

**A Review
Of Traffic Collisions
In
Washington
1981**

WASHINGTON TRAFFIC SAFETY COMMISSION

WASHINGTON 1981
A RECAP OF TRAFFIC COLLISIONS

<u>CATEGORY</u>	<u>1981</u>	<u>CHANGE FROM 1980</u>
PERSONS KILLED	872	-11.5%
DEATH RATE PER 100 MILLION MILES	2.87	-16.3%
FATAL COLLISIONS	790	- 8.1%
PERSONS INJURED	61,083	- 0.2%
TOTAL REPORTED COLLISIONS	111,993	- 1.5%
ESTIMATED ECONOMIC LOSS	\$550,000,000	+ 4.8%
MILES TRAVELLED	30,346,000,000	+ 5.7%
LICENSED DRIVERS	2,732,722	+ 2.6%
REGISTERED VEHICLES	3,408,871	+ 3.5%
POPULATION	4,248,100	+ 3.4%

HIGHLIGHTS FOR 1981

DRINKING DRIVER COLLISIONS

DWI Drivers Involved in Total Collisions	11,609	+ 3.3%
Ratio - DWI Per 100 Involved	9.0	1980 = 8.8
DWI Drivers Involved in Fatal Collisions	364	-16.7%
Ratio - DWI Drivers Per 100	34.3	1980 = 37.9
Had Been Drinking (In Total Collisions)	23,228	+ 0.8%
Ratio - HBD Drivers Per 100	18.2	1980 = 18.0
Had Been Drinking (In Fatal Collisions)	506	-10.9%
Ratio - HBD Drivers Per 100	47.6	1980 = 49.3

HIGHLIGHTS FOR 1981

COLLISIONS BY LOCATION

	<u>1981</u>	<u>CHANGE FROM 1980</u>
Interstate & Other Full Control - All	9,534	- 8.2%
Interstate & Other Full Control - Fatal	109	+ 1.9%
Other State Routes - All Collisions	23,951	- 1.3%
Other State Routes - Fatal Collisions	281	-13.3%
County Roads - All Collisions	25,890	- 1.1%
County Roads - Fatal Collisions	254	-10.2%
City Streets - All Collisions	51,889	- 2.4%
City Streets - Fatal Collisions	132	+ 0.8%

COLLISIONS BY TYPE

Collisions With Other Motor Vehicles - All	81,304	- 1.7%
Collisions With Other Motor Vehicles - Fatal	290	-10.2%
One Car (Fixed Object-Overtuned, Etc.) - All	26,865	- 0.8%
One Car (Fixed Object-Overtuned, Etc.) - Fatal	351	-16.4%
Collision With Pedestrian - All Collisions	1,626	- 4.6%
Collision With Pedestrian - Fatal Collisions	109	+13.5%
Collision With Pedalcyclist - All Collisions	1,083	- 1.3%
Collision With Pedalcyclist - Fatal Collisions	20	+ 8.2%
All Others (RR Train, Animal)-All Collisions	1,115	- 5.5%
All Others (RR Train, Animal)-Fatal Collisions	12	+20.0%

COLLISIONS BY TYPE OF VEHICLE

Passenger Cars Involved in All Collisions	146,195	- 1.6%
Passenger Cars Involved in Fatal Collisions	740	- 4.0%
Lightweight Trucks Involved in All Collisions	37,017	+ 0.6%
Lightweight Trucks Involved in Fatal Collisions	204	-20.9%
Heavy Trucks (Over 10,000) in All Collisions	6,122	-14.5%
Heavy Trucks (Over 10,000) in Fatal Collisions	97	-10.2%
Motorcycles Involved in All Collisions	3,796	- 4.7%
Motorcycles Involved in Fatal Collisions	106	-10.2%

Traffic Safety Statistics
1969 - 1981

<u>Year</u>	<u>Licensed Drivers</u>	<u>Population</u>	<u>Vehicle Registration</u>	<u>Veh. Mil. (Millions)</u>	<u>Traffic Collisions</u>	<u>Traffic Injuries</u>	<u>Traffic Deaths</u>	<u>Traffic Fatality Rate*</u>
1969	1,833,232	3,397,000	2,151,691	19,957.0	103,160	47,354	834	4.18
1970	1,919,980	3,413,250	2,156,510	20,675.8	97,486	53,465	875	4.23
1971	1,965,962	3,430,100	2,231,958	21,860.0	98,956	55,099	876	4.01
1972	2,011,893	3,418,800	2,315,310	22,363.0	101,002	55,454	855	3.82
1973	2,113,460	3,424,300	2,453,880	23,457.0	105,515	58,039	776	3.31
1974	2,122,131	3,448,100	2,545,975	22,585.0	106,242	57,716	761	3.37
1975	2,176,505	3,493,990	2,640,944	24,023.0	120,635	64,145	771	3.21
1976	2,324,697	3,571,591	2,785,500	25,932.0	120,864	66,309	825	3.18
1977	2,339,215	3,661,975	2,952,383	27,449.0	119,058**	71,356	927	3.38
1978	2,485,248	3,774,300	3,042,265	29,378.0	116,923	64,669	1,006	3.42
1979	2,579,368	3,911,200	3,186,898	29,122.0	118,686	65,399	1,034	3.55
1980	2,662,659	4,109,853	3,293,065	28,696.0	113,751	61,532	985	3.43
1981	2,732,722	4,248,100	3,408,871	30,346.0	111,993	61,083	872	2.87

*Traffic deaths per 100 million vehicle miles of travel

**Minimum damage for a reportable collision was increased from \$100 to \$300 to the property of one person on 7/1/77

Figure 1-1

TRAFFIC DEATHS 1971 - 1981

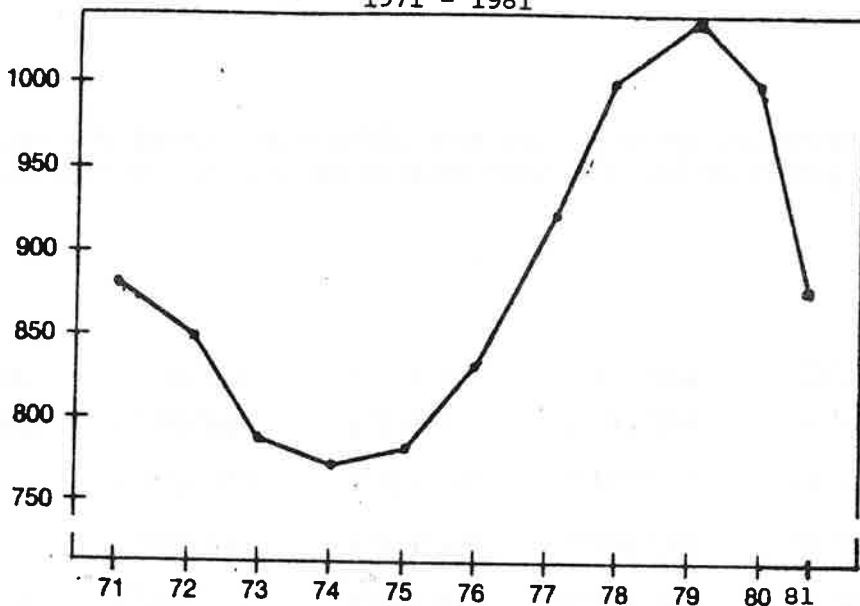


Figure 1-2

MILES TRAVELED (in billions)

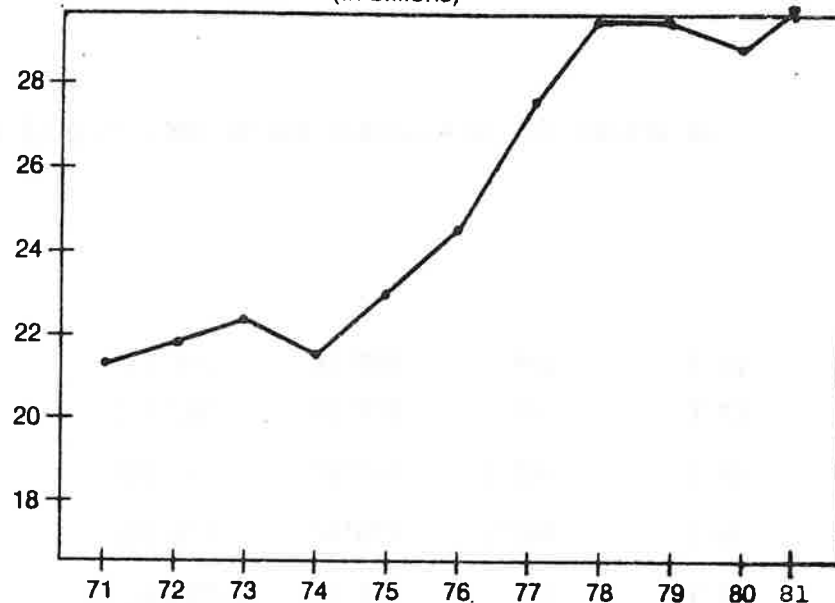


Figure 1-3

DEATH RATE
(per 100 million vehicle miles)

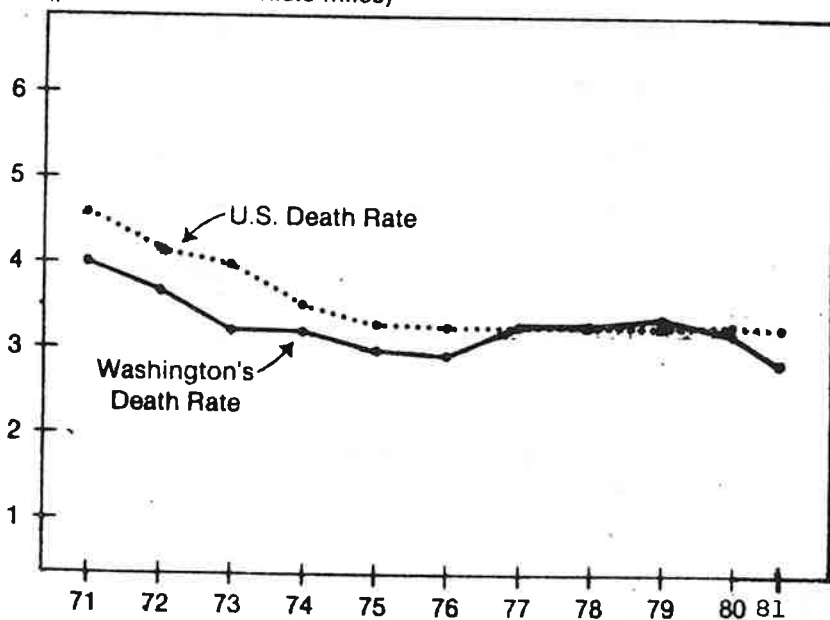
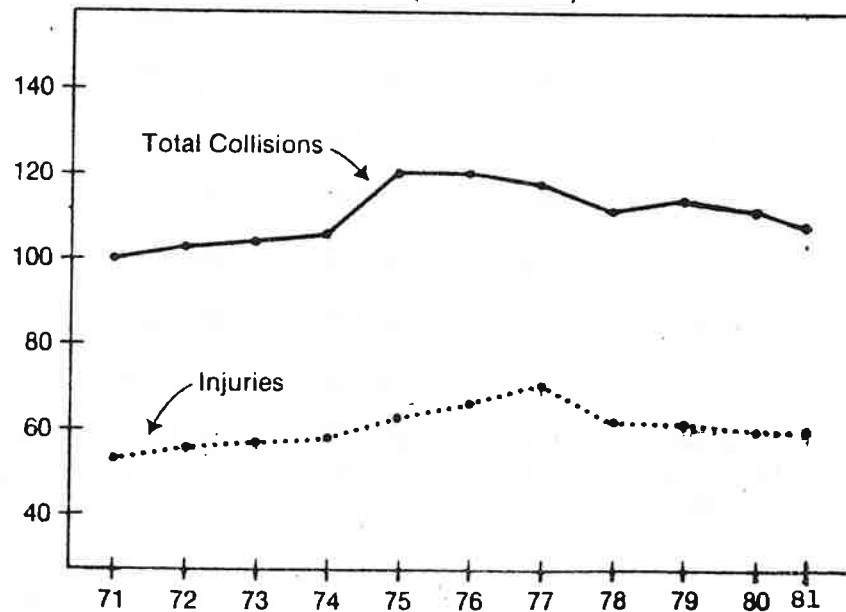


Figure 1-4

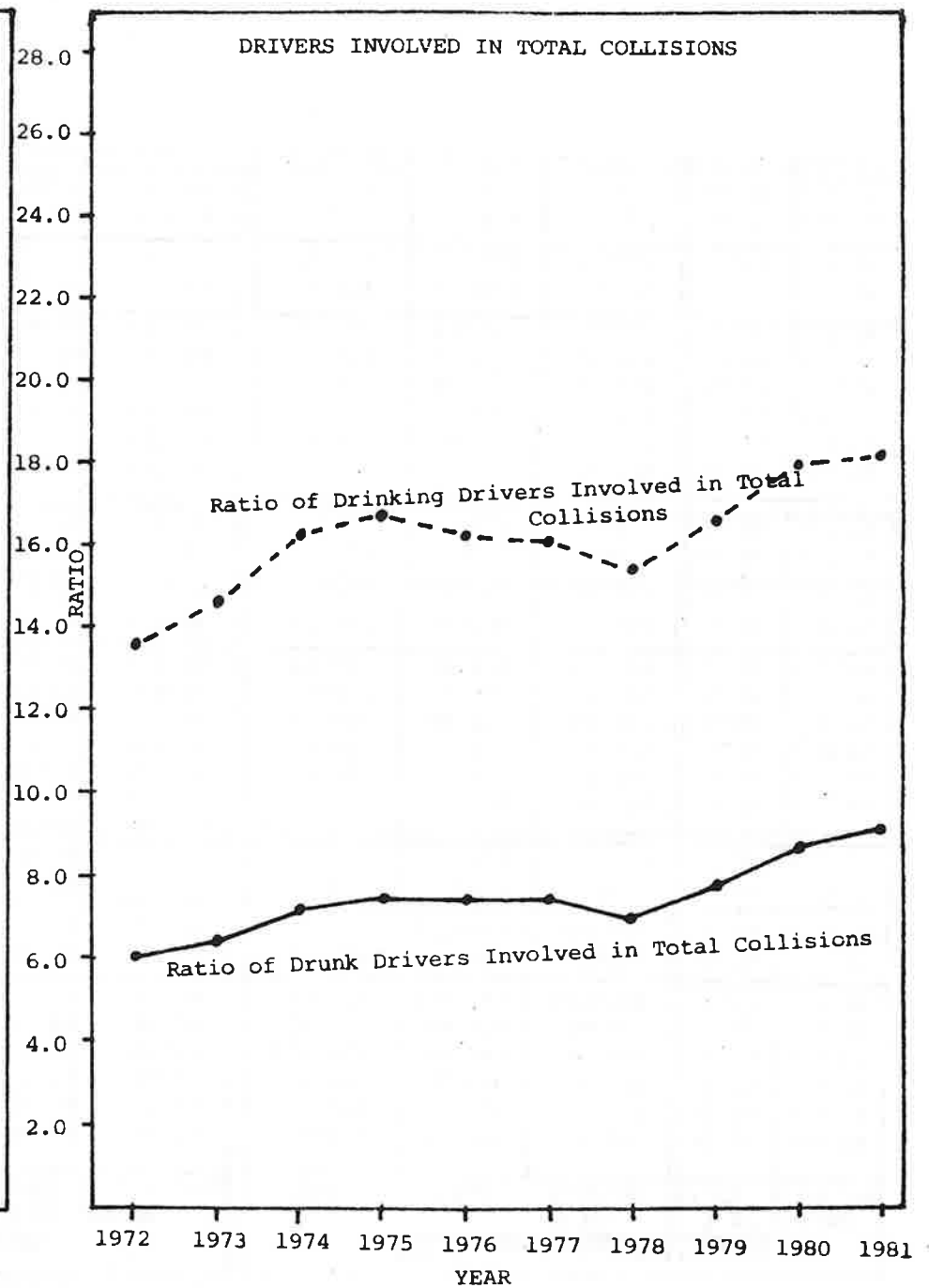
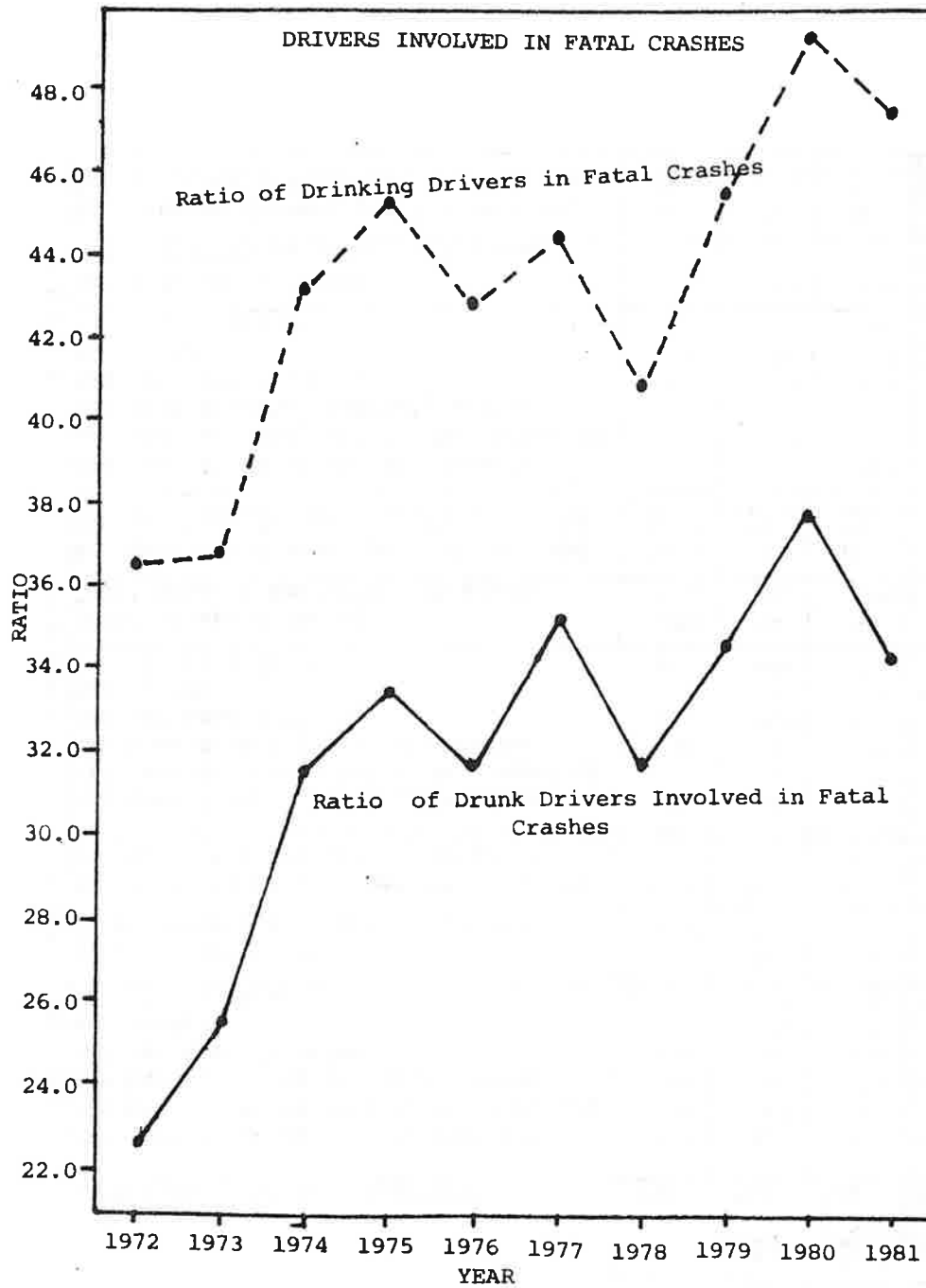
TOTAL REPORTED MOTOR VEHICLE TRAFFIC COLLISION AND INJURIES (in thousands)



DRIVERS INVOLVED IN INVESTIGATED COLLISIONS
1980/1981 AND PREVIOUS 3 YEAR AVERAGE

Condition of Driver (Sobriety)	Fatal Collisions					All Investigated Collisions				
	1981	1980	3 Yr Avg.	% of Change 81-80	% of Change 81-3 yr. Avg	1981	1980	3 Yr. Average	% of Change 81-80	% of Change 81-3 yrA
STATEWIDE										
Had been drinking ability impaired	364	437	417	-16.7%	-12.7%	11,609	11,243	10,476	+3.5%	+10.8%
Had been drinking ability not impaired	74	62	69	+19.5%	+ 7.2%	4,871	5,168	5,107	-5.7%	- 4.6%
Had been drinking sobriety unknown	68	69	57	- 1.4%	+19.2%	6,748	6,636	6,618	+1.7%	+ 2.0%
Had not been drinking	556	584	658	- 4.8%	-15.5%	104,483	104,758	110,958	-0.3%	- 5.8%
Not stated	71	94	89	-24.5%	-20.2%	16,063	14,975	16,620	-7.3%	- 3.4%
Total drivers	1,133	1,246	1,290	- 9.1%	-12.2%	143,774	142,780	149,779	+0.7%	- 4.0%
Total driver drinking	506	569	543	-11.1%	- 6.8%	23,228	23,047	22,201	+0.8%	+ 4.6%
Total drivers excluding not stated	1,062	1,152	1,201	- 7.9%	-11.6%	127,711	127,805	133,159	-0.1%	- 4.1%
No. drinking drivers per 100 involved	47.6	49.4	45.2	- 3.6%	+ 5.3%	18.2	18.0	16.7	+1.1%	+ 9.0%
No. drunk drivers per 100 involved	34.3	37.9	34.7	- 9.5%	- 1.2%	9.1	8.8	7.9	+3.4%	+15.2%
RURAL										
Had been drinking ability impaired	291	328	317	-11.3%	- 8.2%	6,324	6,126	5,778	+3.2%	+ 9.4%
Had been drinking ability not impaired	57	47	47	+21.3%	+21.3%	2,395	2,451	2,404	-2.3%	- 0.4%
Had been drinking sobriety unknown	46	48	39	- 4.2%	+17.9%	3,633	3,517	3,660	+3.3%	- 0.7%
Had not been drinking	406	419	483	- 3.1%	-15.9%	42,650	42,207	44,822	+1.0%	- 4.8%
Not stated	33	44	38	-25.0%	-13.2%	4,409	4,308	4,766	+2.3%	- 7.5%
Total drivers	833	886	924	- 6.0%	- 9.8%	59,411	58,609	61,429	+1.4%	- 3.3%
Total driver drinking	394	423	403	- 6.9%	- 2.2%	12,352	12,094	11,842	+2.1%	+ 4.3%
Total drivers excluding not stated	800	842	886	- 5.0%	- 9.7%	55,002	54,301	56,663	+1.3%	- 2.9%
No. drinking drivers per 100 involved	49.3	50.2	45.5	- 1.8%	+ 8.4%	22.5	22.3	20.9	+0.9%	+ 7.7%
No. of drunk drivers per 100 involved	36.4	39.0	35.8	- 6.7%	+ 1.7%	11.5	8.9	10.2	+29.2%	+12.7%
URBAN										
Had been drinking ability impaired	73	109	100	-33.0%	-27.0%	5,285	5,117	4,698	+3.3%	+12.5%
Had been drinking ability not impaired	17	15	22	+13.3%	-22.7%	2,476	2,717	2,703	-8.9%	- 8.4%
Had been drinking sobriety unknown	22	21	17	+ 4.8%	+29.4%	3,115	3,119	2,921	-0.1%	+ 6.6%
Had not been drinking	150	165	175	- 9.1%	-14.3%	61,833	62,551	66,136	-1.1%	- 6.5%
Not stated	38	50	51	-24.0%	-25.5%	11,654	10,667	10,855	+9.3%	+ 7.4%
Total drivers	300	360	366	-16.6%	-18.0%	84,363	84,171	88,350	+0.2%	- 4.5%
Total driver drinking	112	145	139	-22.8%	-19.4%	10,876	10,953	10,322	-0.7%	+ 5.4%
Total drivers excluding not stated	262	310	315	-15.5%	-16.8%	72,709	73,504	77,495	-1.1%	- 6.2%
No.drinking drivers per 100 involved	42.7	46.8	44.1	- 8.8%	- 3.2%	15.0	14.9	13.3	+0.7%	+12.8%
No. of drunk drivers per 100 involved	27.9	35.2	31.7	-20.7%	-12.0%	7.3	7.0	6.1	+4.3%	+19.7%

RATIO OF DRINKING AND DRUNK DRIVERS INVOLVED IN TRAFFIC COLLISIONS
1972 - 1981



TOXICOLOGIST RESULTS OF DRIVERS KILLED IN FATAL COLLISIONS
1979-1980-1981

Age	Negative Result			Results Less Than .10			Results .10 & Over			Average Test Result		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
16	8	3	8	6	1	0	6	6	0	.14	.12	0
17	4	7	2	1	3	2	9	8	3	.16	.16	.11
18	7	6	7	3	7	3	17	9	8	.16	.13	.08
19	7	5	2	8	3	2	6	6	10	.11	.12	.07
20	7	4	8	5	2	1	5	9	8	.13	.15	.16
21	6	5	4	4	3	3	11	15	11	.16	.16	.14
22	4	3	1	3	4	2	12	11	10	.15	.16	.19
23	3	4	4	3	2	1	9	6	10	.14	.16	.20
24	4	5	5	2	1	2	6	10	11	.15	.16	.17
25	6	1	4	2	1	1	10	6	7	.15	.19	.19
26	5	3	4	3	2	2	15	8	9	.16	.19	.17
27	4	1	4	1	2	1	16	8	5	.18	.16	.18
28	2	2	5	2	1	1	12	11	8	.17	.20	.17
29	6	1	2	2	0	0	11	6	5	.17	.19	.21
30	5	2	5	1	1	2	12	6	8	.19	.20	.16
31	1	2	3	0	0	2	5	5	6	.21	.22	.13
32	6	3	4	2	0	0	6	9	6	.14	.21	.18
33	1	2	3	1	1	2	5	5	7	.16	.17	.17
34	1	3	3	0	0	0	4	6	3	.17	.23	.17
35	3	1	5	0	0	0	6	2	1	.25	.19	.28
36	3	1	3	0	1	0	3	4	0	.23	.17	--
37	1	2	3	1	0	1	4	7	5	.17	.20	.14
38	1	0	3	1	0	0	1	2	4	.07	.21	.18
39	4	2	0	1	0	0	3	4	3	.16	.23	.19
40	4	0	3	0	0	0	2	0	3	.20	--	.19
41 - 45	4	10	8	2	2	1	9	16	15	.18	.21	.17
46 - 50	6	8	7	0	1	3	8	5	9	.23	.17	.20
51 - 55	7	2	4	0	2	1	6	6	9	.20	.17	.18
56 - 60	7	6	9	1	2	0	4	9	4	.19	.19	.24
61 - 65	3	3	5	0	1	0	4	4	1	.19	.22	.23
66 & Over	16	10	12	1	1	1	4	4	3	.14	.15	.16
TOTAL	146	107	140	56	44	34	231	213	192	.17	.18	.17
Change 1981-1979		-4.1%			-29.3%			-16.9%			NC	

STATE OF WASHINGTON
1981
OCCUPANT RESTRAINT EFFECTIVENESS SUMMARY

USAGE RATE

	<u>1981</u>	<u>%</u>	<u>1980</u>	<u>%</u>	<u>1977</u>	<u>%</u>	<u>1975</u>	<u>%</u>
Restraints Used	25,190	15.9%	27,018	17.4%	37,567	22.4%	40,202	25.8%
No Restraints Used	132,921	84.1%	128,264	82.6%	129,841	77.6%	115,719	74.2%
Total Occupants	158,111	100.0%	155,282	100.0%	167,408	100.0%	155,921	100.0%

TYPES OF RESTRAINTS USED - 1981

<u>Type</u>	<u>Number Used</u>		<u>Deaths</u>		<u>Disabling Injury</u>		<u>Evident Injury</u>		<u>Possible Injury</u>		<u>No Injury</u>	
	<u>Number</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
Lap Belt	12,590	8.0%	20	3.5%	229	3.9%	1,084	6.0%	1,391	7.7%	9,866	8.5%
Shoulder Belt	1,561	1.0%	1	0.2%	25	0.4%	143	0.8%	169	0.9%	1,233	1.1%
Lap & Shoulder Belt	10,425	6.6%	10	1.7%	217	3.7%	770	4.3%	1,336	7.4%	8,092	7.0%
Child Restraint	542	0.3%	1	0.2%	5	0.1%	43	0.2%	34	0.2%	459	0.4%
Air Bag - Activated	13	0.1%	1	0.2%	0	--	5	*	2	*	5	*
No Restraints	132,971	84.1%	543	94.3%	5,380	91.9%	15,992	88.7%	15,183	83.8%	95,835	83.0%
Total Occupants	158,102	100.0%	576	100.0%	5,854	100.0%	18,037	100.0%	18,115	100.0%	115,480	100.0%

*Less than 1/10 of 1%.

OCCUPANT RESTRAINT USAGE - 1981
USAGE RATES BY SEX AND AGE GROUP

<u>Occupant</u>	<u>Percent Used Restraints</u>
Male Driver	17.4%
Female Driver	18.2%
Male Passenger	9.9%
Female Passenger	12.6%
Age - 0 - 5	26.1%
" - 6 - 15	9.6%
" - 16 - 19	11.7%
" - 20 - 24	13.4%
" - 25 - 34	17.5%
" - 35 - 64	20.3%
" - 65 & Up	19.5%

STATE OF WASHINGTON
1981
MOTORCYCLE COLLISION ABSTRACT

Motorcycles were involved in 3,728 reportable traffic collisions during 1981 in the State of Washington. Included in that total were 104 fatal collisions with 105 persons killed.

In the fatal collisions 88 were motorcycle drivers and 13 were motorcycle passengers. Helmets were being worn by 43; no helmets were being worn by 55; and helmet information was unknown on 3 of the fatalities.

Total number of motorcyclists injured was 3,701 of which 1,328 were disabling injuries. Of the 3,728 reportable collisions, 3,186 were injury accidents. Thus, 88.3% of all motorcycle collisions were either fatal or injury collisions.

Rural area collisions involving motorcycles totaled 1,724 during 1981, down 60 or 3.4% from 1980. Urban areas motorcycle collisions totaled 2,004, down 126 or 5.9%.

FIVE YEAR MOTORCYCLE COLLISION TOTAL

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>% Change 77 - 81</u>
Total Accidents	3,093	3,282	3,992	3,914	3,728	+20.5%
Fatal Accidents	72	109	116	116	104	+44.4%
Injury Accidents	2,716	2,853	3,471	3,373	3,186	+17.3%
Property Damage Accidents	305	320	405	425	438	+43.6%
Registered Motor- cycles	115,454	106,103	129,641	135,899	139,843	+21.1%
Motorcycle License Endorsements	155,834	172,592	188,484	203,983	214,166	+37.4%

Motorcycle license endorsements have been increasing at a faster rate (+37% since 1977) than motorcycle registrations (+21%). A number of operators continue to renew the endorsement, when their license is renewed, even though they no longer own or operate a motorcycle. This balloons the endorsement data.

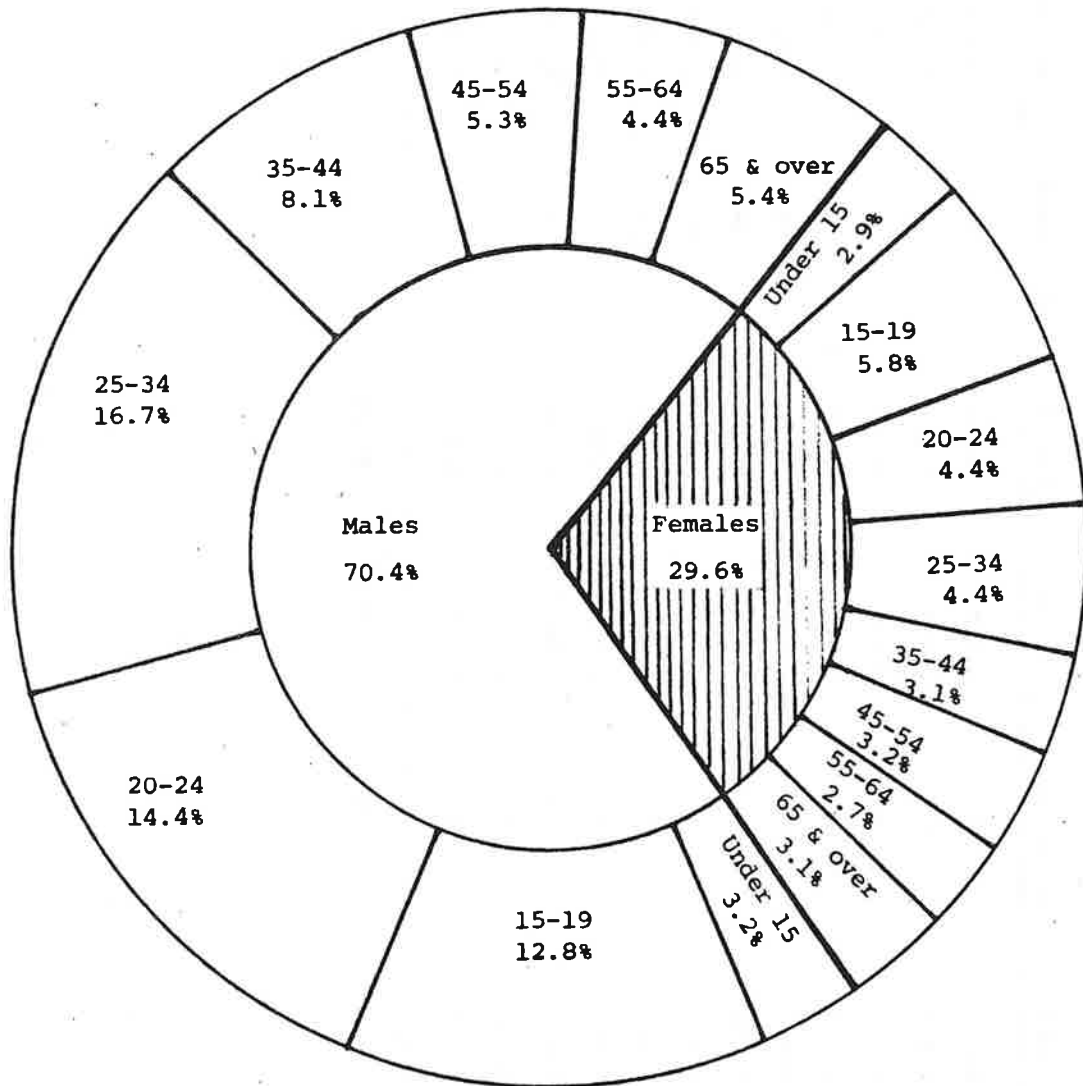
A definite change in the age distribution of motorcycle license endorsement holders has occurred during the past few years. In 1977 32.5% of all motorcycle endorsements were for operators under the age of 25. In 1981 this group represented 21.1% of the total. The age groups between 25 to 39 all increased during this same period. The 25 to 29 group - increased from 23.0% in 1977 to 24.1% in 1981; the 30 to 34 age group increased from 15.5% to 19.4% and the 35 to 39 group increased from 9.0% to 12.5% of all motorcyclists holding endorsements.

The younger 24 and younger riders were involved in slightly more than one-half (50.8%) of all reported motorcycle collisions in 1981, an over-representation rate of 4.15. In 1977 this younger group's accident involvement was 65% of all motorcycle riders involved.

TRAFFIC FATALITIES BY AGE AND SEX

STATE OF WASHINGTON

1981



SUMMARY OF MOTOR VEHICLE ACCIDENTS

FOR THE STATE OF WASHINGTON

ANNUAL REPORT 1981

A40	MONTH	TOTAL ACCIDENTS	FATAL ACC	INJ ACC	P.D. ACC	NO. KILLED	NO. INJ
	JANUARY	8,762	48	3,115	5,599	54	4,453
	FEBRUARY	8,870	52	3,155	5,663	54	4,517
	MARCH	8,498	56	3,194	5,248	65	4,543
	APRIL	8,704	63	3,342	5,299	66	4,894
	MAY	9,037	64	3,489	5,484	68	5,035
	JUNE	9,390	83	3,612	5,695	94	5,300
	JULY	8,635	73	3,458	5,104	80	5,099
	AUGUST	8,939	95	3,638	5,206	107	5,473
	SEPTEMBER	8,964	67	3,483	5,414	73	5,074
	OCTOBER	10,137	53	3,785	6,299	59	5,405
	NOVEMBER	9,734	74	3,499	6,161	80	5,175
	DECEMBER	12,323	62	4,177	8,084	72	6,115
		111,993	790	41,947	69,256	872	61,083

DRIVER AGE DISTRIBUTION - 1981
 COMPARISON OF DRIVERS INVOLVED IN COLLISIONS
 TO NUMBER LICENSED - BY AGE GROUP

Age Group	Involved in Collisions				Licensed Drivers		Over/Under Representation Drivers In	
	Total		Fatal		Number	%	Total	Fatal
	Number	%	Number	%				
Under 16	641	0.38%	7	0.63%	63	--	--	--
16	4,952	3.00%	34	3.07%	27,610	1.01%	+ 2.97	+ 3.04
17 - 18	15,622	9.33%	88	7.94%	101,830	3.73%	+ 2.50	+ 2.13
19 - 20	15,022	8.97%	94	8.48%	123,895	4.53%	+ 1.98	+ 1.87
21 - 22	13,208	7.89%	99	8.93%	132,048	4.83%	+ 1.63	+ 1.85
23 - 24	12,106	7.23%	90	8.10%	140,921	5.16%	+ 1.40	+ 1.57
25 - 29	25,309	15.12%	168	15.15%	370,239	13.55%	+ 1.12	+ 1.12
30 - 34	20,087	12.00%	135	12.17%	355,065	12.99%	- 1.08	- 1.07
35 - 39	13,790	8.24%	102	9.20%	286,070	10.47%	- 1.27	- 1.14
40 - 44	9,747	5.82%	67	6.04%	214,733	7.86%	- 1.35	- 1.30
45 - 49	7,741	4.62%	52	4.69%	181,099	6.63%	- 1.43	- 1.41
50 - 54	7,124	4.26%	50	4.51%	175,837	6.43%	- 1.50	- 1.43
55 - 59	6,743	4.03%	45	4.06%	175,208	6.41%	- 1.59	- 1.58
60 - 64	5,496	3.28%	25	2.25%)				
65 - 69	4,014	2.40%	17	1.55%)--	448,167	16.40%	- 1.79	- 2.33
70 & Over	5,820	3.48%	36	3.25%)				
Male	118,440	66.11%	881	78.9%	1,440,957	52.7%	+ 1.25	+ 1.50
Female	60,709	33.89%	235	21.1%	1,291,828	47.3%	- 1.40	- 2.24

COMPARISON OF TRAFFIC COLLISIONS, NUMBER KILLED AND INJURED -
BY COUNTY - 1981

County	Total Collisions		Fatal Collisions		Number Killed		Injury Collisions		Number Injured	
	Number	%	Number	%	Number	%	Number	%	Number	%
Adams	324	0.29	7	0.89	10	1.15	141	0.34	229	0.37
Asotin	337	0.30	5	0.63	7	0.80	93	0.22	138	0.05
Benton	3,121	2.79	22	2.78	24	2.75	991	2.36	1,483	2.43
Chelan	1,326	1.18	11	1.39	12	1.38	437	1.04	682	1.12
Clallam	1,166	1.04	10	1.27	11	1.26	413	0.98	626	1.02
Clark	4,658	4.16	27	3.42	29	3.33	1,696	4.04	2,505	4.10
Columbia	106	0.09	2	0.25	2	0.23	47	0.11	71	0.12
Cowlitz	2,146	1.92	16	2.03	20	2.29	805	1.91	1,147	1.88
Douglas	415	0.37	4	0.51	4	0.46	159	0.38	230	0.38
Ferry	164	0.15	4	0.51	4	0.46	64	0.15	88	0.14
Franklin	1,004	0.90	5	0.63	5	0.57	289	0.69	439	0.72
Garfield	78	0.07	4	0.51	5	0.57	43	0.10	66	0.11
Grant	940	0.84	15	1.90	17	1.95	360	0.86	543	0.89
Grays Harbor	1,894	1.69	13	1.65	14	1.61	644	1.53	911	1.49
Island	699	0.62	10	1.27	10	1.15	291	0.69	386	0.63
Jefferson	396	0.35	6	0.76	6	0.69	165	0.39	230	0.38
King	39,866	35.60	182	23.04	196	22.48	14,481	34.52	20,661	33.82
Kitsap	3,284	2.93	22	2.78	25	2.87	1,248	2.98	1,719	2.81
Kittitas	918	0.73	12	1.52	12	1.38	328	0.78	487	0.80
Klickitat	335	0.30	2	0.25	2	0.23	149	0.36	236	0.39
Lewis	1,386	1.24	16	2.03	18	2.06	532	1.27	792	1.30
Lincoln	173	0.15	1	0.13	1	0.11	82	0.20	132	0.22
Mason	793	0.71	9	1.14	9	1.03	315	0.75	433	0.71
Okanogan	739	0.66	18	2.28	18	2.06	284	0.68	460	0.75
Pacific	381	0.34	6	0.76	6	0.69	141	0.34	204	0.33
Pend Oreille	171	0.15	0		0		68	0.16	100	0.16
Pierce	13,486	12.04	88	11.14	103	11.81	5,337	12.72	7,880	12.90
San Juan	157	0.14	1	0.13	1	0.11	57	0.14	74	0.12
Skagit	1,647	1.47	20	2.53	24	2.75	722	1.72	1,064	1.74
Skamania	188	0.17	7	0.89	9	1.03	81	0.19	114	0.19
Snohomish	8,777	7.83	63	8.00	67	7.68	3,443	8.21	5,022	8.22
Spokane	8,168	7.29	53	6.71	57	6.53	3,366	8.02	4,920	8.01
Stevens	518	0.46	14	1.77	17	1.94	196	0.47	332	0.54
Thurston	3,162	2.82	22	2.78	25	2.87	1,170	2.79	1,662	2.72
Wahkiakum	67	0.06	2	0.25	2	0.23	19	0.05	34	0.06
Walla Walla	1,098	0.98	13	1.65	13	1.49	413	0.98	622	1.02
Whatcom	2,700	2.41	21	2.66	23	2.63	1,035	2.47	1,550	2.54
Whitman	699	0.62	8	1.01	10	1.15	278	0.66	428	0.70
Yakima	4,506	4.02	49	6.20	54	6.19	1,564	3.73	2,383	3.90
TOTAL	111,993	100.0%	790	100.0%	872	100.0%	41,947	100.0%	61,083	100.0%

COLLISION RATE* BY CITY POPULATION - 1981

(Does not include collisions on state limited access roads or freeways)

City	1981 Population	Traffic Deaths	Death Rate*	No. of Injuries	Injury Rate*	Total Collisions	Collision Rate*
<u>250,000 & Over</u>							
1. Seattle	492,200	41	8.3	8,385	1703.6	17,374	3529.9
<u>100,000 to 250,000</u>							
1. Spokane	171,200	18	10.5	2,926	1709.1	5,160	3014.0
2. Tacoma	159,800	25	15.6	3,325	2080.7	5,872	3674.6
<u>50,000 to 100,000</u>							
1. Bellevue	75,500	3	3.9	1,015	1344.3	2,155	2854.3
2. Everett	56,000	10	17.9	837	1494.6	1,844	3292.9
<u>25,000 to 50,000</u>							
1. Yakima	49,800	2	4.0	938	1883.5	1,954	3923.7
2. Bellingham	43,400	2	4.6	548	1262.7	1,209	2785.7
3. Vancouver	42,600	8	18.8	699	1640.8	1,550	3638.5
4. Bremerton	37,000	2	5.4	571	1543.2	1,233	3332.4
5. Kennewick	34,700	4	11.5	460	1325.6	1,164	3354.5
6. Richland	33,700	3	8.9	410	1216.6	959	2845.7
7. Renton	32,200	4	12.4	749	2326.1	1,429	4437.9
8. Longview	31,100	1	3.2	439	1411.6	959	3083.6
9. Edmonds	28,800	4	13.9	278	965.3	508	1763.9
10. Auburn	27,800	4	14.4	415	1492.8	832	2992.8
11. Olympia	27,600	2	7.2	487	1764.5	1,085	3931.2
12. Walla Walla	25,400	0	0	285	1122.0	618	2433.1
<u>15,000 to 25,000</u>							
1. Redmond	24,600	1	4.1	287	1166.7	611	2483.7
2. Pullman	23,800	1	4.2	136	571.4	285	1197.5
3. Lynnwood	23,700	0	0	512	2160.3	930	3924.0
4. Kent	23,400	3	12.8	752	3213.7	1,176	5025.6
5. Mercer Island	21,400	1	4.7	105	490.7	224	1046.7
6. Kirkland	19,000	1	5.3	203	1068.4	463	2436.8
7. Aberdeen	18,700	1	5.3	202	1080.2	647	3359.9
8. Puyallup	18,200	0	0	266	1461.5	601	3302.2
9. Pasco	18,200	0	0	197	1082.4	652	3582.4
10. Port Angeles	17,300	1	5.8	199	1150.3	518	2994.2
11. Wenatchee	17,300	1	5.8	160	924.9	524	3028.9
12. Mountlake Terrace	16,200	2	12.3	110	679.0	257	1586.4
<u>10,000 to 15,000</u>							
1. Lacey	14,200	2	14.1	134	943.7	374	2633.8
2. Mt. Vernon	13,300	1	7.5	171	1285.7	329	2473.7
3. Oak Harbor	12,317	1	8.1	70	568.3	152	1234.1
4. Ellensburg	11,900	0	0	68	571.4	181	1521.0
5. Centralia	11,200	0	0	137	1223.2	340	3035.7
6. Kelso	11,150	1	9.0	182	1632.3	361	3237.7
7. Moses Lake	10,400	2	19.2	106	1019.2	227	2182.7
Statewide Urban (Less urban freeways)	2,143,430	168	7.8	29,070	1356.2	60,093	2803.6

*Frequency per 100,000

COMPARISON OF TRAFFIC COLLISIONS, TRAVEL,
LICENSED DRIVERS AND MOTOR VEHICLE REGISTRATION
1981

County	Total Accidents		*Miles Traveled		Licensed Drivers		Registered Vehicles	
	Number	%	Number	%	Number	%	Number	%
Adams	324	0.29	298,265	0.98	9,667	0.35	13,471	0.39
Asotin	337	0.30	91,647	0.30	10,698	0.39	13,092	0.39
Benton	3,121	2.79	859,355	2.83	75,795	2.78	84,433	2.50
Chelan	1,326	1.18	355,023	1.17	32,491	1.19	43,370	1.28
Clallam	1,166	1.04	397,868	1.31	34,569	1.27	42,177	1.25
Clark	4,658	4.16	1,309,363	4.31	127,444	4.67	153,626	4.54
Columbia	106	0.09	49,639	0.16	2,751	0.10	4,362	0.13
Cowlitz	2,146	1.92	773,692	2.55	51,724	1.90	65,863	1.95
Douglas	415	0.37	174,682	0.58	14,782	0.54	17,658	0.52
Ferry	164	0.15	52,678	0.17	3,465	0.13	3,574	0.11
Franklin	1,004	0.90	347,320	1.14	22,430	0.82	42,743	1.26
Garfield	78	0.07	40,877	0.13	1,966	0.07	2,764	0.08
Grant	940	0.84	610,765	2.01	32,070	1.18	44,398	1.31
Grays Harbor	1,894	1.69	598,836	1.97	43,269	1.59	51,720	1.53
Island	699	0.62	201,862	0.67	27,235	1.00	31,207	0.92
Jefferson	396	0.35	154,456	0.51	11,015	0.40	13,189	0.39
King	39,866	35.60	8,781,342	28.94	873,650	32.04	1,089,921	32.20
Kitsap	3,284	2.93	782,757	2.58	92,718	3.40	109,063	3.22
Kittitas	918	0.73	610,074	2.01	15,587	0.57	20,410	0.60
Klickitat	335	0.30	183,068	0.60	10,839	0.40	14,699	0.43
Lewis	1,386	1.24	620,018	2.04	38,424	1.41	51,978	1.54
Lincoln	173	0.15	188,384	0.62	6,966	0.26	10,995	0.33
Mason	793	0.71	247,685	0.82	20,514	0.75	24,922	0.74
Okanogan	739	0.66	290,101	0.96	22,388	0.82	25,774	0.76
Pacific	381	0.34	170,489	0.56	12,072	0.44	14,295	0.42
Pend Oreille	171	0.15	80,514	0.27	5,495	0.20	6,469	0.19
Pierce	13,486	12.04	2,955,852	9.74	301,091	7.37	345,406	10.21
San Juan	157	0.14	16,051	0.05	5,549	0.20	7,322	0.22
Skagit	1,647	1.47	644,083	2.12	46,264	1.70	61,340	1.81
Skamania	188	0.17	73,688	0.24	4,541	0.17	5,127	0.15
Snohomish	8,777	7.83	2,080,452	6.86	219,317	8.04	275,203	8.14
Spokane	8,168	7.29	2,451,731	8.08	218,897	8.02	268,908	8.00
Stevens	518	0.46	213,240	0.70	17,394	0.64	21,013	0.62
Thurston	3,162	2.82	1,102,598	3.63	85,161	3.12	111,125	2.29
Wahkiakum	67	0.06	44,831	0.15	2,290	0.03	3,074	0.09
Walla Walla	1,098	0.98	303,550	1.00	28,154	1.03	35,203	1.04
Whatcom	2,700	2.41	692,571	2.28	69,203	2.54	85,279	2.52
Whitman	699	0.62	340,125	1.12	21,392	0.78	26,575	0.79
Yakima	4,506	4.02	1,130,613	3.73	107,723	3.95	140,227	4.15

*In thousands

Figure 1-5
MULTIPLE VEHICLE COLLISIONS
 (in thousands)

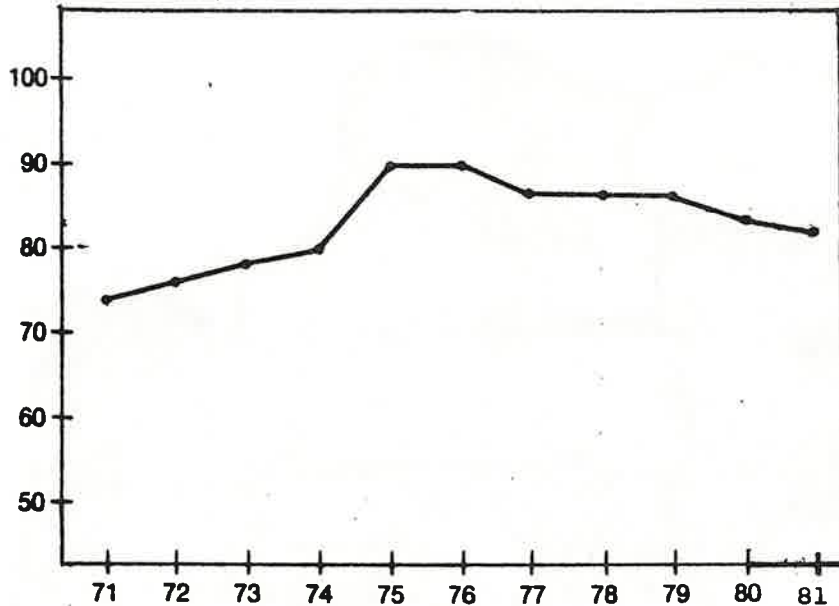


Figure 1-6
SINGLE VEHICLE COLLISIONS
 (in thousands)

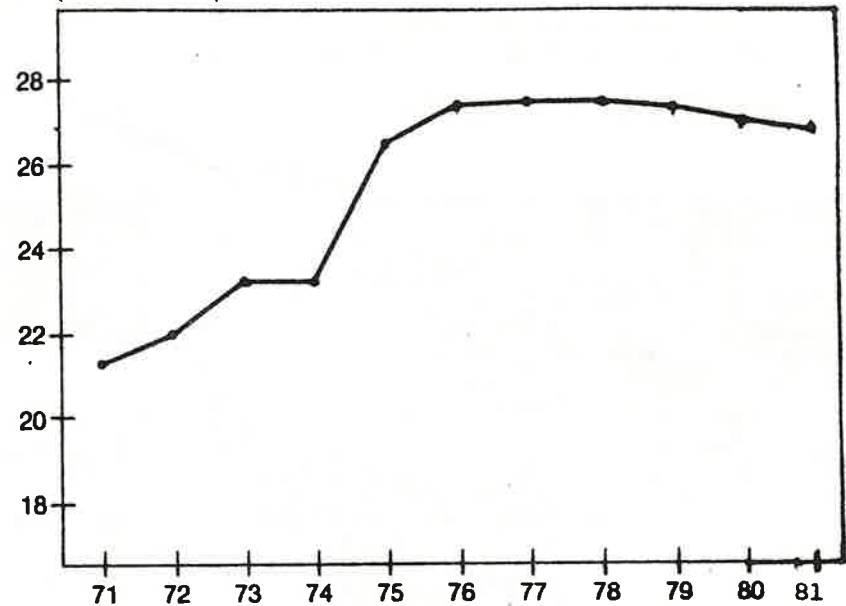


Figure 1-7
VEHICLE-PEDESTRIAN COLLISIONS
 (in hundreds)

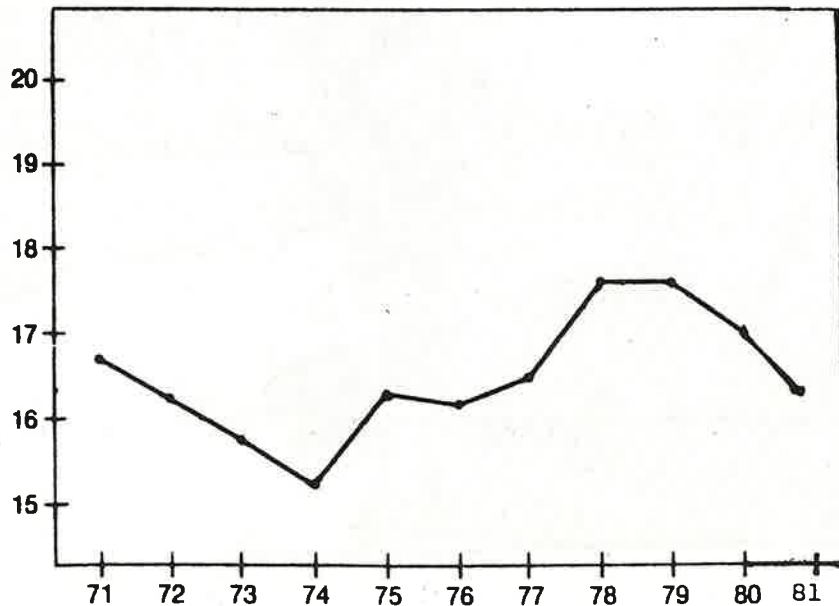
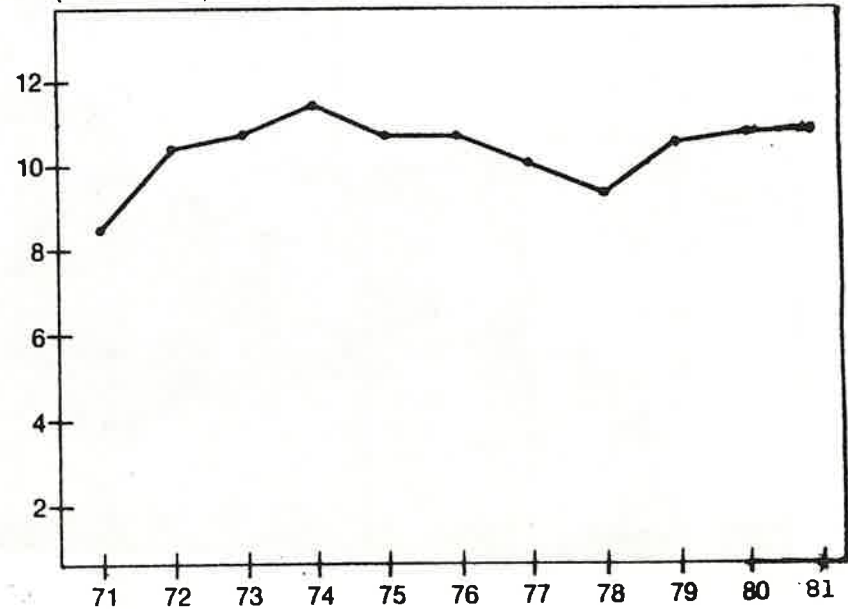
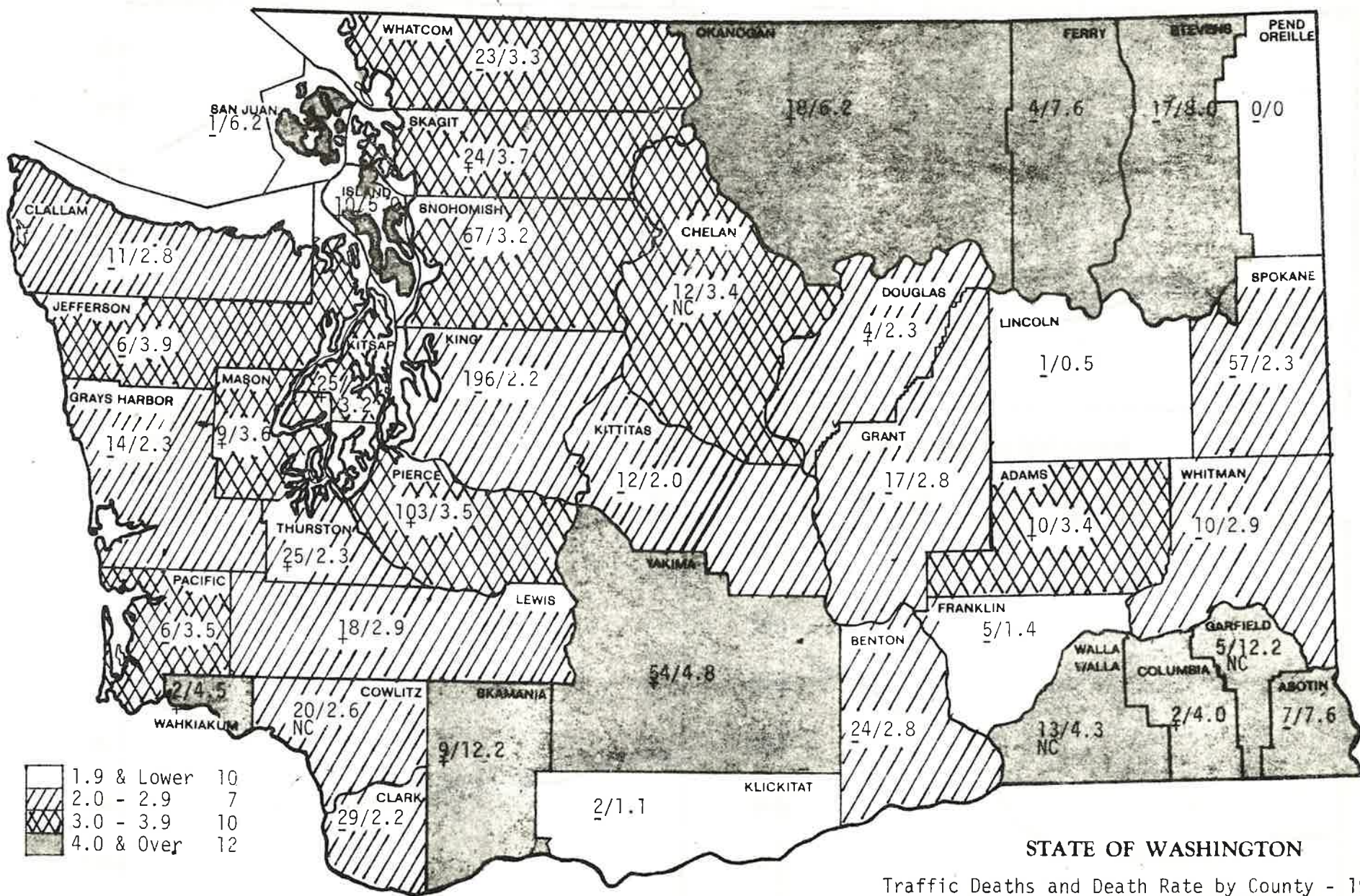


Figure 1-8
VEHICLE-PEDALCYCLIST COLLISIONS
 (in hundreds)





STATE OF WASHINGTON

Traffic Deaths and Death Rate by County - 1981
Statewide Death Rate 2.9

Example: Traffic Deaths/Death Rate
872/2.9
- Less than 1980
+ More Than 1980

SUMMARY OF MOTOR VEHICLE TRAFFIC COLLISIONS

ANNUAL REPORT 1981

TYPE OF COLLISION (FIRST HARMFUL EVENT)	FOR THE PERIOD 01/01 - 12/31, 1981				STATEWIDE						
	NUMBER OF COLLISIONS				NUMBER OF PERSONS						
*** SINGLE VEHICLE COLLISION ***	TOTAL	FATAL	NON FATAL	PROPERTY DAMAGE	TOTAL KILLED	TOTAL INJURED	INJURIES			NO INJURY	
							A.	B.	C.		
FIXED OBJECT:											
RAN OVER EMBANKMENT	1,707	36	901	770	42	1,301	273	684	344	1,208	
RAN INTO DITCH OR BANK	3,979	31	1,846	2,102	33	2,460	432	1,288	740	3,115	
STRUCK TREE OR STUMP	1,920	36	962	922	40	1,372	329	671	372	1,372	
STRUCK POLE OR POST	4,992	52	2,304	2,636	59	3,034	582	1,683	769	3,807	
STRUCK GUARDRAIL OR BARRIER	2,955	38	1,209	1,708	43	1,579	315	819	445	2,454	
STRUCK OTHER FIXED OBJECT	4,844	36	1,674	3,134	39	2,145	368	1,176	601	4,406	
STRUCK OTHER OBJECT	302	2	101	199	2	132	24	66	42	296	
OVERTURNED	5,261	114	2,948	2,199	117	4,133	963	2,152	1,018	3,626	
VEHICLE-PEDESTRIAN	1,626	109	1,515	2	115	1,641	588	641	412	1,977	
VEHICLE-RAILWAY TRAIN	136	10	50	76	12	66	13	31	22	109	
VEHICLE-PEDALCYCLIST	1,083	20	1,056	7	20	1,094	262	597	235	1,267	
VEHICLE-ANIMAL	979	2	182	795	2	232	44	127	61	1,039	
NON-COLLISION	456	4	221	231	4	261	57	135	69	487	
TOTAL SINGLE VEHICLE COLLISIONS	30,240	490	14,969	14,781	528	19,450	4,250	10,070	5,130	25,163	
*** MULTIPLE VEHICLE COLLISION ***											
HEAD-ON	961	108	581	272	132	1,441	488	606	347	1,294	
REAR-END	21,761	26	9,011	12,724	26	13,363	883	4,054	8,426	46,399	
SIDESWIPE	7,178	22	1,463	5,693	26	2,266	378	895	993	15,876	
ANGULAR DIRECTION	21,212	57	7,851	13,304	60	12,534	1,532	4,914	6,088	43,281	
ENTER/LEAVE PARKED POSITION	1,345	3	163	1,179	4	203	15	65	123	2,873	
ENTER/LEAVE DRIVEWAY ACCESS	10,109	20	2,957	7,132	24	4,364	505	1,714	2,145	21,127	
STRUCK PARKED VEHICLE	9,555	8	1,455	8,092	8	1,826	229	1,014	583	10,103	
SAME DIRECTION BROADSIDE	2,535	4	560	1,971	5	851	111	319	421	5,435	
OPPOSITE DIRECTION BROADSIDE	1,128	29	488	611	35	948	235	410	303	2,105	
ONE LEFT/ONE STRAIGHT OPPOSITE DIR	5,520	21	2,270	3,229	21	3,564	507	1,545	1,512	11,164	
OTHER MULTIPLE VEHICLE COLLISIONS	449	2	179	268	3	273	44	126	103	603	
TOTAL MULTIPLE VEHICLE COLLISIONS	81,753	300	26,978	54,475	344	41,633	4,927	15,662	21,044	160,260	
TOTAL COLLISIONS	111,993	790	41,947	69,256	872	61,083	9,177	25,732	26,174	185,423	

*** NOTE *** THE THREE CATEGORIES OF INJURIES FOLLOW THE MANUAL ON CLASSIFICATION OF MOTOR VEHICLE COLLISIONS (1970 EDITION).
 A. DISABLING INJURY, AN INJURY OTHER THAN FATAL THAT PREVENTS THE INJURED PERSON FROM CONTINUING NORMAL ACTIVITIES.
 B. NON-DISABLING INJURY, AN INJURY OTHER THAN INCAPACITATING THAT IS EVIDENT TO ANYONE VIEWING THE INJURED PARTY.
 C. POSSIBLE INJURY, AN INJURY THAT IS REPORTED OR CLAIMED BUT IS NOT AN INCAPACITATING OR EVIDENT INJURY.

SUMMARY OF MOTOR VEHICLE ACCIDENTS BY AGE AND VIOLATION

FOR THE PERIOD 01/01 - 12/31, 1981

PREPARED BY RECORDS SECTION W. S. P.

DRIVER AGE	DWI	SPEED COND	SPEED DISR LEGAL	SIG OR SIGN	IMP TRAVEL	LANE	FTYROW	FOL TOO CLOSE	OVER CENTER	DEF EQUIP	IMP PASS	OTHER CIRCUM	TOTAL
15 & UNDER	22	155	51	26	0	93	19	15	39	6	135	561	
16	147	820	267	207	0	725	291	98	207	77	639	3,478	
17	303	1,002	327	302	0	931	449	123	326	121	853	4,717	
18	472	1,077	359	367	0	929	528	142	344	138	871	5,227	
19	503	883	281	349	0	819	463	118	344	87	819	4,666	
20	507	816	225	306	0	760	441	73	289	111	724	4,252	
21	633	768	222	281	0	675	386	83	218	66	702	4,034	
22	584	633	182	244	0	627	381	69	220	75	557	3,572	
23	548	592	149	214	0	624	341	73	161	63	527	3,292	
24	466	540	148	229	0	616	314	72	161	50	528	3,124	
25	480	525	118	188	0	601	273	71	157	48	457	2,918	
26	459	471	113	187	0	497	250	63	156	56	453	2,705	
27	400	417	95	155	0	442	216	50	131	58	435	2,399	
28	408	408	85	169	0	487	226	60	115	56	410	2,424	
29	337	397	63	163	0	467	234	52	103	54	402	2,272	
30 THRU 34	1,492	1,507	270	582	0	1,922	923	187	430	173	1,621	9,107	
35 THRU 39	964	1,002	134	370	0	1,348	586	119	315	112	1,043	5,993	
40 THRU 44	675	631	81	276	0	987	411	86	170	63	743	4,123	
45 THRU 49	543	504	57	223	0	800	304	72	111	51	599	3,264	
50 THRU 54	426	389	33	254	0	846	295	53	121	49	511	2,977	
55 THRU 59	363	363	26	249	0	897	266	50	91	37	506	2,848	
60 THRU 64	250	286	16	188	0	909	203	43	71	41	449	2,456	
65 THRU 69	133	179	12	210	0	748	153	28	53	36	357	1,909	
70 THRU 74	61	121	9	164	0	712	101	24	34	16	246	1,488	
75 & OVER	25	118	13	226	0	998	115	36	48	19	393	1,991	
NOT STATED	558	1,723	506	599	0	997	491	254	241	170	4,831	10,370	
TOTAL	11,759	16,327	3,842	6,728	0	20,457	8,660	2,114	4,656	1,833	19,811	96,187	

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SUMMARY OF MOTOR VEHICLE TRAFFIC COLLISIONS

FOR THE PERIOD 01/01 - 12/31, 1981

PREPARED BY RECORDS SECTION W. S. P.

STATEWIDE COLLISION TOTALS	INVESTIGATING AGENCY					TOTAL
	W. S. P.	SHERIFF	OTHER LAW ENFORCEMENT	NOT INVESTIGATED		
TOTAL	28,667	12,169	46,164	24,993		111,993
FATAL	586	40	164	0		790
INJURY	13,414	4,950	17,753	5,830		41,947
PROPERTY DAMAGE	14,667	7,179	28,247	19,163		69,256
FREEWAY	6,349	126	879	2,180		9,534
RURAL-STATE ROUTE	10,651	769	780	1,999		14,199
COUNTY ROAD	10,684	10,579	367	4,260		25,890
OTHER ROUTES	983	595	44,138	16,554		62,370
SINGLE VEHICLE - ALL	12,990	4,389	6,513	1,766		25,658
SINGLE VEHICLE - FATAL	277	22	44	0		343
MULTIPLE VEHICLE - ALL	13,565	6,335	31,040	20,809		71,749
MULTIPLE VEHICLE - FATAL	220	11	59	0		290
ALL COLLISIONS - MAIN CAUSES						
EXCEEDING LEGAL OR SAFE SPEED	10,968	3,136	6,065	* NA		20,169
FAILURE TO YIELD RIGHT OF WAY	3,988	2,424	14,044			20,457
DRIVING WHILE INTOXICATED	5,128	1,605	5,024			11,757
FALLING ASLEEP OR INATTENTION	3,070	1,791	8,035			12,896
FOLLOWING TOO CLOSE	2,642	1,018	4,999			8,660
DISREGARDING SIGNS OR SIGNALS	1,173	743	4,811			6,728
FATAL COLLISIONS - MAIN CAUSES						
DRIVING WHILE INTOXICATED	301	13	54	* NA		368
EXCEEDING LEGAL OR SAFE SPEED	143	13	38			194
FAILURE TO YIELD RIGHT OF WAY	39	3	28			70
CROSSING OVER CENTER LINE	48	2	11			61
DISREGARDING SIGNS OR SIGNALS	30	1	15			46
FALLING ASLEEP OR INATTENTION	35	0	9			44

* DRIVER VIOLATIONS COME FROM INVESTIGATED COLLISIONS ONLY