7	
Leslie	21	16	2	3	13	10	6	3	2	4	23	1
Letcher	54	38	3	2	27	25	24	11	3	3	47	2
Lewis	27	24	2	2	15	14	10	8	2	3	38	2
Lincoln	35	35	0	2	17	18	18	15	0	3	29	3
Livingston	19	14	1	2	12	7	6	5	1	2	19	
Logan	46	42	0	5	20	22	26	15	0	7	38	
Lyon	17	11	0	1	8	6	9	4	0	1	13	
McCracken	191	154	6	5	79	75	106	74	6	5	115	1(
McCreary	25	26	3	5	15	5	7	16	4	5	18	
McLean	14	16	0		9	14	5	1	0		10	2
Madison	171	183	7	4	64	79	100	100	7	4	104	13
Magoffin	33	42	1		24	27	8	14	1	1	37	
Marion	44	60	4	4	16	31	24	25	4	6	27	
Marshall	46	29	4	0	25	21	17	8	8	0	35	2
Martin	22	22	1	0	11	13	10	9	1	0	19	

# 1990 vs. 1991 ACCIDENTS INVOLVING DRINKING DRIVERS

				ACCID	ENTS					PERS	SONS	
COUNTY	то	TAL	FA'	<b>TAL</b>	000000000000000000000000000000000000000	FATAL JURY		ERTY IAGE	KILL	.ED	INJ	URED
	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991
Mason	57	53	2	1	27	27	28	25	4	1	47	58
Meade	53	45	0	4	29	20	24	21	0 .	5	41	33
Menifee	9	3	1	0	6	3	2	0	1	0	9	4
Mercer	43	39	3	3	21	14	19	22	3	3	32	25
Metcalfe	10	16	1	0	5	12	4	4	1	0	14	15
Monroe	9	16	0	0	4	7	5	9	0	0	11	7
Montgomery	55	40	3	5	23	17	29	18	5	5	38	28
Morgan	31	29	3	31	14	20	14	6	. 3	3	23	32
Muhlenberg	76	51	3	0	41	30	32	21	3	0	56	37
Nelson	64	51	7	1	35	27	22	23	7	1	55	35
Nicholas	17	21	0	0	7	13	10	8	0	0	12	21
Ohio	35	33	2	1	23	19	10	13	2	1	41	22
Oldham	50	35	1	0	30	18	19	17	1	0	41	22
Owen	19	15	0	2	13	6	6	7	0	2	19	g
Owsley	15	9	0	1	8	3	7	5	0		13	6
Pendleton	23	14	3	1	11	5	9	8	3	2	14	Ę
Perry	74	70	4	4	34	41	36	25	4	4	15	65
Pike	170	178	8	5	81	93	81	80	9	5	142	139
Powell	14	14	1	0	7	7	6	7	1	0	7	12
Pulaski	76	72	2	9	44	33	30	30	2	9	74	58
Robertson	2	3	0	0	2	3	0	0	0	0	2	Ę
Rockcastle	32	29	3	1	18	23	11	5	3	1	31	50
Rowan	53	52	3	2	24	29	26	21	3	2	51	52
Russell	40	33	3	3	15	16	22	14	3	3	27	37
Scott	41	51	2	3	16	24	23	24	3	3	29	32
Shelby	74	57	5	4	38	25	31	28	6	5	54	35
Simpson	20	32	2	0	12	15	6	17	2	0	18	27
Spencer	17	20	0		12	12	5	7	0	1	20	21
Taylor	38	24	2	2	12	13	24	9	2	2	18	22
Todd	22	25	3	0	12	19	7	6	3	0	14	25
Trigg	15	16	0	1	9	6	6	9	0	1	12	12
Trimble	8	10	0	2	4	7	4	1	0	2	6	16
Union	36	25	1	1	16	17	19	7	1	2	30	27
Warren	269	220	7	9	131	99	131	112	7	10	231	141
Washington	209	19	0	3	12	9	8	7	0	4	23	1.5
Wayne	31	23	3	1	15	11	13	11	3	1	24	26
Webster	27	18	1	1	15	7	11	10	1	2	21	13
Whitley	73	58	3	5	44	29	26	24	3	6	66	54
Wolfe	16	16	0	2	9	8	7	6	0	2	13	1!
Woodford	56	42	3	1	33	21	20	20	3	1	54	2
TOTALS	8,159	7,301	303	311	3,891	3,472	3,965	3,518	336	365	6,181	5,46

