

**Facts on  
MOTOR  
VEHICLE  
CRASHES  
in  
MINNESOTA  
during  
1973**



MINNESOTA DEPARTMENT OF

**PUBLIC SAFETY**

Highway Building, St. Paul, 55155

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during  
1973**

Highway Safety and Research Section  
211 State Highway Building  
St. Paul, Minnesota 55155  
May 1974





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# Introduction

This report has been prepared by the Minnesota Department of Public Safety in accordance with Minnesota Statutes, Section 169.10, for the year 1973. The information is derived principally from reports submitted by drivers and police agencies on crashes involving death, personal injury or property damage of \$100 or more.

Selected highway crash data are presented to determine trends, to point out problem areas and to establish the dominant characteristics of motor vehicle crashes in Minnesota so that appropriate countermeasures can be implemented.

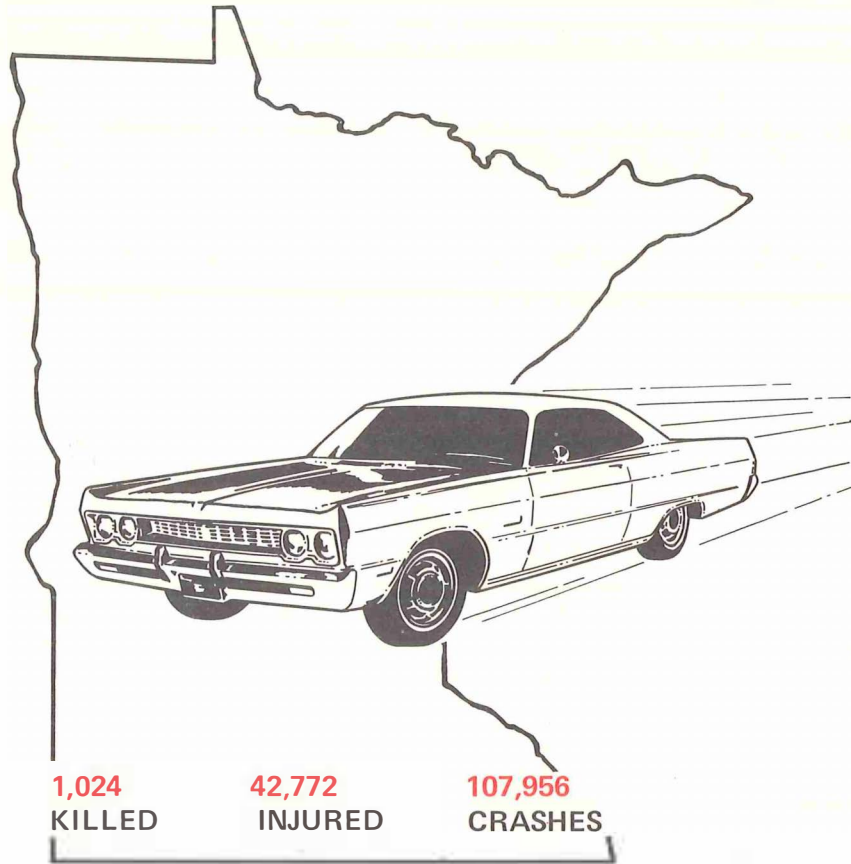
In 1973, 1,024 people were killed and 42,772 injured in 107,956 crashes throughout the state. Over 2.5 million vehicles traveled 24.9 billion miles on 128,302 miles of roadway. Approximately 2.20 million Minnesota citizens had a license to drive last year.

In addition to death and injury, the economic loss due to traffic crashes in our state in 1973 has been set at \$540,781,500. This figure is derived from cost breakdowns established by the Department of Transportation for fatalities, injuries and damage done in fatal, personal injury and property damage crashes.

The report itself is divided into nine parts, the first examining the vehicles, drivers and crashes, the other reviewing pedestrians, alcohol involvement, and selected types of motor vehicle crashes. Graphical charts as well as data tables have been included in the hopes that this will enable the reader to more clearly understand and analyze the trends present in the crash picture for the State of Minnesota through 1973.

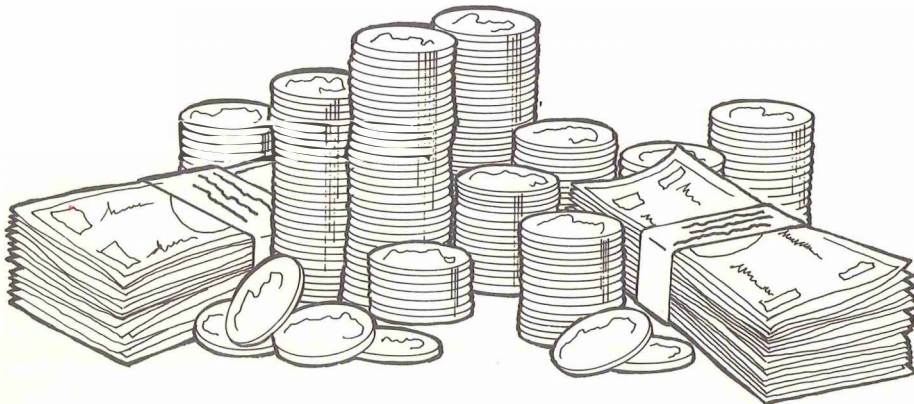


## PERSONAL LOSS



## ESTIMATED COST

ECONOMIC LOSS: **\$540,781,500**





## PART 1.

# Crash Facts Summary

### Trends by Year, Month, Day, and Hour

The year 1973 provided a continuation of the trend for more drivers to drive more vehicles more miles. From a safety standpoint, however, an interesting phenomenon took place during the last few months of the year: Minnesotans began to run out of gas. The increasing volume of automobile sales began to slow and take a dip toward "replacement only" levels, drivers cut back on unnecessary trips, and traffic began to thin on Minnesota roadways. Due partly to these factors, and to a number of safety programs aimed at various segments of the motoring public, Minnesota experienced declines rather than increases in the number of traffic accidents and fatalities occurring during 1973.

The number of vehicle miles traveled is perhaps the most important factor to consider (in terms of exposure) when looking at the record. In 1973, each licensed driver traveled an average of 11,436 miles. There was one crash for every 233,058 vehicle miles traveled, and one fatality for every 24,570,313 vehicle miles. Both of these ratios are lower than 1972, indicating the Minnesota drivers had a much better chance during 1973 to drive and survive.

In Minnesota summer and fall months tend to contribute larger numbers of fatalities and fatal crashes than the remaining months of the year. During 1973, the months of July through October contributed 41 percent of the fatalities and 40 percent of the fatal crashes. An average of three people per day were killed on Minnesota roadways over that period.

Friday and Saturday have consistently accounted for the greatest numbers of accidents. On these two days, 34 percent of all crashes and 36 percent of fatal crashes occurred. Sunday has also consistently shown greater numbers of fatal crashes than other days of the week, though to a lesser extent. If one assumes that vehicular travel (and thus exposure) tends to peak on these three days of the week, which is a fairly solid assumption, then the accident involvement pattern should logically follow that which in fact exists.

When all crashes are broken down by hour of day, the 3 to 6 p.m. "rush hour" showed the peak number of crashes. Looking at just fatal crashes, a bi-modal pattern appears, with the peak accident hours being 1 a.m. and between 5 and 7 p.m.

Looking at the graphs showing yearly comparisons of crashes and fatal crashes broken down by month, day, and hour, it becomes obvious that the aforementioned patterns appear every year with little, if any variation.



## **Types of Crashes**

The breakdown of 1973 motor vehicle crashes by type indicates that three categories of crashes constituted 91 percent of the total. Crashes involving two motor vehicles in traffic, crashes in which motor vehicles ran off the road, and crashes with parked cars were the three most frequently occurring types, with the "motor vehicle in traffic" category contributing 68 percent of the total.

Accidents involving railroad trains with motor vehicles, and pedestrians with motor vehicles produced the largest fatality per crash ratio in 1973. Both of these crash types produced fatalities at a 7 percent rate during this period.

In terms of injury and death, pedestrian crashes tend to be the most severe of all the possible accident types. During 1973, pedestrian-involved accidents produced either injury or death 99 percent of the time.

## **Urban and Rural Configuration**

The metropolitan areas of Minneapolis, St. Paul and Duluth contributed 31 percent of all crashes but only 12 percent of the fatal crashes during 1973. This has generally been the pattern over the years; i.e., the urban areas generally contribute more of the injury and property damage accidents, while most of the fatal accidents take place in rural areas.

## **Road Conditions and Weather Factors**

The majority of all crashes occurred on clear, dry days, and more than 70 percent of all fatal crashes occurred under these ideal driving conditions.

Fatal crashes were fairly evenly divided between the hours of daylight and darkness, although 63 percent of all crashes occurred during daylight hours.

## **Drivers Involved in Crashes**

In 1973 there were 180,118 drivers involved in crashes. Of that group, 70.4 percent were males and 26.2 percent were females. This is a slight increase in the proportion of female involvement over 1972 and an even greater change from the comparison year of 1963. What this possibly indicates is that more females are on the roadways driving more miles now than they have in the past, and are thereby increasing their exposure to possible accident involvement.

Although males made up the greater portion of all drivers in crashes, there proved to be little difference between the sexes in terms of degree of severity of crash. Less than 1 percent of both groups were involved in fatals, about 26 percent were involved in personel injury crashes, and the remaining 73 percent of both groups were involved in property damage crashes.

Looking at the ages of all licensed drivers and comparing this with the ages of the driver population involved in crashes results in an interesting pattern. Although almost all of the age groups indicated show some disproportionate involvement in accidents in relation to their relative appearance in the licensed driver population, some age groups show greater disproportion than others.

The age group 20-24 shows the largest disproportion, followed closely by the 15-19 year olds, and then the 25-29 grouping. As one continues up the age range, disproportionate involvement diminishes and becomes insignificant.

There are no doubt, a number of reasons for this recurring trend, but the most probable is that the early years are usually the most mobile of the average drivers lifetime, and thus the risk of accident involvement is significantly higher at this point in one's driving life.

## **Vehicle Movements in Crashes**

In two-vehicle accidents, the most often occurring intersection type crash was that involving two vehicles entering an intersection at right angles. Forty-seven percent of all intersection crashes and 69 percent of all fatal intersection crashes were of this type.

In two-vehicle non-intersection type crashes, the most frequently occurring incident involved a moving vehicle colliding with a parked unit. Slightly more than one-third of all two-vehicle non-intersection crashes were of this type.

Although not the most frequently occurring, the head-on type crash between two motor vehicles moving in opposite directions had by far the greatest chance for fatality. Nearly one of every eighteen crashes of this type produced a fatality. The only other situation which produced fatalities at anywhere near this ratio was that involving like vehicle movements, but located at an intersection. Here the ratio was one fatal crash for every forty-two accidents.

## **Motor Vehicles in Crashes**

There were 2,531,037 vehicles registered in Minnesota during 1973. Of these, 200,281 were involved in a crash of some type. Passenger cars made up 73.8 percent of the registered vehicles and were 83.4 percent of all vehicles involved in crashes. Trucks accounted for 19.5 percent of the registered vehicles and comprised about one-tenth of the total crash vehicles.

Two motor vehicle types stand out as the most hazardous when involved in crashes. Snowmobiles and motorcycles, both of which are open-bodied vehicles, have the highest fatal crash to all crash ratio. Nearly one of every sixteen snowmobiles involved in a crash during 1973 was involved in a fatal crash. The ratio for motorcycles was one of thirty-nine. No other vehicle types approach these two in incidence of fatal crash to crash involvement.

## **Motor Vehicle Inspection**

There were 89,505 cars; 19,311 trucks; 15,793 school buses and 384 motorcycles inspected in 1973. Since 1973 all school buses have been inspected twice yearly; thus the figure for school bus inspections should not be misconstrued to indicate a twofold increase in the actual number of school buses.

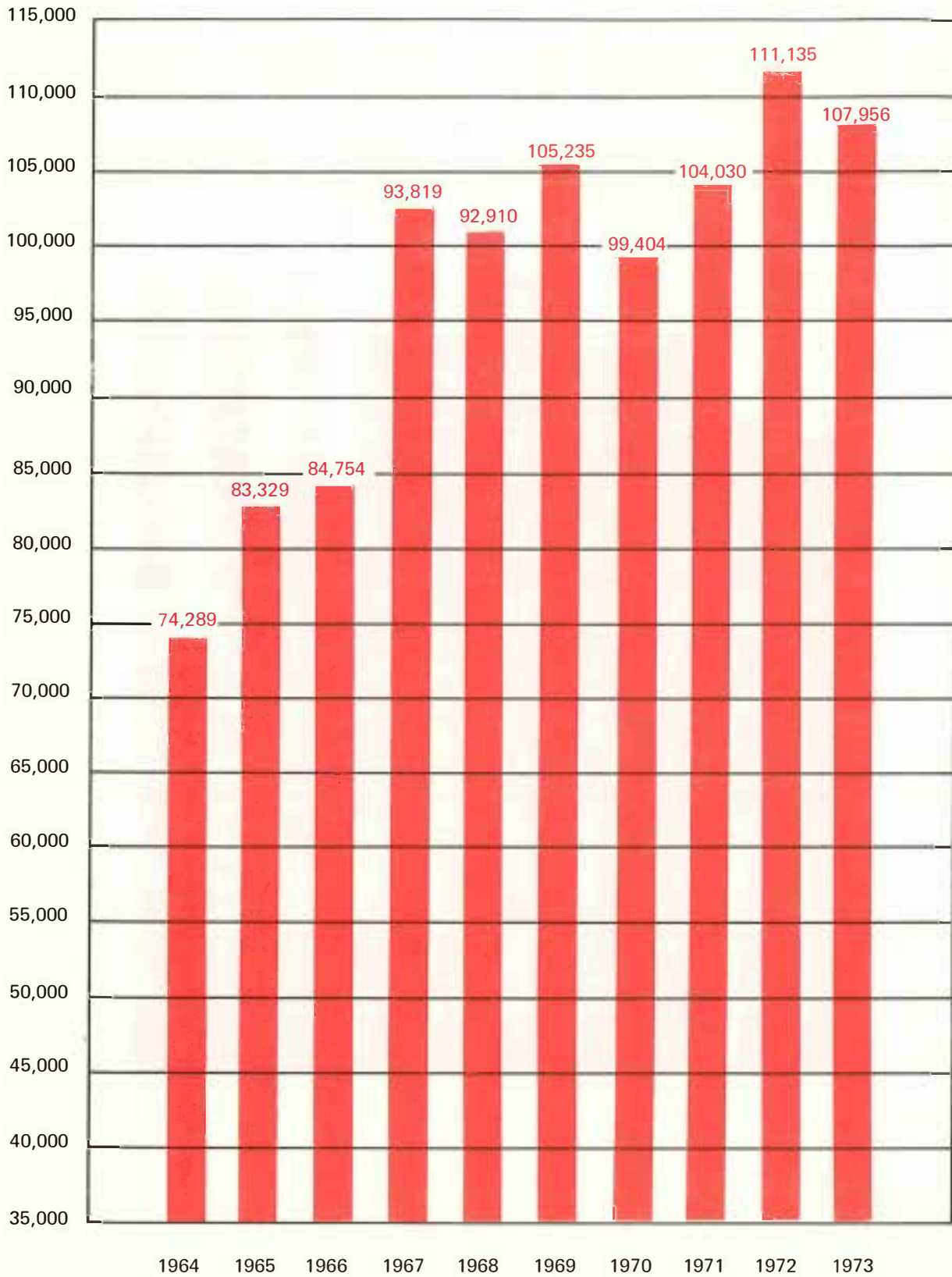
The number of motorcycles inspected during 1973 almost doubled, while automobiles and trucks maintained much the same inspection levels as in previous years. Even with the increase in numbers inspected, motorcycles still maintained the lowest rejection rate.....showing a decrease even from the 1972 figure. Automobiles and trucks maintained rejection levels similiar to 1971 and 1972 while the rejection rate for school buses dropped significantly from its level in previous years.

## **Roadway Mileage and Crashes**

During 1973, Minnesotans traveled 25.2 billion miles on 128,302 miles of roadway. The trunk highway and interstate systems carried slightly more than 50 percent of this vehicle mileage, while constituting less than 10 percent of the available travelable roadway. Obviously, this led to some very dense traffic at times, especially in the larger metropolitan areas.

The truck highway system contributed a slightly higher portion of all accidents (39.2 percent) than any other road system, and by far the greater portion of all fatal crashes (51.8 percent). This pattern has been recurrent over a period of years and is due largely to the heavy traffic load (vehicle miles) as well as the aging construction (narrow lanes, blind curves, etc.) and absence of modern high speed safety features on many of the older roadways which make up this, the "backbone" of Minnesota's vehicle movement system.

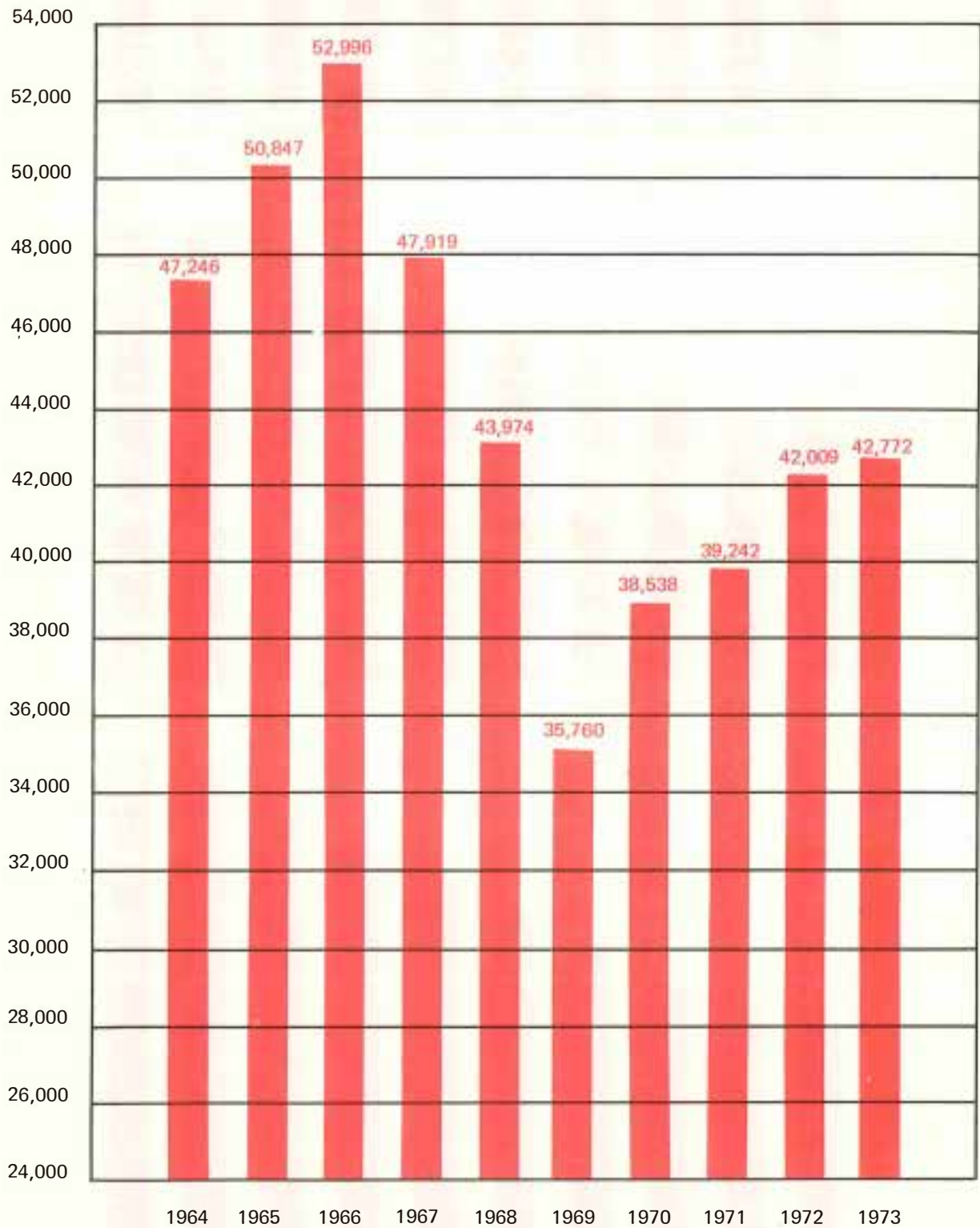
### TRAFFIC CRASHES, 1964 - 1973



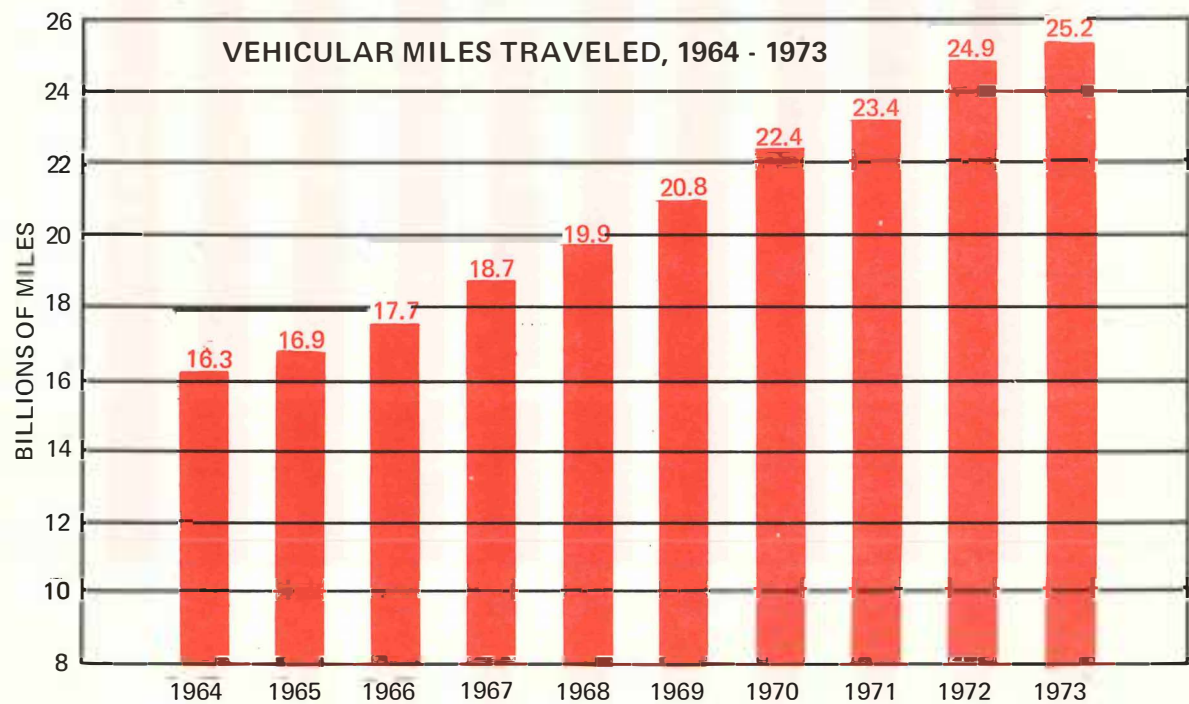
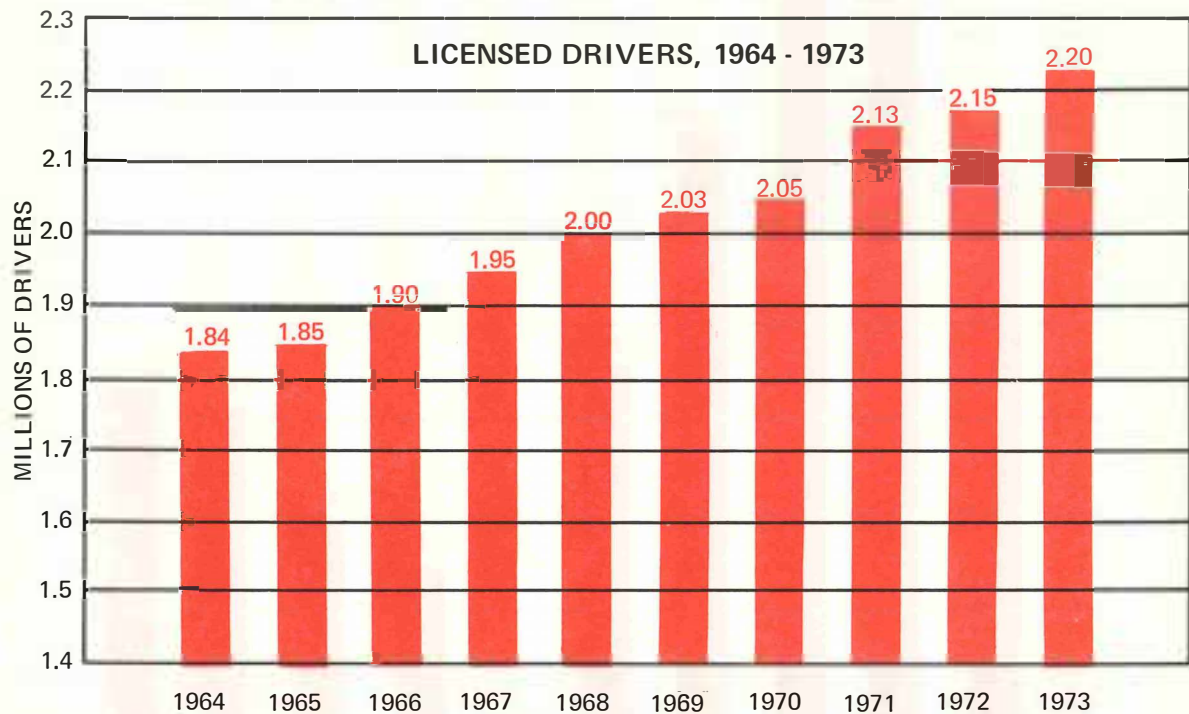
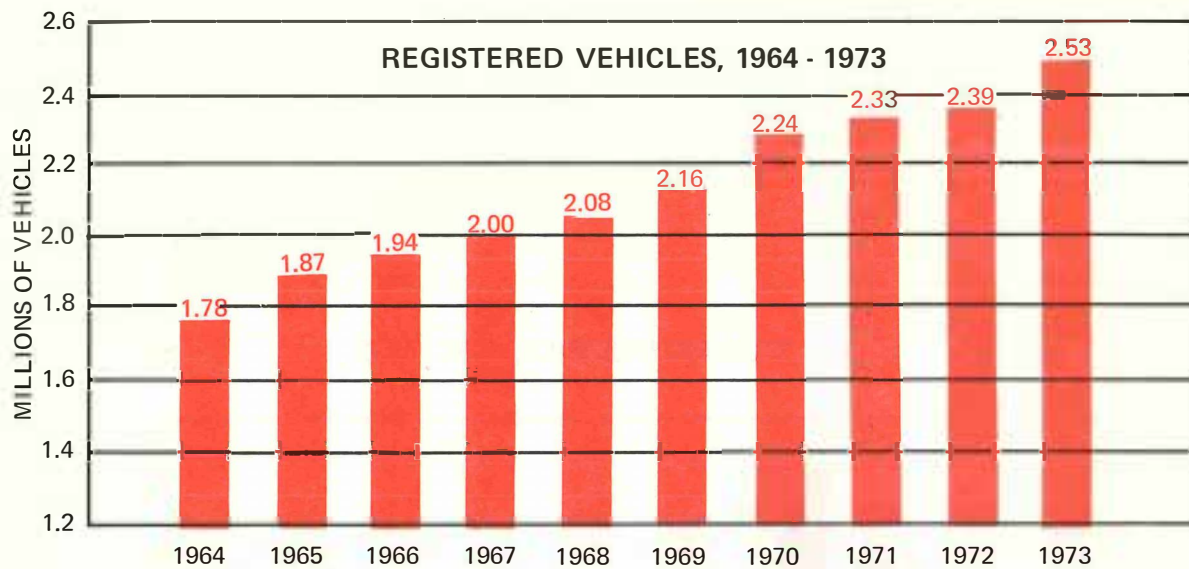
TRAFFIC FATALITIES, 1964 - 1973



