## Traffic Safety Facts 1994

U.S. Department of Transportation National Highway Traffic Safety Administration



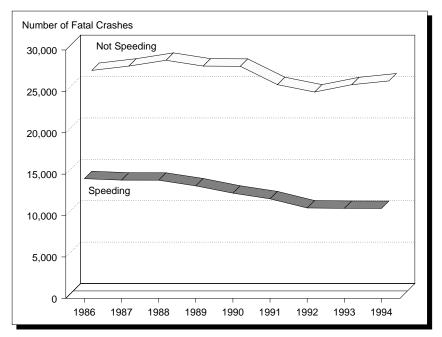
## Speed



"The economic cost of speed-related crashes is estimated to be more than \$23 billion each

Speed—exceeding the posted speed limit or driving too fast for conditions—is one of the most prevalent factors contributing to traffic crashes. The human and economic sacrifice is unacceptable. The economic cost to society of speed-related crashes is estimated by NHTSA to be more than \$23 billion per year. In 1994, speed was a factor in 30 percent of all fatal crashes, and 12,480 lives were lost in speed-related crashes.

Figure 1. Fatal Crashes by Speed Status, 1986-1994



Motor vehicle crashes cost society an estimated \$4,400 per second. The total economic cost of crashes was estimated at \$137.5 billion in 1990. The 1994 costs of **speed-related** crashes were estimated to be more than \$23 billion—\$44,190 per minute or \$732 per second. The health care costs of speed-related crashes in 1994 were estimated at approximately \$2 billion.

Table 1. Estimated Annual Economic Costs of Speed-Related Crashes (1990 Dollars per Year)

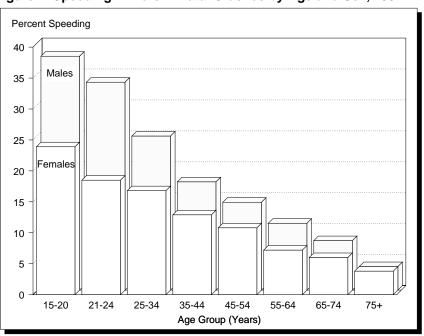
Crash Type	Cost					
Fatal	\$9.8 billion					
Injury (Non-Fatal)	\$9.1 billion					
Property-Damage-Only	\$4.3 billion					
Total	\$23.2 billion					

In 1994, 500,000 people received minor injuries in speed-related crashes. An additional 60,000 people received moderate injuries, and 23,000 received critical injuries in speed-related crashes.

Few drivers view speeding as an immediate risk to their personal safety. However, speeding reduces a driver's ability to steer safely around curves or objects in the roadway, extends the distance necessary to stop a vehicle, and increases the distance a vehicle travels while the driver reacts to a dangerous situation.

Young male drivers are the most likely to speed. The relative proportion of speed-related crashes to all crashes decreases with increasing driver age. In 1994, nearly 40 percent of the male drivers 15 to 20 years old who were involved in fatal crashes were speeding at the time of the crash.

Figure 2. Speeding Drivers in Fatal Crashes by Age and Sex, 1994



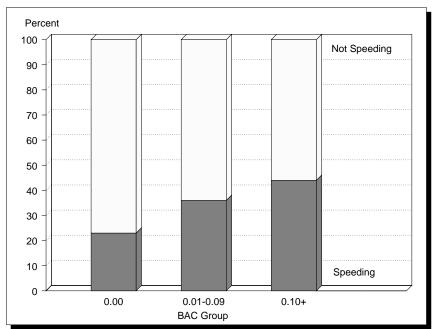
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Alcohol and speeding seem to go hand in hand. In 1994, 49 percent of the **speeding** drivers under 21 years old who were involved in fatal crashes were also intoxicated, with a blood alcohol concentration (BAC) of 0.10 (grams per deciliter [g/dl]) or greater. In contrast, only 9 percent of the **nonspeeding** drivers under age 21 involved in fatal crashes in 1994 were intoxicated.

For drivers between 21 and 24 years of age who were involved in fatal crashes in 1994, 65 percent of **speeding** drivers were intoxicated, compared with only 20 percent of **nonspeeding** drivers.