# DRIVERS UNDER INFLUENCE OF DRUGS INVOLVED IN TRAFFIC ACCIDENTS

The following chart shows the number of drivers suspected of being under the influence of drugs involved in accidents, together with the number of persons killed and injured in those accidents. A total of 331 drivers were suspected of being under the influence of drugs based on preliminary investigation of the officer investigating the accident. 8 drivers were involved in fatal accidents (13 persons killed) and 174 drivers were involved in injury accidents (276 persons injured).

COUNTY	ALL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PERSONS	PERSON
ADAIR	3	0	1	0	1
ALLEN	5	0	1	0	1
ANDERSON	1	0	1	0	2
BALLARD	2	0	1	0	2
BARREN	3	0	3	0	9
BATH	0	0	0	0	0
BELL	6	1	4	3	4
BOONE	9	0	7	0	12
BOURBON	1	0	0	0	0
BOYD	4	0	1	0	2
BOYLE	3	0	3	0	6
BRACKEN	0	0	0	0	0
BREATHITT	6	0	4	0	7
BRECKINRIDGE	0	0	0	0	0
BULLITT	4	0	0	0	0
BUTLER	0	0	0	0	0
CALDWELL	0	0	0	0	0
CALLOWAY	0	0	0	0	0
CAMPBELL	5	0	2	0	2
CARLISLE	0	0	0	0	0
CARROLL	1	0	0	0	0
CARTER	2	0	2	0	5
CASEY	0	0	0	0	0
CHRISTIAN	6	0	4	0	4
CLARK	1	0	1	0	1
CLAY	11	0	8	0	11
CLINTON	0	0	0	0	0
CRITTENDEN	0	0	0	0	0
CUMBERLAND	1	0	0	0	0
DAVIESS	15	0	5	0	10
EDMONSON	2	0	2	0	4
ELLIOTT	2	0	2	0	2
ESTILL	1	0	0	0	0
FAYETTE	22	0	11	0	15
FLEMING	1	0	1	0	1
FLOYD	4	0	2	0	2
FRANKLIN	1	0	1	0	2
FULTON	2	0	1	0	1
GALLATIN	0	0	0	0	0

COUNTY	ALL ACCIDENT	FATAL S ACCIDENTS	INJURY ACCIDENT	PERSON KILLED	PERSON
GARRARD	0	0	0	0	0
GRANT	1	0	0	0	0
GRAVES	4	0	2	0	2
GRAYSON	1	0	0	0	0
GREEN	0	0	0	0	0
GREENUP	2	0	2	0	2
HANCOCK	0	0	0	0	0
HARDIN	3	0	2	0	5
HARLAN	4	0	1	0	1
HARRISON	3	0	2	0	2
HART	0	0	0	0	0
HENDERSON	1 1	0	0	0	0
HENRY	1	0	1	0	2
HICKMAN	0	0	0	0	0
HOPKINS	4	0	2	0	2
JACKSON	1	1	0	1	3
JEFFERSON	31	0	16	0	25
JESSAMINE	2	0	2	0	3
JOHNSON	2	0	1	0	2
KENTON	20	1	8	1	13
KNOTT	0	0	0	0	0
KNOX	5	0	2	0	2
LARUE	0	0	0	0	0
LAUREL	9	1	6	3	12
LAWRENCE	0	0	0	0	0
LEE	1	0	0	0	0
LESLIE	0	0	0	0	0
LETCHER	3	0	1	0	1
LEWIS	1	0	1	0	1
LINCOLN	0	0	0	0	0
LIVINGSTON	0	0	0	0	0
LOGAN	0	0	0	0	0
LYON	0	0	0	0	0
McCRACKEN	9	0	7	0	11
McCREARY	0	0	0	0	0
McLEAN	0	0	0	0	0
MADISON	6	0	1	0	1
MAGOFFIN	3	0	2	0	3
MARION	0	0	0	0	0