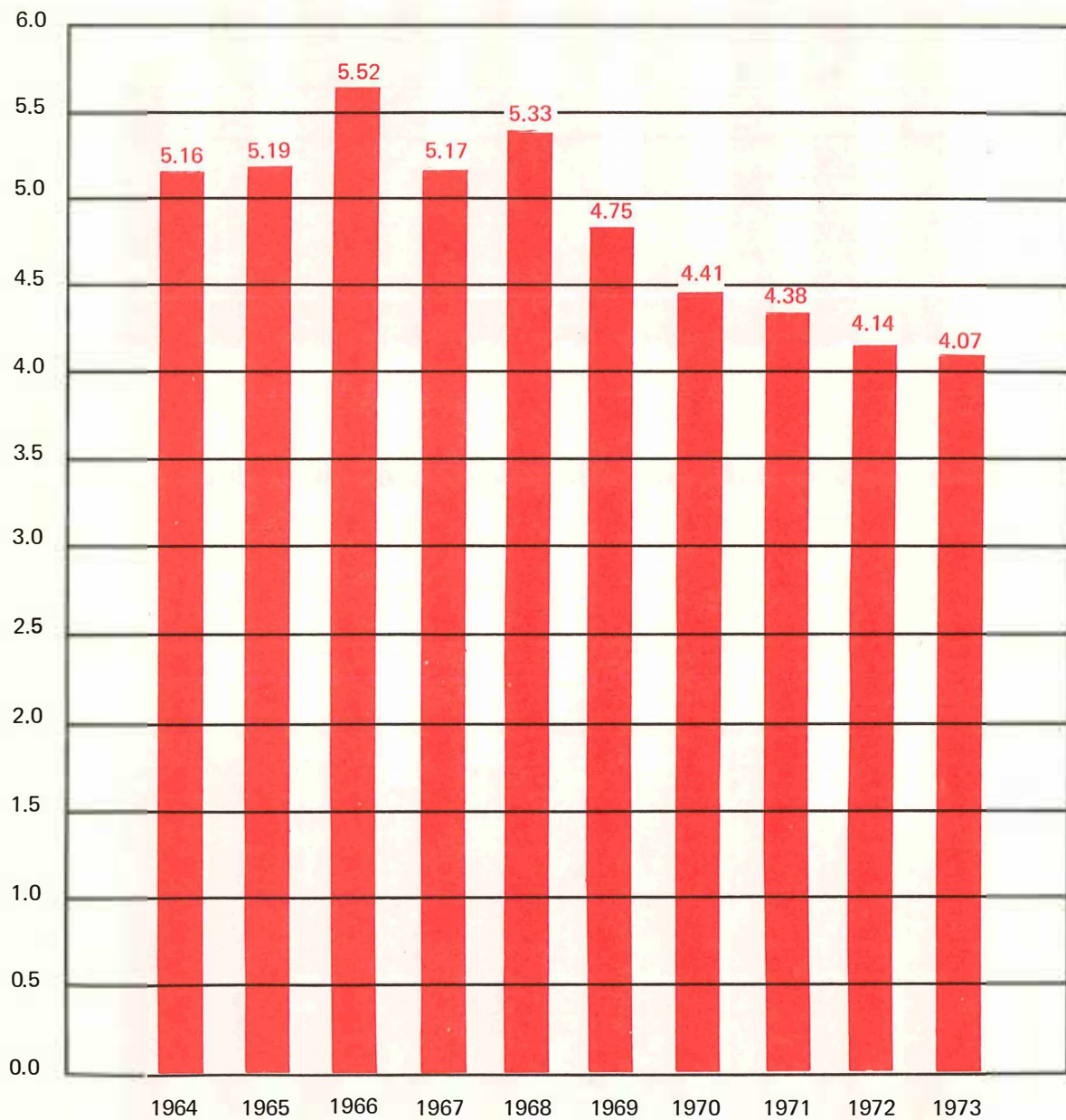
### TRAFFIC INJURIES, 1964 - 1973





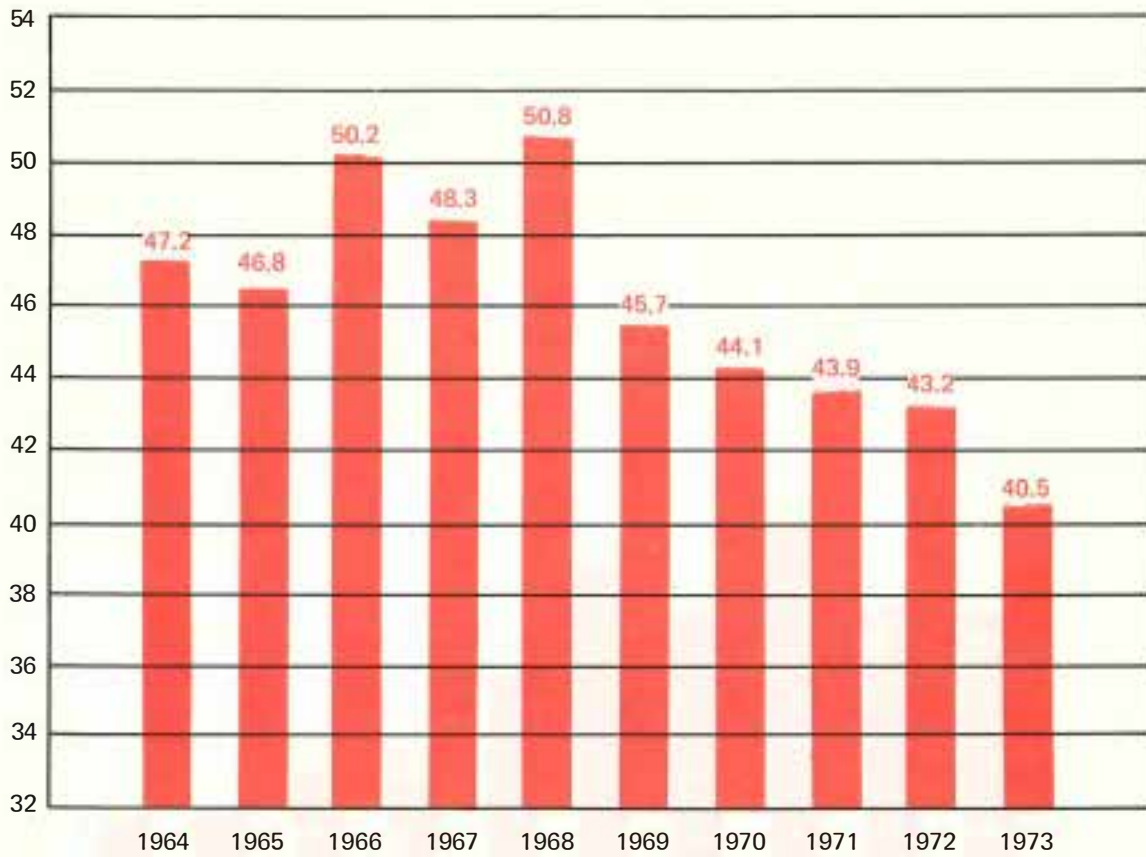


**FATALITY RATE PER HUNDRED MILLION  
VEHICLE MILES TRAVELED, 1964 - 1973**

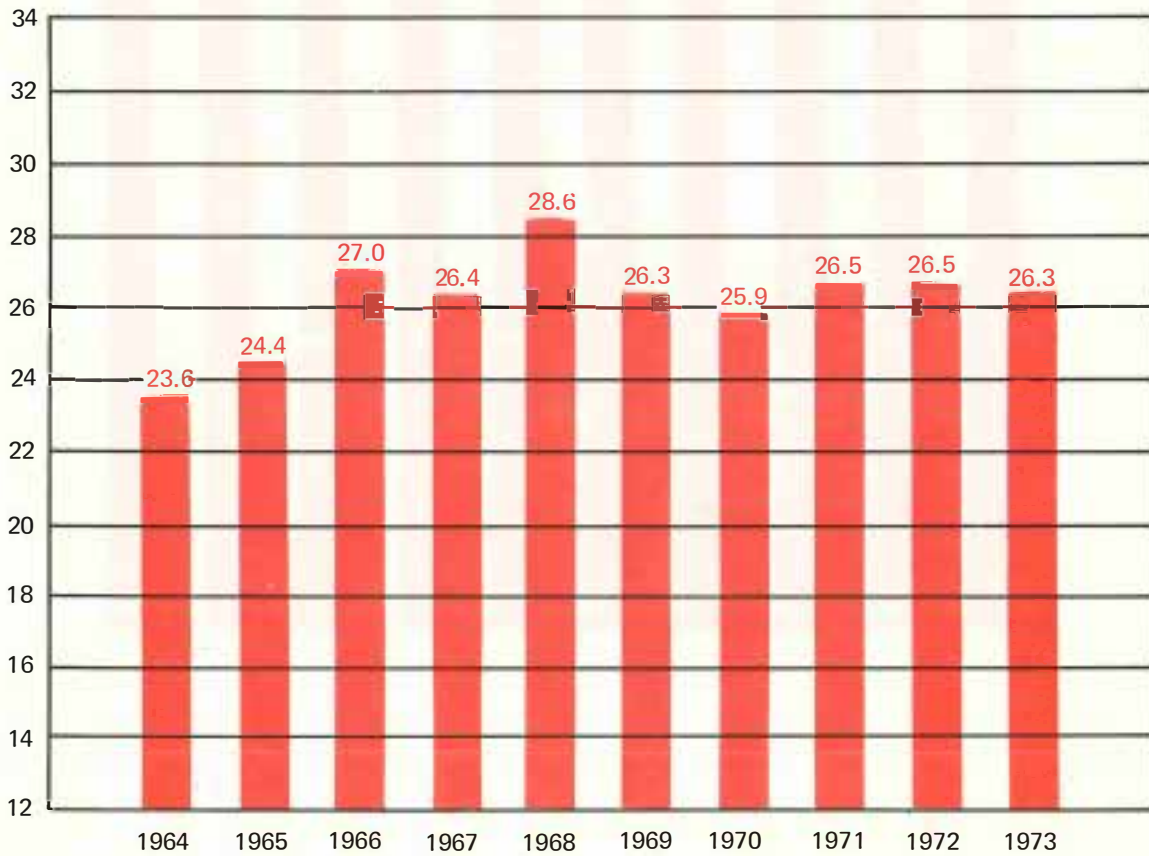


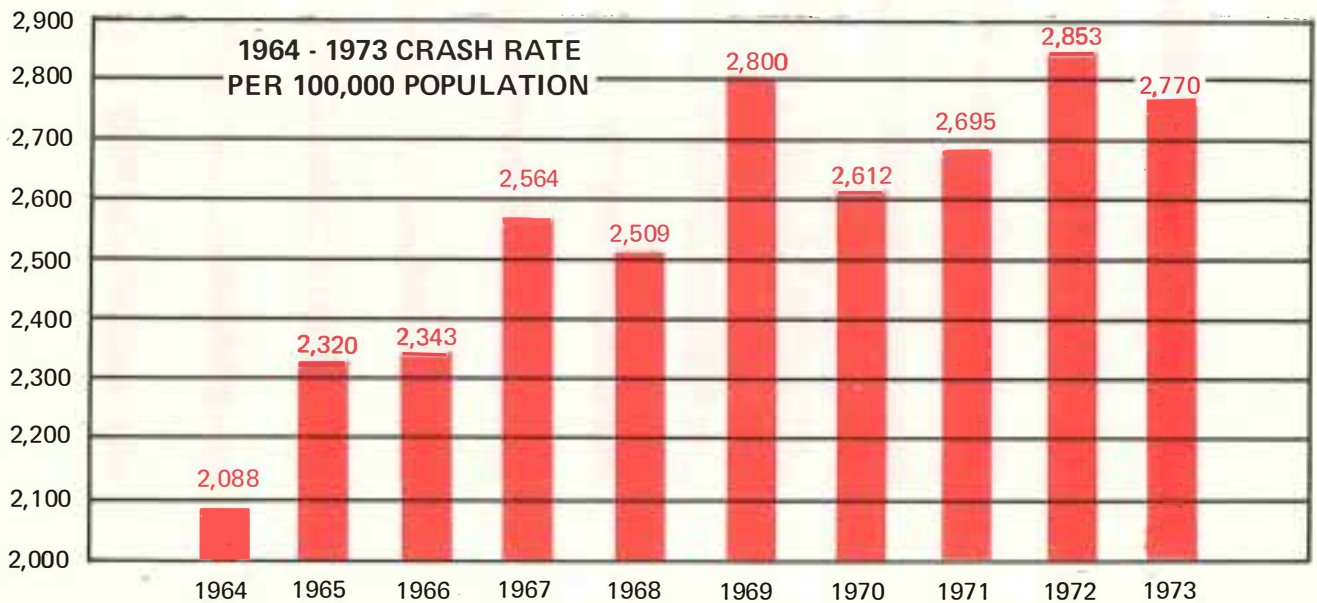
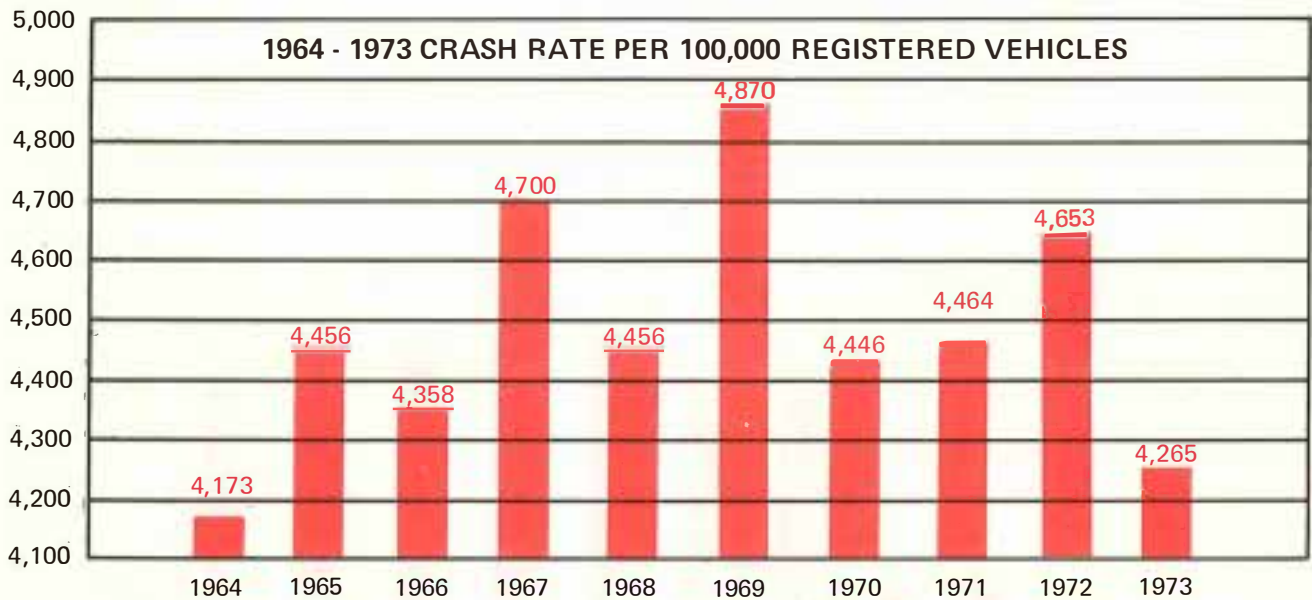
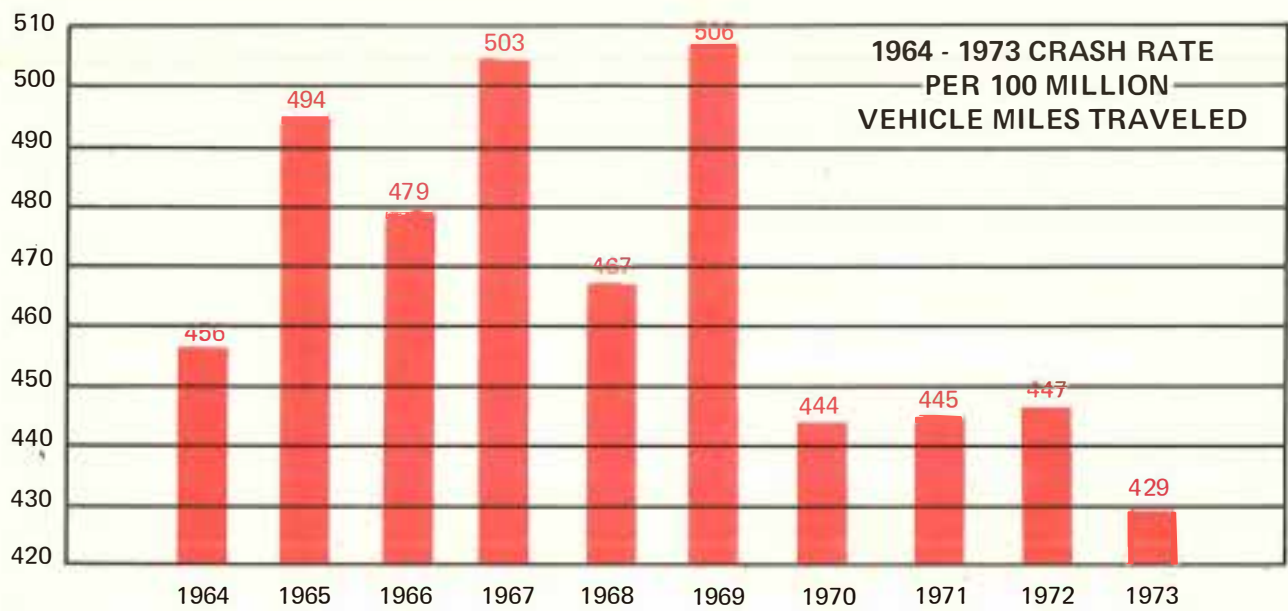


1964 - 1973 FATALITY RATE PER 100,000 REGISTERED VEHICLES



1964 - 1973 FATALITY RATE PER 100,000 POPULATION

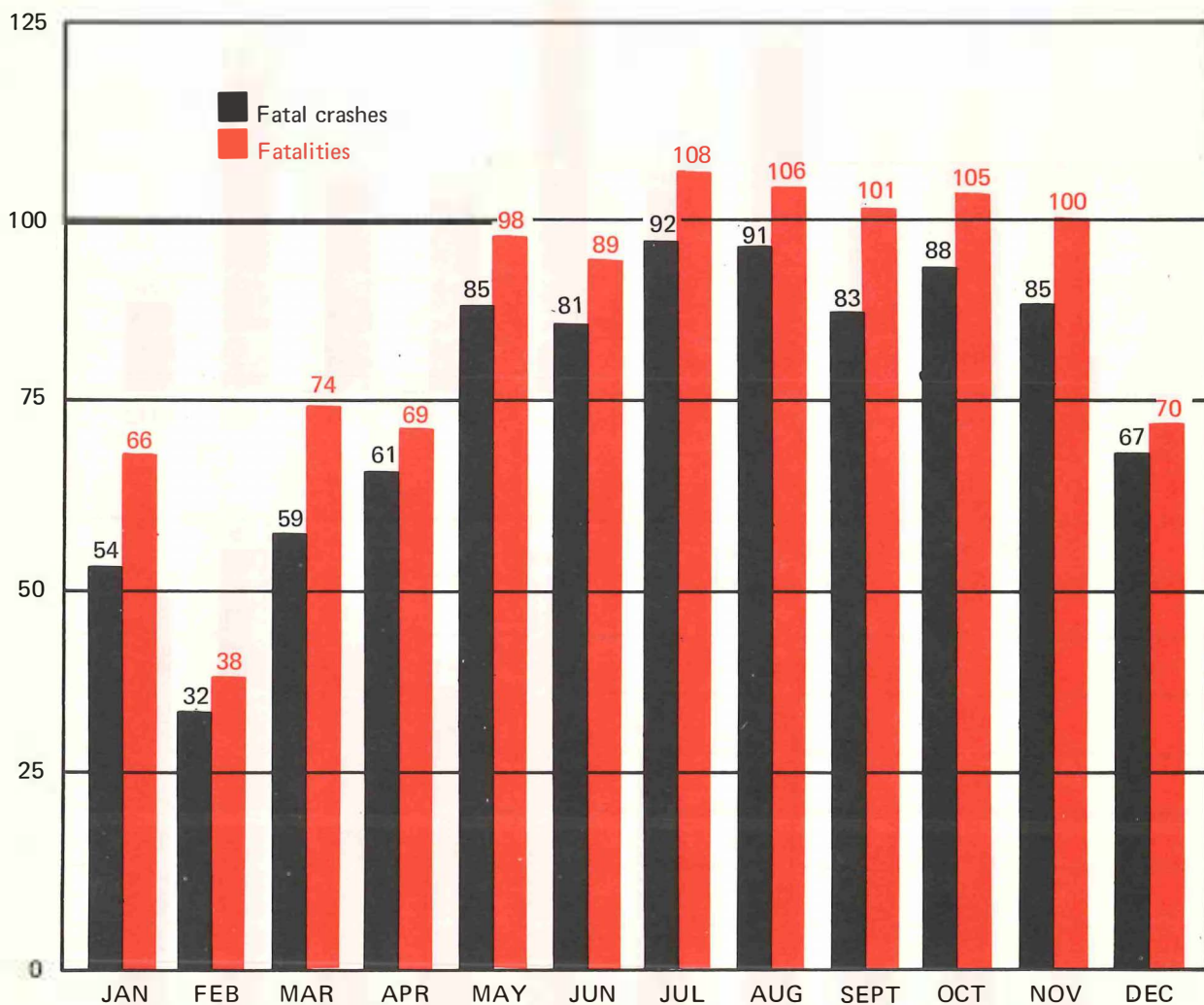




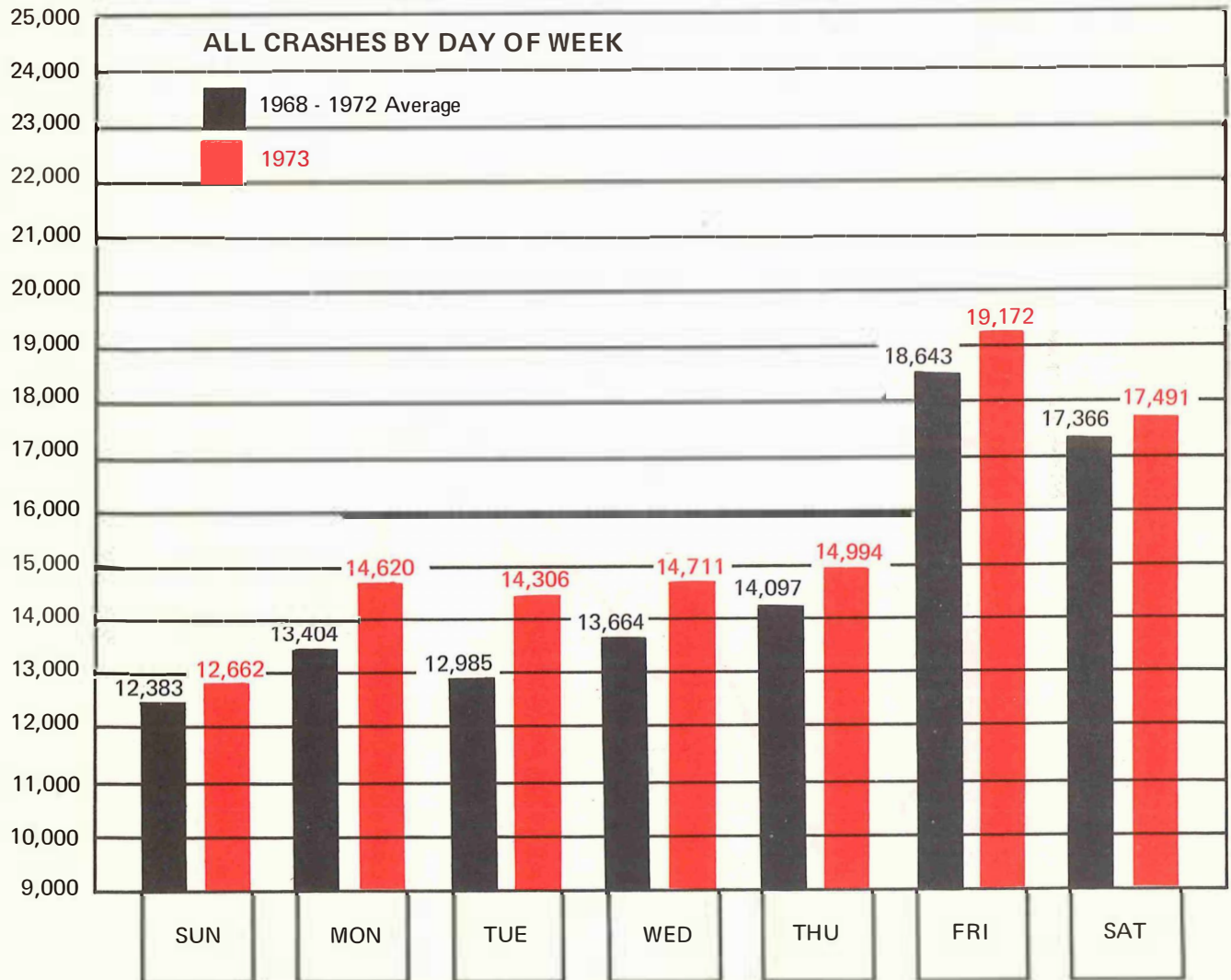
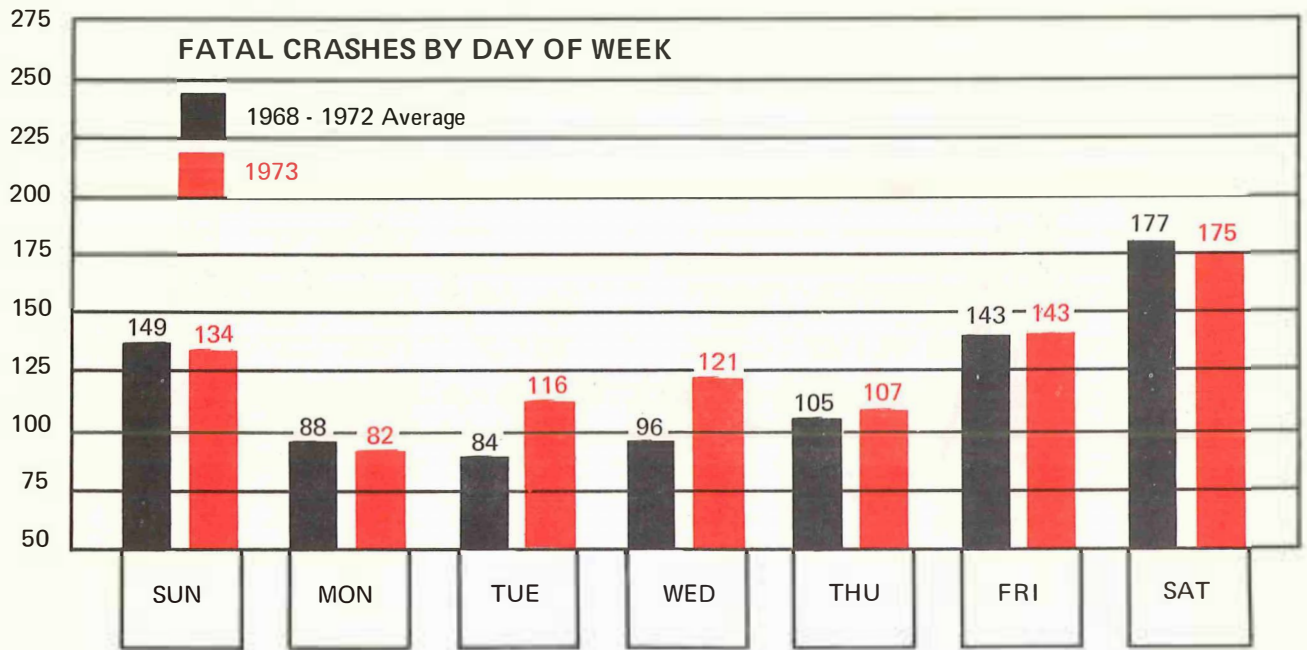
### MINNESOTA TRAFFIC TOLL: 1973 VS. AVERAGE OF 1968 - 1972

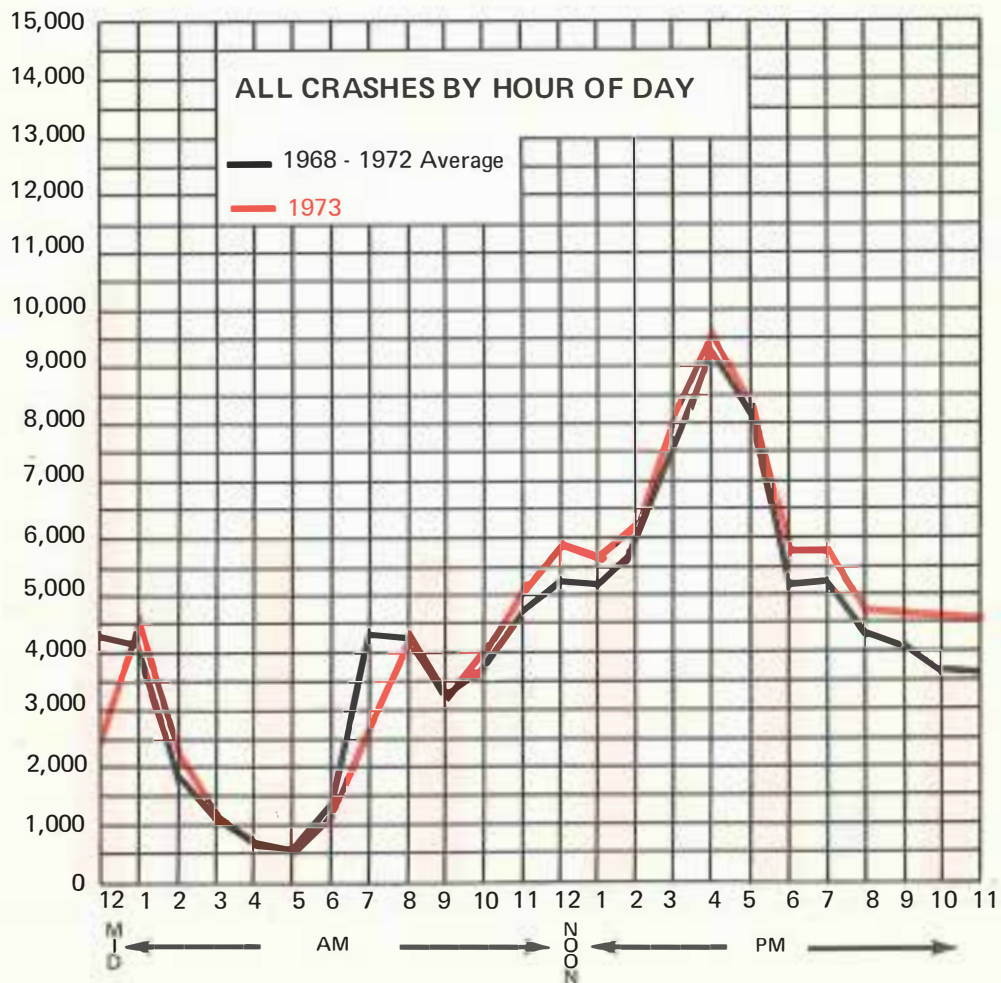
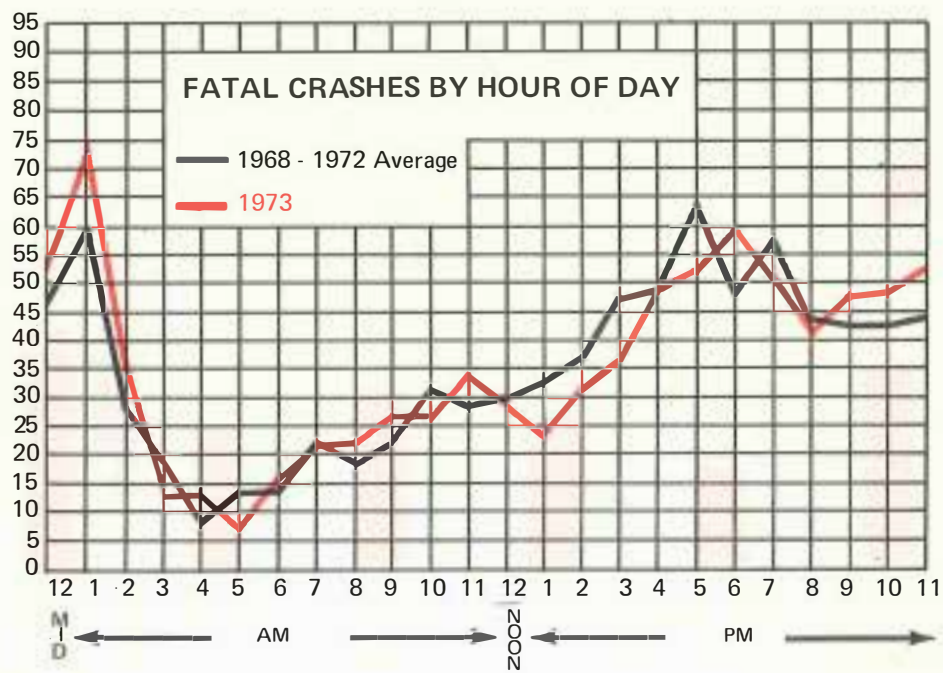
	1968 - 1972 AVERAGE	1973
Deaths	1,018	1,024
Injuries	39,905	42,772
Crashes	102,543	107,956
Registered Motor Vehicles	2,240,058	2,531,037
Licensed Drivers	2,070,000	2,200,000
Vehicle Miles Traveled (Millions)	22,271	25,160
Fatality Rate per 100 Million Vehicle Miles Traveled	4.57	4.07

### 1973 FATAL CRASHES AND FATALITIES BY MONTH









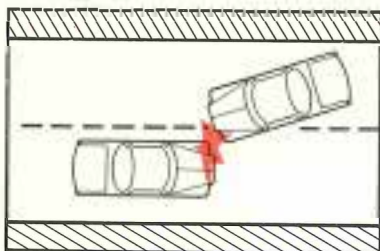
# **ACCIDENT DISTRIBUTION BY DAY OF WEEK AND TIME OF DAY, 1973**

HOUR BEGIN	TOTAL ACC.		MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY		SATURDAY		SUNDAY	
	ALL	FATAL	ALL	FATAL	ALL	FATAL	ALL	FATAL	ALL	FATAL	ALL	FATAL	ALL	FATAL	ALL	FATAL
Midnite	2,602	54	253	7	200	5	229	4	284	5	324	10	652	12	660	11
1:00 a.m.	4,616	73	256	5	308	7	368	7	475	10	488	6	1,355	23	1,366	15
2:00	2,204	35	161		132	3	180	2	186	3	205	6	690	9	650	12
3:00	1,191	12	93		75	1	83		106	2	111	1	362	3	361	5
4:00	664	13	58	1	49		54	2	62	1	69	2	190	5	182	2
5:00	643	8	73		70		55	3	68	1	78		148	2	151	2
6:00	1,438	16	276	1	225	2	221	2	220	3	209	1	168	5	119	2
7:00	4,368	22	965	1	730	4	796	9	820	4	723	3	211	1	123	
8:00	4,135	23	796	4	689	2	732	6	700	2	760	6	321	2	137	1
9:00	3,398	27	490	1	523	7	529	5	509	1	544	4	505	7	298	2
10:00	4,041	27	560	6	562	7	594	4	581	1	630	5	695	1	419	3
11:00	5,043	35	760	2	729	5	744	2	687	6	758	10	872	6	493	4
Noon	5,999	29	840	5	751	3	802	1	768	5	972	5	1,094	7	772	3
1:00 p.m.	5,754	24	855	5	738	7	737	4	799	2	923	4	1,017	1	685	1
2:00	6,177	32	925	2	775	5	849	4	856	3	1,046	6	1,020	8	706	4
3:00	8,136	36	1,257	3	1,144	6	1,148	5	1,223	3	1,549	7	1,063	8	752	4
4:00	9,598	49	1,328	9	1,469	8	1,570	8	1,514	7	1,859	8	1,080	4	778	5
5:00	8,277	52	1,114	3	1,290	7	1,251	9	1,271	6	1,660	6	955	10	736	11
6:00	5,597	60	670	7	859	12	758	7	740	5	1,150	7	801	13	619	9
7:00	5,389	50	699	2	761	7	724	8	730	6	1,096	5	800	11	579	11
8:00	4,382	42	586	1	547	3	541	3	591	10	898	7	714	10	505	8
9:00	4,318	48	512	6	558	6	522	7	603	2	860	9	724	8	539	7
10:00	4,232	49	479	4	497	4	535	8	504	9	923	9	830	8	464	7
11:00	4,078	53	395	7	404	4	470	9	487	6	1,059	15	913	9	350	3
Not stated	1,676	9	219		221	1	219	2	210	1	278	1	311	2	218	2
Total Accidents	107,956	878	14,620	82	14,306	116	14,711	121	14,994	107	19,172	143	17,491	175	12,662	134

# TYPE OF CRASH

## COLLISION WITH:

### MOTOR VEHICLE IN TRAFFIC



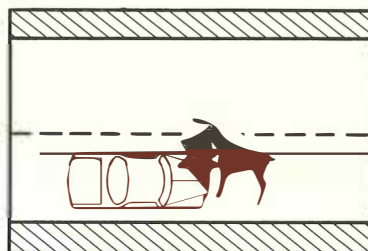
Average  
1968-1972

1973

Crashes 71,927  
Killed 516  
Injured 27,719

73,083  
498  
28,248

### ANIMAL



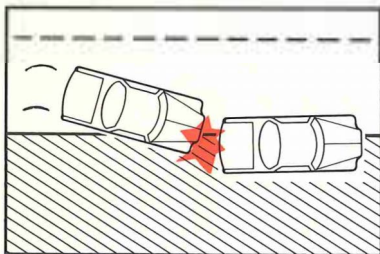
Average  
1968-1972

1973

Crashes 1,315  
Killed 2  
Injured 174

1,651  
1  
198

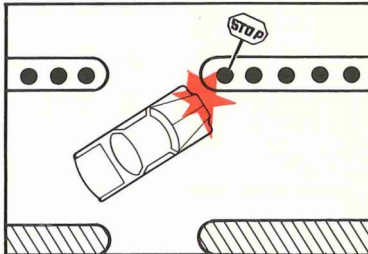
### PARKED MOTOR VEHICLE



Crashes 10,801  
Killed 14  
Injured 1,494

11,395  
6  
1,655

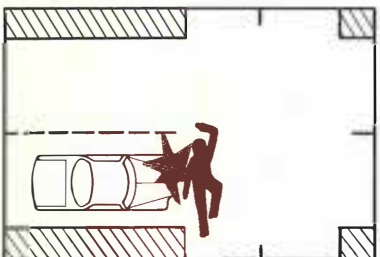
### FIXED OBJECT



Crashes 3,696  
Killed 39  
Injured 1,287

3,663  
52  
1,358

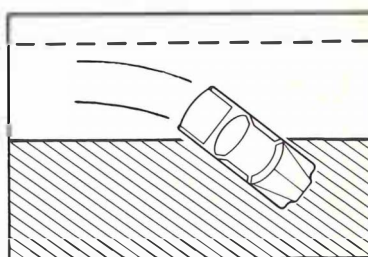
### PEDESTRIAN



Crashes 1,930  
Killed 133  
Injured 1,826

1,940  
136  
1,890

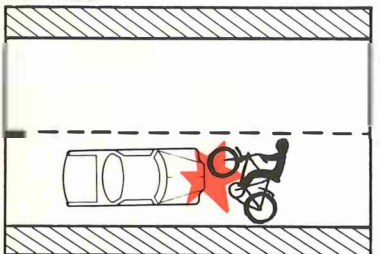
### RAN OFF ROAD



Crashes 10,746  
Killed 230  
Injured 5,907

13,601  
265  
7,353

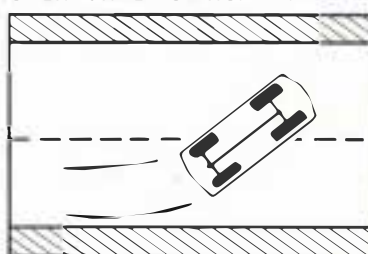
### BICYCLE



Crashes 833  
Killed 22  
Injured 799

1,301  
17  
1,240

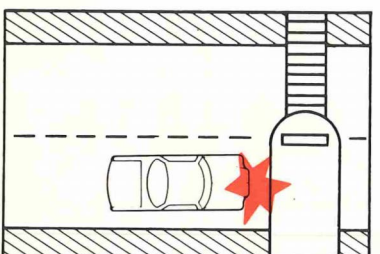
### OVERTURNED ON ROADWAY



Crashes 480  
Killed 9  
Injured 338

607  
11  
482

### TRAIN



Crashes 313  
Killed 47  
Injured 166

323  
29  
177

### OTHER



Crashes 503  
Killed 6  
Injured 194

392  
9  
171

## FATALITIES AND INJURIES BY TYPE OF MOTOR VEHICLE CRASH IN MINNESOTA IN 1973\*

TYPE OF CRASH	NUMBER OF CRASHES				NUMBER OF PERSONS					Fatality Rate Per 1,000 Crashes
	All	Fatal	Personal Injury	Property Damage	Killed	Injured	Injury Types** A                      B                      C			
Single-vehicle crash:										
Ran off the road	13,601	246	5,229	8,126	265	7,353	3,939	2,101	1,313	19.5
Overturned on the road	607	11	366	230	11	482	238	160	84	18.1
Vehicle collided with:										
Pedestrian	1,940	135	1,789	16	136	1,890	997	441	452	70.1
Motor vehicle in traffic	73,083	385	16,600	56,098	498	28,248	9,190	6,408	12,650	6.8
Parked motor vehicle	11,395	6	1,338	10,051	6	1,655	821	462	372	.5
Railroad train	323	22	127	174	29	177	97	41	39	89.8
Bicyclist	1,301	17	1,160	124	17	1,240	551	479	210	13.1
Animal	1,651	1	146	1,504	1	198	108	50	40	.6
Fixed Object	3,663	46	1,023	2,594	52	1,358	734	362	262	14.2
Other Object	183	1	52	130	1	66	39	16	11	5.5
Other Non-collision	209	8	95	106	8	105	58	32	15	38.3
TOTALS:	107,956	878	27,925	79,153	1,024	42,772	16,772	10,552	15,448	9.5

\* All crashes are coded according to the first event; e.g., if a car hits a pedestrian and then a parked car, the crash is coded as a collision with a pedestrian.

\*\* Injury type A - Visible signs of injury, bleeding wound, distorted member

B - Other visible injury, such as bruises, abrasions, swelling

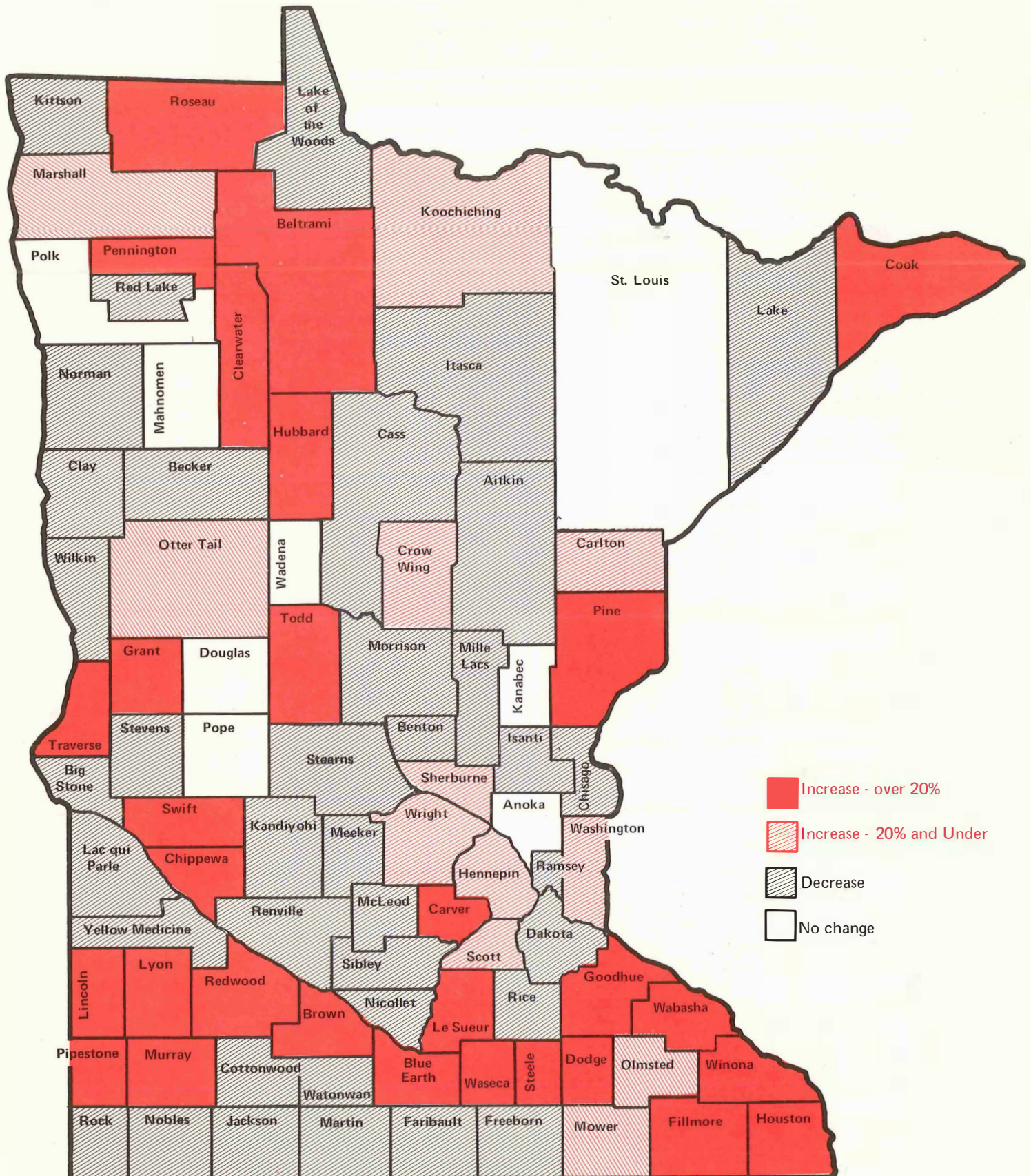
C - No visible injury, but complaint of pain or momentary unconsciousness



# CRASHES, KILLED, AND INJURED BY COUNTY FOR 1973 AND THE AVERAGE OF 1968 - 1972









COUNTY	ALL CRASHES		KILLED		INJURED		COUNTY	ALL CRASHES		KILLED		INJURED	
	Avg. 1968-72	1973	Avg. 1968-72	1973	Avg. 1968-72	1973		Avg. 1968-72	1973	Avg. 1968-72	1973	Avg. 1968-72	1973
Aitkin	225	264	8	3	102	148	Marshall	153	168	5	6	71	79
Anoka	3,392	4,029	36	36	1,776	2,188	Martin	542	667	11	4	238	301
Becker	453	532	12	10	214	260	Meeker	377	383	8	4	146	144
Beltrami	585	579	11	16	217	187	Mille Lacs	342	352	8	3	153	146
Benton	540	626	12	9	269	362	Morrison	636	659	15	13	292	332
Big Stone	140	148	4	1	58	48	Mower	1,070	1,035	10	11	424	415
Blue Earth	1,940	1,956	16	23	729	718	Murray	155	158	4	5	67	52
Brown	727	764	7	14	263	313	Nicollet	550	620	10	4	214	258
Carlton	569	602	11	13	212	247	Nobles	524	511	9	7	176	152
Carver	581	713	12	23	282	340	Norman	122	125	4	3	54	49
Cass	319	355	14	11	154	182	Olmsted	2,251	2,569	19	21	913	998
Chippewa	286	269	5	9	92	72	Otter Tail	821	811	16	17	324	354
Chisago	337	446	12	7	158	216	Pennington	349	405	2	4	120	159
Clay	1,508	1,542	11	10	397	371	Pine	296	308	7	12	128	125
Clearwater	97	129	4	6	45	50	Pipestone	221	255	5	7	85	96
Cook	92	117	3	4	36	51	Polk	734	790	15	15	303	279
Cottonwood	260	320	6	4	88	129	Pope	145	182	4	4	65	57
Crow Wing	980	1,075	11	12	375	418	Ramsey	16,904	16,957	60	57	5,944	6,039
Dakota	3,173	3,992	34	23	1,304	1,713	Red Lake	71	90	3	1	32	39
Dodge	197	230	5	7	93	132	Redwood	303	344	4	8	128	198
Douglas	521	605	7	7	212	217	Renville	347	338	12	8	145	140
Faribault	348	363	6	5	152	160	Rice	1,052	1,146	13	10	403	439
Fillmore	375	366	6	12	136	129	Rock	202	236	4	2	77	69
Freeborn	974	1,000	10	7	406	377	Roseau	129	177	4	5	54	58
Goodhue	841	930	12	17	318	429	St. Louis	5,410	5,284	60	60	1,775	1,932
Grant	84	97	3	5	43	38	Scott	751	941	17	18	365	486
Hennepin	33,225	33,348	122	123	12,684	12,572	Sherburne	528	600	15	16	248	332
Houston	314	373	4	7	138	160	Sibley	236	284	6	4	113	143
Hubbard	205	276	5	10	112	117	Stearns	2,604	2,673	33	22	1,051	1,119
Isanti	267	280	10	6	132	177	Steele	719	753	8	15	263	297
Itasca	714	776	15	13	302	360	Stevens	173	195	2	0	58	77
Jackson	304	333	7	2	127	141	Swift	227	252	5	8	91	104
Kanabec	176	189	5	5	94	100	Todd	292	324	8	14	124	160
Kandiyohi	768	862	12	11	284	292	Traverse	78	96	2	3	29	43
Kittson	97	113	3	2	39	59	Wabasha	358	403	6	10	155	162
Koochiching	358	362	7	8	160	202	Wadena	221	210	3	3	66	66
Lac qui Parle	162	168	6	5	69	82	Waseca	322	388	5	7	124	165
Lake	276	310	5	4	113	122	Washington	1,636	2,002	21	23	725	882
Lake of the Woods	50	67	2	1	25	43	Watsonwan	310	322	8	6	121	115
Le Sueur	385	451	6	14	154	184	Wilkin	213	238	5	4	66	94
Lincoln	102	114	3	4	53	54	Winona	1,130	1,297	14	23	365	409
Lyon	494	517	9	13	184	200	Wright	769	933	18	20	404	513
McLeod	573	609	16	9	210	213	Yellow Medicine	199	198	6	3	80	88
Mahnomen	67	80	3	3	30	34	TOTALS	102,553	107,956	1,012	1,024	39,820	42,772

# FATALITIES BY COUNTY COMPARED WITH 1968 - 1972 AVERAGE





# LOCATION OF CRASHES BY POPULATION, 1973

	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES	KILLED	INJURED
 <b>MINNEAPOLIS</b> (434,400)	18,221	54	4,142	14,025	58	6,426
 <b>ST. PAUL</b> (309,866)	12,539	33	2,958	9,548	35	4,084
 <b>DULUTH</b> (105,578)	2,861	17	675	2,169	18	933
 <b>BLOOMINGTON</b> (81,970)	2,515	8	647	1,860	8	953
25,000 - 50,000 	17,709	49	4,640	13,020	51	6,852
10,000 - 25,000 	15,349	56	3,899	11,394	61	5,706
2,500 - 10,000 	12,128	55	2,820	9,253	60	4,147
 <b>RURAL (Under 2,500)</b>	26,634	606	8,144	17,884	733	13,671

**1973  
COUNTY CRASH REPORT**

COUNTY	ALL CRASHES	FATAL CRASHES	NUMBER KILLED	PERSONAL INJURY CRASHES	NUMBER INJURED	PROPERTY DAMAGE CRASHES
Aitkin	264	3	3	78	148	183
Anoka	4,029	32	36	1,354	2,188	2,643
Becker	532	9	10	148	260	375
Beltrami	579	10	16	118	187	451
Benton	626	9	9	206	362	411
Big Stone	148	1	1	32	48	115
Blue Earth	1,956	16	23	476	718	1,464
Brown	764	13	14	204	313	547
Carlton	602	12	13	162	247	428
Carver	713	17	23	213	340	483
Cass	355	9	11	105	182	241
Chippewa	269	8	9	47	72	214
Chisago	446	6	7	141	216	299
Clay	1,542	10	10	257	371	1,275
Clearwater	129	4	6	27	50	98
Cook	117	3	4	34	51	80
Cottonwood	320	3	4	67	129	250
Crow Wing	1,075	11	12	274	418	790
Dakota	3,992	21	23	1,111	1,713	2,860
Dodge	230	5	7	75	132	150
Douglas	605	7	7	143	217	455
Faribault	363	5	5	104	160	254
Fillmore	366	8	12	79	129	279
Freeborn	1,000	7	7	258	377	735
Goodhue	930	14	17	257	429	659
Grant	97	3	5	24	38	70
Hennepin	33,348	116	123	8,254	12,572	24,978
Houston	373	4	7	100	160	269
Hubbard	276	10	10	72	117	194
Isanti	280	6	6	98	177	176
Itasca	776	12	13	224	360	540
Jackson	333	2	2	89	141	242
Kanabec	189	5	5	51	100	133
Kandiyohi	862	10	11	211	292	641
Kittson	113	2	2	37	59	74
Koochiching	362	7	8	127	202	228
Lac Qui Parle	168	5	5	55	82	108
Lake	310	2	4	92	122	216
Lake of the Woods	67	1	1	25	43	41
Le Sueur	451	10	14	117	184	324
Lincoln	114	4	4	25	54	85
Lyon	517	12	13	139	200	366
McLeod	609	7	9	143	213	459
Mahnomen	80	2	3	18	34	60
Marshall	168	5	6	50	79	113
Martin	667	4	4	190	301	473
Meeker	383	4	4	90	144	289
Mille Lacs	352	3	3	96	146	253
Morrison	659	11	13	197	332	451
Mower	1,035	10	11	283	415	742
Murray	158	4	5	33	52	121

COUNTY	ALL CRASHES	FATAL CRASHES	NUMBER KILLED	PERSONAL INJURY CRASHES	NUMBER INJURED	PROPERTY DAMAGE CRASHES
Nicollet	620	4	4	156	258	460
Nobles	511	6	7	110	152	395
Norman	125	3	3	23	49	99
Olmsted	2,569	18	21	664	998	1,887
Otter Tail	811	13	17	210	354	588
Pennington	405	3	4	99	159	303
Pine	308	9	12	75	125	224
Pipestone	255	7	7	53	96	195
Polk	790	12	15	180	279	598
Pope	182	3	4	36	57	143
Ramsey	16,957	53	57	4,266	6,039	12,638
Red Lake	90	1	1	23	39	66
Redwood	344	7	8	125	198	212
Renville	338	7	8	84	140	247
Rice	1,146	8	10	284	439	854
Rock	236	2	2	48	69	186
Roseau	177	5	5	31	58	141
St. Louis	5,284	52	60	1,309	1,932	3,923
Scott	941	14	18	299	486	628
Sherburne	600	13	16	183	332	404
Sibley	284	3	4	88	143	193
Stearns	2,673	20	22	738	1,119	1,915
Steele	753	12	15	184	297	557
Stevens	195	0	0	53	77	142
Swift	252	7	8	73	104	172
Todd	324	8	14	95	160	221
Traverse	96	3	3	25	43	68
Wabasha	403	7	10	103	162	293
Wadena	210	3	3	40	66	167
Waseca	388	5	7	102	165	281
Washington	2,002	19	23	582	882	1,401
Watonwan	322	5	6	72	115	245
Wilkin	238	4	4	53	94	181
Winona	1,297	19	23	287	409	991
Wright	933	16	20	311	513	606
Yellow Medicine	198	3	3	51	88	144
TOTALS	107,956	878	1,024	27,925	42,772	79,153

**1973**  
**MINNESOTA MOTOR VEHICLE TRAFFIC CRASHES**  
**BY CITY GROUPINGS**

CITY GROUP	ALL CRASHES	FATAL CRASHES	NUMBER KILLED	PERSONAL INJURY CRASHES	NUMBER INJURED	PROPERTY DAMAGE CRASHES
<b>A. Pop. 100,000 or more</b>						
Minneapolis	18,221	54	58	4,142	6,426	14,025
St. Paul	12,539	33	35	2,958	4,084	9,548
Duluth	2,861	17	18	675	933	2,169
<b>B. Pop. 20,000 - 99,999</b>						
Austin	745	2	2	195	271	548
Bloomington	2,515	8	8	647	953	1,860
Brooklyn Center	997	1	1	243	371	753
Crystal	523	3	3	152	226	368
Edina	1,220	3	4	311	439	906
Mankato	1,466	2	2	323	461	1,141
Minnetonka	902	3	3	275	402	624
Moorhead	1,178	2	2	181	243	995
Richfield	1,435	3	3	362	522	1,070
Rochester	1,941	3	3	461	671	1,477
Roseville	1,177	3	3	317	483	857
St. Cloud	1,783	3	3	458	656	1,322
St. Louis Park	1,295	1	1	346	505	948
South St. Paul	651	0	0	126	180	525
Winona	860	4	4	194	264	662
<b>C. Pop. 10,000 - 19,999</b>						
Albert Lea	650	2	2	146	197	502
Anoka	504	0	0	117	195	387
Brainerd	511	0	0	102	143	409
Brooklyn Park	592	3	3	198	315	391
Burnsville	630	4	5	187	292	439
Columbia Heights	581	2	3	171	237	408
Coon Rapids	692	4	4	253	409	435
Cottage Grove	242	2	2	64	96	176
Faribault	591	1	1	147	216	443
Fergus Falls	275	0	0	66	82	209
Fridley	979	8	9	341	547	630
Golden Valley	998	1	1	282	431	715
Hibbing	385	2	2	99	147	284
Hopkins	677	2	2	193	274	482
Maplewood	669	3	3	225	338	441
New Ulm	415	4	4	95	136	316
Owatonna	476	3	3	103	146	370
Red Wing	429	2	2	100	143	327
Robbinsdale	573	2	2	122	163	449
Virginia	392	1	1	67	92	324
West St. Paul	563	0	0	148	234	415
White Bear Lake	601	3	3	196	283	402
Willmar	497	1	1	101	133	395
<b>D. Pop. 5,000 - 9,000</b>						
Alexandria	303	0	0	67	103	236
Apple Valley	117	1	1	43	76	73
Bemidji	325	1	1	52	71	272
Blaine	507	3	4	182	315	322
Chisholm	73	0	0	0	0	73
Cloquet	251	2	2	49	63	200
Crookston	229	0	0	51	63	178

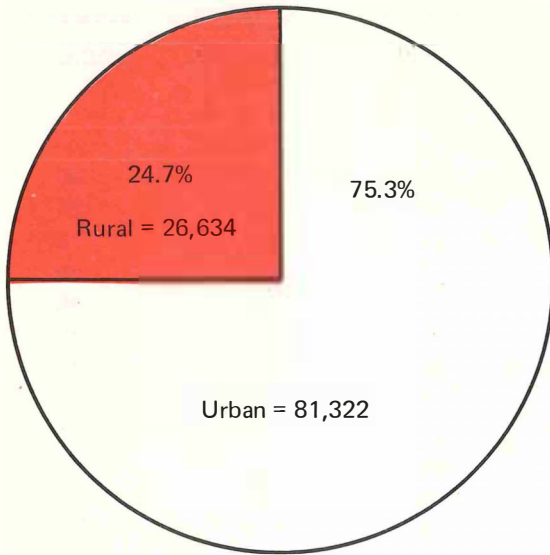
CITY GROUP	ALL CRASHES	FATAL CRASHES	NUMBER KILLED	PERSONAL INJURY CRASHES	NUMBER INJURED	PROPERTY DAMAGE CRASHES
Detroit Lakes	204	0	0	39	55	165
East Grand Forks	218	3	3	40	61	175
Eden Prairie	289	3	4	97	140	189
Ely	103	0	0	5	5	98
Eveleth	41	0	0	2	6	39
Fairmont	364	1	1	91	135	272
Falcon Heights	138	0	0	30	43	108
Grand Rapids	279	0	0	56	81	223
Hastings	319	0	0	61	93	258
Hutchinson	265	0	0	42	52	223
International Falls	181	1	1	55	78	125
Inver Grove Heights	323	5	5	110	163	208
Litchfield	136	0	0	12	14	124
Little Falls	272	0	0	51	69	221
Marshall	218	1	1	61	78	156
Mendota Heights	287	1	1	74	109	212
Montevideo	132	2	2	17	25	113
Mound	117	0	0	26	37	91
Mounds View	229	1	1	69	119	159
New Brighton	369	2	3	101	141	266
Northfield	210	1	1	28	38	181
North Mankato	168	0	0	37	61	131
North St. Paul	233	3	4	71	116	159
Orono	192	5	5	65	99	122
Pipestone	128	0	0	28	41	100
Plymouth	509	4	4	160	244	345
St. Anthony	208	0	0	50	67	158
St. Peter	210	1	1	46	66	163
Shakopee	287	2	2	83	123	202
Shoreview	181	2	2	48	67	131
Stillwater	283	0	0	64	87	219
Thief River Falls	307	1	1	68	100	238
Waseca	195	1	1	38	53	156
Worthington	314	1	2	61	80	252
<b>E. Pop. 2,500 - 4,999</b>						
Arden Hills	209	0	0	73	109	136
Aurora	42	0	0	7	12	35
Babbitt	19	0	0	2	4	17
Bayport	45	1	1	11	14	33
Benson	76	1	1	20	25	55
Blue Earth	84	0	0	16	22	68
Breckenridge	121	0	0	20	27	101
Buffalo	111	0	0	30	39	81
Caledonia	45	0	0	7	7	38
Cambridge	88	2	2	22	36	64
Chanhassen	154	2	2	49	80	103
Chaska	111	1	2	31	48	79
Circle Pines	35	0	0	14	23	21
Deephaven	28	0	0	5	9	23
East Bethel	44	2	2	17	39	25
East Granite Falls	7	0	0	0	0	7
Excelsior	97	0	0	20	24	77

CITY GROUP	ALL CRASHES	FATAL CRASHES	NUMBER KILLED	PERSONAL INJURY CRASHES	NUMBER INJURED	PROPERTY DAMAGE CRASHES
Farmington	77	0	0	17	22	60
Forest Lake	127	1	1	35	59	91
Glencoe	90	1	1	13	18	76
Glenwood	51	0	0	2	4	49
Granite Falls	43	0	0	8	11	35
Hoyt Lakes	28	0	0	5	7	23
Jackson	112	0	0	19	24	93
LaCrescent	82	0	0	22	31	60
Lake City	92	0	0	21	25	71
Lakeville	208	2	3	60	81	146
Lino Lakes	108	2	2	44	78	62
Le Sueur	64	0	0	6	8	58
Little Canada	236	2	2	78	113	156
Luverne	96	0	0	15	18	81
Mahtomedi	36	0	0	9	14	27
Maple Grove	190	1	1	63	102	126
Minnetrista	71	2	2	28	47	41
Mora	59	0	0	11	18	48
Morris	110	0	0	24	34	86
New Hope	340	0	0	104	145	236
Newport	156	2	3	45	61	109
New Prague	69	0	0	9	10	60
Olivia	59	0	0	7	13	52
Ortonville	63	0	0	11	14	52
Osseo	126	0	0	21	29	105
Park Rapids	78	0	0	11	14	67
Princeton	95	0	0	27	37	68
Proctor	51	0	0	8	11	43
Redwood Falls	109	0	0	27	46	82
Roseau	62	0	0	3	5	59
St. James	110	0	0	20	21	90
St. Paul Park	67	0	0	17	20	50
Sauk Centre	51	0	0	5	9	46
Sauk Rapids	104	0	0	34	57	70
Shorewood	85	1	1	24	35	60
Silver Bay	40	0	0	10	15	30
Sleepy Eye	88	0	0	21	30	67
Springfield	56	1	1	8	12	47
Spring Lake Park	159	0	0	56	80	103
Staples	33	0	0	1	1	32
Stewartville	40	0	0	8	13	32
Tracy	52	0	0	9	15	43
Two Harbors	101	0	0	17	20	84
Vadnais Heights	109	0	0	35	53	74
Wadena	121	0	0	19	29	102
Waite Park	145	1	1	45	83	99
Wayzata	278	3	3	62	104	213
Wells	42	0	0	8	10	34
Windom	163	0	0	24	35	139
Woodbury	129	1	1	42	66	86

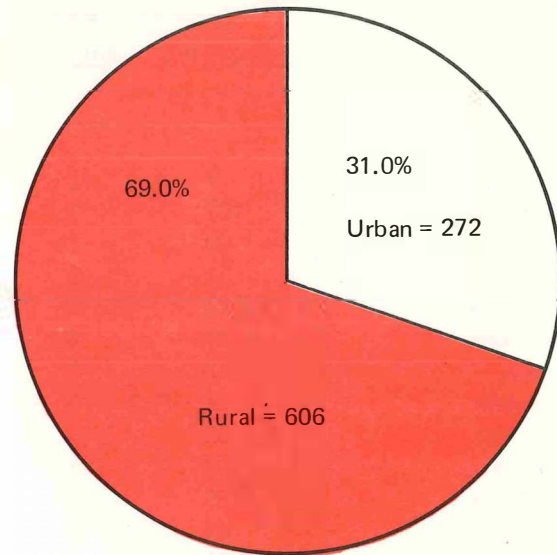


## LOCATION OF 1973 CRASHES BY URBAN OR RURAL AREA

ALL CRASHES = 107,956



FATAL CRASHES = 878

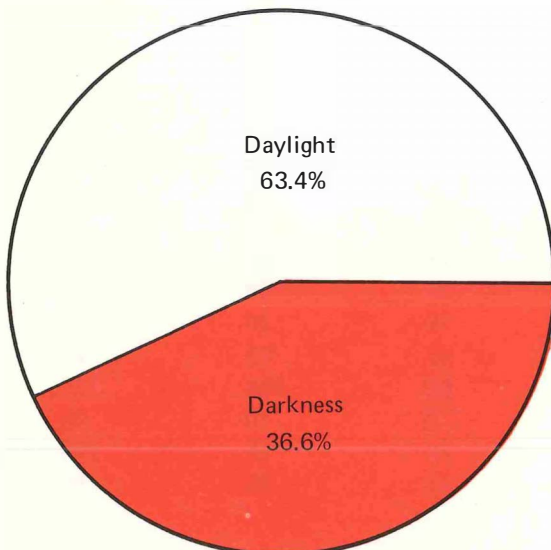


## LIGHT CONDITIONS IN 1973 CRASHES

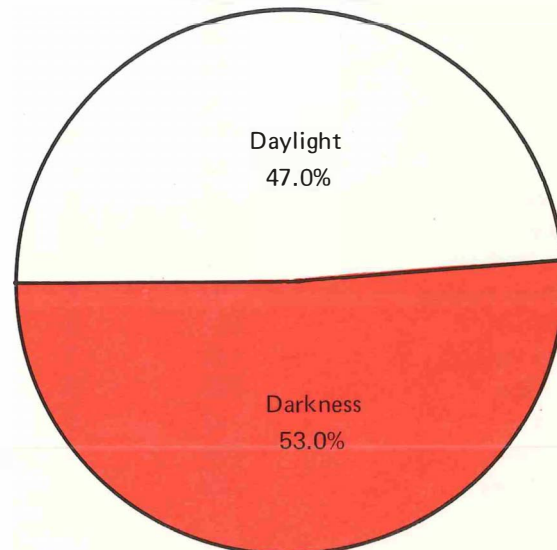
	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES
Daylight	68,478	413	16,816	51,249
Darkness	39,478	465	11,109	27,904
TOTAL	107,956	878	27,925	79,153

NUMBER KILLED	NUMBER INJURED
483	25,683
541	17,089
1,024	42,772

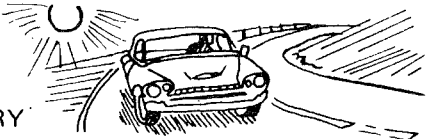

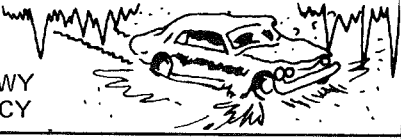
ALL CRASHES



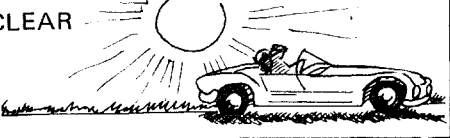
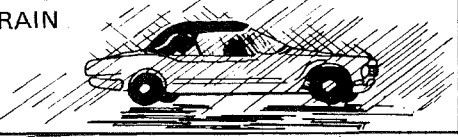
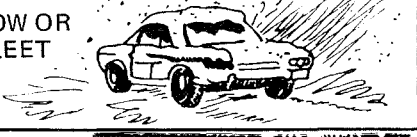
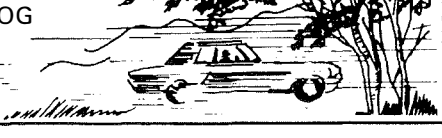
FATAL CRASHES



## ROAD SURFACE CONDITIONS IN 1973 TRAFFIC CRASHES

	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES
<b>DRY</b> 	48,311	665	18,212	29,434
<b>WET</b> 	16,626	115	5,822	10,689
<b>SNOWY OR ICY</b> 	12,596	81	3,117	9,398
<b>ALL OTHERS &amp; NOT STATED</b>	30,423	17	774	29,632
<b>TOTAL</b>	107,956	878	27,925	79,153

## WEATHER CONDITIONS IN 1973 TRAFFIC CRASHES

	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES
<b>CLEAR</b> 	63,329	753	22,597	39,979
<b>RAIN</b> 	8,599	66	2,992	5,541
<b>SNOW OR SLEET</b> 	4,369	22	1,148	3,199
<b>FOG</b> 	847	12	311	524
<b>ALL OTHER</b>	30,812	25	877	29,910
<b>TOTAL</b>	107,956	878	27,925	79,153

### 1973 ROAD MILEAGE SUMMARY

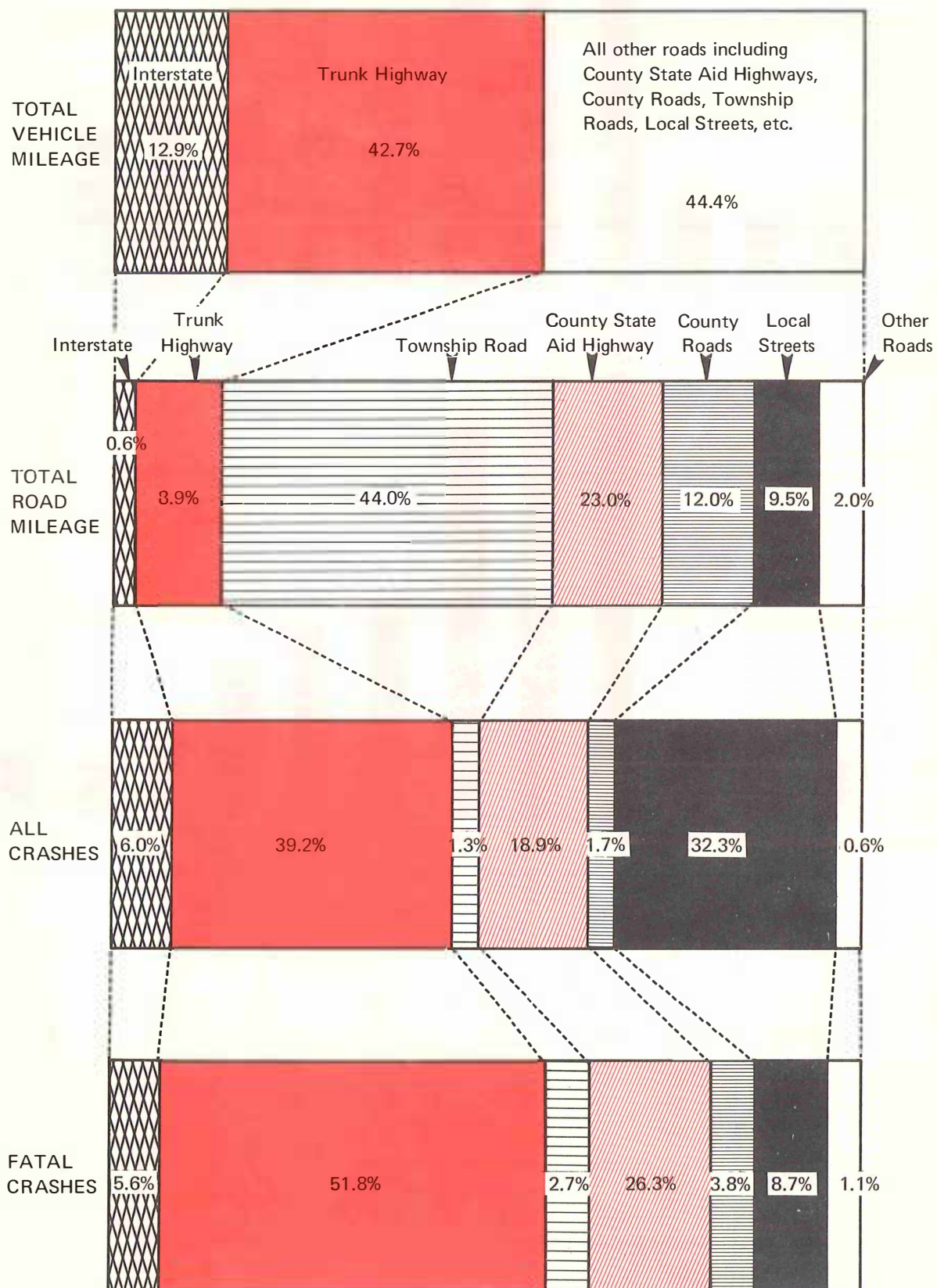
TYPE OF ROAD	MILES	PERCENT
Interstate Freeways		
Open to Traffic	716	0.6%
Trunk Highways	11,458	8.9
County State Aid Highways	29,560	23.0
County Roads	15,409	12.0
Township Road	56,423	44.0
Local Street	12,203	9.5
Other Road	2,533	2.0
<b>TOTAL</b>	<b>128,302</b>	<b>100.0%</b>

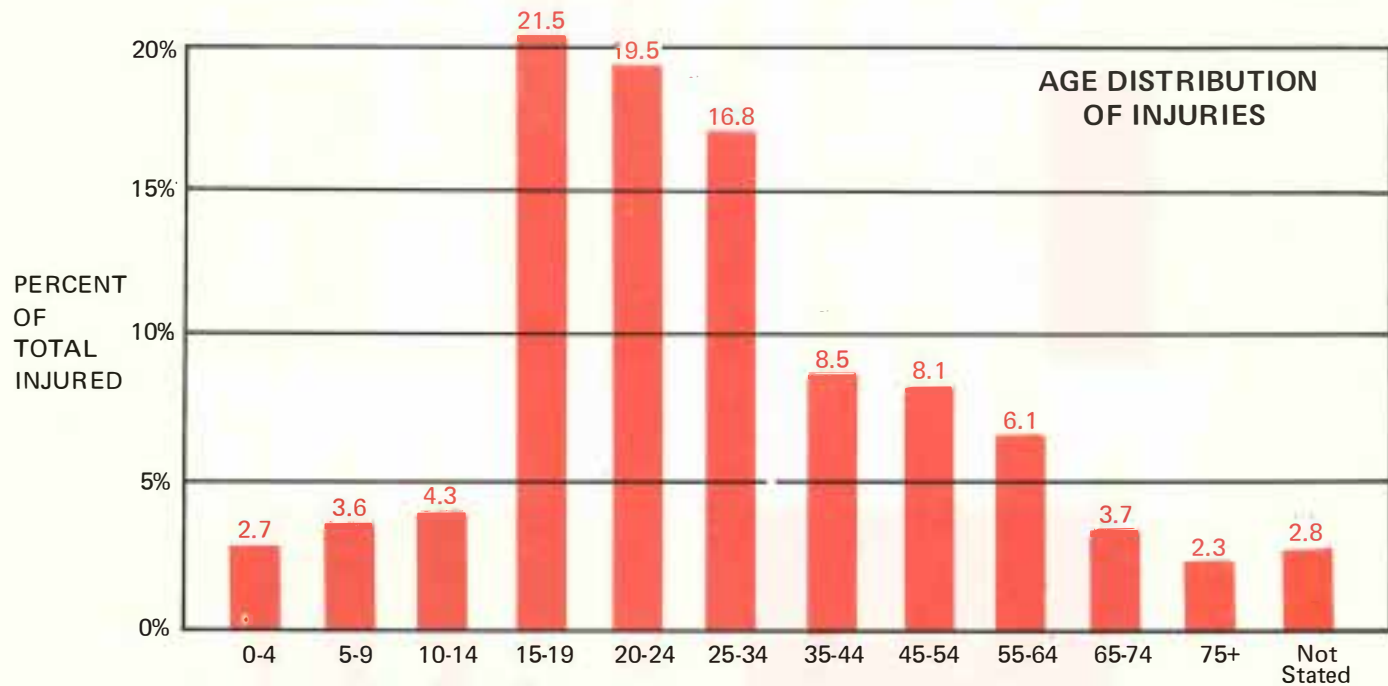
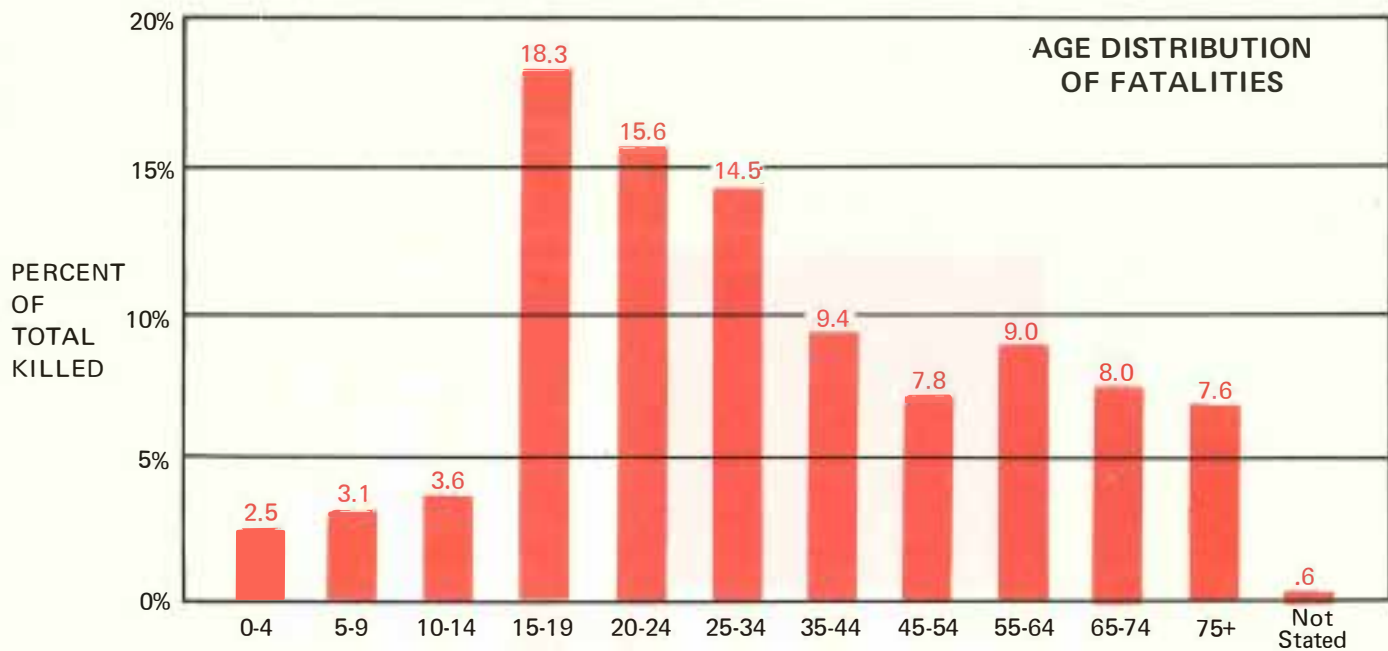
### 1973 CRASHES BY TYPE OF ROAD CLASSIFICATION

ROAD CLASSIFICATION	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES	NUMBER OF PEOPLE KILLED	NUMBER OF PEOPLE INJURED
Urban* Interstate	5,461	34	1,307	4,120	36	1,947
Rural Interstate	1,000	15	242	743	18	410
Urban* Trunk Highway	28,882	115	7,470	21,297	125	11,500
Rural Trunk Highway	13,426	340	4,134	8,952	420	7,251
County State Aid Highway	20,462	231	6,236	13,995	265	9,576
County Road	1,820	33	590	1,197	39	930
Township Road	1,386	24	428	934	31	716
Local Street	34,858	76	7,346	27,436	78	10,174
Other Road	661	10	172	479	12	268
<b>TOTAL</b>	<b>107,956</b>	<b>878</b>	<b>27,925</b>	<b>79,153</b>	<b>1,024</b>	<b>42,772</b>

\* Any built-up area of 2,500 or more population

# 1973 MILEAGE AND CRASH DISTRIBUTION BY TYPE OF ROADWAY

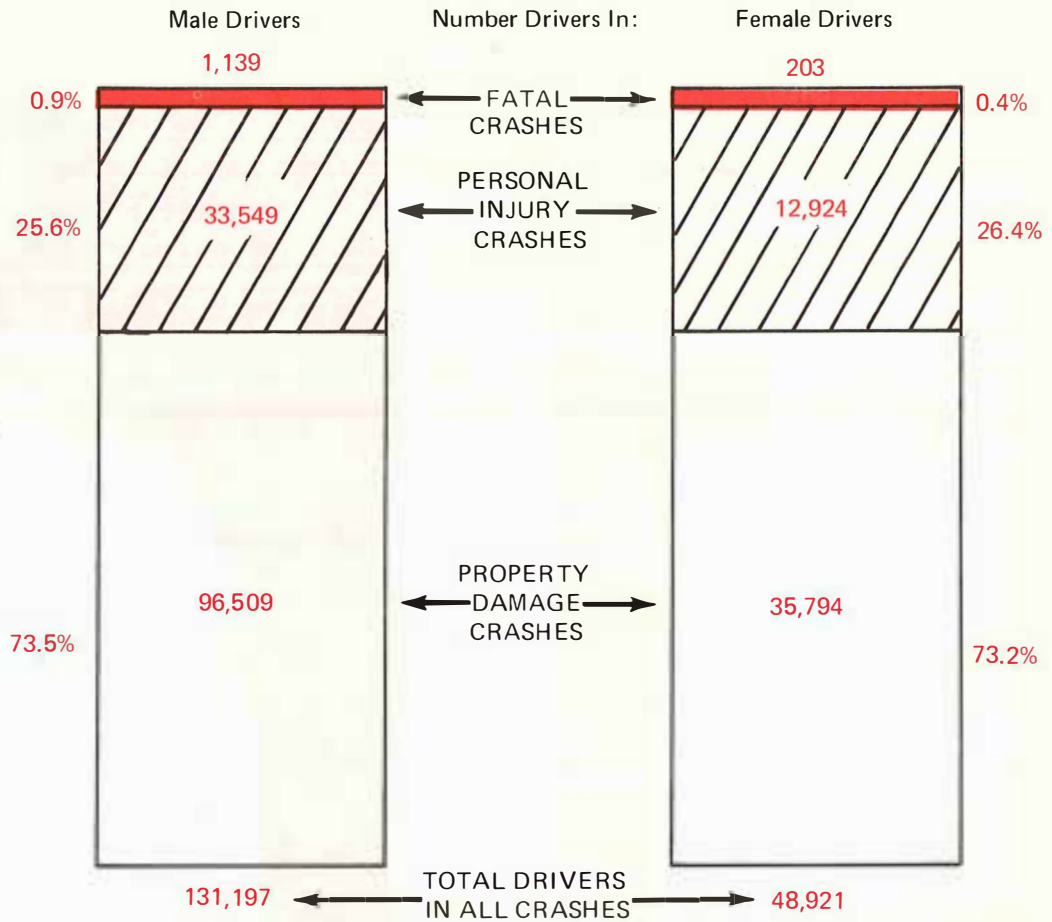




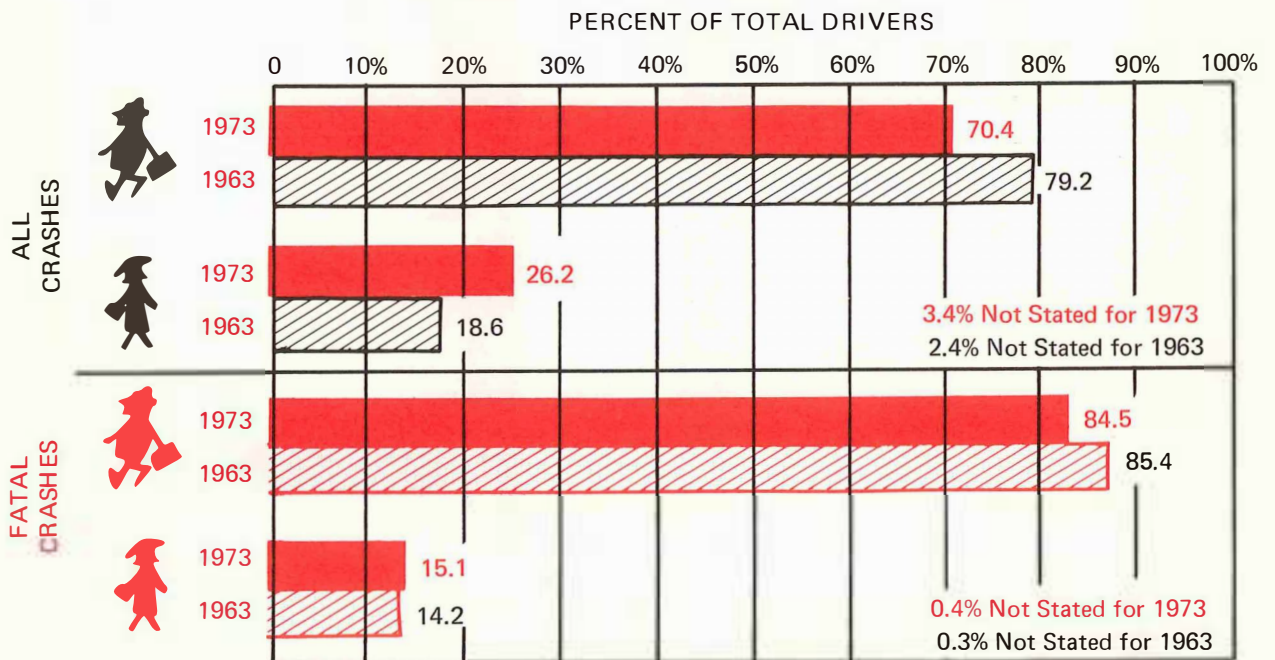
AGE GROUP	TOTAL KILLED			TOTAL INJURED		
	All	Male	Female	All	Male	Female
0 - 4	26	20	6	1,171	596	575
5 - 9	32	23	9	1,561	874	687
10 - 14	37	25	12	1,826	1,008	818
15 - 19	187	126	61	9,214	5,635	3,579
20 - 24	160	132	28	8,344	5,199	3,145
25 - 34	148	118	30	7,196	4,325	2,871
35 - 44	96	64	32	3,640	1,991	1,649
45 - 54	80	57	23	3,459	1,744	1,715
55 - 64	92	55	37	2,612	1,328	1,284
65 - 74	82	45	37	1,592	721	871
75 - up	78	52	26	970	515	455
Not Stated	6	2	4	1,187	547	640
<b>TOTAL</b>	<b>1,024</b>	<b>719</b>	<b>305</b>	<b>42,772</b>	<b>24,483</b>	<b>18,289</b>



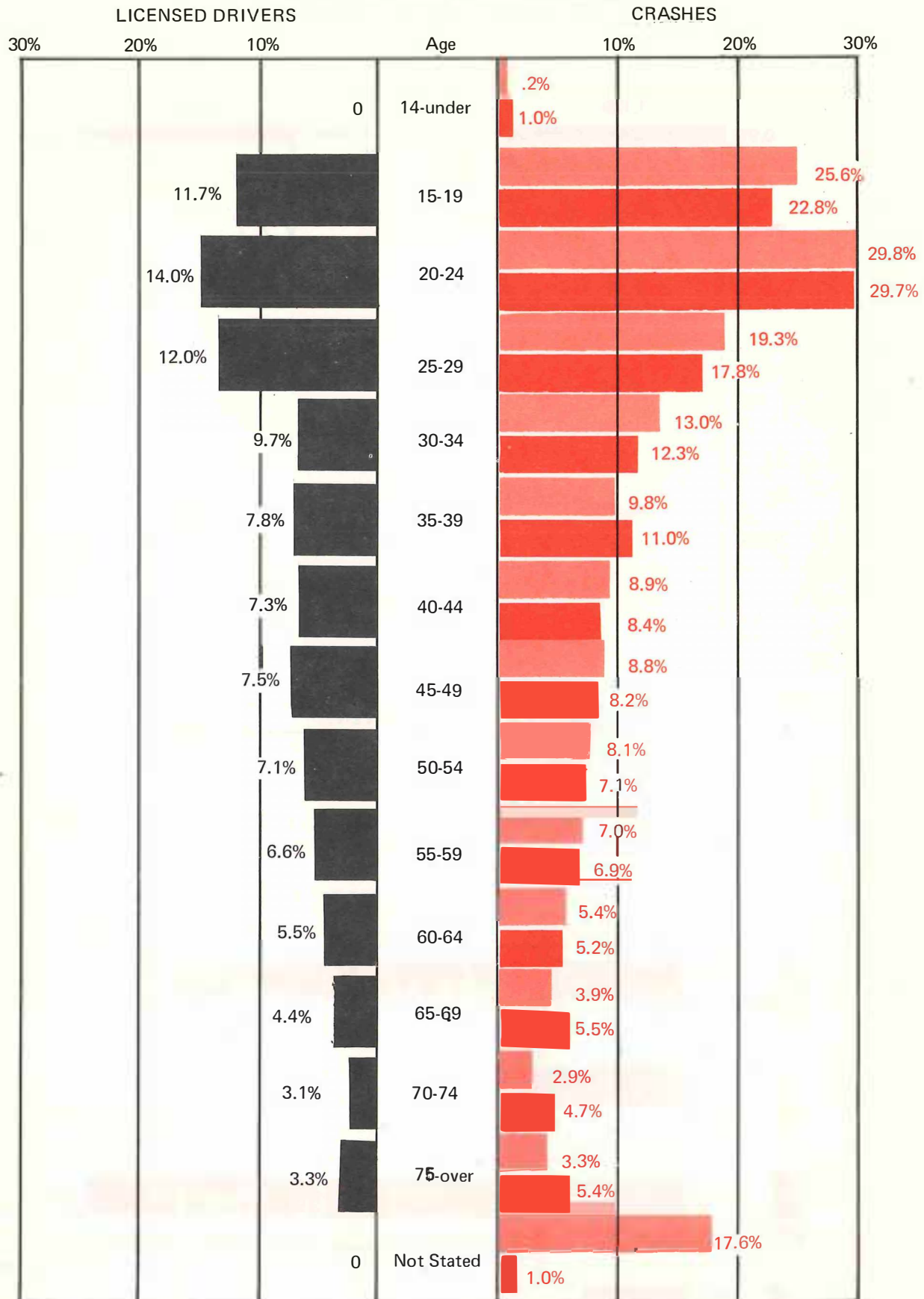
# **DISTRIBUTION OF DRIVERS IN 1973 CRASHES BY SEX AND DEGREE OF SEVERITY**



## **1963 - 1973 COMPARISON OF MALE AND FEMALE DRIVERS IN CRASHES**



# AGE DISTRIBUTION OF LICENSED DRIVERS AND MOTOR VEHICLE CRASHES, 1973



■ Percent of All Licensed Drivers  
 ■ Proportion of All Crashes Involving This Age Group  
 ■ Proportion of All Fatal Crashes Involving This Age Group

Total Crashes: 107,956  
 Fatal Crashes: 878

Note: The crash involvement statistics are derived from the actual number of crashes in which each age group appears. Since members of different age groups may appear in the same accident, that crash appears twice or more and thus the percentage involvement totals more than 100%.

### DRIVERS IN 1973 TRAFFIC CRASHES

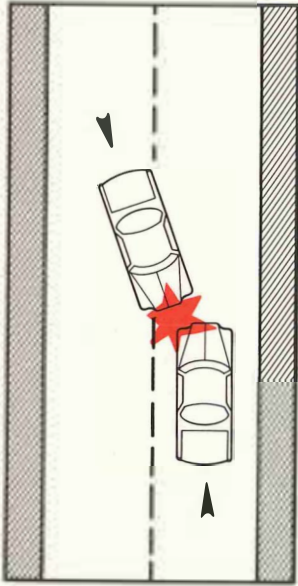
AGE	NUMBER OF DRIVERS IN:				NUMBER LICENSED DRIVERS
	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES	
14-under	180	10	61	109	0
15-19	30,054	219	8,499	21,336	258,510
20-24	35,167	280	10,134	24,753	311,722
25-29	22,231	162	6,216	15,853	264,501
30-34	14,705	111	4,198	10,396	211,564
35-39	11,002	99	2,994	7,909	171,950
40-44	9,862	76	2,665	7,121	160,877
45-49	9,807	73	2,614	7,120	164,809
50-54	8,924	63	2,309	6,552	155,816
55-59	7,713	61	1,980	5,672	144,026
60-64	5,954	47	1,551	4,356	120,997
65-69	4,304	48	1,080	3,176	95,416
70-74	3,169	41	793	2,335	67,908
75-over	3,593	49	933	2,611	71,904
Not Stated	19,735	9	988	18,738	0
<b>TOTAL</b>	<b>186,400</b>	<b>1,348</b>	<b>47,015</b>	<b>138,037</b>	<b>2,200,000</b>

### PROBABLE DRIVER BEHAVIORS IN 1973 CRASHES

DRIVER BEHAVIOR INDICATED	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES
Illegal / Unsafe Speed	11,503	199	4,789	6,515
Traffic Control Violation	2,809	40	1,368	1,401
Over Center Line, Wrong Lane	2,872	128	1,047	1,697
Improper Parking, Starting, Stopping	1,571	15	394	1,162
Improper Passing	1,353	17	341	995
Following Too Closely	4,131	6	1,404	2,721
Failure To Yield Right-Of-Way	12,438	96	4,526	7,816
No Signal / Improper Signal	622	0	153	469
Vision Obscurement	2,209	19	698	1,492
Bicycle Violation	689	7	672	10
Impeding Traffic	265	1	82	182
Improper Left Turn	1,037	10	291	736
Improper Right Turn	609	0	78	531
Other Improper Turn	947	2	201	744
Beyond Driver's Control	36,115	387	12,914	22,814
Defective Equipment	1,513	11	578	924
Pedestrian Violation	914	38	844	32
Other	104,803	372	16,635	87,796
<b>TOTAL</b>	<b>186,400</b>	<b>1,348</b>	<b>47,015</b>	<b>138,037</b>

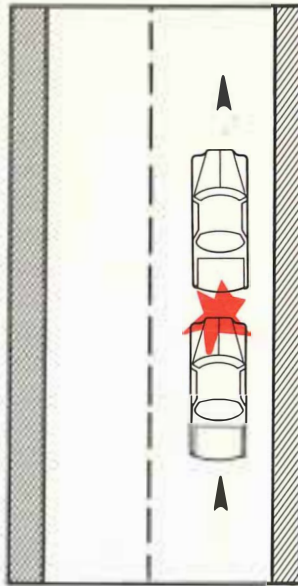


## 1973 VEHICLE MOVEMENTS IN TWO-VEHICLE NON-INTERSECTION CRASHES



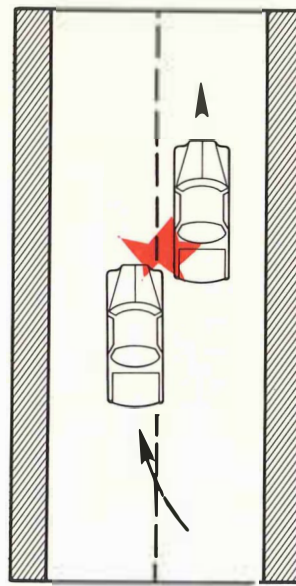
**OPPOSITE DIRECTION  
BOTH MOVING**

All Crashes	1,875
Fatal Crashes	107
Personal Injury	
Crashes	749
Property Damage	
Crashes	1,019



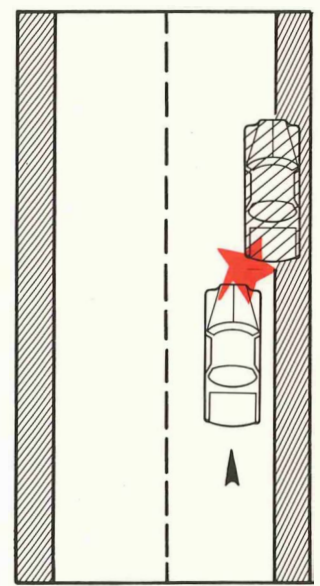
**BOTH SAME DIRECTION  
REAR END**

All Crashes	2,763
Fatal Crashes	21
Personal Injury	
Crashes	1,027
Property Damage	
Crashes	1,715



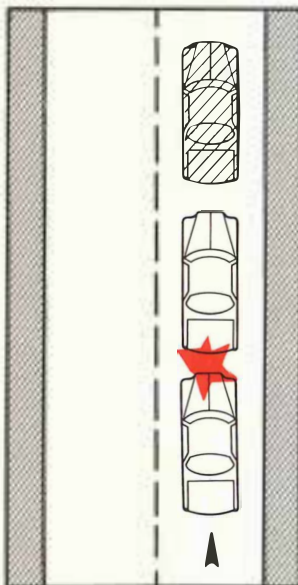
**SIDESWIPE**

All Crashes	1,495
Fatal Crashes	5
Personal Injury	
Crashes	297
Property Damage	
Crashes	1,193



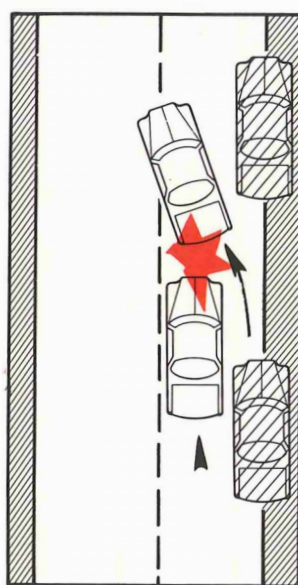
**ONE VEHICLE PARKED**

All Crashes	9,375
Fatal Crashes	14
Personal Injury	
Crashes	1,428
Property Damage	
Crashes	7,933



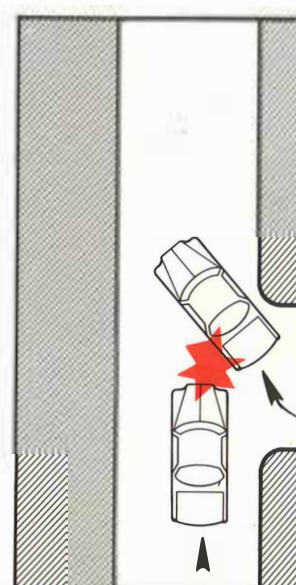
**ONE VEHICLE STOPPED  
IN TRAFFIC**

All Crashes	1,856
Fatal Crashes	5
Personal Injury	
Crashes	758
Property Damage	
Crashes	1,093



**ONE VEHICLE ENT.  
OR LVE. PRK. SPACE**

All Crashes	1,117
Fatal Crashes	0
Personal Injury	
Crashes	98
Property Damage	
Crashes	1,019



**ONE VEHICLE ENT. OR  
LVE. ALLEY OR DRIVEWAY**

All Crashes	3,946
Fatal Crashes	9
Personal Injury	
Crashes	1,014
Property Damage	
Crashes	2,923

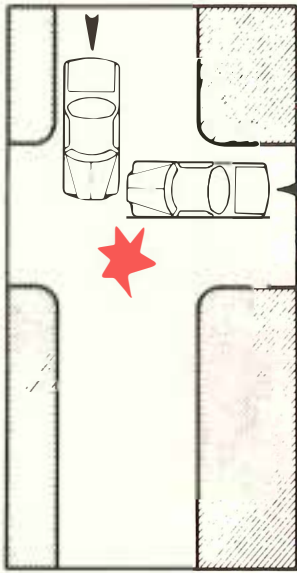
### ALL OTHERS & NOT STATED

All Crashes	3,223
Fatal Crashes	40
Personal Injury	
Crashes	850
Property Damage	
Crashes	2,333

### TOTAL TWO-VEHICLE NON-INTERSECTION CRASHES

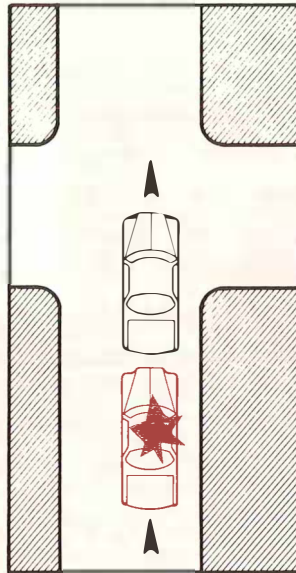
All Crashes	25,650
Fatal Crashes	201
Personal Injury	
Crashes	6,221
Property Damage	
Crashes	19,228

## 1973 VEHICLE MOVEMENTS IN TWO-VEHICLE INTERSECTION CRASHES



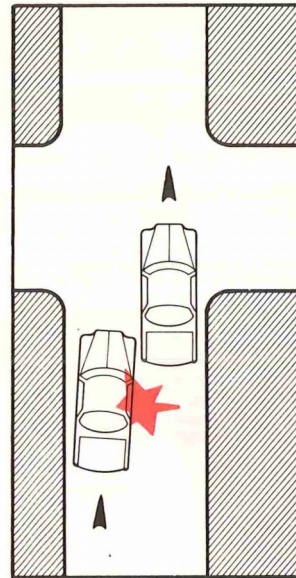
### ENTERING AT ANGLE

All Crashes	15,810
Fatal Crashes	131
Personal Injury	
Crashes	5,857
Property Damage	
Crashes	9,822



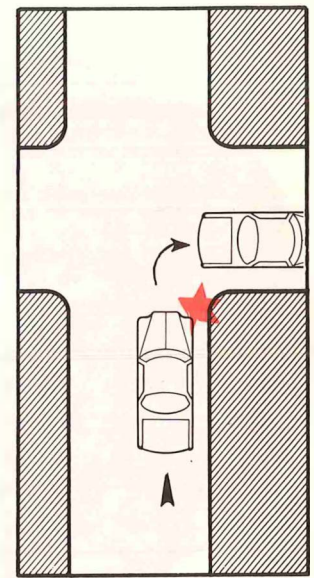
### SAME DIRECTION – BOTH STRAIGHT REAR END

All Crashes	6,881
Fatal Crashes	13
Personal Injury	
Crashes	2,522
Property Damage	
Crashes	4,346



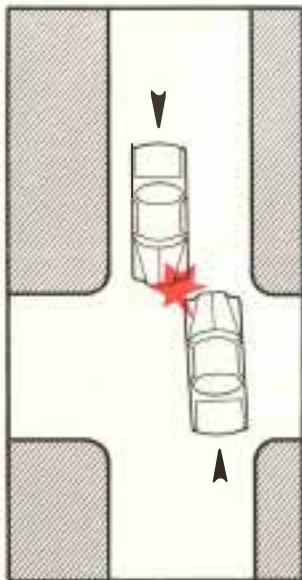
### SIDESWIPE

All Crashes	550
Fatal Crashes	0
Personal Injury	
Crashes	117
Property Damage	
Crashes	433



### SAME DIRECTION ONE TURNING, ONE STRAIGHT

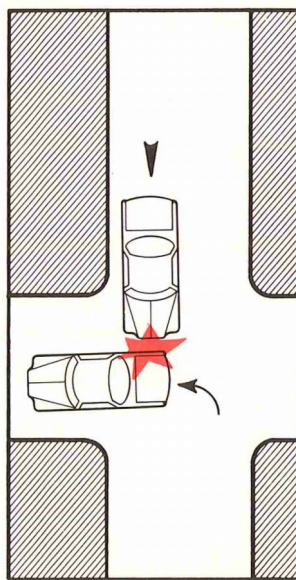
All Crashes	2,910
Fatal Crashes	1
Personal Injury	
Crashes	874
Property Damage	
Crashes	2,035



### OPPOSITE DIRECTION

#### GOING STRAIGHT

All Crashes	168
Fatal Crashes	4
Personal Injury	
Crashes	93
Property Damage	
Crashes	71



#### ONE TURNING LEFT, ONE STRAIGHT

All Crashes	3,627
Fatal Crashes	25
Personal Injury	
Crashes	1,419
Property Damage	
Crashes	2,183

### SAME DIRECTION ALL OTHERS

All Crashes	1,829
Fatal Crashes	1
Personal Injury	
Crashes	309
Property Damage	
Crashes	1,519

### OPPOSITE DIRECTION ALL OTHERS

All Crashes	627
Fatal Crashes	7
Personal Injury	
Crashes	174
Property Damage	
Crashes	446

### NOT STATED

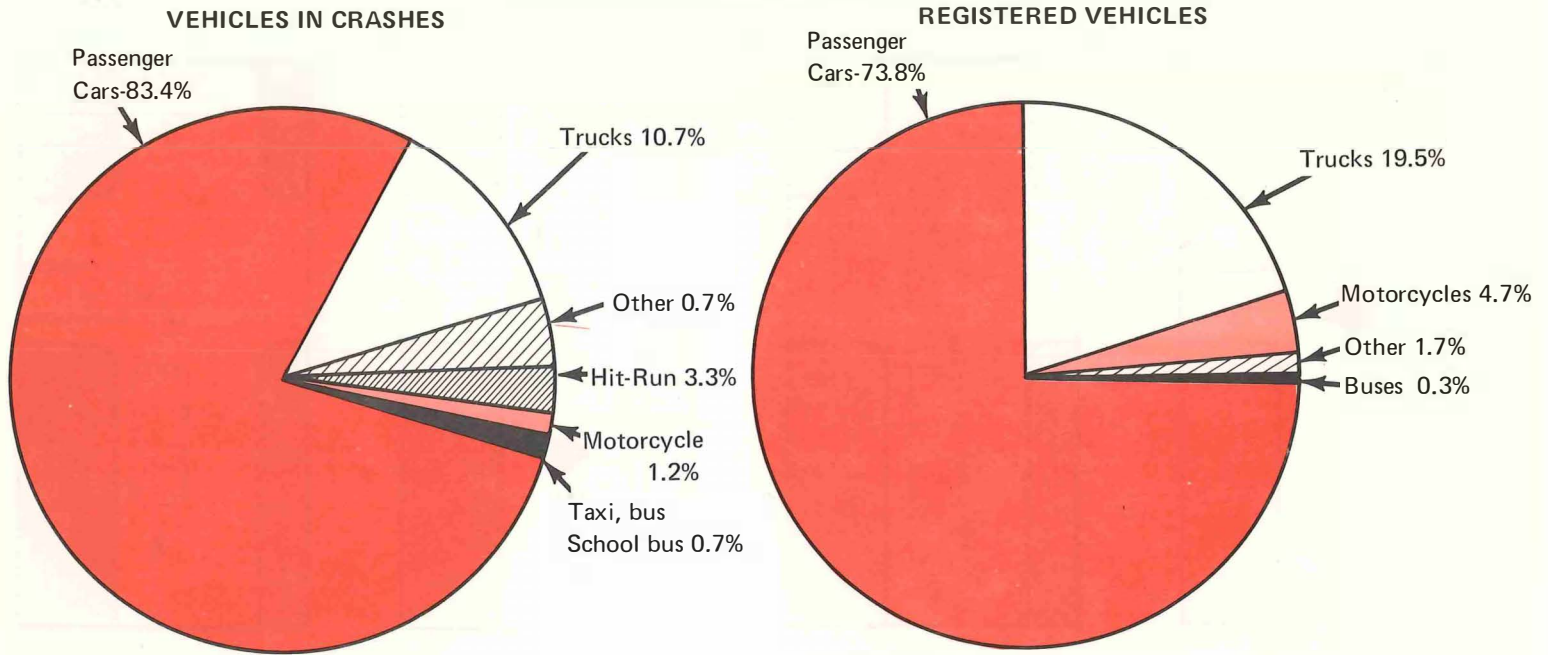
All Crashes	1,311
Fatal Crashes	8
Personal Injury	
Crashes	318
Property Damage	
Crashes	985

### TOTAL TWO VEHICLE INTERSECTION CRASHES

All Crashes	33,713
Fatal Crashes	190
Personal Injury	
Crashes	11,683
Property Damage	
Crashes	21,840



# **1973 CRASH INVOLVEMENT COMPARED WITH REGISTRATIONS BY TYPE OF MOTOR VEHICLE**



## **VEHICLES IN CRASHES**

TYPE MOTOR VEHICLE	NUMBER OF VEHICLES IN:			
	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES
Passenger Cars	166,712	948	40,298	125,466
Pass. Car & Trailer	230	5	53	172
Trk/Trk Tractor	18,112	203	4,399	13,510
Trk Tractor & Semi-Trail.	2,901	85	777	2,039
Trk Tractor & Twin-Trail.	—	—	—	—
Other Truck Comb.	341	7	76	258
FM Tractor &/or Fm. FM. Equipment	235	8	78	149
Taxicab	447	3	107	337
Bus	629	4	174	451
School Bus	422	5	116	301
Motorcycle	2,478	64	1,948	466
Snowmobile	159	10	98	51
Emergency Vehicles	65	1	22	42
Military Vehicles	18	0	6	12
Other Public Vehicles	590	13	155	422
Hit-Run Vehicles	6,568	11	632	5,925
Other & Not Stated	374	8	71	295
<b>TOTAL VEHICLES</b>	<b>200,281</b>	<b>1,375</b>	<b>49,010</b>	<b>149,896</b>

## **REGISTRATIONS**

TYPE MOTOR VEHICLE	1973 REGISTRATIONS
Passenger Cars	1,866,756
Trucks	
Gross Weight	385,826
Farm	104,200
Urban	4,410
Buses	6,510
Motorcycles	119,277
Recreational	12,318
Tax Exempt	31,740
<b>TOTAL</b>	<b>2,531,037</b>

### DRIVER LICENSING DATA 1965 - 1973

	1965	1966	1967	1968*	1969*	1970*	1971*	1972	1973
Number of Licensed Drivers	1,850,000	1,900,000	1,950,000	2,000,000	2,025,000	2,050,000	2,125,000	2,150,000	2,200,000
Permits Issued	162,939	175,330	164,303	170,826	168,061	167,713	168,110	156,230	162,016
Written Tests	172,030	189,719	173,475	207,068	241,720	266,649	264,068	226,000	238,482
Road Tests	175,284	193,815	178,921	200,373	213,058	221,856	221,741	198,000	215,604
Regular Licenses Issued	457,920	455,558	519,673	666,566	534,356	522,528	613,000		
Classified Licenses Issued: **								720,777	630,689
Class A								60,306	62,371
Class B								22,139	24,825
Class C								638,332	543,493
Duplicate Licenses Issued:	163,752	175,191	185,039	197,779	202,373	209,393	217,331	190,265	203,836
Endorsements on Licenses									
Motorcycle	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	55,377
School Bus	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	16,469
Driver Evaluations	11,365	13,941	14,189	15,294	14,254	15,201	13,033	18,783	12,744
Driver Evaluation Suspensions	18,884	16,975	16,775	17,069	16,212	14,669	11,065	11,901	12,011
Safety Responsibility Act Suspensions	24,823	24,801	21,067	19,585	21,602	26,431	23,734	17,734	19,060
Revocations	8,477	8,807	8,912	10,819	11,961	12,134	12,974	12,624	14,987
License Cancellations	3,190	3,503	3,338	4,004	3,540	3,357	3,447	5,656	4,789
Medical Referrals	3,304	4,436	4,894	6,136	4,155	2,752	3,892	2,442	2,724
Referrals to Driver Improvement Clinics									643
Reported Convictions	214,542	232,344	219,938	239,627	241,579	235,676	253,652	225,491	297,412

\*Motorcycle license data are included.

\*\* Beginning in 1972, classified licenses were issued.

### MINNESOTA VEHICLE REGISTRATION, 1965 - 1973

TYPE OF VEHICLE	1965	1966	1967	1968	1969	1970	1971	1972	1973
Passenger Cars	1,506,210	1,552,540	1,578,791	1,643,025	1,694,936	1,732,607	1,782,734	1,806,394	1,866,756
Trucks									
Gross Weight	213,933	228,964	246,135	265,678	288,778	310,150	334,414	355,100	385,826
Farm	101,274	103,055	104,124	105,074	105,242	105,212	105,202	103,346	104,200
Urban	3,384	3,693	3,925	4,037	4,250	4,402	4,731	4,645	4,410
SUB-TOTAL, TRUCKS	318,591	335,712	354,184	374,789	398,270	419,764	444,347	463,091	494,436
Tax Exempt	23,613	22,899	25,997	29,603	26,647	24,438	26,296	24,443	31,740
Buses	1,906	2,157	1,943	1,970	1,948	1,799	1,300	2,956	3,019
School Buses	3,821	3,921	4,038	4,314	4,508	4,740	5,093	3,604	3,491
Motorcycles	39,395	49,775	55,892	60,886	61,199	71,914	90,150	103,286	119,277
Recreational <sup>1</sup>	191	525	1,286			4,834	6,592	9,233	12,318
MOTOR VEHICLE SUB-TOTAL	1,893,727	1,967,529	2,022,131	2,114,587	2,187,514	2,260,096	2,356,512	2,413,007	2,531,037
Mobile Homes <sup>2</sup>	18,955	20,892	23,904	25,997	28,728	34,440	38,670	30,560	604
Trailers <sup>3</sup>	67,787	246,978	79,073	290,125	333,085	336,686	378,939	398,718	451,539
SUB-TOTAL, TRAILERS	86,742	267,870	102,977	316,122	361,813	371,126	417,609	429,278	452,143
Collector's Item <sup>4</sup>							7,779	8,504	9,427
GRAND TOTAL	1,980,469	2,235,399	2,125,108	2,430,709	2,549,327	2,631,222	2,781,900	2,850,789	3,098,632

1. Motor-powered vehicles used for human habitation during recreational activities.

2. The reduction in 1972 registrations of mobile homes is due to a change in registration year from January 1 through December 31 to October 1 through September 30.

3. After May 24, 1973 mobile homes are no longer required to be registered with the Department of Motor Vehicles.

4. The number of vehicles registered as collector's items is unknown prior to 1971.

# MOTOR VEHICLE INSPECTION

TYPE OF VEHICLE	1972 <sup>1</sup>			
	NUMBER DEFECTS	NUMBER REJECTED	NUMBER* INSPECTED	PERCENT REJECTED
Cars	68,171	36,010	79,959	45.0%
Trucks	17,205	8,402	18,050	46.5%
School Buses	9,162	3,825	8,012	47.7%
Motorcycles	72	50	194	25.8%
TOTAL VEHICLES	94,610	48,287	106,215	45.5%

TYPE OF VEHICLE	1971			
	NUMBER DEFECTS	NUMBER REJECTED	NUMBER INSPECTED <sup>2</sup>	PERCENT REJECTED
Cars	67,187	42,019	84,945	49.5%
Trucks	14,466	10,030	21,224	47.3%
School Buses	2,782	2,468	5,035	49.0%
Motorcycles	32	29	172	16.8%
TOTAL VEHICLES	84,467	54,546	111,376	49.0%

TYPE OF VEHICLE <sup>3</sup>	1970			
	NUMBER DEFECTS	NUMBER REJECTED	NUMBER INSPECTED	PERCENT REJECTED
Cars	57,920	36,314	66,070	55.0%
Trucks	18,330	10,599	19,570	54.1%
School Buses	2,283	2,223	4,835	46.0%
TOTAL VEHICLES	78,533	49,136	90,475	54.3%

TYPE OF VEHICLE	1969			
	NUMBER DEFECTS	NUMBER REJECTED	NUMBER INSPECTED	PERCENT REJECTED
Cars	61,666	37,444	67,354	55.6%
Trucks	7,241	4,725	8,025	58.9%
School Buses	3,227	2,869	4,939	58.1%
Motorcycles	112	112	145	77.2%
TOTAL VEHICLES	72,246	45,150	80,463	56.1%

<sup>1</sup>Due to coding errors, 8,858 vehicles inspected in District 25 are not represented in this table.

<sup>2</sup>Includes only those vehicles for which complete inspection reports are available.

<sup>3</sup>Motorcycles were not inspected in 1970.

# MOTOR VEHICLE INSPECTION

TYPE OF VEHICLE	1973			
	NUMBER DEFECTS	NUMBER REJECTED	NUMBER* INSPECTED	PERCENT REJECTED
Cars	78,800	42,190	89,505	47.1%
Trucks	18,393	9,241	19,311	47.9%
School Buses	12,278	5,885	15,793	37.3%
Motorcycles	113	80	384	20.8%
TOTAL VEHICLES	100,584	57,396	124,993	45.9%

<sup>4</sup>Beginning in 1973 all school buses are inspected twice yearly, thus these figures represent two inspections of the same vehicle.



## PART 2.

# Pedestrian - Involved Crashes

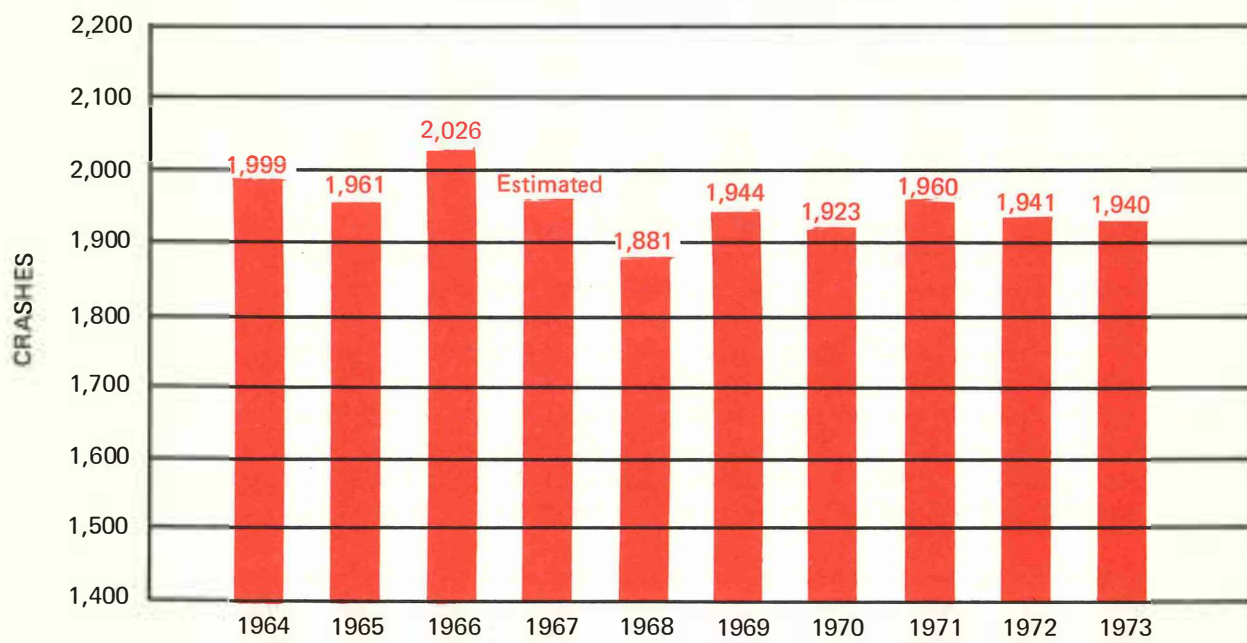
Pedestrians, by virtue of the fact that skin and bone are no match for two tons of steel, are more vulnerable to injury than the victims of any other type crash.

Since 1964 there has been an average of 1,954 pedestrian crashes per year, in which an average of 133 fatalities and 1,991 injuries have occurred. During 1973, there were 1,940 pedestrian-involved crashes in which 149 pedestrians were killed and an additional 1,940 were injured. Both the numbers killed and injured are increases over the 1972 figures, but well below records established in earlier periods.

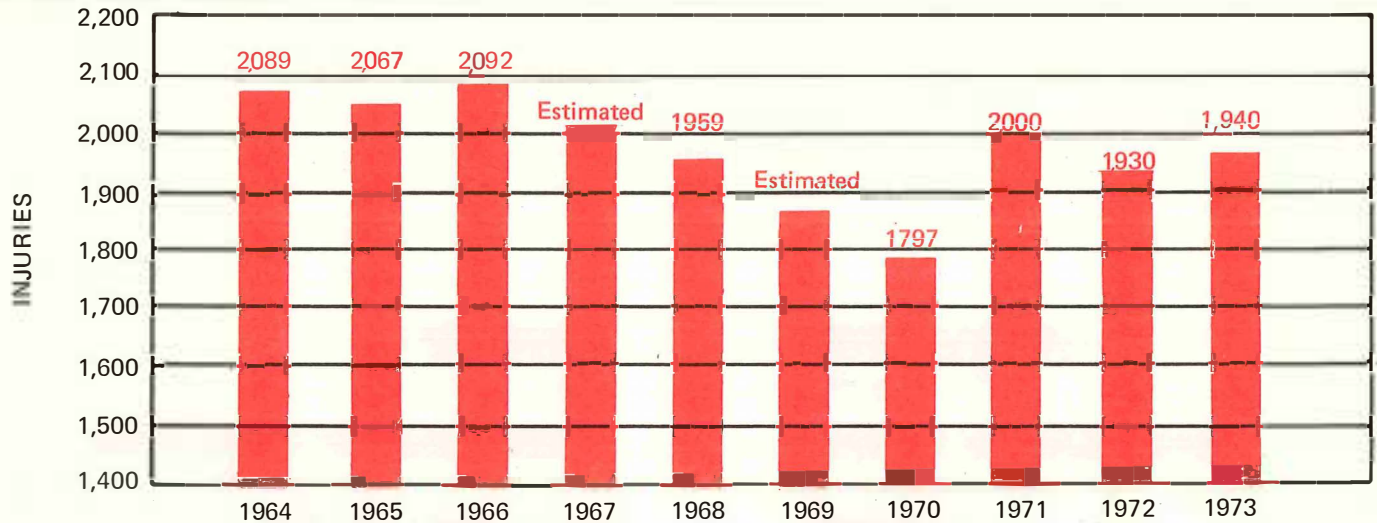
It is normally the very young and the very old age groups that contribute the most to the pedestrian fatality picture. During 1973, nearly 30 percent of the pedestrian fatalities were in the two age groups 5-9 and 75 or over. Injuries provide a somewhat different picture, with the peak number of injuries coming from the ages under fourteen. What this implies is that it is the young who are involved in the majority of pedestrian type crashes, but since they are physically better able to recover from serious injury, they do not contribute as much to the fatality picture as they conceivably could. The very old on the other hand do not mend as easily and thus contribute heavily to the fatality picture even though they appear relatively less often in the overall pedestrian crash picture.

Like crashes involving only motor vehicles or motor vehicles and other objects, pedestrian-involved crashes tended to increase during the peak people movement hours of 3 to 6 p.m. These three hours contribute 32 percent of all pedestrian crashes. The hourly breakdown for fatal pedestrian-involved crashes also closely follows that for fatal motor vehicle accidents discussed previously. The "rush hour" provides one peak (the largest), with a second smaller peak occurring around 1 a.m. in the morning.

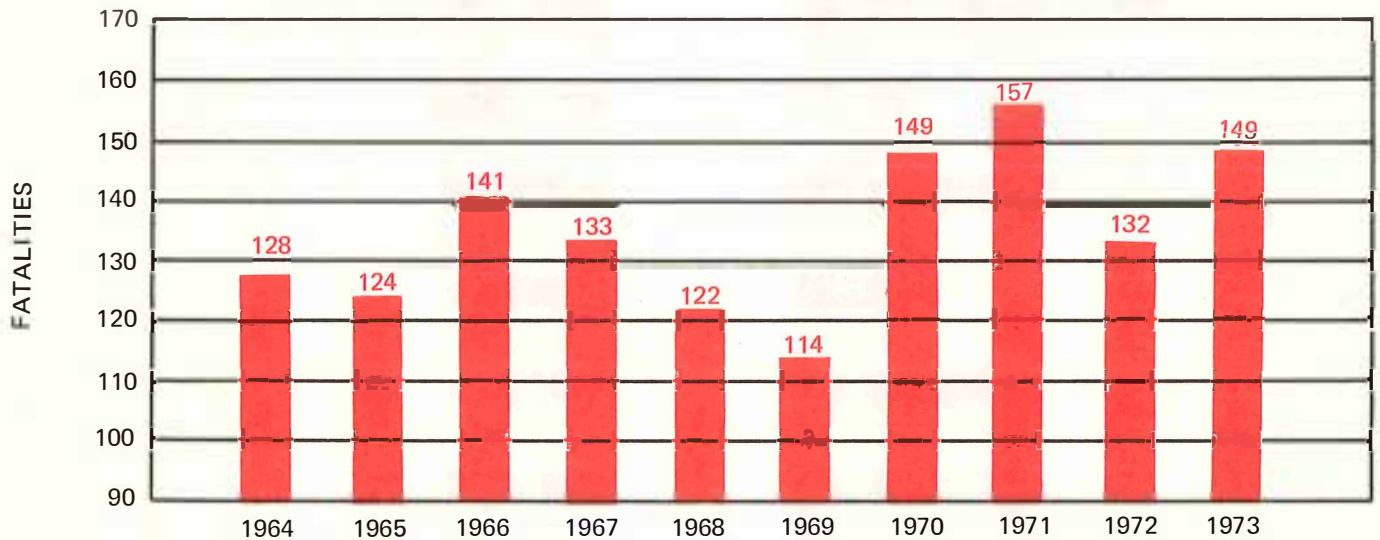
PEDESTRIAN CRASHES, 1964 - 1973



### PEDESTRIANS INJURED, 1964 - 1973



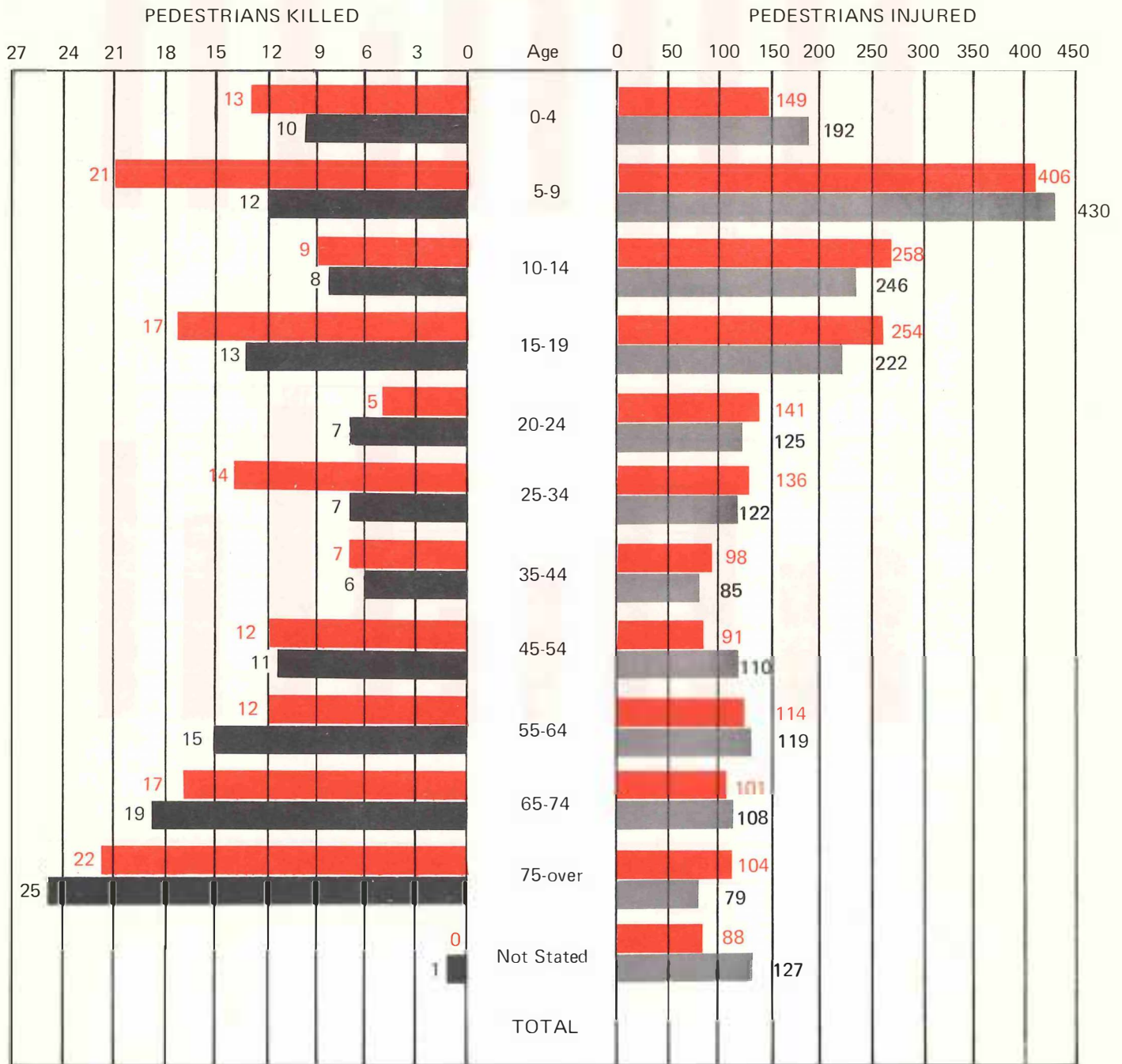
### PEDESTRIANS KILLED, 1964 - 1973



### PEDESTRIANS KILLED AND INJURED BY AGE AND SEX, 1973

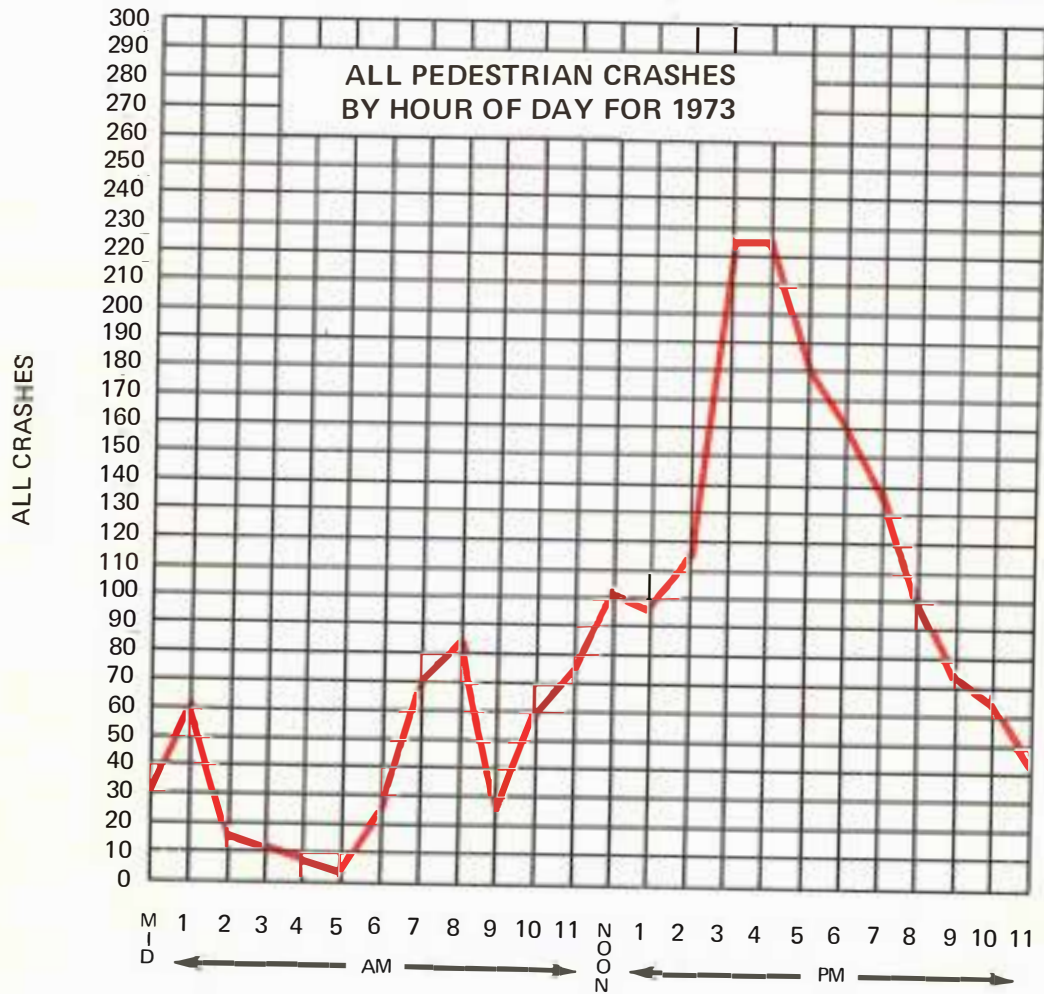
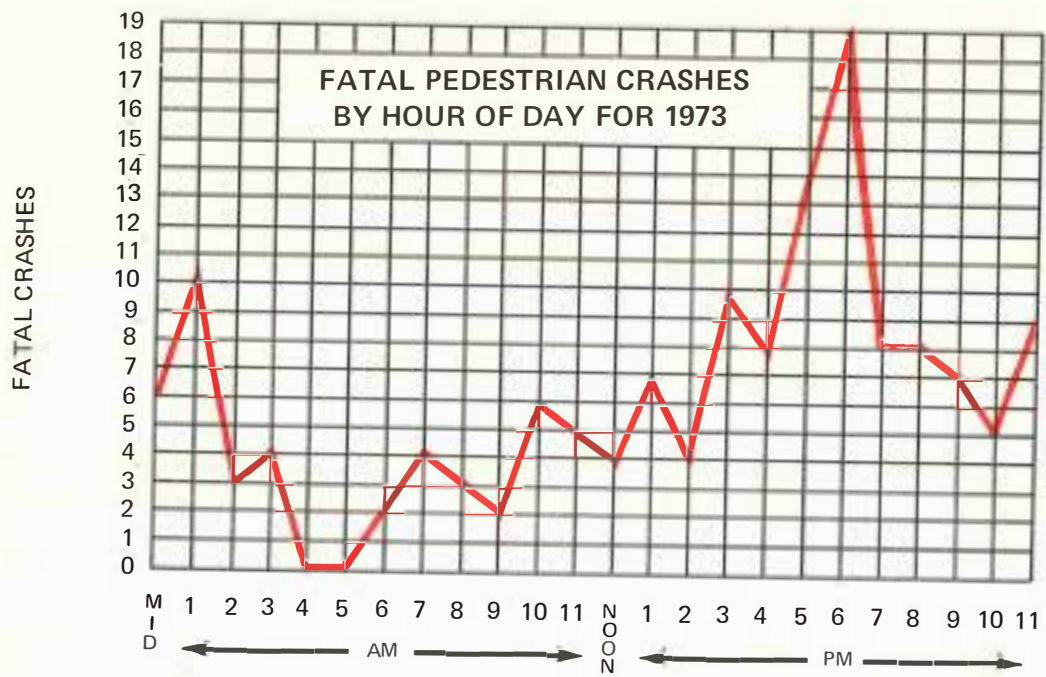
AGE GROUP	TOTAL KILLED			TOTAL INJURED		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
0-4	12	1	13	88	61	149
5-9	14	7	21	274	132	406
10-14	3	6	9	153	105	258
15-19	9	8	17	130	124	254
20-24	5	0	5	80	61	141
25-34	9	5	14	83	53	136
35-44	5	2	7	56	42	98
45-54	7	5	12	46	45	91
55-64	5	7	12	55	59	114
65-74	8	9	17	44	57	101
75-over	10	6	22	48	56	104
Not Stated	0	0	0	52	36	88
<b>TOTAL</b>	<b>93</b>	<b>56</b>	<b>149</b>	<b>1,109</b>	<b>831</b>	<b>1,940</b>

# **AGES OF PEDESTRIANS KILLED AND INJURED IN 1973 COMPARED WITH THE AVERAGE YEAR FROM 1968 - 1972**

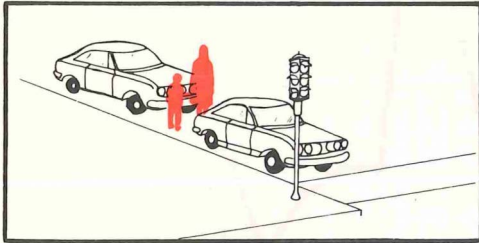


- Injuries, 1973
- Fatalities, 1973
- Fatalities, 1968-1972 Average
- Injuries, 1968-1972 Average



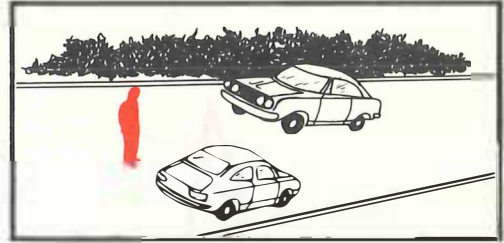


## ACTIONS OF PEDESTRIANS KILLED, 1973



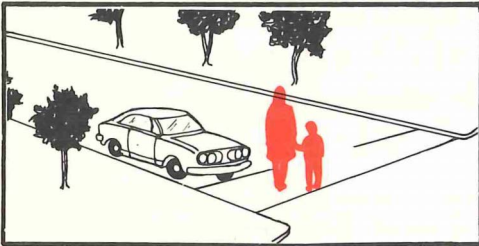
**CROSSING NOT AT INTERSECTION**

21 Killed  
304 Injured



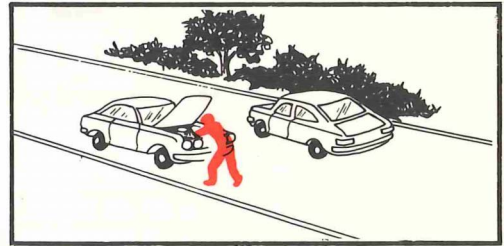
**STANDING IN ROADWAY**

9 Killed  
35 Injured



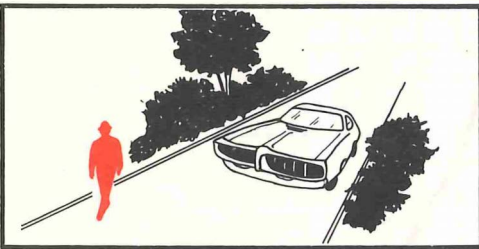
**CROSSING AT INTERSECTION**

10 Killed  
500 Injured



**WORKING IN ROADWAY**

8 Killed  
24 Injured



**WALKING IN ROAD WITH TRAFFIC**

14 Killed  
54 Injured



**PLAYING IN ROADWAY**

1 Killed  
32 Injured



**WALKING IN ROAD AGAINST TRAFFIC**

2 Killed  
16 Injured



**GETTING ON-OFF VEHICLE OR SCHOOL BUS**

2 Killed  
32 Injured

**ALL OTHERS STATED**

67 Killed  
587 Injured

**NOT STATED**

15 Killed  
356 Injured

# PEDESTRIAN ACTIONS IN 1973 MINNESOTA FATAL TRAFFIC CRASHES BY AGE

ACTION	TOTAL KILLED	0-4	5-9	10-14	15-19	20-24	25-44	45-64	65-over
Crossing at intersection	10	0	0	0	0	0	0	3	7
Crossing not at intersection	21	0	5	0	1	0	1	4	10
Walking in road with traffic	14	0	0	2	6	0	3	2	1
Walking in road against traffic	2	0	0	0	0	0	2	0	0
Standing in road	9	0	0	0	0	1	2	4	2
Entering or leaving vehicle	1	0	0	0	1	0	0	0	0
Crossing to or from school bus	1	0	1	0	0	0	0	0	0
Working on vehicle in roadway	6	0	0	1	2	1	2	0	0
Working in roadway	2	0	0	0	0	1	1	0	0
Playing in roadway	1	1	0	0	0	0	0	0	0
Other in roadway	65	11	13	6	7	1	4	8	15
Not in roadway	2	0	0	0	0	0	1	1	0
Not stated	15	1	2	0	0	1	5	2	4
TOTAL	149	13	21	9	17	5	21	24	39



PEDESTRIAN ACTIONS IN 1973 MINNESOTA PERSONAL INJURY CRASHES BY AGE

ACTION	TOTAL INJURED	0-4	5-9	10-14	15-19	20-24	25-44	45-64	65-over	NOT STATED
Crossing at intersection	500	10	63	54	42	45	79	85	105	17
Crossing not at intersection	304	22	97	45	40	14	21	27	30	8
Walking in road with traffic	54	1	5	11	23	2	4	5	3	0
Walking in road against traffic	16	0	0	5	4	1	2	3	1	0
Standing in road	35	0	4	1	7	6	11	3	2	1
Entering or leaving vehicle	23	0	3	3	5	2	5	3	2	0
Crossing to or from school bus	9	0	5	4	0	0	0	0	0	0
Working on vehicle in roadway	19	0	0	1	3	6	8	1	0	0
Working in roadway	5	0	0	0	0	0	2	1	0	2
Playing in roadway	32	10	12	8	1	1	0	0	0	0
Other in roadway	565	79	162	78	58	39	49	49	32	19
Not in roadway	22	1	1	2	7	1	3	2	3	2
Not stated	356	26	54	46	64	24	50	26	27	39
TOTAL	1,940	149	406	258	254	141	234	205	205	88

## PART 3.

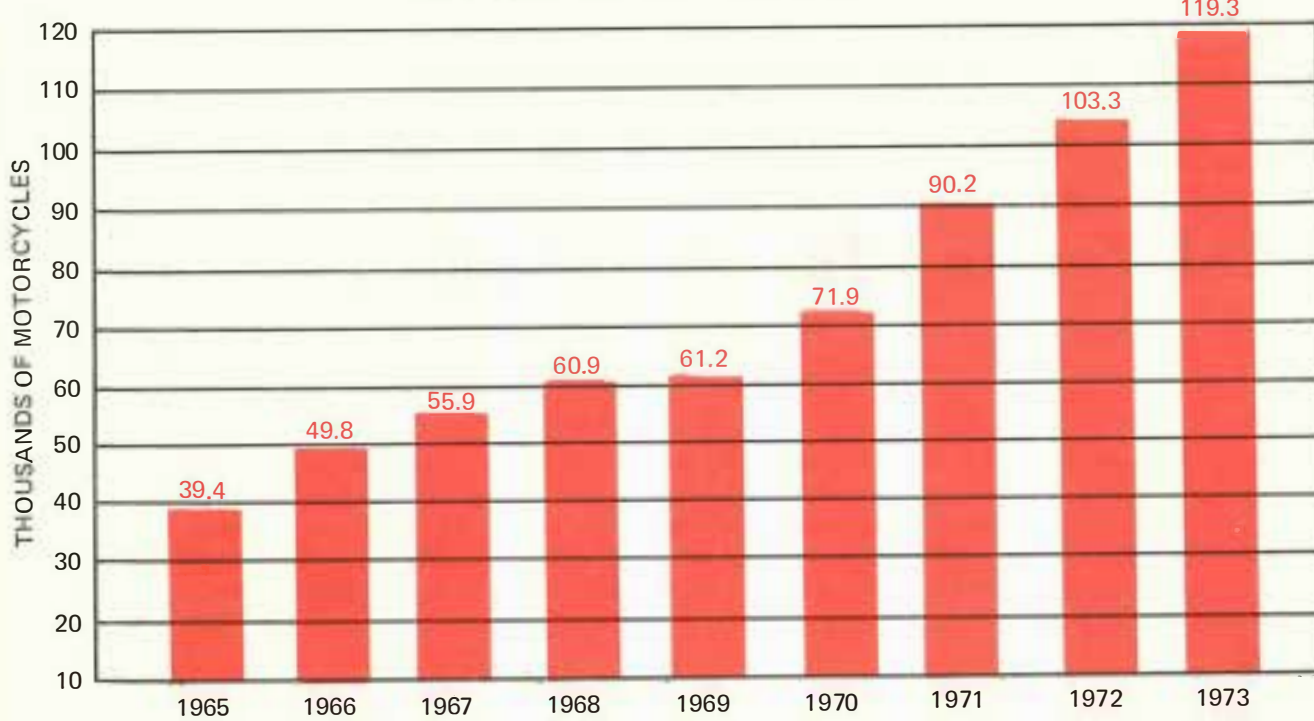
# Motorcycle - Involved Crashes

The motorcycle has evolved as an inexpensive, quick, sporty means of transportation. More and more people are purchasing and registering these two-wheeled motor vehicles each year. Many people are using them daily as a means of transportation to and from work. This increasing usage, coupled with the inherent vulnerability of the motorcycle rider, has led to steadily increasing numbers of injuries and fatalities.

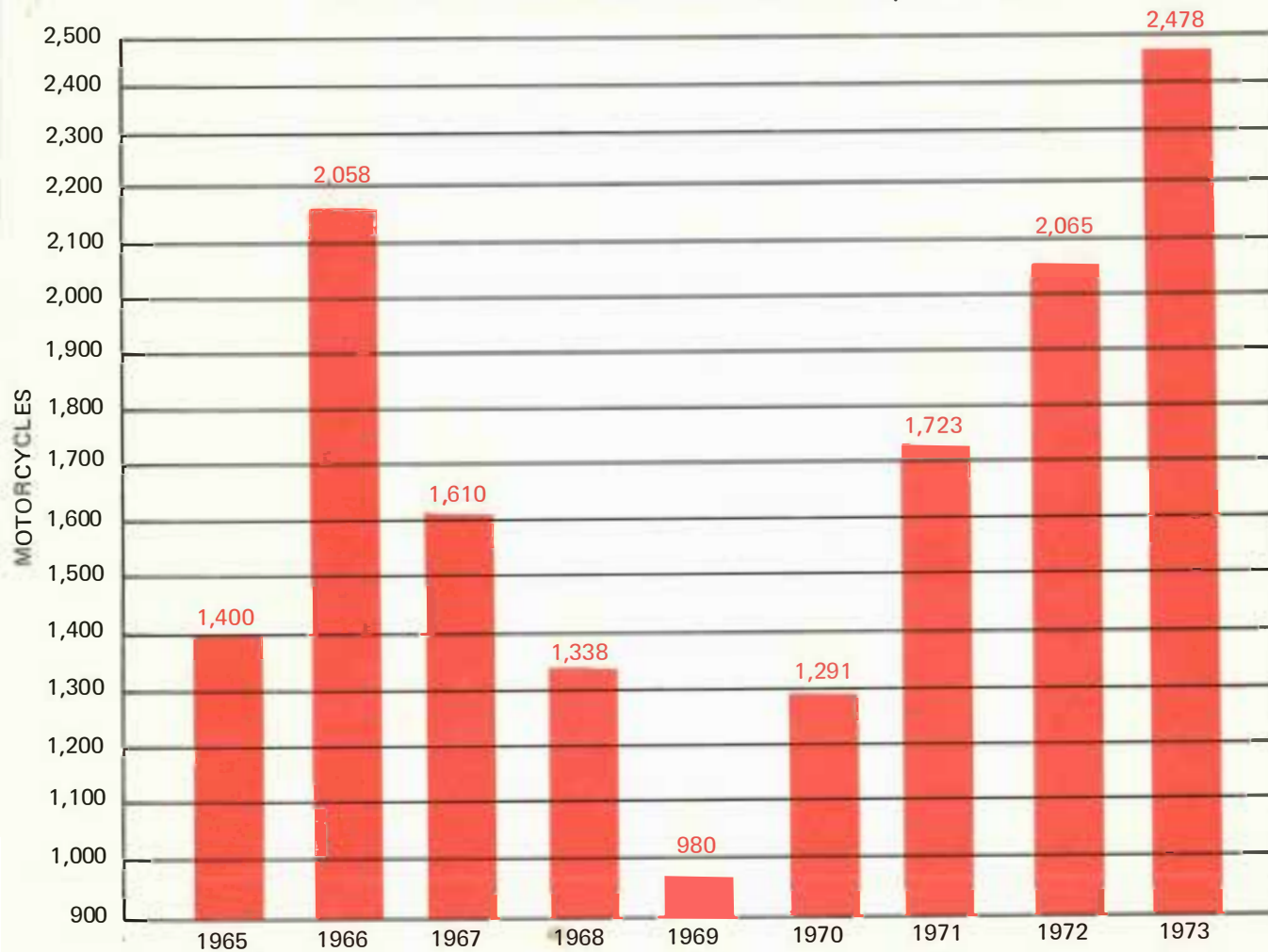
Riders of motorcycles are without doubt the most endangered segment of the motorized population which commonly utilize the state's roadways. Out of the 2,411 motorcycle-involved crashes during 1973, only 19 percent were non-injury crashes. This compares with 74.6 percent of the crashes involving all other vehicle types. Of the 2,399 injuries sustained in motorcycle-involved crashes, 12 percent were of the very minor 'C' type, whereas nearly 60 percent were fatal or serious in nature. By comparison, in crashes involving all other vehicle types, 36 percent of the injuries were of the very minor 'C' type, while less than 40 percent were serious (type 'A') or fatal.

In essence, then, motorcycle-involved crashes 1) are more likely to be fatal; 2) are conducive to more serious injuries; and 3) tend to be injurious to the motorcycle rider more often than not.

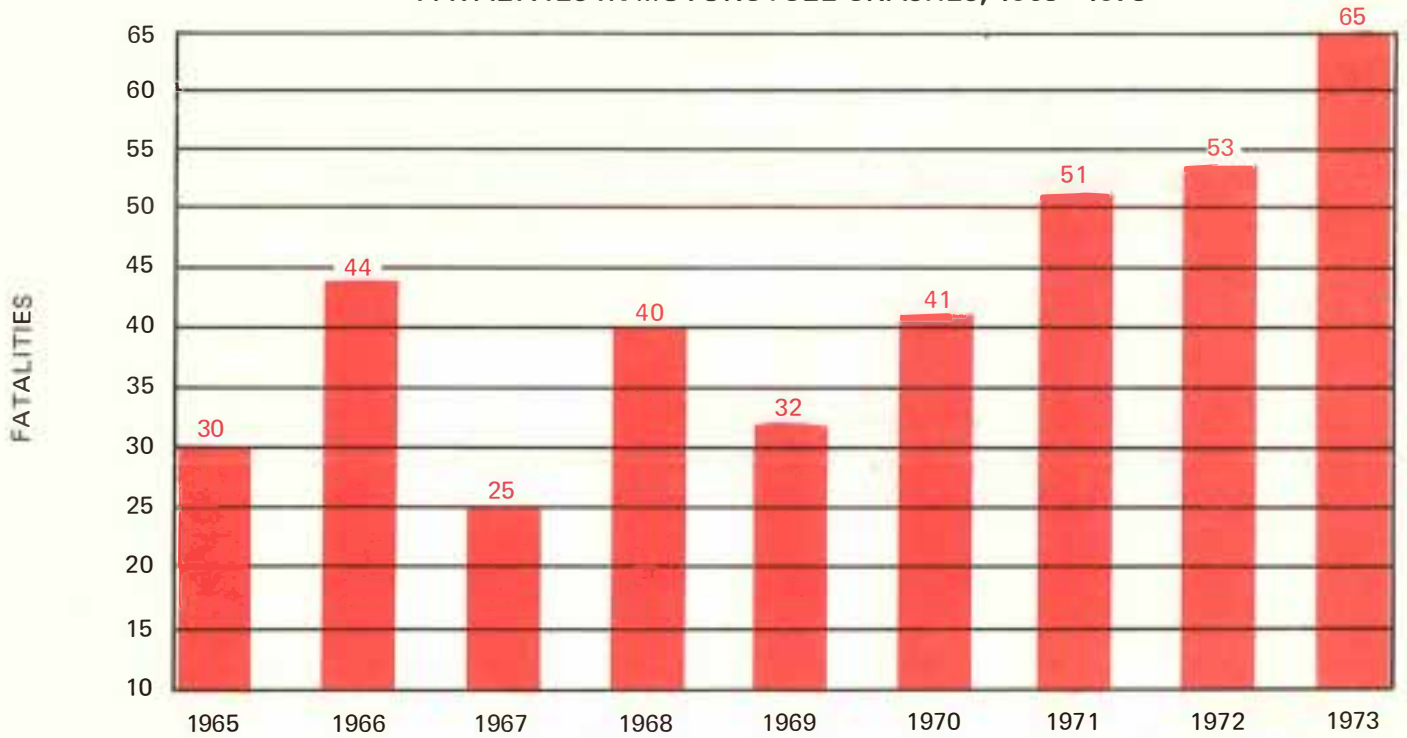
REGISTERED MOTORCYCLES, 1965 - 1973



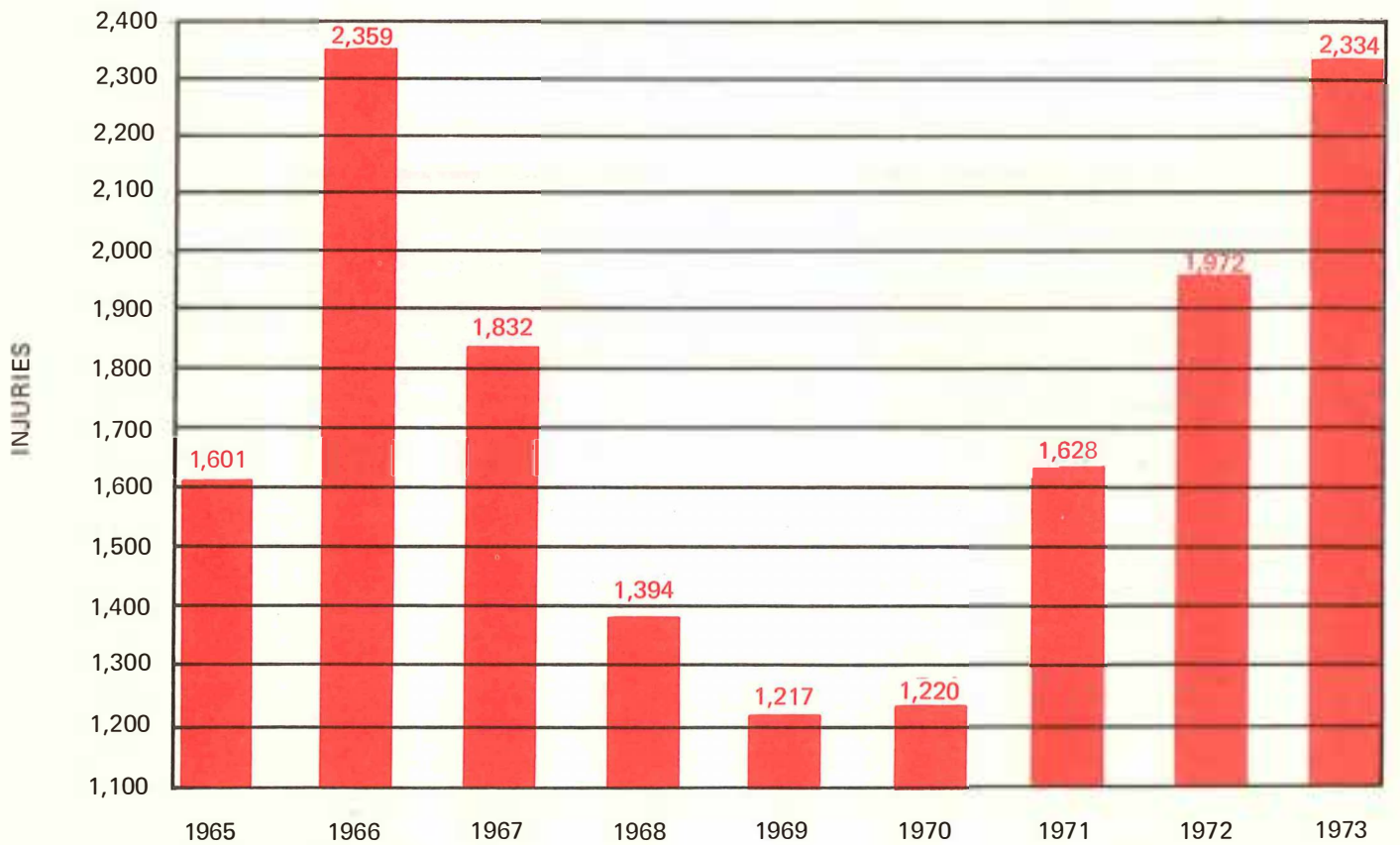
MOTORCYCLES INVOLVED IN ACCIDENTS, 1965 - 1973



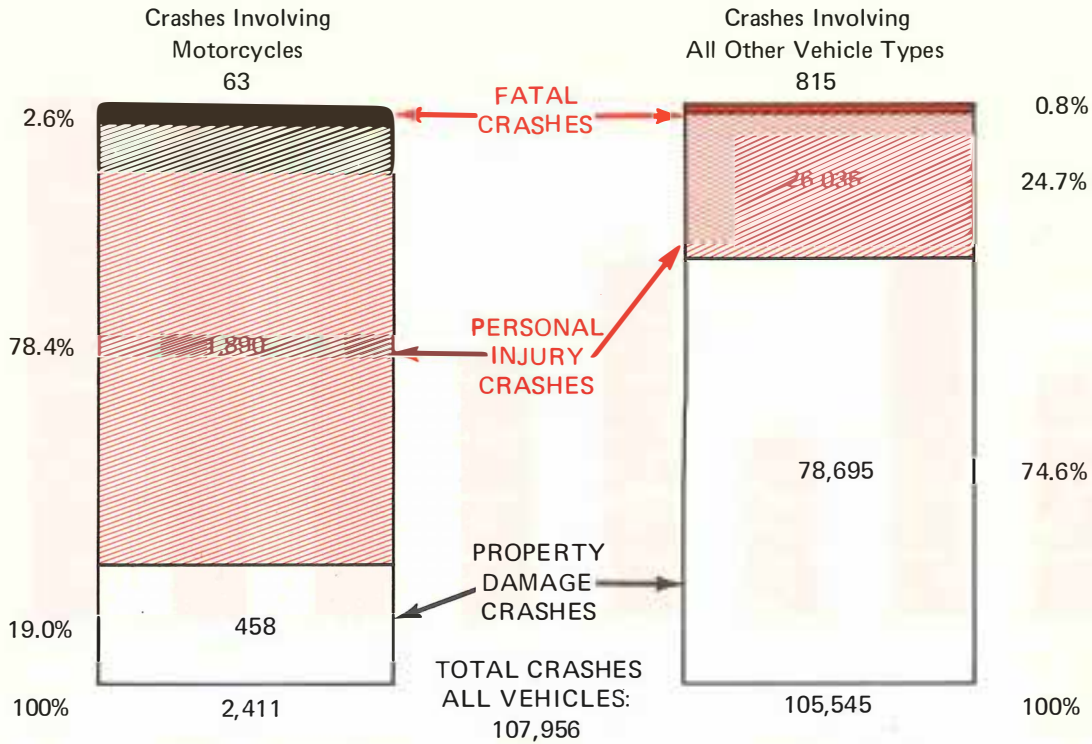
FATALITIES IN MOTORCYCLE CRASHES, 1965 - 1973



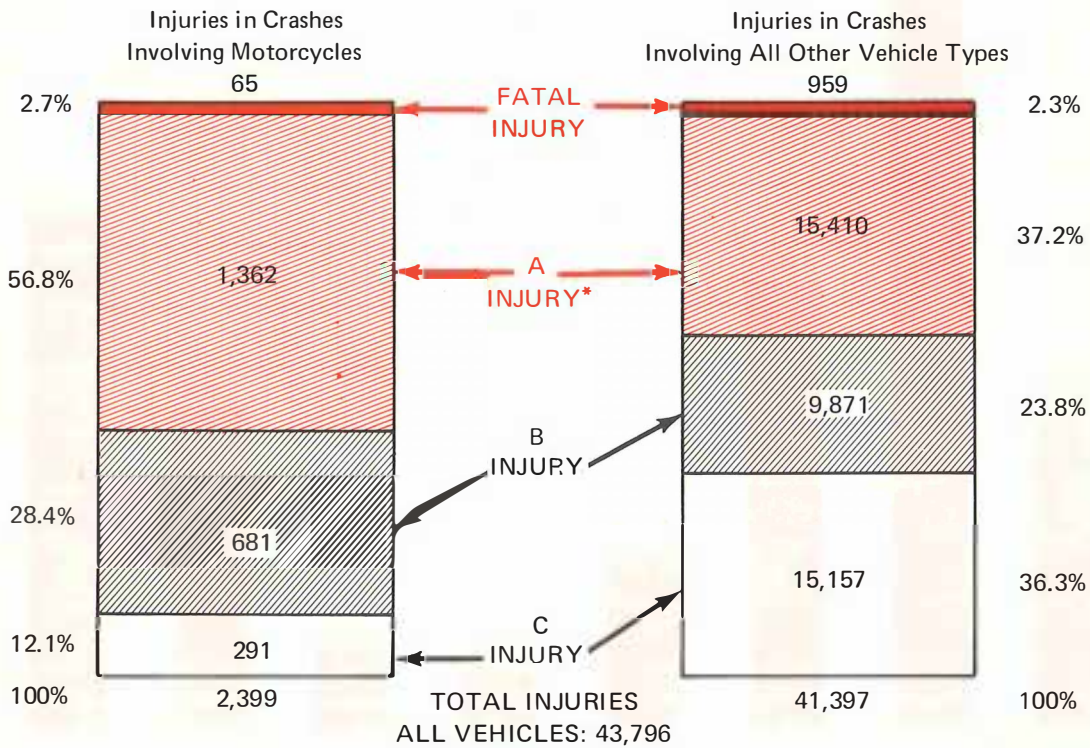
INJURIES IN MOTORCYCLE CRASHES, 1965 - 1973



## SEVERITY OF CRASHES INVOLVING MOTORCYCLES AND ALL OTHER MOTOR VEHICLES, 1973



## SEVERITY OF INJURIES INVOLVING MOTORCYCLES AND ALL OTHER MOTOR VEHICLES, 1973



\*INJURY TYPE A - Visible signs of injury, bleeding wound, distorted member  
 B - Other visible injury such as bruises, abrasions, swelling  
 C - No visible injury, but complaint of pain or momentary unconsciousness

## **PART 4.**

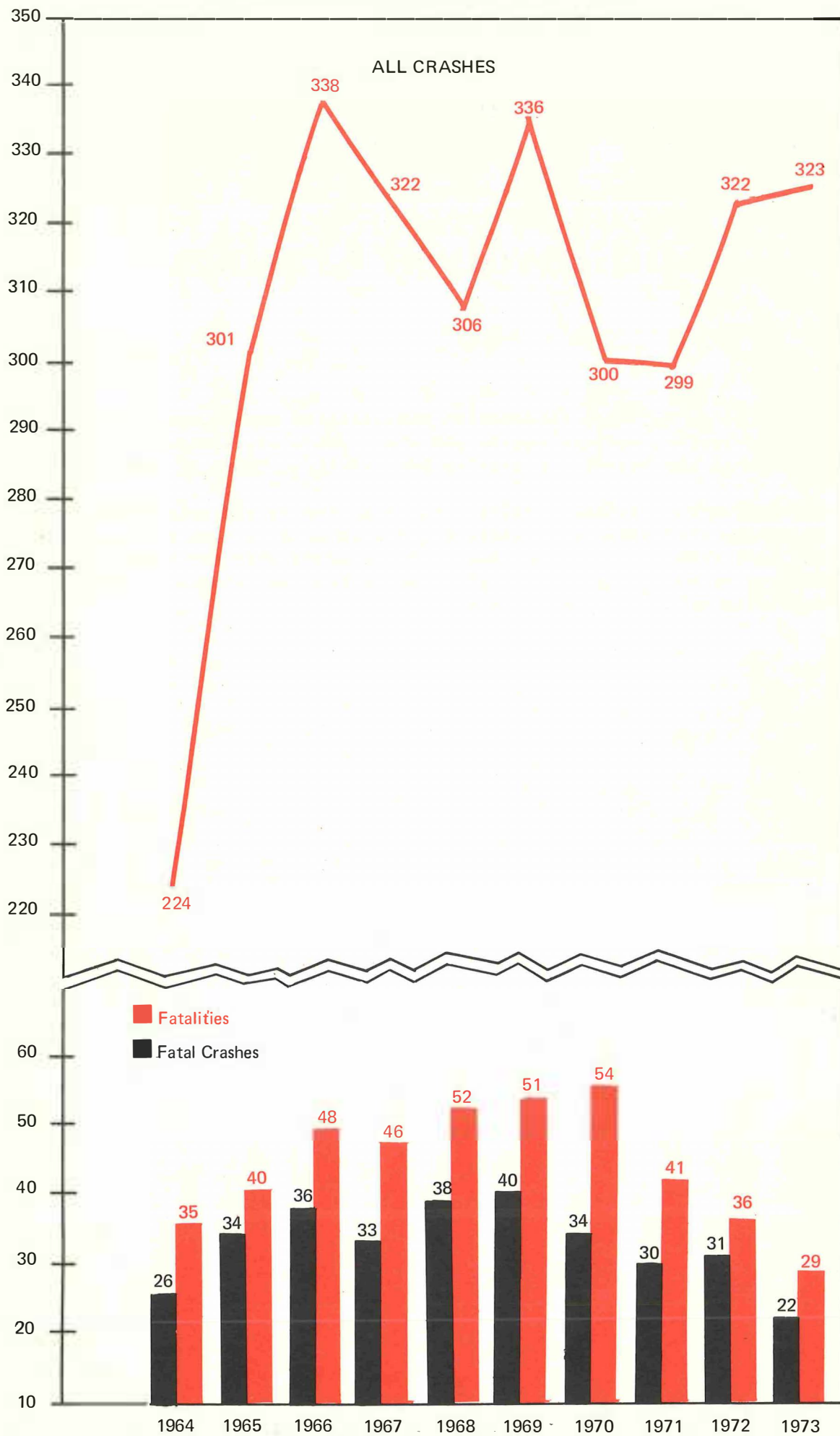
# **Train Involved Crashes**

Although there is no reliable information available as to an increase or decrease in frequency of contact between trains and motor vehicles, accurate information is available as to the outcome of crashes between these types of transportation.

In 1973 there were 323 crashes involving railroad trains and motor vehicles. Twenty-two of these crashes were fatal, killing 29 people. The totals and proportions have remained much the same over the years with the chances for fatality always being considerably higher in crashes involving trains than in crashes involving other types of vehicles.



# NUMBER OF TRAIN CRASHES, 1964 - 1973





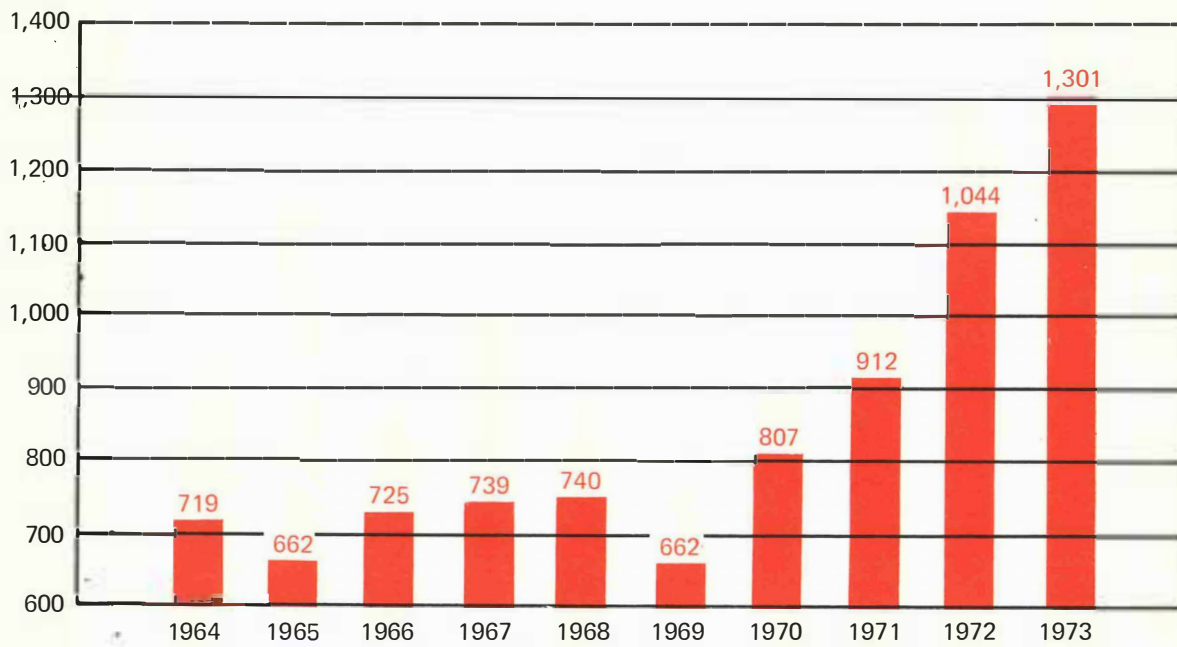
## **PART 5.**

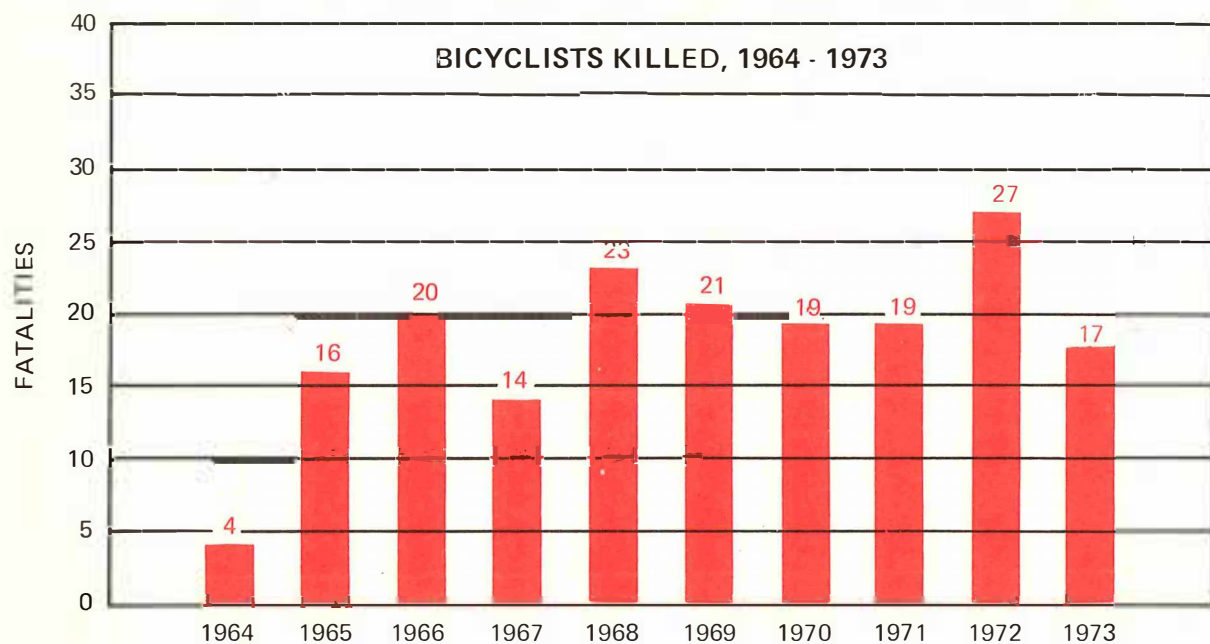
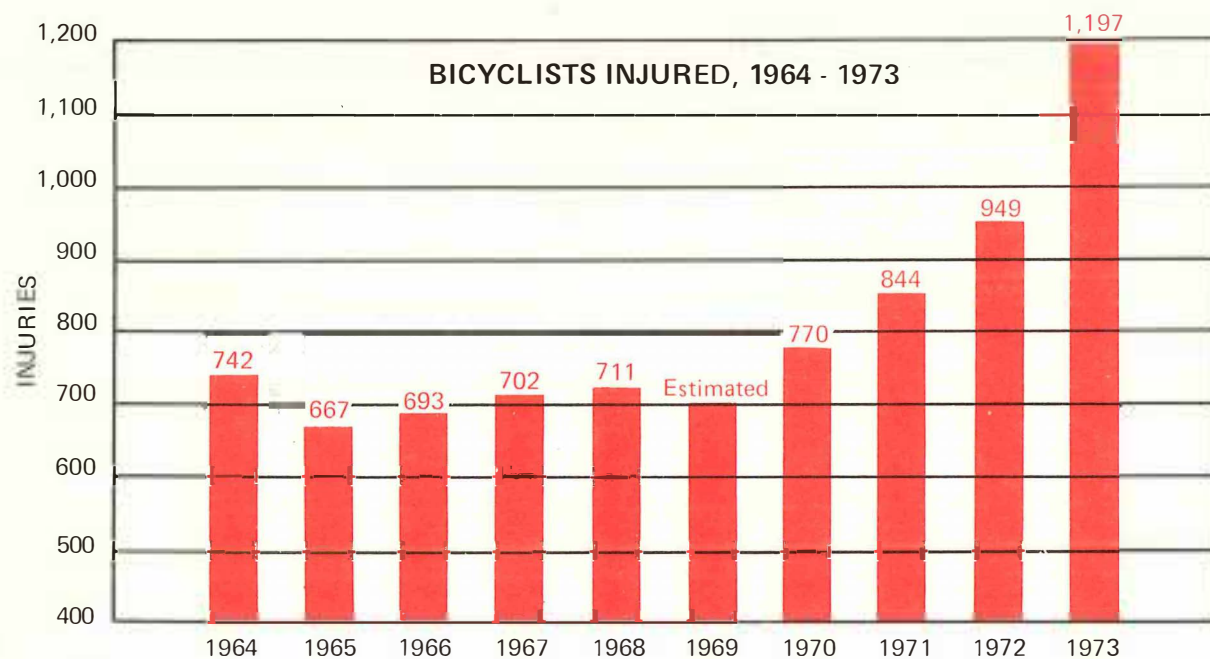
# **Bicycle - Involved Crashes**

The increasing popularity of the bicycle as a means of transportation, method of exercise, and source of pleasure has obviously contributed to an increase in the numbers of this vehicle type on the roadways and consequently increased the chances for bicyclist involvement in motor vehicle crashes.

The number of bicycle crashes climbed to an all time high for the fourth straight year during 1973, despite several safety programs aimed specifically at this population. Fortunately, the majority of these accidents produced injury rather than death, with 17 bicyclists killed and another 1,197 injured in the 1,301 bicycle-involved crashes. The 17 bike deaths represents a significant drop from the 27 deaths in 1972, and marks the lowest bike fatality figure since 1967 when 14 were killed.

### BICYCLE CRASHES, 1964 - 1973





**BICYCLISTS KILLED AND INJURED BY AGE AND SEX, 1973**

AGE GROUP	BICYCLISTS KILLED			BICYCLISTS INJURED		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
0-4	1	0	1	15	5	20
5-9	3	1	4	167	61	228
10-14	4	0	4	320	110	430
15-19	2	3	5	204	120	324
20-24				55	40	95
25-34	2	1	3	30	12	42
35-44				11	1	12
45-54				8	3	11
55-64				4		4
65-74				2		2
75-over				3		3
Not Stated				22	4	26
<b>TOTAL</b>	<b>12</b>	<b>5</b>	<b>17</b>	<b>841</b>	<b>356</b>	<b>1,197</b>



## PART 6.

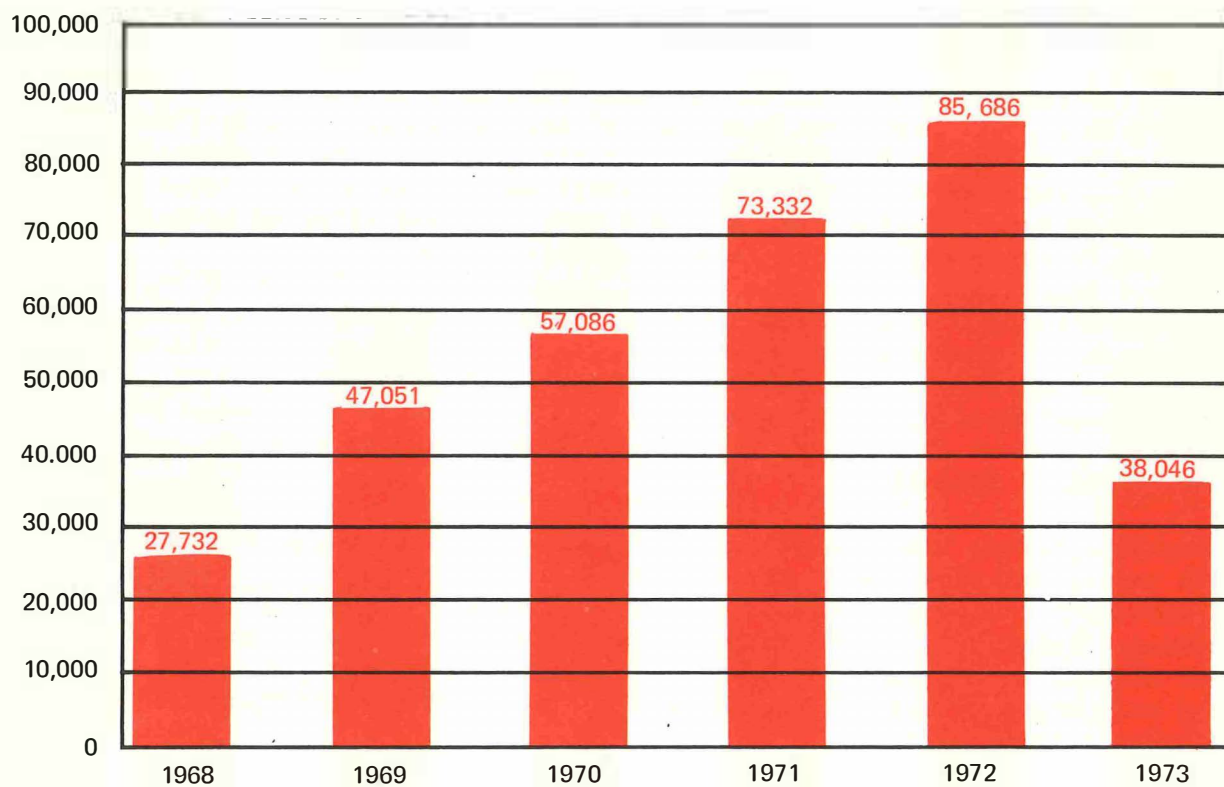
# Snowmobile - Involved Crashes

Like the motorcycle, the snowmobile has entered the limelight in the past few years as a means of opening up Minnesota's great outdoors to larger and larger numbers of people. As an indication of this trend, up through 1972 the number of snowmobile registrations in any one year had more than tripled since 1968. During 1973, however, this ever increasing trend took a sharp downward swing, and snowmobile registrations were little more than half of the records high set in 1972. This may indicate that purchases of new snowmobiles, as well as re-registration of old ones, has 1) reached saturation levels, or 2) decreased due to climactic conditions not conducive to great quantities of snow cover during the 1973 winter periods. The fuel shortage may also have affected winter recreational trends enough to drop new snowmobile sales.

Although registrations have fallen off significantly, snowmobile-involved motor vehicle crashes reached a record high of 149 in 1973. Fortunately, the majority of these accidents were of the personal injury and property damage type, while 10 of them were fatal, killing 11 people. This constitutes a decrease from the peak fatality year of 1972, but is still significantly larger than the previous four year period of 1968-1971.

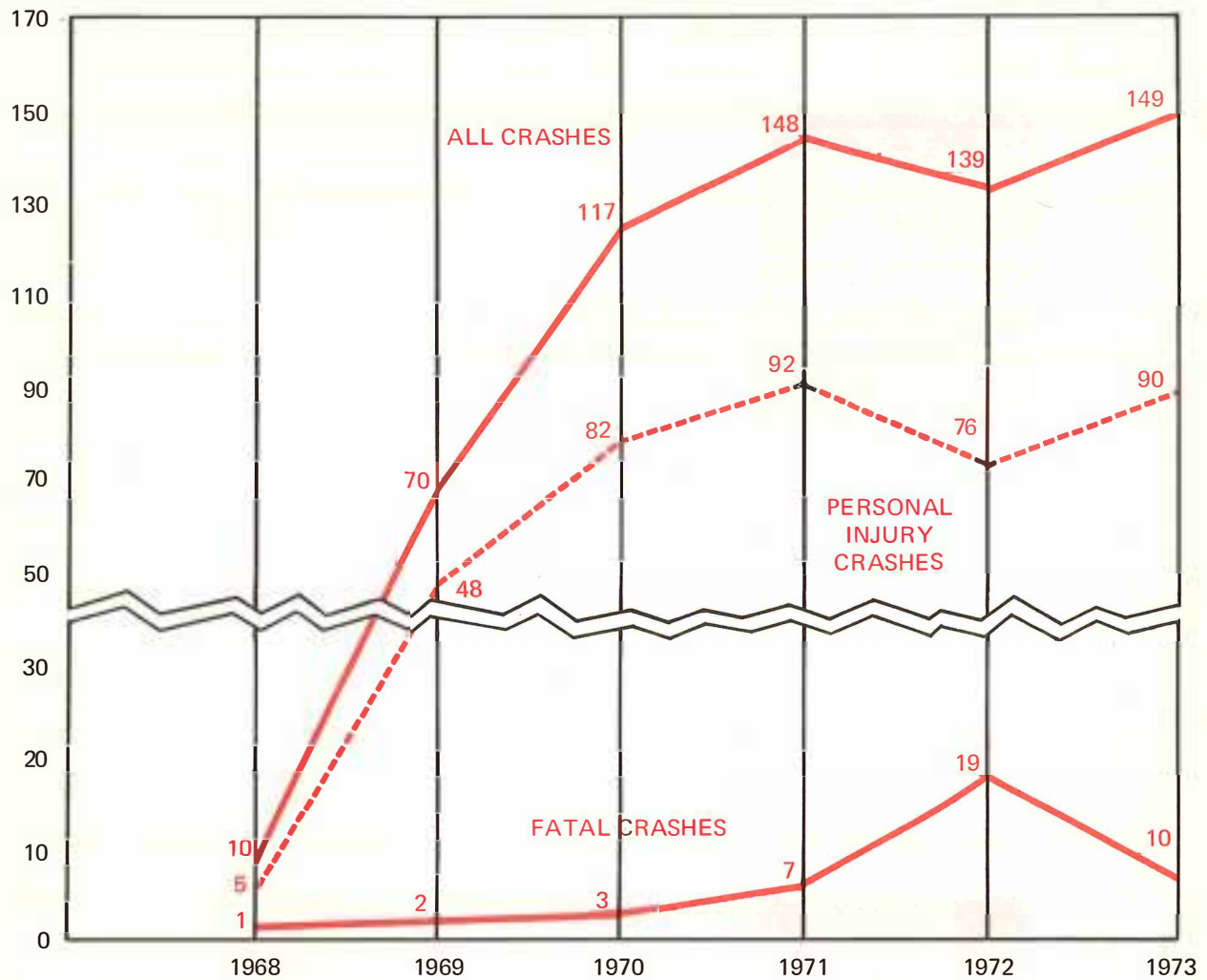
The snowmobile rider, like the motorcycle rider, is a very vulnerable individual. The 1973 statistics showed that the snowmobile rider involved in a crash had a better chance of escaping without any type of injury, but had a greater chance of becoming a fatality than the motorcyclist. While as a group, snowmobile-involved crashes were proportionately less serious (i.e., more of them produced only property damage) than motorcycle accidents, proportionately more of them were fatal accidents.

### SNOWMOBILE REGISTRATIONS ISSUED, 1968 - 1973





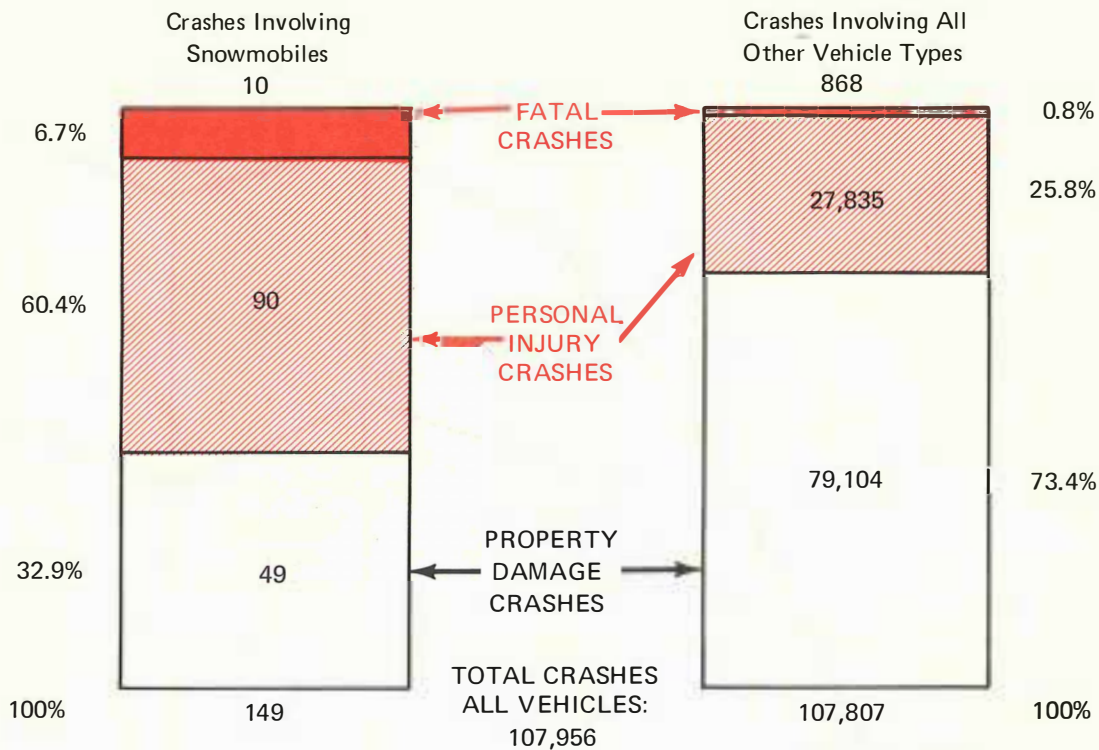
### SNOWMOBILE CRASHES, 1968 - 1973



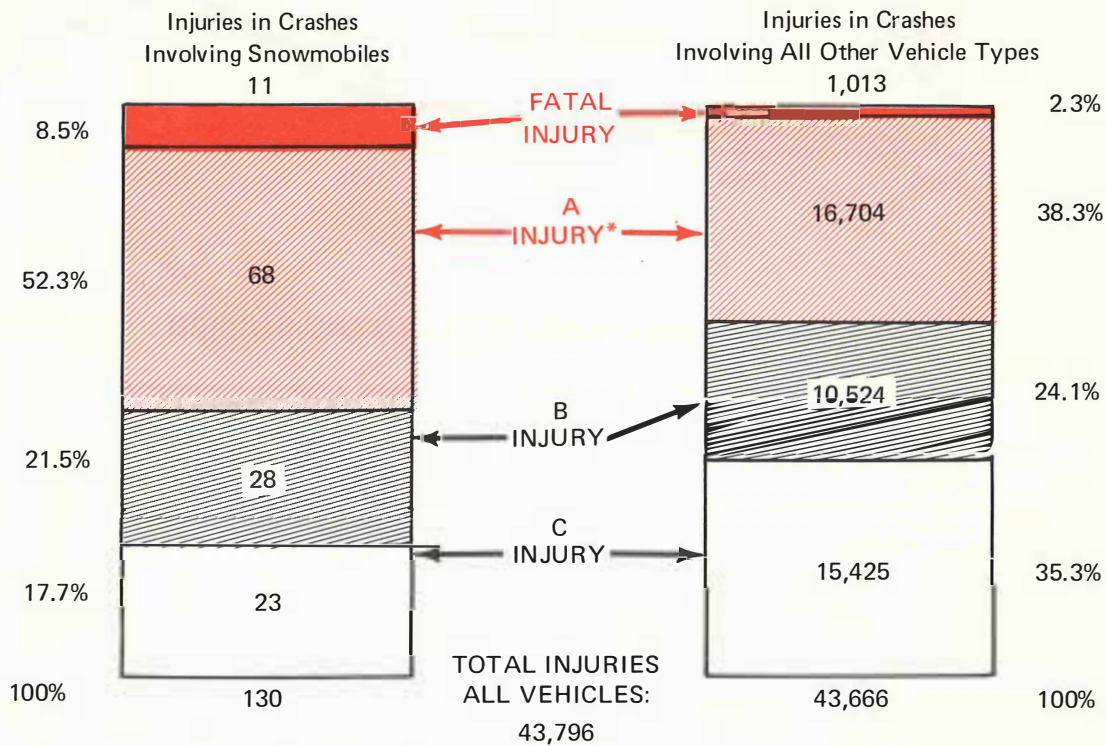
### TYPES OF CRASHES AND NUMBER KILLED AND INJURED

YEAR	ALL CRASHES	FATAL CRASHES	PERSONAL INJURY CRASHES	PROPERTY DAMAGE CRASHES	NUMBER KILLED	NUMBER INJURED
1968	10	1	5	4	1	6
1969	70	2	48	20	3	61
1970	117	3	82	32	3	100
1971	148	7	92	49	8	129
1972	139	19	76	44	19	94
1973	149	10	90	49	11	119

## SEVERITY OF CRASHES INVOLVING SNOWMOBILES AND ALL OTHER MOTOR VEHICLES, 1973



## SEVERITY OF INJURIES INVOLVING SNOWMOBILES AND ALL OTHER MOTOR VEHICLES, 1973



\* INJURY TYPE A - Visible signs of injury, bleeding wound, distorted member  
 B - Other visible injury such as bruises, abrasions, swelling  
 C - No visible injury, but complaint of pain or momentary unconsciousness

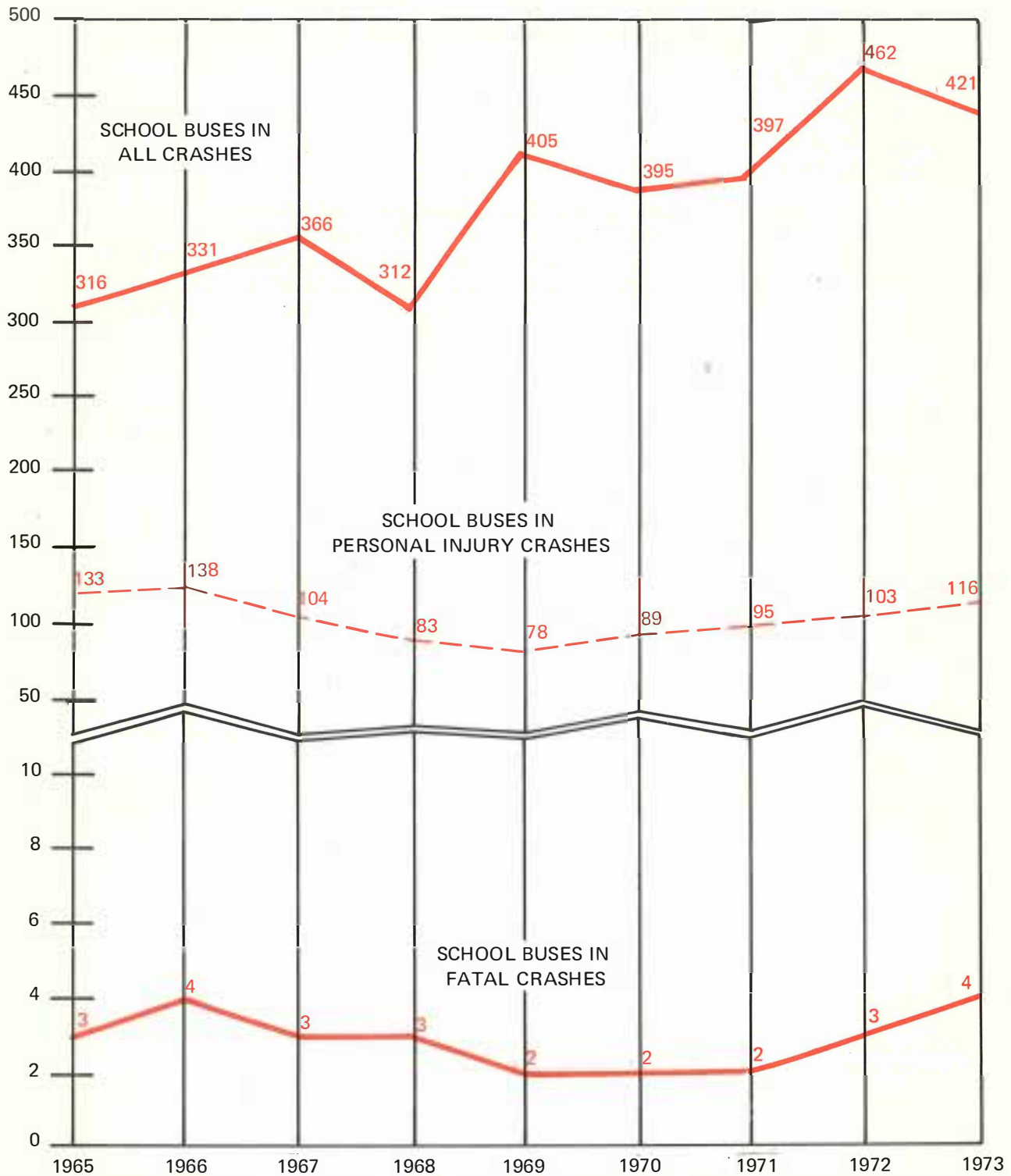
## **PART 7.**

# **School Bus - Involved Crashes**

Over the years school buses have generally tended to contribute very little to the state crash picture. In 1973, 421 school buses were involved in 417 crashes. This is less than one-half of one percent of all crashes involving motor vehicles in the state. Of this group, 116 school buses were involved in 113 personal injury accidents and 4 fatal crashes, killing 4 people. One of the four fatalities was the driver of the other vehicle involved, one was a bicyclist and two were pedestrians, one of which was a young child running to meet the bus.

The statistics from 1965 through 1973 shed a very favorable light upon the school bus as a mode of transportation. The number of crashes involving school buses has gone generally upward, which is understandable considering that more buses were on the road transporting more people in recent years. Fatal crashes have fluctuated around a mid-point of three per year since 1965, peaking at four crashes in 1966 and 1973.

SCHOOL BUSES INVOLVED IN CRASHES, 1965-1973



## PART 8.

# Teen-Age Driver Crash Facts

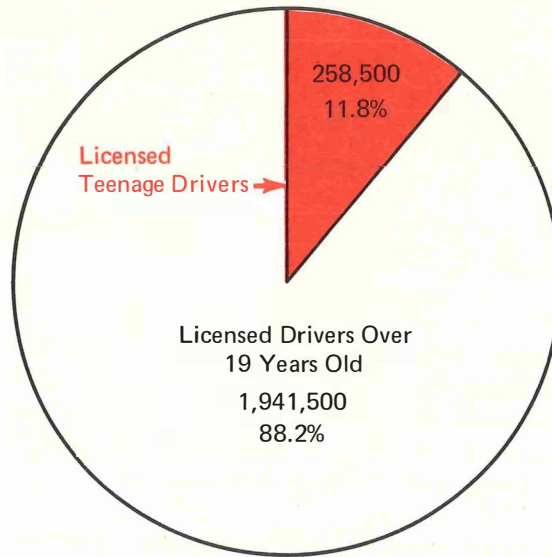
The teen-age driver has been stereotyped as a bad risk, both by insurance companies and by older drivers with whom they share the highways and streets. To a certain degree, such typical appraisals of teen-age drivers are correct. In light of recent statistical comparisons, however, teen-age drivers show definite improvement and deserve a closer look and fairer evaluation.

The teen-age driver has always been disproportionately involved in motor vehicle crashes in relation to their actual appearance in the licensed driver population. Although this phenomenon is not unusual (since it is true of most age groups), teen-age drivers over the years have normally shown a larger disproportion than other age groups with the exception of the 20-24 category, which exhibits very nearly the same amount of disproportion.

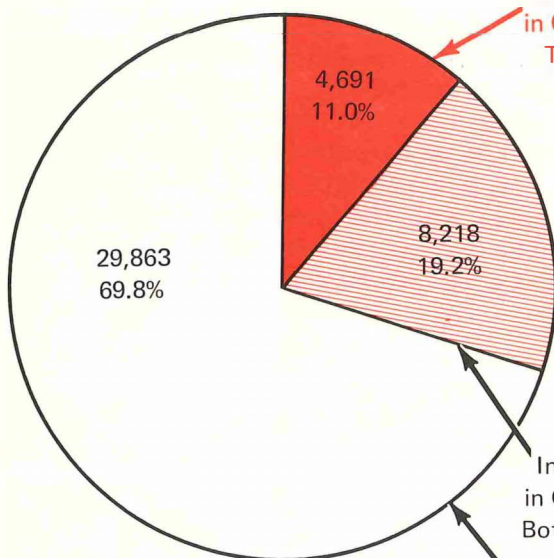
It must not be construed that this disproportion has remained static; in fact, from 1964 to 1968 there had been a general widening of this gap. Since 1968, however, there has been a general narrowing (i.e., decrease) in this disproportion. Other statistics tend to show the same trend. For example, since 1967 the proportion of teen-agers involved in crashes compared to the total teen-age licensed driver population has generally decreased from 15.6 percent to 11.5 percent in 1973.

What this seems to show is that programs aimed at the beginning driver are paying off in terms of reduced probability of accident involvement. The teen-age driver today is a much more experienced individual going into his driving career than his counterpart of five or ten years ago. Yet the aforementioned disproportion continues to exist. The reason why is hidden in a combination of factors, some of which are mobility (i.e., exposure), attitude, and the somewhat fading, yet still strong, mystique of the automobile for the young, which results in greater manipulation and experimentation, and ultimately in greater probability of crash involvement.