Alcohol and speeding are clearly a deadly combination. Alcohol involvement is prevalent for drivers involved in speed-related crashes. In 1994, 44 percent of the **intoxicated** drivers (BAC = 0.10 or higher) involved in fatal crashes were speeding, compared with only 23 percent of the **sober** drivers (BAC = 0.00) involved in fatal crashes (Figure 3).

Figure 3. All Drivers Involved in Fatal Crashes by BAC Level and Speed Status, 1994



"Between midnight and 3 am, 80 percent of speeding drivers involved in fatal crashes had been drinking."

For both speeding and nonspeeding drivers involved in fatal crashes, the percentage of those who had been drinking, with BAC 0.01 or greater, at the time the crash occurred was higher at night than during the day. Between midnight and 3 am, 80 percent of **speeding** drivers involved in fatal crashes had been drinking.

Figure 4. Drivers in Fatal Crashes by Alcohol Involvement, Speed Status, and Time of Day, 1994

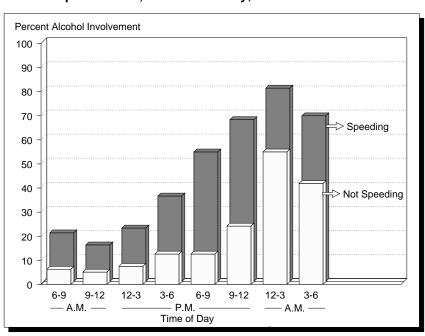
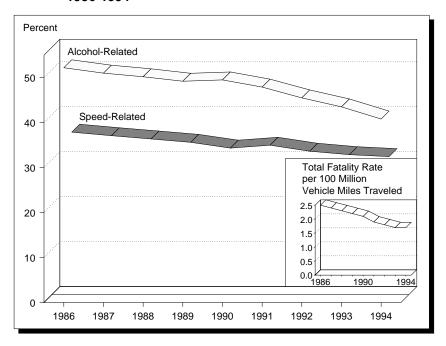


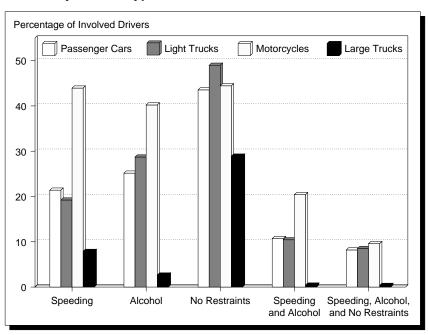
Figure 5. Percentages of Fatalities Related to Speed and to Alcohol, 1986-1994



"Speed involvement for motorcyclists in fatal crashes was twice as high as for car and light truck drivers."

In 1994, 44 percent of all motorcyclists involved in fatal crashes were speeding. The percentage of speed involvement in fatal crashes was more than twice as high for motorcyclists as for drivers of passenger cars or light trucks, and the percentage of alcohol involvement was nearly 50 percent higher for motorcyclists.

Figure 6. Speeding, Alcohol Involvement, and Failure To Use Restraints Among Drivers Involved in Fatal Crashes by Vehicle Type, 1994



In 1994, only 35 percent of **speeding** passenger vehicle drivers under 21 years old who were involved in fatal crashes were wearing safety belts at the time of the crash. In contrast, 54 percent of **nonspeeding** drivers in the same age group were restrained. For drivers 21 years and older, the percentage of **speeding** drivers involved in fatal crashes who were using restraints at the time of the crash was also 35 percent, but 62 percent of **nonspeeding** drivers in fatal crashes were restrained.

In 1994, 22 percent of **speeding** drivers involved in fatal crashes had an invalid license at the time of the crash, compared with 10 percent of **nonspeeding** drivers.

Crash severity increases with increasing vehicle speed at the time of impact. The chances of death or serious injury double for every 10 miles per hour over 50 miles per hour that a vehicle travels. For vehicles traveling 10 miles per hour above or below the average speed, crash involvement rates are almost 6 times those for vehicles traveling within 10 miles per hour of the average speed.