# DRIVERS UNDER INFLUENCE OF DRUGS INVOLVED IN TRAFFIC ACCIDENTS (CONT'D)

COUNTY	ALL ACCIDENTS	FATAL ACCIDENTS	INJURY ACCIDENTS	PERSONS KILLED	PERSONS INJURED
MARSHALL	2	0	2	0	5
MARTIN	1	0	0	0	0
MASON	0	0	0	0	0
MEAD	3	0	3	0	8
MENIFEE	0	0	0	0	0
MERCER	4	0	2	0	4
METCALFE	0	0	0	0	0
MONROE	1	0	1	0	1
MONTGOMERY	2	1	0	1	2
MORGAN	3	0	2	0	5
MUHLENBERG	4	0	2	0	2
NELSON	1	0	1	0	1
NICHOLAS	2	0	1	0	1
OHIO	0	0	0	0	0
OLDHAM	1	0	0	0	0
OWEN	0	0	0	0	0
OWSLEY	0	0	0	0	0
PENDLETON	2	0	0	0	0
PERRY	4	0	4	0	5
PIKE	14	0	8	0	9
POWELL	2	0	0	0	0
PULASKI	4	0	1	0	_1

COUNTY	ALL AGGIDENTS	FATAL ACGIDENTS	INJURY ACCIDENTS	PERSONS KILLED	PERSONS INJURED
ROBERTSON	0	0	0	0	0
ROCKCASTLE	2	0	1	0	1
ROWAN	2	0	0	0	0
RUSSELL	0	0	0	0	0
SCOTT	3	0	1	0	1
SHELBY	5	1	1	2	6
SIMPSON	1	0	1	0	1
SPENCER	2	. 0	0	0	0
TAYLOR	1	0	1	0	2
TODD	0	0	0	0	0
TRIGG	0	0	0	0	0
TRIMBLE	0	0	0	0	0
UNION	0	0	0	0	0
WARREN	12	0	8	0	11
WASHINGTON	0	0	0	0	0
WAYNE	3	0	2	0	4
WEBSTER	0	0	0	0	0
WHITLEY	9	2	5	2	7
WOLFE	0	0	0	0	0
WOODFORD	0	0	0	0	0
TOTAL	331	8	174	13	276

# DRUG INVOLVED ACCIDENTS BY AREA DEVELOPMENT DISTRICT

AREA	TOTAL	TYPE ACCIDE	NT REPORTED	NUMBER PERS	ONS
DEVELOPMENT DISTRICT	NUMBER REPORTED	FATAL	INJURY	KILLED	INJURED
Purchase	19	0	13	0	21
Pennyrile	14	0	8	0	8
Green River	16	0	5	0	10
Barren River	24	0	16	0	27
Lincoln Trail	8	0	6	0	14
Jefferson KIPDA	44	1	18	2	33
Northern Kentucky	38	1	17	1	27
Buffalo Trace	2	0	2	0	2
Gateway	7	1	2	1	7
FIVCO	10	0	7	0	11
Big Sandy	24	0	13	0	16
Kentucky River	14	0	9	0	13
Cumberland Valley	47	5	27	9	41
Lake Cumberland	12	0	5	0	8
Bluegrass	52	0	26	0	38
STATE TOTALS	331	8	174	13	276
STATE TOTALS	331	0		10	



# FATAL ACCIDENT REPORTING SYSTEM



#### FATAL ACCIDENT REPORTING SYSTEM

The Fatal Accident Reporting System (FARS) is a computerized file containing data on all fatal accidents occurring each year in the fifty states, the District of Columbia, and Puerto Rico. The system is operated by the National Highway Traffic Safety Administration for the purpose of identifying safety problems, suggesting solutions, and helping to provide an objective basis to evaluate the effectiveness of motor vehicle safety standards and highway safety countermeasures.

FARS has a contract with a government agency in each state for the purpose of fatal accident data acquisition. In Kentucky, this contract is with the Kentucky State Police Records Section.