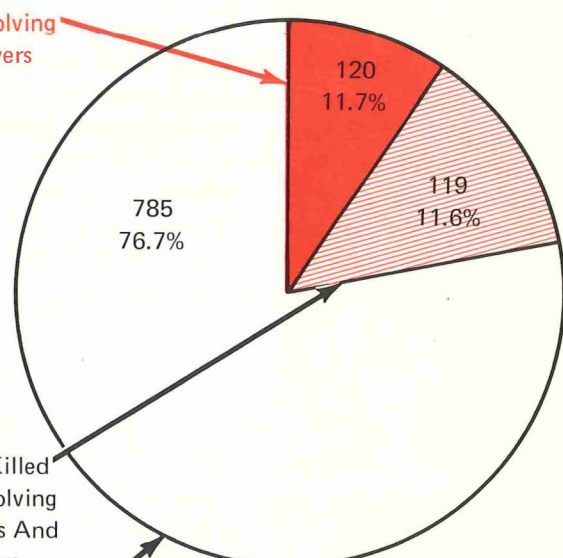
TOTAL ALL LICENSED DRIVERS  
2,200,000



TOTAL INJURED  
42,772



TOTAL KILLED  
1,024



Injured and Killed  
in Crashes Involving  
Teenage Drivers  
Only

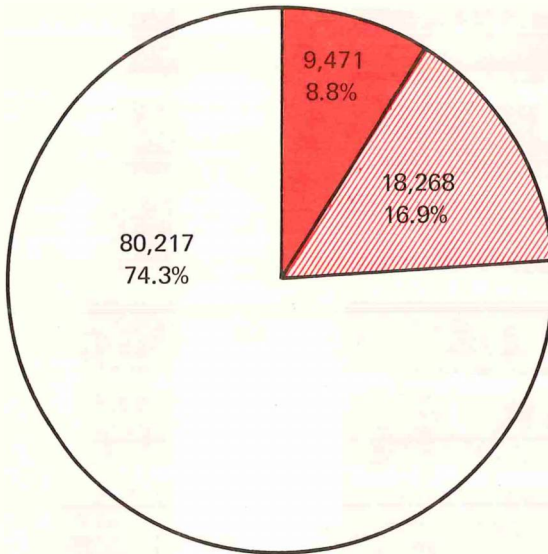
Injured and Killed  
in Crashes Involving  
Both Teenagers And  
Older Drivers

Injured and Killed  
in Crashes Involving  
Only Drivers Over 19 Years Old

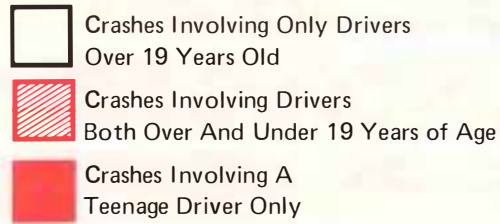
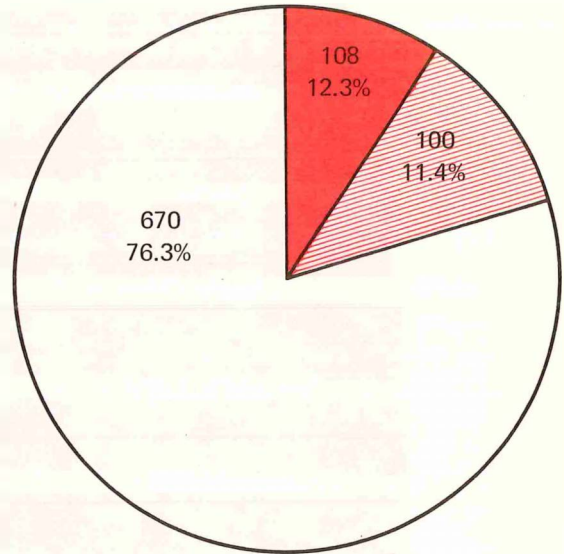


## TEENAGE DRIVING RECORD, 1973

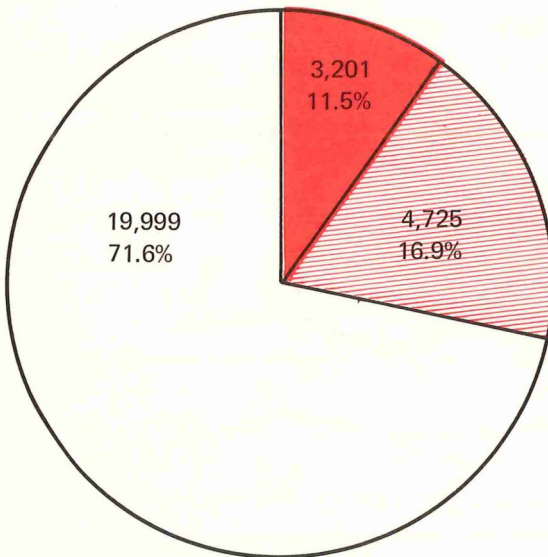
**TOTAL CRASHES**  
107,956



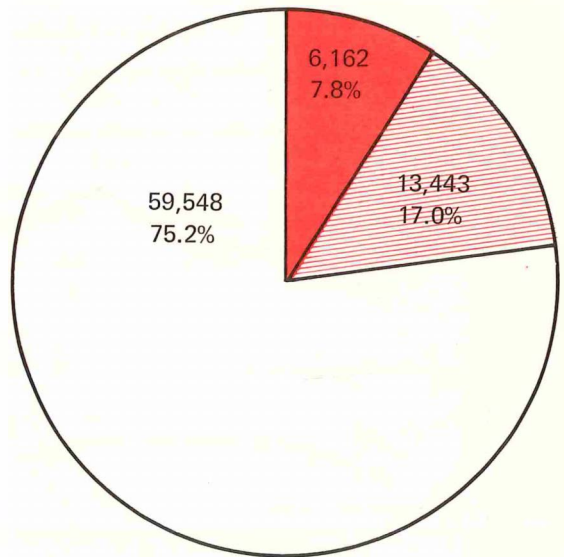
**FATAL CRASHES**  
878



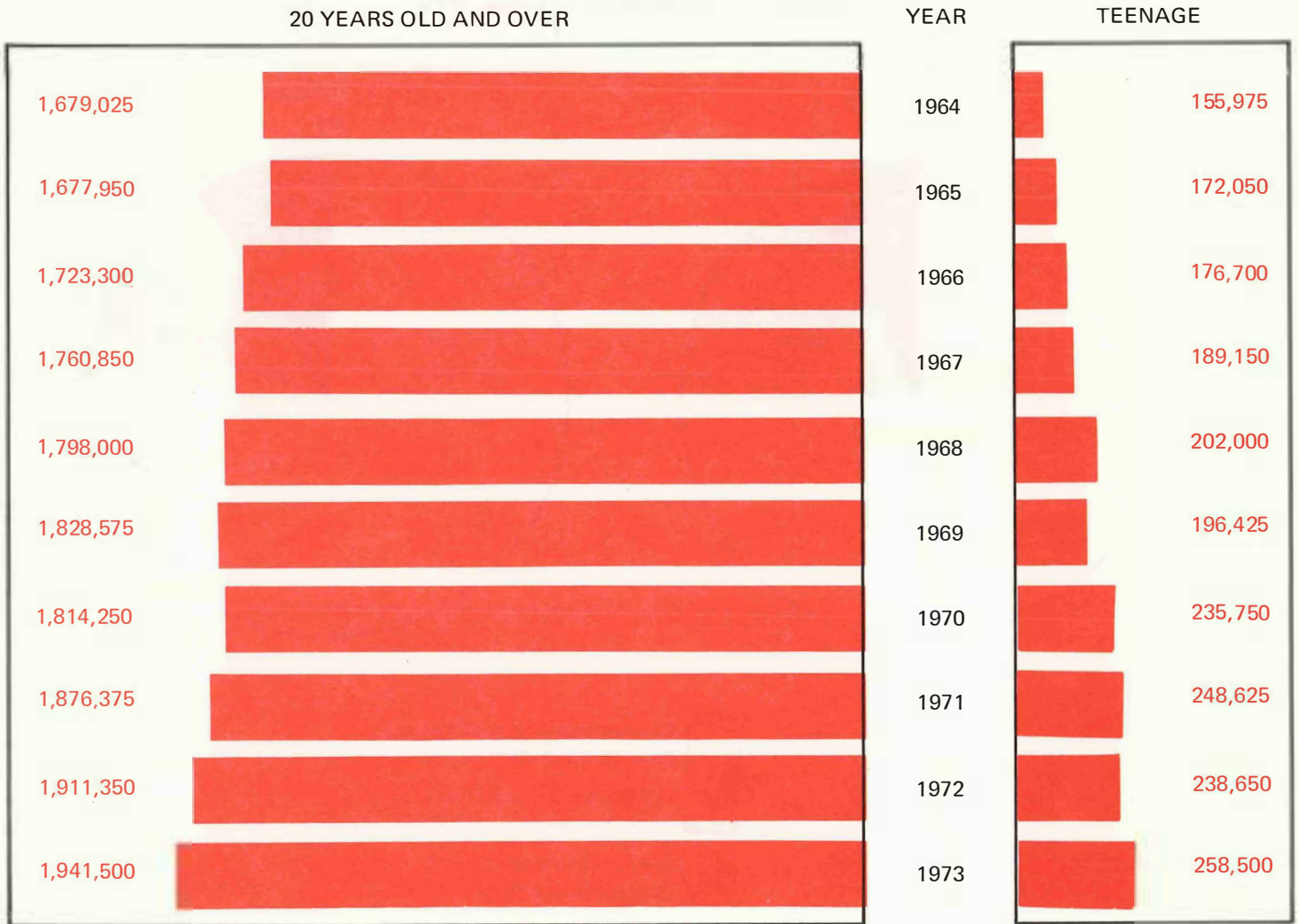
**PERSONAL INJURY CRASHES**  
27,925



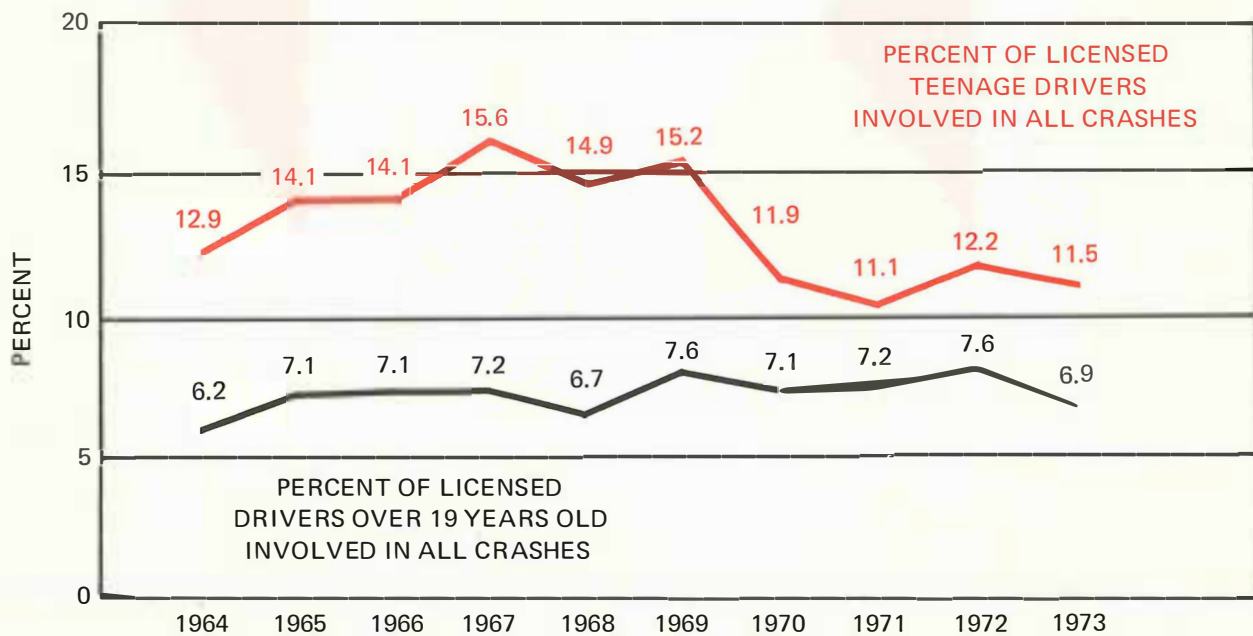
**PROPERTY DAMAGE CRASHES**  
79,153



# NUMBER OF LICENSED DRIVERS BY AGE, 1964 - 1973

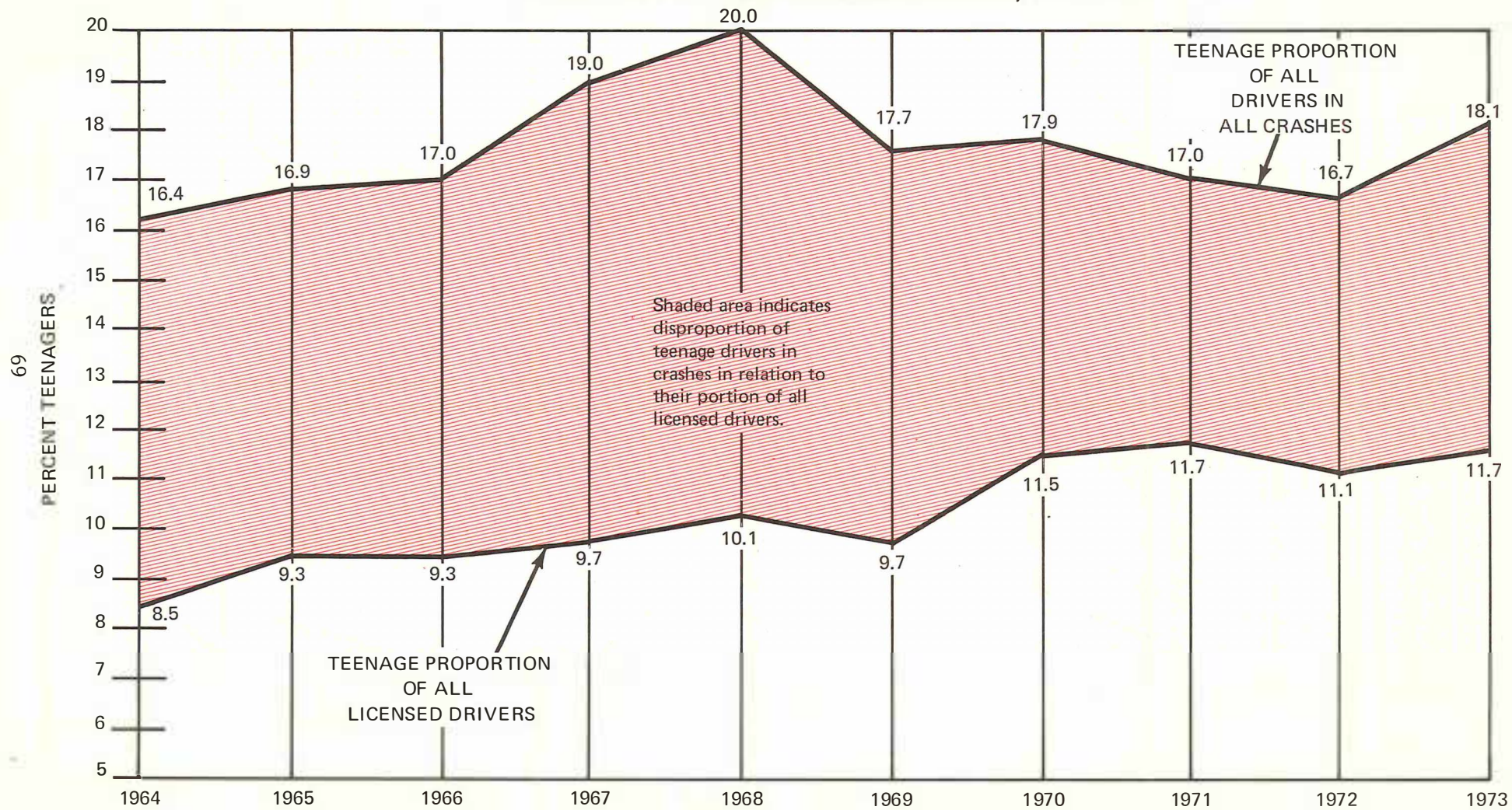


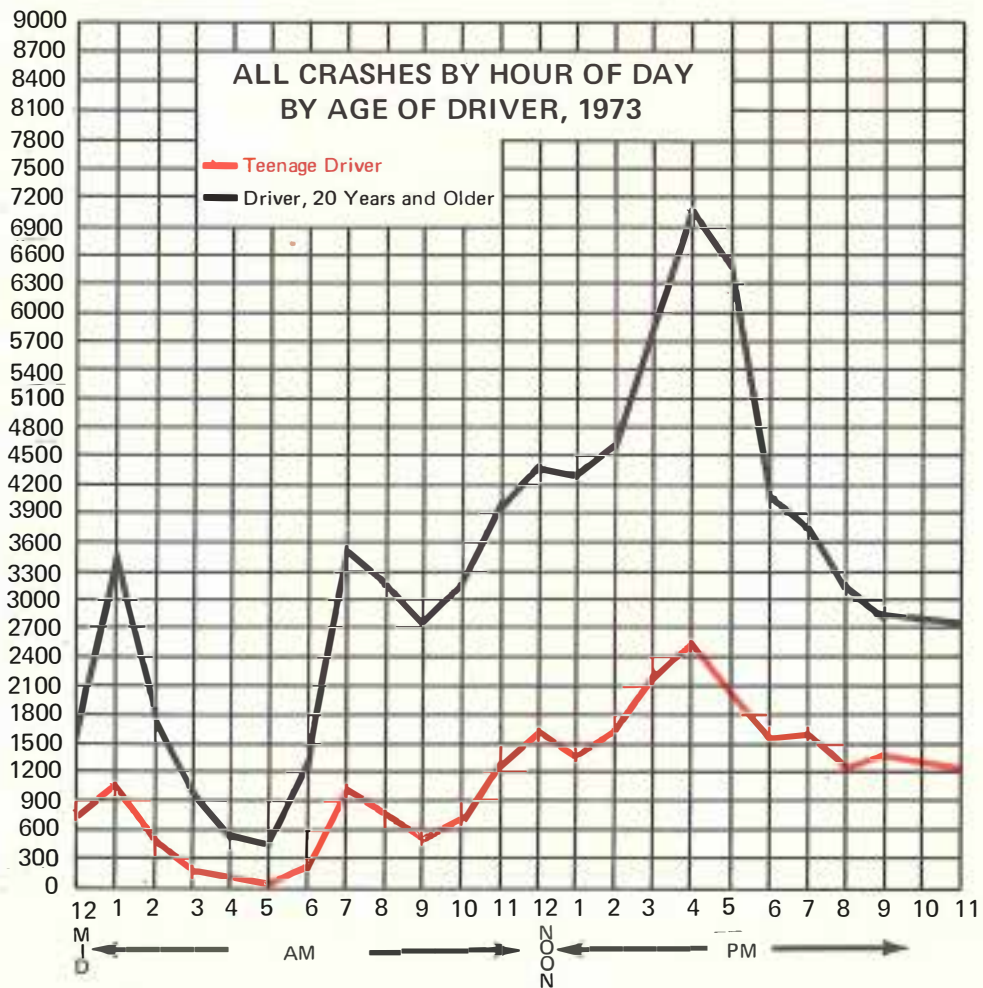
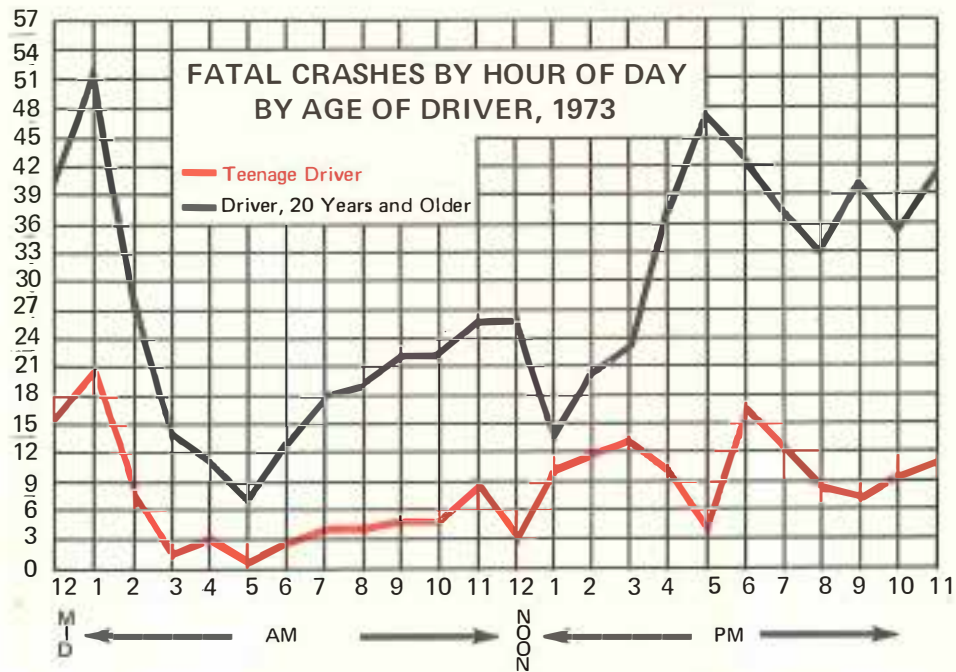
## PERCENT OF TEENAGE AND OTHER LICENSED DRIVERS INVOLVED IN CRASHES, 1964 - 1973





TEENAGE DRIVERS AS A PERCENT OF ALL LICENSED DRIVERS  
AND AS A PERCENT OF DRIVERS IN CRASHES, 1964 - 1973





## PART 9.

# Drinking Drivers and Pedestrians

In 1973, 561 drivers were killed in motor vehicle crashes. Alcohol content was determined for 406 (72.4 percent) of these drivers, with 59.1 percent testing positive and at or above the .10 blood alcohol level considered illegal by Minnesota Law. The drinking driver tends to be a danger not only to himself, but to all others sharing the road with him. During 1973, 35.0 percent of the 240 alcohol-positive drivers were involved in multi-vehicle crashes, and an additional 60.0 percent were involved in single-car "ran-off-the-road" and "fixed object" type crashes.

June, August and October provided the largest portions of positive-testing fatal cases, with 13.7 percent, 11.3 percent and 11.3 percent respectively. The hours of midnight to 3 a.m. contributed 35.4 percent of all alcohol-positive cases, while the hours of 6 to 9 p.m. and 9 p.m. to midnight contributed the next highest proportions at 16.7 percent and 24.6 percent respectively.

In 1973, there were 13,047 DWI (driving while intoxicated) convictions. Out of this group, 16.0 percent of 2,094 drivers were convicted for the second time or more. Repeat convictions begin to fall off quite sharply after the second conviction, and there are very few people who survive or are caught and convicted five times or more (less than one percent of the total repeat convictions in any one year). Along with this increased number of DWI convictions, the number of revocations under the implied consent law reached an all time high of 877 cases during 1973.

Out of the 149 pedestrians killed in 1973, 73 were tested for alcohol. This is a substantial increase over previous years in which the testing program was operative. Of these 73 alcohol-tested pedestrian fatalities, 30 had alcohol in their system, with 23 testing at or above the 0.10 percent BAC level. Of the positive-testing group, 53.4 percent were between the ages of 16-20 and 25-29, while 16.7 percent were 60 years of age or older.

### 1973 ALCOHOL-POSITIVE DRIVER FATALITIES

TYPE OF CRASH	NUMBER OF DRIVER FATALITIES	PERCENT OF DRIVER FATALITIES
Multi-vehicle Collision	84	35.0%
Ran Off the Road	121	50.4
Collision With:		
Parked Vehicle	1	0.4
Fixed Object	23	9.6
Animal, Other Object, Bicycle	0	0.0
Pedestrian	0	0.0
Railroad Train	4	1.7
Snowmobile	1	0.4
Non-collision Including Overturned	6	2.5
TOTALS	240	100.0%



### DRINKING DRIVER FACTS, 1968 - 1973

1968	%	1969	%	1970	%	1971	%	1972	%	1973	%	
1,060		988		987		1,024		1,031		1,024		people were killed in motor vehicle crashes
531	49.6	504	51.0	488	49.5	510	49.9	567	54.9	561	54.8	drivers were killed
265	49.9	270	53.5	241	49.4	259	50.8	398	70.2	406	72.4	fatally injured drivers were tested for alcohol
144	54.3	147	54.5	142	59.0	155	59.8	229	57.5	240	59.1	of those tested had alcohol in their system (called positive cases)
114	79.2	122	82.9	122	85.9	126	81.3	177	77.3	206	85.8	of the positive cases were at or above the 0.10% level of intoxication
131	91.0	137	93.1	136	95.8	141	91.0	210	91.7	227	94.6	of the positive cases were male
13	9.0	10	6.9	6	4.2	14	9.0	19	8.3	13	5.4	of the positive cases were female
37	32.5	46	31.3	42	29.5	48	31.0	56	31.6	85	41.3	of the positive cases which tested 0.10% or higher occurred between midnight and 3 a.m.
67	46.6	63	42.9	58	40.8	75	48.4	100	43.7	105	43.8	of the positive cases were between the ages of 16 and 24
56	83.6	62	98.4	49	84.5	60	80.0	68	68.0	85	41.3	of the 16 to 24-year-olds testing positive were at or above 0.10%
26	18.1	33	22.4	22	15.5	34	21.9	38	16.6	21	8.8	of the positive cases were under the legal drinking age*

\*The age of majority was legally lowered to 18 years of age on June 1, 1973.

# 1973 DRIVER FATALITIES, LEVEL OF INTOXICATION AND AGE

AGE	TOTAL KILLED	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)						PERCENT OF AGE GROUP TESTING POSITIVE	PERCENT OF ALL POSITIVE CASES
				.010- .049	.050- .099	.100- .149	.150- .249	.250- over	TOTAL POSITIVE		
0-15	7	1	1							0.0	0.0
16-20	119	83	33	6	8	13	22	1	50	60.2	20.9
21-24	89	75	20	0	4	16	29	6	55	73.3	22.9
25-29	64	51	11	1	1	7	25	6	40	78.4	16.7
30-34	37	32	7	2	2	4	13	4	25	78.1	10.4
35-39	40	33	17	1	0	2	9	4	16	48.5	6.7
40-44	21	13	5	0	0	2	5	1	8	61.5	3.3
45-49	28	21	11	2	1	0	6	1	10	47.6	4.2
50-54	31	25	11	0	2	2	9	1	14	56.0	5.8
55-59	23	16	8	0	1	3	1	3	8	50.0	3.3
60-64	29	15	9	0	1	1	1	3	6	40.0	2.5
65-up	73	41	33	1	1	0	4	2	8	19.5	3.3
unknown	0										
TOTALS	561	406	166	13	21	50	124	32	240	59.1	100.0

### 1973 DRIVER FATALITIES, LEVEL OF INTOXICATION AND TIME OF CRASH

TIME	TOTAL KILLED	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)						PERCENT OF GROUP TESTING POSITIVE	PERCENT OF ALL POSITIVE CASES
				.010- .049	.050- .099	.100- .149	.150- .249	.250- over	TOTAL POSITIVE		
Mid-3am	111	91	6	3	7	23	43	9	85	93.4	35.4
3am-6am	25	19	7	1	1	1	8	1	12	63.2	5.0
6am-9am	48	37	30	1	0	1	3	2	7	18.9	2.9
9am-Noon	57	37	30	0	2	0	5	0	7	18.9	2.9
Noon-3pm	57	39	32	0	0	1	5	1	7	17.9	2.9
3pm-6pm	71	45	26	1	2	6	9	1	19	42.2	7.9
6pm-9pm	93	66	26	2	2	9	17	10	40	60.6	16.7
9pm-Mid	91	68	9	5	6	8	33	7	59	86.8	24.6
unknown	8	4	0	0	1	1	1	1	4	100.0	1.7
TOTALS	561	406	166	13	21	50	124	32	240	59.1	100.0

# 1973 DRIVER FATALITIES, LEVEL OF INTOXICATION AND MONTH OF CRASH

MONTH	TOTAL KILLED	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)						PERCENT OF GROUP TESTING POSITIVE	PERCENT OF ALL POSITIVE CASES
				.010- .049	.050- .099	.100- .149	.150- .249	.250- over	TOTAL POSITIVE		
January	35	22	10	2	1	3	6	0	12	54.5	5.0
February	22	15	7	0	0	4	4	0	8	53.3	3.3
March	40	33	16	0	1	2	8	6	17	51.5	7.1
April	37	25	9	1	2	6	5	2	16	64.0	6.7
May	47	30	10	0	1	5	12	2	20	66.7	8.3
June	52	46	13	1	5	8	15	4	33	71.7	13.7
July	65	43	22	3	2	0	13	3	21	48.8	8.7
August	54	38	11	2	4	6	8	7	27	71.1	11.3
September	57	39	17	2	1	5	10	4	22	56.4	9.2
October	54	45	18	0	3	5	18	1	27	60.0	11.3
November	59	44	20	1	0	3	18	2	24	54.5	10.0
December	39	26	13	1	1	3	7	1	13	50.0	5.4
TOTALS	561	406	166	13	21	50	124	32	240	59.1	100.0

# 1973 DRIVER FATALITIES, LEVEL OF INTOXICATION AND ROAD CLASS OF CRASH

ROAD CLASS	TOTAL KILLED	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)						PERCENT OF GROUP TESTING POSITIVE	PERCENT OF ALL POSITIVE CASES
				.010-.049	.050-.099	.100-.149	.150-.249	.250-over	TOTAL POSITIVE		
Interstate-(rural)	11	9	2	0	1	3	2	1	7	77.8	2.9
Interstate-(urban)	22	21	6	2	1	2	10	0	15	71.4	6.3
Trunk Hwy-(rural)	237	171	80	6	6	18	49	12	91	53.2	37.9
Trunk Hwy-(urban)	59	46	22	1	0	5	16	2	24	52.2	10.0
County Road	174	118	37	3	8	17	40	13	81	68.6	33.7
City Street	32	22	7	0	4	2	5	4	15	68.2	6.3
Township Road	26	19	12	1	1	3	2	0	7	36.8	2.9
TOTALS	561	406	166	13	21	50	124	32	240	59.1	100.0

### DWI CONVICTIONS, 1964 - 1973

1973	13,047
1972	11,303
1971	9,687
1970	8,634
1969	8,471
1968	7,431
1967	5,977
1966	5,792
1965	6,133
1964	6,307

### REVOCATIONS UNDER THE IMPLIED CONSENT LAW, 1964 - 1973

1973	871
1972	568
1971	423
1970	855
1969	691
1968	166
1967	22
1966	22
1965	25
1964	17

### REPEAT DWI CONVICTIONS, 1966 - 1973

	1966	1967	1968	1969	1970	1971	1972	1973
Second Conviction	851	708	983	1,162	1,316	1,454	1,716	1,480
Third Conviction	197	200	228	276	351	370	419	479
Fourth Conviction	44	34	48	41	64	57	98	102
Fifth Conviction	11	7	7	10	22	23	24	20
Sixth Conviction	3	2	4	3	3	6	4	6
Seventh Conviction	0	0	0	0	3	1	2	7
Eighth Conviction	2	0	0	0	1	2	2	0
Ninth Conviction	2	1	0	0	0	1	0	0
Tenth Conviction	0	0	0	0	0	1	0	0
Eleventh Conviction	0	0	0	0	0	0	1	0
Twelfth Conviction	0	0	0	0	0	0	1	0
Total Repeat Convictions	1,110	952	1,270	1,492	1,760	1,915	2,267	2,094
Total DWI Convictions	5,792	5,977	7,431	8,471	8,634	9,687	11,303	13,047
Percent Repeat Convictions	19.2%	15.9%	17.1%	17.6%	20.4%	19.8%	*20.1%	16.0%



**BLOOD ALCOHOL LEVELS IN 1973 DWI ARRESTS  
(SAMPLES ANALYZED BY STATE LABORATORY)**

AGE	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)					TOTAL POSITIVE	PERCENT OF AGE GROUP POSITIVE	PERCENT OF TOTAL TESTING POSITIVE
			.010-.049	.050-.099	.100-.149	.150-.249	.250-over			
Not Determined	635	45	8	29	78	382	93	590	92.9	10.9
15 and under	146	26	6	30	38	45	1	120	82.2	2.2
16 - 20	804	54	27	80	196	422	25	750	93.3	13.8
21 - 24	840	41	8	58	137	539	57	799	95.1	14.8
25 - 34	1,157	36	4	26	147	784	160	1,121	96.9	20.6
35 - 44	790	17	1	21	70	489	192	773	97.8	14.2
45 - 54	701	9	4	9	58	437	184	692	98.7	12.7
55 - 64	437	6	0	13	46	256	116	431	98.6	7.9
65 - over	165	8	2	5	24	96	30	157	95.2	2.9
TOTALS	5,675	242	60	271	794	3,450	858	5,433	95.7	100.0

### HIGHWAY PATROL DWI ARRESTS AND CONVICTIONS, 1964 - 1973

YEAR	NUMBER ARRESTS	NUMBER CONVICTIONS	PERCENT CONVICTIONS
1973	4,722	3,391	71.8
1972	3,534	2,752	77.9
1971	2,410	1,954	81.1
1970	1,860	1,510	81.2
1969	1,640	1,404	85.6
1968	1,535	1,342	87.4
1967	1,384	1,242	89.7
1966	1,225	1,164	95.0
1965	1,268	1,184	93.4
1964	1,270	1,211	95.4

### BLOOD ALCOHOL LEVELS IN STATEWIDE DWI ARRESTS, 1969 - 1973 (SAMPLES ANALYZED BY STATE LABORATORY)

ALCOHOL LEVEL (Percent)	1969	1970	1971	1972	1973
Negative (.000 - .009)	137	151	166	193	242
.010 - .049	114	86	52	80	60
.050 - .099	178	176	229	237	271
.100 - .149	559	612	469	676	794
.150 - .199	1,154	1,343	1,653	1,985	1,803
.200 - .249	878	905	1,063	1,422	1,647
.250 - .299	327	293	570	658	621
.300 - .349	52	54	74	141	156
.350 - .399	10	12	27	33	81
TOTAL	3,409	3,632	4,303	5,425	5,675

## Additions and Corrections

Please note the following changes:

1. Disregard the table on page 79 and insert the accompanying table in its place.



BLOOD ALCOHOL LEVELS IN 1973 DWI ARRESTS  
(SAMPLES ANALYZED BY STATE LABORATORY)

AGE	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION(PERCENT)					TOTAL POSITIVE	% AGE GRP POS	% OF ALL POS CASES
			.010-.049	.050-.099	.100-.149	.150-.249	.250-over			
Not Determined	635	45	8	29	78	382	93	590	92.9	10.8
15 under	16	2	0	7	2	5	0	14	87.5	0.2
16-17	132	15	8	26	37	45	1	117	88.6	2.1
18-20	802	43	35	82	198	419	25	759	94.6	13.9
21-24	840	41	8	58	137	539	57	799	95.1	14.7
25-34	1,157	36	4	26	147	784	160	1,121	96.9	20.6
35-44	790	17	1	21	70	489	192	773	97.8	14.2
45-54	701	9	4	9	58	437	184	692	98.7	12.7
55-64	437	6	0	13	46	256	116	431	98.6	7.9
65 over	165	8	2	5	24	96	30	157	95.2	2.9
TOTALS	5,675	222	70	276	797	3,452	858	5,453	95.7	100.0

NOTE: These data refer to analysis of chemical specimens submitted to the Bureau of Criminal Apprehension laboratory by state and local police agencies.





DRINKING PEDESTRIAN FACTS, 1968 - 1973

1968	%	1969	%	1970	%	1971	%	1972	%	1973	%	
122		114		149		157		132		149		pedestrians were killed in motor vehicle crashes*
46	37.7	34	29.8	41	27.5	44	28.0	67	50.8	73	49.0	fatally injured pedestrians were tested for alcohol
11	23.9	17	50.0	20	48.7	30	68.2	31	46.3	30	41.1	of those tested had alcohol in their system (called positive cases)
10	91.0	15	88.1	14	70.0	23	76.7	26	83.9	23	76.7	of the positive cases were at or above the 0.10% level of intoxication
4	36.4	2	11.8	3	15.0	10	33.3	4	12.9	1	3.3	of the positive cases were 65 or older
0	0.0	1	5.9	3	15.0	5	16.7	9	29.0	3	10.0	of the positive cases were under the legal drinking age.* *

\* Includes pedestrians killed in all types of motor vehicle crashes, including those in which the pedestrian was hit subsequent to the initial accident.

\* \* The age of majority was legally lowered to 18 years of age on June 1, 1973.

# 1973 PEDESTRIAN FATALITIES, LEVEL OF INTOXICATION BY AGE

AGE	TOTAL KILLED	TOTAL TESTED	TOTAL NEGATIVE	BLOOD ALCOHOL CONCENTRATION (PERCENT)						PERCENT OF AGE GROUP TESTING POSITIVE	PERCENT OF ALL POSITIVE CASES
				.010- .049	.050- .099	.100- .149	.150- .249	.250- over	TOTAL POSITIVE		
0-15	47	3	3	0	0	0	0	0	0	0.0	0.0
16-20	15	14	6	1	2	2	2	1	8	57.1	26.7
21-24	3	2	1	0	0	0	1	0	1	50.0	3.3
25-29	11	10	2	1	0	0	7	0	8	80.0	26.7
30-34	3	2	1	0	0	0	0	1	1	50.0	3.3
35-39	5	5	3	0	0	0	2	0	2	40.0	6.7
40-44	2	1	0	0	0	0	1	0	1	100.0	3.3
45-49	6	4	1	0	0	0	1	2	3	75.0	10.0
50-54	6	6	5	0	1	0	0	0	1	16.7	3.3
55-59	7	6	6	0	0	0	0	0	0	0.0	0.0
60-64	5	5	1	2	0	0	1	1	4	80.0	13.4
65-up	39	15	14	0	0	1	0	0	1	6.7	3.3
TOTALS	149	73	43	4	3	3	15	5	30	41.1	100.0