Speed was a factor in 30 percent of the fatal crashes that occurred on dry roads in 1994 and in 31 percent of those that occurred on wet roads. Speed was a factor in 48 percent of the fatal crashes that occurred when there was snow or slush on the road and in 46 percent of those that occurred on icy roads.

Speed was involved in one-third of the fatal crashes that occurred in construction/maintenance zones in 1994.

In 1994, 88 percent of speed-related fatalities occurred on roads that were not Interstate highways. Of all speed-related fatalities, 94 percent occurred on roads with a posted speed limit of 55 miles per hour or less.

"Only 12 percent of speed-related fatalities occur on Interstate highways."

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death or serious

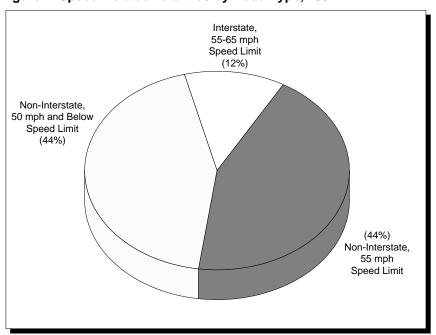
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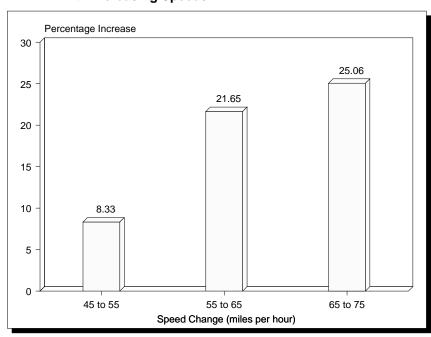
Figure 7. Speed-Related Fatalities by Road Type, 1994



Fuel consumption increases steadily with increasing travel speed above 45 miles per hour. Passenger cars and light trucks use approximately 50 percent more fuel traveling at 75 miles per hour than they do at 55 miles per hour.

The cost of fuel for an average passenger car traveling 100 miles at 55 miles per hour is \$4.36, compared with \$6.64 for a car traveling at 75 miles per hour. For an average light truck traveling 100 miles at 55 miles per hour the fuel cost is \$6.07, compared with \$9.10 for a light truck traveling at 75 miles per hour.

Figure 8. Percentage Increases in Fuel Consumption with Increasing Speeds



"Passenger vehicles use about 50 percent more fuel traveling at 75 miles an hour than they do at 55 miles an hour."

## For more information:

Information on speed involvement in traffic fatalities is available from the National Center for Statistics and Analysis, NRD-31, 400 Seventh Street, S.W., Washington, D.C. 20590. Telephone inquiries should be addressed to Ms. Louann Hall at (202) 366-4198. FAX messages should be sent to (202) 366-7078. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

"Serving the Highway Safety Community by the Numbers"

Table 2. Speed-Related Traffic Fatalities and Costs by Road Type and Speed Limit, 1994

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					ed Fatalities by Road Type and Speed Limit							Estimated Costs of Speed-Related Crashes by Road Type		
	Total Traffic		Inter	state			Non-In	terstate			(	Million 1990	Dollars)	
State	Fatalities	Total	65 mph	55 mph	55 mph	50 mph	45 mph	40 mph	35 mph	<35 mph	Total	Interstate	Non-Interstate	
AL	1,083	341	15	13	196	7	33	26	27	23	635	54	581	
AK AZ	85 903	33 341	2 46	4 10	7 95	5 20	0 49	2 42	0 43	2 27	61 633	11 125	50 508	
AR	610	204	14	3	108	<u>2.</u> 9	26	9	11	<del>2</del> 7 13	380	34	346	
CA	4,226	1,743	94	167	713	70	126	129	237	170	3,245	491	2,753	
CO	585	220	33	16	65	8	23	24	23	27	410	97	313	
CT	310	93	0	13	3	8	14	4	17	34	173	30	143	
DE DC	112 69	29 38	0 0	2 0	10 0	15 2	0 3	1 0	0 3	1 30	54 71	4 9	50 61	
FL	2,687	549	25	18	136	<del></del> 17	129	46	77	93	1,022	99	923	
GA	1,426	341	16	17	174	7	53	10	40	18	635	65	570	
HI	122	41	0	3	3	3	7	1	6	18	76	7	69	
ID II	249	93	12	4	43	7	7	0	8	6	173	30	143	
IL IN	1,554 974	448 241	29 13	53 10	215 86	1 19	20 29	9 33	4 14	117 32	834 449	162 54	672 395	
IA	<u>974</u> 478	60	<u></u>	<u>10</u>	23	<u>19</u>	<u>2</u>	<u></u> 0	! <del>.1.</del> 8	<u>52</u> 18	112		106	
KS	442	101	4	5	58	3	5	3	6	13	188	17	171	
KY	778	218	9	3	154	0	13	0	25	4	406	22	383	
LA	838	182	8	10	68	7	41	1	26	20	339	37	302	
ME	188	72	1	0	7	10	27	10	7	8	134	4	130	
MD MA	651 440	149 92	<u>0</u> 1	<u>17</u> 11	<u>23</u> 9	<u>25</u> 6	<u>10</u> 13	<u>17</u> 5	<u>17</u> 14	38 33	<u>277</u> 171	<u>41</u> 22	236 149	
MI	1,419	362	17	12	173	14	27	12	45	41	674	61	612	
MN	644	152	9	7	96	5	6	6	0	20	283	30	253	
MS	791	114	16	2	47	20	20	3	3	3	212	34	179	
MO	1,089	407	16	21	242	5	21	22	36	41	758	76	681	
MT	202	73	13	<u>2</u>	46	1	<u>2</u> 1	0	<u>3</u>	6	136	28	108	
NE NV	271 294	66 133	3 19	0 4	23 42	21 8	19	4 3	, 21	6 17	123 248	6 43	117 205	
NH	119	37	3	2	1	3	1	8	8	10	69	11	58	
NJ	761	55	0	2	8	19	4	8	3	11	102	7	95	
NM	447	161	21	6	44	9	21	8	24	9	300	54	246	
NY	1,658	470	0	25	201	28	18	27	22	113	875	67	808	
NC ND	1,431 88	530 35	20 1	18 0	323 17	7 2	80 1	0 1	65 1	12 6	987 65	74 2	912 63	
OH	1,371	345	15	20	190	10	24	9	48	27	642	73	570	
OK	687	321	27	22	182	13	18	15	20	19	598	97	501	
OR	490	133	11	6	78	3	10	1	8	15	248	32	216	
PA.	1,441	522	0	50	163	9	105	51	104	40	972	93	879	
RI SC	63 847	22 398	0 26	3 6	0 179	2 11	1 76	1 26	2 45	12 28	41 741	7 63	34 678	
SD	154	596 66	3	0	42	2	76 5	0	45	26 9	123	6	117	
TN	1,214	342	10	18	114	13	63	43	32	46	637	56	581	
TX	3,186	1,114	91	77	498	33	100	77	117	106	2,072	354	1,718	
UT	342	107	16	10	25	6	12	<u>8</u> -	6	17	199	48	151	
VT	77	27	2	0	1	11	0	5 4	5	2	50	4	47 257	
VA WA	930 638	235 219	22 15	18 11	119 40	2 38	26 13	4 11	23 54	18 32	437 408	80 48	357 359	
WV	356	101	6	0	56	2	1 <u>0</u>		9	10	188	11	177	
WI	712	235	11	3	136	1	28	2	23	19	437	28	410	
WY	144	69	15	1	35	0	5	<u>2</u>	4	5	128	34	95	
USA	40,676	12,480	732	726	5,317	548	1,348	736	1,355	1,445	23,228	2,947	20,281	
PR	598	292	0	69	14	16	68	28	59	38	544	136	408	

Notes: Totals may not equal sum of components due to independent rounding. The total column for speed-related fatalities includes fatalities that occurred on roads for which the speed limit was unknown. The total column for costs of speed-related crashes includes costs for crashes that occurred on unknown road types. Costs are based on preliminary estimates.