For reasons of timeliness in reporting and continuity among the states, *FARS* counts only those fatalities that occur within 30 days of the accident date. *FARS* differs from Kentucky data in that it collects data not only from the accident reports submitted from across the state, but contacts many other sources to obtain additional data pertinent to the accident, vehicles, drivers, etc. Examples of additional sources contacted by *FARS* are vehicle registration files, Driver Licensing, Vital Statistics, EMS reports, labs, coroners, and medical examiners.

A 15 minute audio/slide presentation (also available on VHS) more fully explaining the Fatal Accident Reporting System is available by contacting the FARS Unit of the Kentucky State Police Records Section.

#### DRIVERS INVOLVED IN FATAL ACCIDENTS-AGE AND ALCOHOL INVOLVEMENT

The chart depicts the ages of all drivers in fatal accidents vs. alcohol involved drivers in fatal accidents and the percentages of involvement for various ages and age groups. The alcohol involved teenager driver (ages 13 through 19) represents almost 13% of the total number of alcohol involved drivers and 29% of all teenage drivers in fatal accidents.

NOTE: Data is derived from the Fatal Accident Reporting System (FARS). The number of alcohol related drivers differs from those reported through the Kentucky Accident Reporting System because FARS follows up on alcohol test results.

AGE	Number of Drivers	Alcohol Involved	% Alcohol Involved
Under 16	8	0	0
16	30	6	20
17	38	14	36
18	33	12	36
19	43	13	30
20	42	19	45
21	32	16	50
22-24	84	38	45
25-34	272	109	40
35-44	199	54	27
45-54	107	23	21
55-64	60	7	11
65-74	67	9	13
Over 74	35	4	11
Unknown	5	0	0
TOTALS	1,055	324	30

# ALCOHOL INVOLVEMENT BY AGE AND TEST RESULTS FOR DRIVERS INVOLVED IN 1991 FATAL ACCIDENTS

DURING 1991, 365 PERSONS WERE KILLED IN FATAL ACCIDENTS INVOLVING A DRINK-ING DRIVER. THIS REPRESENTS 44% OF ALL PERSONS KILLED IN TRAFFIC ACCIDENTS IN KENTUCKY DURING 1991.

The chart below shows drinking drivers by age and alcohol test result. 63% of the drinking drivers were found to have been legally intoxicated (0.10% or above) at the time of the accident.

AGE	# OF DRINKING DRIVERS*		TEST RESULTS					NOT	RESULTS OR TEST
		.00	.0105	.0609	.1019	.20 +	REFUSED	TESTED	UNK.
Under 16	0	0	0	0	0	0	0	0	0
16	6	0	1	1	3	0	0	0	1
17	14	4	5	0	3	0	1	1	0
18	12	2	3	1	4	1	0	0	1
19	13	1	2	2	6	1	0	1	0
20	19	1	1	3	9	4	0	1	0
21	16	1	2	3	7	3	0	0	0
22-24	38	0	6	3	12	10	0	3	4
25-34	109	7	5	11	45	31	1	2	7
35-44	54	2	4	6	21	17	0	3	1
45-54	23	2	1	1	3	14	0	1	1
55-64	7	0	0	0	0	6	0	1	0
65-74	9	2	1	2	0	4	0	0	0
75 +	4	1	0	0	1	2	0	0	0
TOTAL	324	23	31	33	114	93	2	13	15

<sup>\*</sup>Drinking driver refers to a driver suspected by the police to be drinking, and/or a driver who tested positive for alcohol in a subsequent test.

#### **FATALLY INJURED PEDESTRIANS**

DURING 1991, 35% OF THE FATALLY INJURED PEDESTRIANS OVER THE AGE OF 15 WERE DRINKING. THEIR AVERAGE ALCOHOL TEST WAS 0.21%

Another traffic hazard is the drinking pedestrian. The right-hand chart shows the number of fatally injured pedestrians by age and alcohol involvement.

AGE	TOTAL	NUMBER DRINKING	AVERAGE TEST RESULTS
0-5	5	0	0
6-10	5	0	0
11-15	4	1	.14
16-20	4	1	.14
21-25	4	3	.14
26-30	0	0	0
31-40	9	4	.37
41-50	5	2	.27
51-60	4	2	.33
61-70	5	1	.17
71-80	3	0	0
81+	6	1	0
TOTAL	54	15	.21

# ACTIVE RESTRAINTS AND EJECTION IN FATAL ACCIDENTS

The chart below plots overall results in fatal accidents when active restraints (safety belts, harnesses, child restraints) are used. A comparison of "used" versus "not used" for 1991 FARS data strongly confirms both the life-saving advantage as well as the reduction of serious injury when restraints are in place. 84 PERCENT OF THE VEHICLE OCCUPANTS KILLED DURING 1991 WERE NOT RESTRAINED. 73 PERCENT OF THE VEHICLE OCCUPANTS SUFFERING INCAPACITATING INJURY WERE NOT RESTRAINED. 69 PERCENT OF THE OCCUPANTS SUFFERING NON-INCAPACITATING INJURY WERE NOT RESTRAINED.

Result	Restraint Used	Restraint Not Used	Unknown If Used	TOTAL
Fatal Injury	100	609	12	721
Incapacitating Injury	102	304	9	415
Non-Incapacitating Injury	73	171	2	246
Possible Injury	37	98	1	136
No Injury	99	208	11	318
Unknown If Injured	1	0	2	3
Injured, Severity Unknown	0	0	1	1
TOTAL	412	1,390	38	1,840

Of the 1,840 vehicle occupants involved in fatal accidents in 1991, only 412 were using safety restraints - an overall usage rate of 22% in fatal accidents.

#### **EJECTION**

Result	Total Ejection	Partial Ejection	No Ejection	Unknown	TOTAL
Fatal Injury	177	67	476	1	721
Incapacitating Injury	48	10	357	0	415
Non-Incapacitating Injury	14	3	229	0	246
Possible Injury	1	1	134	0	136
No Injury	1	0	316	1	318
Unknown If Injured	0	0	2	1	3
Injured, Severity Unknown	0	0	1	0	1
TOTAL	241	81	1,515	3	1,840

The above chart shows overall injuries in fatal accidents according to whether the vehicle occupant was ejected from the vehicle, partially ejected, or not ejected. 24% of the persons killed were ejected. 73 % OF THOSE VEHICLE OCCUPANTS WHO WERE EJECTED WERE KILLED. This data also reaffirms the life-saving advantage of using an active restraint, since the possibility of being ejected upon impact is significantly reduced.

#### CHILD RESTRAINTS

Kentucky's "child restraint law" (KRS 189.125) became effective July 15, 1982, and requires that any parent or legal guardian of a child "forty inches in height or less, when transporting the child in a motor vehicle owned by that parent or guardian operated on the roadways, streets and highways of this state, shall have such child properly secured in a child restraint system of a type meeting federal motor vehicle safety standards."

In order to qualify, the child restraint system must be certified as having been federally approved. (Federal approval of a child restraint system is based on its having withstood dynamic crash tests - 30 mph crash into a fixed barrier.)

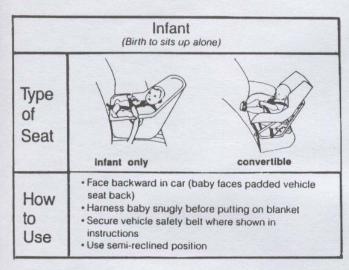
The data on child restraint depicted in the chart below reflects age (four years and under) rather than the height of the child. Other states with child restraint laws have adopted the "four years and under" standard in their statutes.

RESULT	Age 4 & under Total	Child Restraint Used	Lap Belt &/or Harness Used	None Used	Unknown
Killed	22	9	1	12	0
Injured (incapacitating)	14	5	2	7	0
Injured (non-incapacitating)	14	7	2	5	0
Injured (possible)	3		0	2	0
Not Injured	8	3	0	5	0
TOTAL	61	25	5	31	0

Of the 61 child occupants (4 and under) in 1991 fatal accidents only 30 children were secured in a child restraint. Of the 22 children killed, 12 had no restraint and only 9 were using child safety seats. This information confirms what other studies have suggested regarding the effectiveness of child restraints. An infant or small child's survival can depend on whether the child was properly secured.



# CHILD RESTRAINTS **BABY ALWAYS RIDES FACING REAR**



#### The "best" car seat . . .

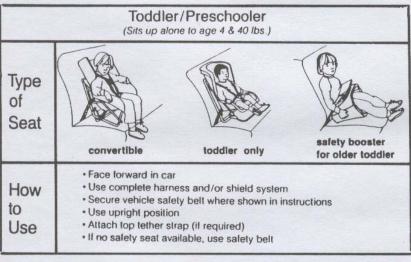
Fits your child.

Some seats fit only infants; others work only with toddlers who can sit up well. "Convertible" models adjust for use from birth to 4 years.

#### Fits your car.

Try before you buy. Follow manufacturer's instructions exactly; fasten safety belt tightly in position shown. Try in both back and front seats, although back seat is usually safer. Try convertible seats in infant and toddler positions. Fits your needs.

Choose a seat that is easy for you to install in your car(s) and use on every ride. Some seats are easier to move from car to car. For a seat which requires the use of a top tether strap, you must install a special bolt in your car for rear seat use; some cars have pre-drilled holes or hardware for these bolts. For front seat use, fasten tether strap to an unused rear safety belt.



### Support baby's head and body



Rolled diapers, blankets

How can I keep my child in the car seat? Start a lifelong habit with baby's first ride. Strengthen the habit by never making an exception. Always wear your own safety belt.

#### Before you buy a used car seat, be sure you can answer "yes" to all of the questions on this checklist:

- · Is it crash-tested?
- · Do you have all the parts? (Harness, shield, tether)
- · Is it free from signs of a crash? (Cracks or twisting)
- Will you get manufacturer's instruction booklet?

#### Four Rules for Safety

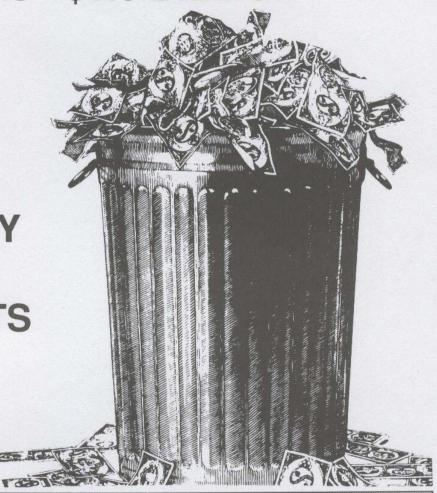
- 1. Never hold a child on your lap
- 2. Use a crash-tested seat
  3. Always use the harness/shield
- 4. Attach the car safety belt correctly

#### Older Child (4 years, 40 lbs. and over) Type of Seat safety booster vehicle safety belt · Safety boosters: Use either harness or shield provided or How shoulder/lap belt Keep lap belt snug across hip/thigh bones to · Vehicle shoulder harness must not cross face or neck Use · One safety belt per person

# \$1.3 - \$1.6 BILLION

THE COST of KENTUCKY TRAFFIC ACCIDENTS

1991



The calculable costs of motor vehicle accidents include wage loss, medical expense, insurance administration costs, and property damage. Two formulas provided by the National Safety Council were used to arrive at a cost range for traffic accidents in Kentucky during 1991.

The **high** range (\$1.6 billion) was derived from the following formula:

600000000000000000000000000000000000000
j
000
000
000
,000

The **low** range (\$1.3 billion) was derived from the following formula:

Urban Accidents Deaths	Average X Cost	Estimated = Cost
176	X \$3,100,000	= \$545,600,000
Rural Accident Deaths		
652	X \$1,100,000	= \$717,200,000
TOTAL LOW	/ FSTIMATE:	\$1,262,800,000

KENTUCKY STATE POLICE RECORDS SECTION 1250 Louisville Road Frankfort, Kentucky 40601

BULK RATE U.S. POSTAGE PAID Frankfort, Ky Permit No. 674

TO: