

1993
Fatal Collisions
in Washington


May 1993



Source:
Washington Fatal Accident
Reporting System (FARS)



WASHINGTON TRAFFIC SAFETY COMMISSION
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Preface

This document summarizes 1993 fatal traffic collisions on Washington State roadways. The major data source used is the Washington Fatal Accident Reporting System (FARS), a traffic records system managed by the Washington Traffic Safety Commission (WTSC) under a contract with the National Highway Traffic Safety Administration (NHTSA).

Note: The FARS data included in this document are based on all fatal collisions for 1993 reported as of April 1994. There may be minor revisions in FARS statistical information after the date of this publication.

Other data sources for this report are the Washington State Patrol (WSP), Washington State Department of Transportation (WSDOT), Department of Licensing (DOL), and the Office of Financial Management (OFM).

Table of Contents

I. Overview

Overview of fatalities and exposure	1
Licensed drivers, travel, registered vehicles & population	1
Traffic deaths and miles traveled	2
Fatalities by status of person killed	2
Population, vehicle, travel and fatality summary	3
Licensed drivers and drivers in fatal collisions	4
Drivers in fatal collisions by previous DWI record	5
Traffic fatalities, vehicle registrations & rates	6

II. Fatal collisions

Fatal collisions by month	7
Fatal collisions by first harmful event	8
Fatal collisions by location in trafficway	8
Vehicles in fatal collisions by motor vehicle class	9
Vehicles in fatal collisions by severity of damage	9

III. Traffic fatalities

Traffic fatalities by month	10
Traffic fatalities by county	11
Traffic fatalities by age group	12
Severity of injuries in fatal crashes	13
Safety restraint use by vehicle occupants killed	14
Motorcycle helmet use by motorcyclists killed	14
BAC level of drivers killed	15
Status of persons killed	16
Vehicle drivers and passengers killed	17
Pedestrians, motorcyclists and pedalcyclists killed	17
Chronology of Traffic Safety Legislation	18

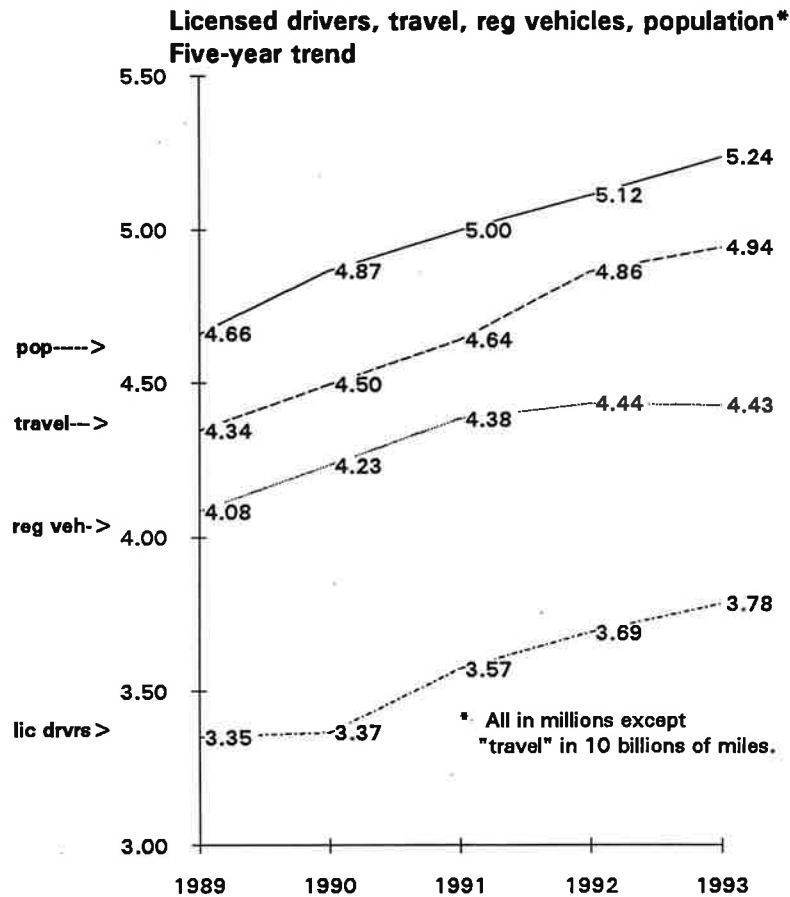
1. Overview

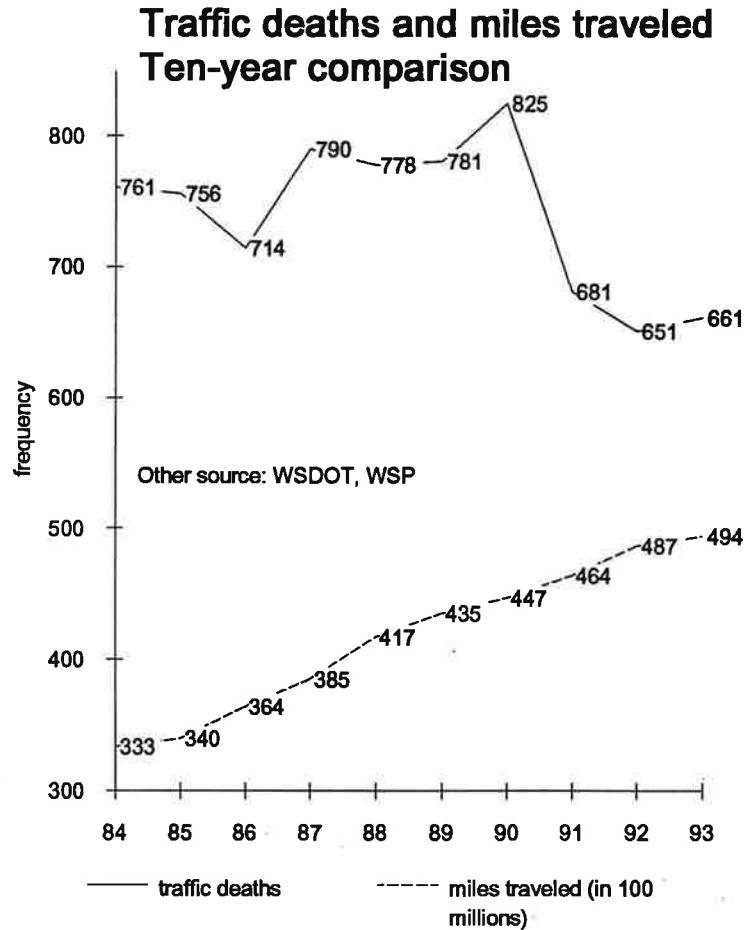
Overview of fatalities and exposure
Five-year comparison

	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 3-yr avg
Fatal collisions	579	592	601	726	694	653	-11.4%
Drivers involved in fatal clsns	832	856	876	1,066	1,043	960	-13.4%
Vehicles involved in fatal clsns	838	876	896	1,070	1,048	973	-13.8%
Persons killed	661	651	681	825	781	735	-10.0%
Males killed	455	443	476	588	531	510	-10.7%
Females killed	206	208	205	237	250	225	-8.4%
Miles traveled (in millions)*	49,444	48,644	46,365	44,694	43,449	45,788	8.0%
Deaths per 100 million miles*	1.34	1.34	1.47	1.83	1.80	1.61	-16.8%
Licensed drivers	3,784,430	3,689,741	3,572,038	3,366,146	3,350,324	3,494,562	8.3%
Registered vehicles*	4,428,944	4,435,259	4,384,000	4,233,853	4,084,367	4,284,370	3.4%
Population	5,240,900	5,116,700	5,000,400	4,866,692	4,660,700	4,911,123	6.7%

*Preliminary for 1993

Other source: DOL, WSDOT, OFM





Fatalities by status of person killed Five-year comparison

status	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Vehicle driver	350	344	378	438	420	395	-11.4%
Vehicle passenger	186	170	176	232	174	188	-1.1%
Pedestrian	79	80	79	80	110	87	-9.5%
Motorcycle driver	35	42	35	57	59	48	-27.5%
Motorcycle passenger	3	6	8	4	10	7	-57.1%
Pedalcyclist	8	9	5	14	8	9	-11.1%
Total	661	651	681	825	781	735	-10.0%

**Population, travel and fatality summary
1972 - 1993**

year	population	lic. drivers	reg vehicles	miles drvn*	deaths +	death rate ++
1972	3,418,800	2,011,893	2,315,310	22,363.0	855	3.82
1973	3,424,300	2,113,460	2,453,880	23,457.0	776	3.31
1974	3,448,100	2,122,131	2,545,975	22,585.0	761	3.37
1975	3,493,990	2,176,505	2,640,944	24,023.0	771	3.21
1976	3,571,591	2,324,697	2,785,500	25,932.0	825	3.18
1977	3,661,975	2,339,215	2,952,383	27,449.0	927	3.38
1978	3,774,300	2,485,248	3,042,265	29,378.0	1,006	3.42
1979	3,911,200	2,579,368	3,186,898	29,122.0	1,034	3.55
1980	4,132,353	2,662,659	3,293,065	28,696.0	985	3.43
1981	4,250,200	2,732,722	3,408,871	30,346.0	872	2.87
1982	4,264,000	2,774,212	3,313,348	30,353.0	757	2.49
1983	4,285,100	2,867,032	3,372,966	32,275.0	705	2.18
1984	4,328,100	2,973,468	3,459,772	33,344.0	761	2.28
1985	4,384,100	2,980,717	3,546,152	33,978.0	756	2.22
1986	4,419,700	3,029,375	3,651,102	36,416.0	714	1.96
1987	4,481,100	3,156,600	3,833,058	38,520.0	790	2.05
1988	4,565,000	3,264,065	3,896,828	41,698.0	778	1.87
1989	4,660,700	3,350,324	4,084,367	43,449.3	781	1.80
1990	4,866,692	3,366,146	4,233,853	44,694.0	825	1.85
1991	5,000,400	3,572,038	4,384,000	46,365.0	681	1.47
1992	5,116,700	3,689,741	4,435,259	48,644.0	651	1.34
1993	5,240,900	3,784,430	4,428,944	49,444.0	661	1.34

Other source: WSP, OFM, DOL, WSDOT

* In millions; preliminary estimate for 1992

+ State adopted a 90-day fatal-reporting policy in 1980
and a 30-day fatal-reporting policy in 1989.

++Traffic deaths per 100 million vehicle miles of travel.

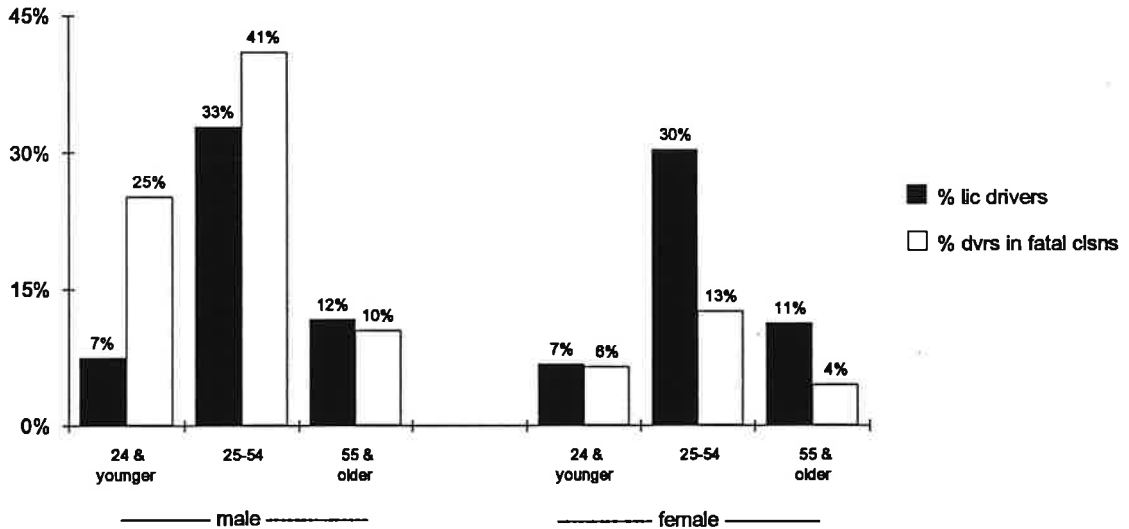
**Licensed drivers and drivers in fatal collisions
By age group and sex - 1993**

	males				females			
	licensed drivers	% of all lic drivers	fatal clsns	% of all fatal clsns	licensed drivers	% of all lic drivers	fatal clsns	% of all fatal clsns
17 & younger	39,709	1.0%	33	4.0%	37,208	1.0%	14	1.7%
18-20	89,825	2.4%	81	9.8%	79,542	2.1%	18	2.2%
21-24	150,453	4.0%	93	11.3%	136,377	3.6%	21	2.5%
25-34	443,074	11.7%	143	17.4%	406,031	10.7%	50	6.1%
35-44	466,902	12.3%	129	15.7%	438,293	11.6%	32	3.9%
45-54	332,614	8.8%	66	8.0%	301,848	8.0%	21	2.5%
55-64	197,729	5.2%	34	4.1%	180,449	4.8%	13	1.6%
65 & over	242,040	6.4%	52	6.3%	242,336	6.4%	24	2.9%
Total	1,962,346	51.9%	631	76.6%	1,822,084	48.1%	193	23.4%

* There were 8 additional drivers with unknown age or sex.

Other source: DOL

**Licensed drivers vs drivers in fatal collisions
Percentages by sex and age group - 1993**



Drivers in fatal collisions by license status & previous DWI record*
 Five-year comparison

previous* DWIs	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Valid license							
0 prev DWI	676	710	736	865	878	797	-15.2%
1 prev DWI	12	10	9	13	13	11	6.7%
2 or more DWIs	6	0	0	2	0	1	1,100.0%
Unknown prev record	2	3	0	1	0		
Percent w/ prev DWI	2.6%	1.4%	1.2%	1.7%	1.5%	1.4%	80.1%
Invalid license							
0 prev DWI	82	99	94	98	85	94	-12.8%
1 prev DWI	26	17	19	22	22	20	30.0%
2 or more DWIs	0	2	2	3	6	3	-100.0%
Unknown prev record	1	3	1	4	0		
Percent w/ prev DWI	24.1%	16.1%	18.3%	20.3%	24.8%	19.9%	21.2%
Unknown license status	27	12	15	58	39	31	-12.9%
Total drivers	832	856	876	1,066	1,043	960	-13.4%

* During three years previous to fatal collision.

invalid
 108

 802
 13.5%
 694
Valid

802

Traffic fatalities & vehicle registration By county - 1993

county	deaths	vehicle registration	rate*
Adams	8	15,466	5.17
Asotin	3	15,929	1.88
Benton	12	103,834	1.16
Chelan	15	56,133	2.67
Clallam	6	54,357	1.10
Clark	40	228,542	1.75
Columbia	0	4,580	0.00
Cowlitz	9	79,542	1.13
Douglas	13	22,706	5.73
Ferry	6	4,604	13.03
Franklin	16	46,948	3.41
Garfield	0	2,707	0.00
Grant	17	53,740	3.16
Grays Harbor	15	55,911	2.68
Island	6	48,557	1.24
Jefferson	4	20,505	1.95
King	114	1,327,120	0.86
Kitsap	21	167,497	1.25
Kittitas	12	25,886	4.64
Klickitat	2	16,104	1.24
Lewis	16	61,103	2.62
Lincoln	1	11,431	0.87
Mason	9	38,907	2.31
Okanogan	8	31,230	2.56
Pacific	4	17,206	2.32
Pend Oreille	1	9,149	1.09
Pierce	61	474,515	1.29
San Juan	1	12,019	0.83
Skagit	16	89,138	1.79
Skamania	4	5,980	6.69
Snohomish	47	430,957	1.09
Spokane	39	317,829	1.23
Stevens	8	26,853	2.98
Thurston	25	190,722	1.31
Wahkiakum	2	2,912	6.87
Walla Walla	15	36,991	4.06
Whatcom	30	121,898	2.46
Whitman	4	28,375	1.41
Yakima	51	171,061	2.98
Total	661	4,428,944	1.49

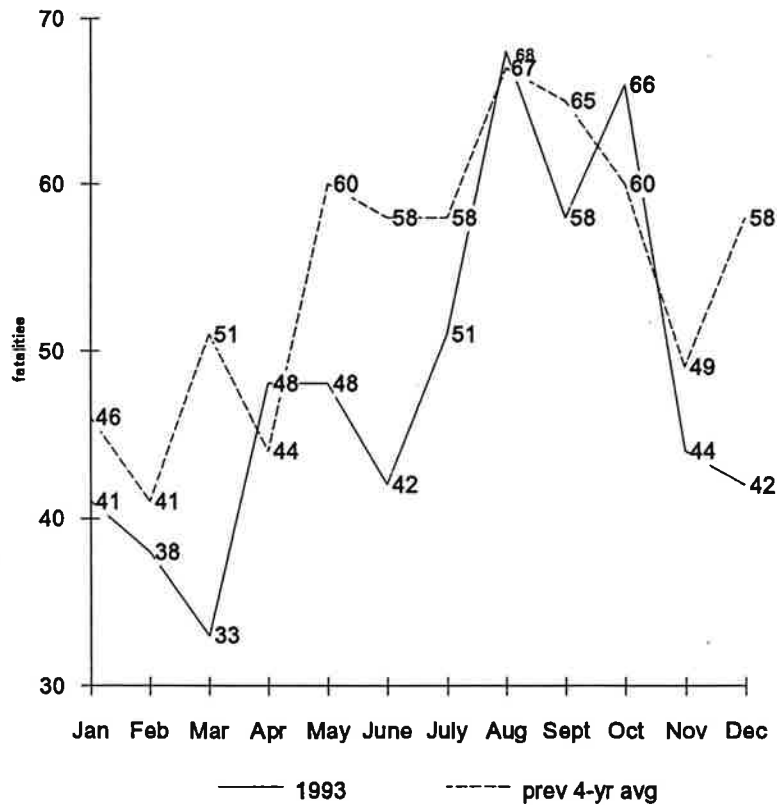
* Traffic deaths per 10,000 registered vehicles.

II. Fatal collisions

Fatal collisions by month
Five-year comparison

month	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
January	41	42	44	60	37	46	-10.4%
February	38	45	39	48	30	41	-6.2%
March	33	43	51	57	51	51	-34.7%
April	48	44	35	48	48	44	9.7%
May	48	49	59	68	63	60	-19.7%
June	42	57	45	69	60	58	-27.3%
July	51	43	51	72	66	58	-12.1%
August	68	66	61	78	61	67	2.3%
September	58	48	63	69	78	65	-10.1%
October	66	58	57	55	71	60	9.5%
November	44	34	49	51	60	49	-9.3%
December	42	63	47	51	69	58	-27.0%
Total	579	592	601	726	694	653	-11.4%

Fatal collisions by month
1993 vs previous 4-year average



Fatal collisions by first harmful event
Five-year comparison

	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Collision w/ other motor vehicle	210	232	225	275	284	254	-17.3%
Collision w/ fixed or other object	171	167	180	217	183	187	-8.4%
Vehicle overturned	100	95	103	120	104	106	-5.2%
Vehicle - pedestrian	75	76	70	78	100	81	-7.4%
Vehicle - pedalcycle	7	9	5	14	8	9	-22.2%
Vehicle - railway vehicle	2	4	7	6	6	6	-65.2%
Vehicle - animal	0	1	2	1	1	1	-100.0%
Other	13	5	7	14	5	8	67.7%
Not stated	1	3	2	1	3	2	-55.6%
Total	579	592	601	726	694	653	-11.4%

Fatal collisions by location in trafficway
Five-year comparison

location	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
On roadway	311	346	319	391	400	364	-14.6%
Shoulder	19	13	22	31	32	25	-22.4%
Median	10	22	21	30	19	23	-56.5%
Roadside	150	111	137	168	127	136	10.5%
Outside right of way	25	53	31	48	36	42	-40.5%
Off roadway - location unknown	59	45	67	54	74	60	-1.7%
Other (in parking lane, etc.)	3	2	2	4	6	4	-14.3%
Unknown	2	0	2	0	0		
Total	579	592	601	726	694	653	-11.4%

Vehicles in fatal collisions by motor vehicle class**Five-year comparison**

vehicle type	1993	1992	1991	1990	1989	prev	'93 vs
						4-yr avg	prev 4-yr avg
Passenger vehicles	440	476	491	592	575	534	-17.5%
Light trucks (under 10,000 lb)	230	242	248	274	272	259	-11.2%
Medium & heavy trucks	60	47	55	73	75	63	-4.0%
Utility trucks	41	46	39	47	38	43	-3.5%
Motorcycles	38	47	42	62	71	56	-31.5%
Buses	6	4	6	6	4	5	20.0%
Other	7	5	4	9	4	6	27.3%
Unknown	16	9	11	7	9	9	77.8%
Total vehicles	838	876	896	1,070	1,048	973	-13.8%

Vehicles in fatal collisions by severity of damage**Five-year comparison**

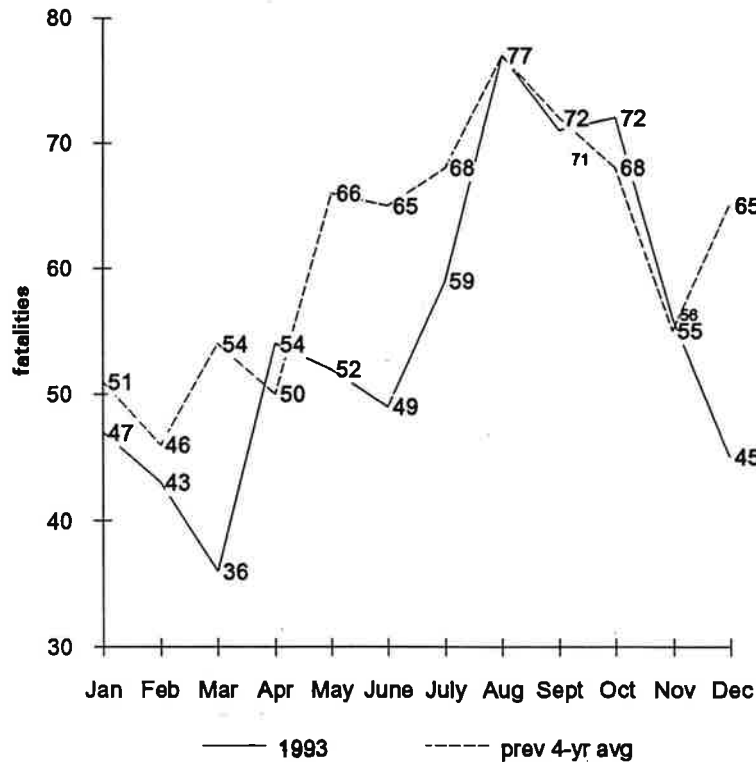
	1993	1992	1991	1990	1989	prev	'93 vs
						4-yr avg	prev 4-yr avg
Towed away	741	769	813	949	919	863	-14.1%
Driven away	94	102	79	119	129	107	-12.4%
Abandoned	1	1	2	1	0		
Unknown/ not reported	2	4	2	1	0		
Total	838	876	896	1,070	1,048	973	-13.8%

III. Traffic fatalities

Traffic fatalities by month
Five-year comparison

	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
January	47	45	53	63	42	51	-7.4%
February	43	49	49	53	33	46	-6.5%
March	36	46	55	61	53	54	-33.0%
April	54	47	47	55	52	50	7.5%
May	52	51	64	75	74	66	-21.2%
June	49	61	51	82	65	65	-24.3%
July	59	50	58	85	76	67	-12.3%
August	77	71	73	92	72	77	0.0%
September	71	56	66	80	85	72	-1.0%
October	72	67	62	62	81	68	5.9%
November	56	37	54	56	71	55	2.8%
December	45	71	49	61	77	65	-30.2%
Total	661	651	681	825	781	735	-10.0%

Traffic fatalities by month
1993 vs previous 4-year average



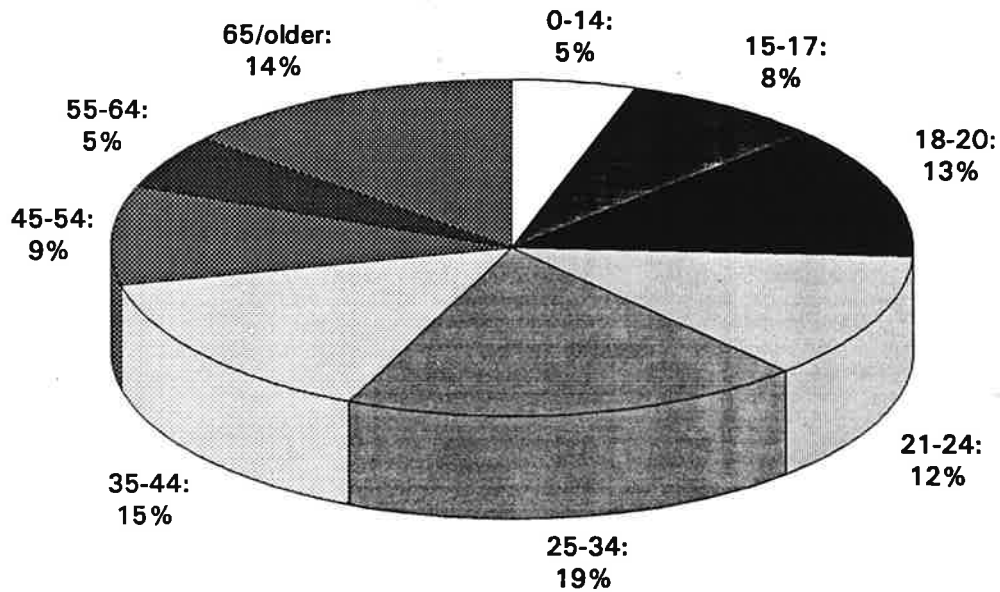
Traffic fatalities by county
Five-year comparison

county	1993	1992	1991	1990	1989	'93 vs	
						prev 4-yr avg	prev 4-yr avg
Adams	8	7	9	8	13	9.3	-13.5%
Asotin	3	0	2	1	1	1.0	200.0%
Benton	12	17	17	22	11	16.8	-28.4%
Chelan	15	12	17	12	15	14.0	7.1%
Clallam	6	6	2	17	19	11.0	-45.5%
Clark	40	39	32	36	33	35.0	14.3%
Columbia	0	3	0	3	4	2.5	-100.0%
Cowlitz	9	8	13	23	21	16.3	-44.6%
Douglas	13	7	7	9	6	7.3	79.3%
Ferry	6	3	3	9	5	5.0	20.0%
Franklin	16	14	12	14	11	12.8	25.5%
Garfield	0	2	0	0	1	0.8	-100.0%
Grant	17	15	12	24	23	18.5	-8.1%
Grays Harbor	15	13	20	15	14	15.5	-3.2%
Island	6	5	5	8	8	6.5	-7.7%
Jefferson	4	5	6	3	15	7.3	-44.8%
King	114	123	123	170	146	140.5	-18.9%
Kitsap	21	21	28	11	19	19.8	6.3%
Kittitas	12	30	27	39	29	31.3	-61.6%
Klickitat	2	4	4	13	2	5.8	-65.2%
Lewis	16	19	17	26	23	21.3	-24.7%
Lincoln	1	7	7	2	3	4.8	-78.9%
Mason	9	17	7	11	15	12.5	-28.0%
Okanogan	8	13	8	11	13	11.3	-28.9%
Pacific	4	6	6	2	5	4.8	-15.8%
Pend Oreille	1	4	2	3	4	3.3	-69.2%
Pierce	61	60	61	85	68	68.5	-10.9%
San Juan	1	1	6	1	1	2.3	-55.6%
Skagit	16	11	16	24	16	16.8	-4.5%
Skamania	4	4	2	2	5	3.3	23.1%
Snohomish	47	43	69	76	66	63.5	-26.0%
Spokane	39	31	26	39	43	34.8	12.2%
Stevens	8	4	10	16	6	9.0	-11.1%
Thurston	25	29	22	17	17	21.3	17.6%
Wahkiakum	2	0	0	0	1	0.3	700.0%
Walla Walla	15	8	14	7	8	9.3	62.2%
Whatcom	30	15	16	21	32	21.0	42.9%
Whitman	4	3	12	7	13	8.8	-54.3%
Yakima	51	42	41	38	46	41.8	22.2%
Total	661	651	681	825	781	734.5	-10.0%

Fatalities by age group
Five-year comparison

age group	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
0 - 14	34	38	43	51	50	46	-25.3%
15 - 17	53	35	42	60	41	45	19.1%
18 - 20	84	54	74	73	89	73	15.9%
21 - 24	81	88	89	107	82	92	-11.5%
25 - 34	123	132	144	203	204	171	-28.0%
35 - 44	97	91	84	116	102	98	-1.3%
45 - 54	62	56	48	74	55	58	6.4%
55 - 64	36	33	45	41	49	42	-14.3%
65 & older	90	121	111	100	109	110	-18.4%
Unknown	1	3	1	0	0		
Total	661	651	681	825	781	735	-10.0%

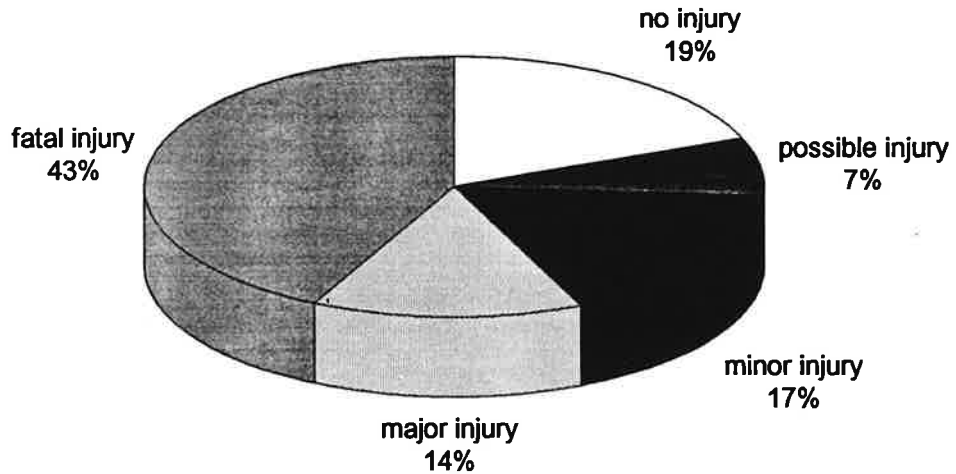
Age groups of persons killed - 1993



Severity of injuries to all persons involved in fatal crashes
Five-year comparison

severity	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Fatal injury	661	651	681	825	781	735	-10.0%
Major injury	224	258	248	336	295	284	-21.2%
Minor injury	266	281	293	309	257	285	-6.7%
Possible injury	113	118	113	109	105	111	1.6%
No injury	299	286	304	363	388	335	-10.8%
Unknown injury	10	0	0	0	0		
Total persons	1,573	1,594	1,639	1,942	1,826	1,750	-10.1%

Injury severity of persons involved in fatal collisions - 1993



Safety restraint use by vehicle occupants killed

Five-year comparison

	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Lap & shoulder	151	125	151	137	122	134	12.9%
Lap belt	19	22	24	30	20	25	-23.0%
Deployed air bag*	3	5	na*	na*	na*		
Child safety seat	3	2	4	3	1	3	20.0%
Total restraints used	176	154	179	170	143	162	9.0%
% used	32.8%	30.0%	32.3%	24.9%	22.4%	27.4%	20.0%
No restraint used	322	335	346	480	454	404	-20.2%
% not used	60.1%	65.2%	62.3%	70.2%	71.0%	67.2%	-10.6%
Unknown restraint use	38	25	30	34	42	33	16.0%
% unknown use	7.1%	4.9%	5.4%	5.0%	6.6%	5.5%	30.0%

* na = not available

Motorcycle helmet use by motorcyclists killed

Five-year comparison

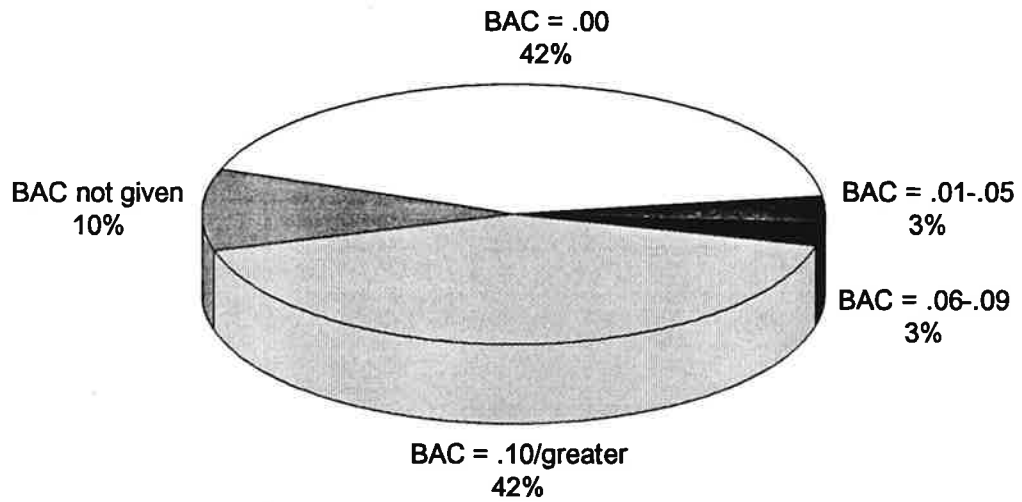
	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
Motorcycle helmet worn	27	42	36	44	21	36	-24.5%
% worn	71.1%	87.5%	83.7%	73.3%	30.9%	68.9%	3.2%
Motorcycle helmet not worn	11	6	7	16	47	19	-42.1%
% not worn	28.9%	12.5%	16.3%	26.7%	69.1%	31.1%	-7.0%

BAC level of drivers killed

Five-year comparison

BAC test	1993	1992	1991	1990	1989	prev 4-yr avg	'93 vs prev 4-yr avg
.00	169	162	177	202	207	187	-9.6%
.01 - .05	7	13	14	25	19	18	-60.6%
.06 - .09	9	11	18	13	12	14	-33.3%
.1 & greater	150	159	175	213	186	183	-18.1%
Not given	38	38	30	38	50	39	-2.6%
Unknown	12	0	0	1	0		
Total fatalities	385	383	414	492	474	441	-12.6%

BAC levels of drivers killed - 1993

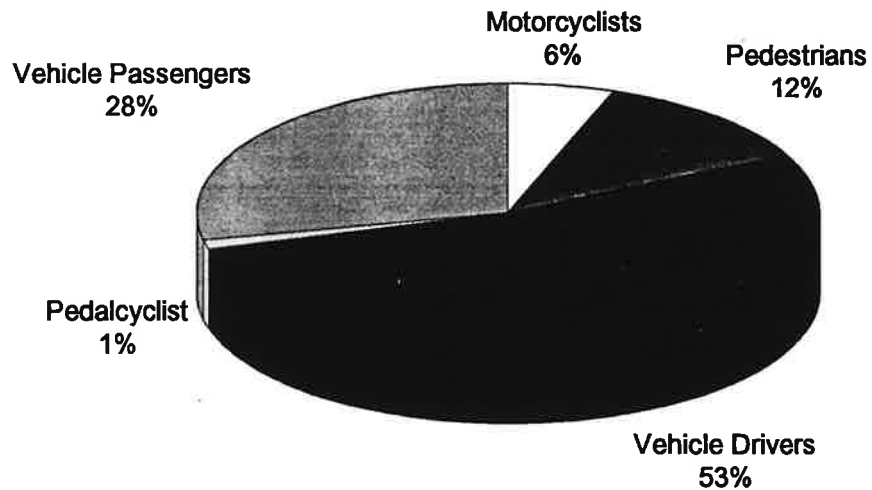


Status of persons killed

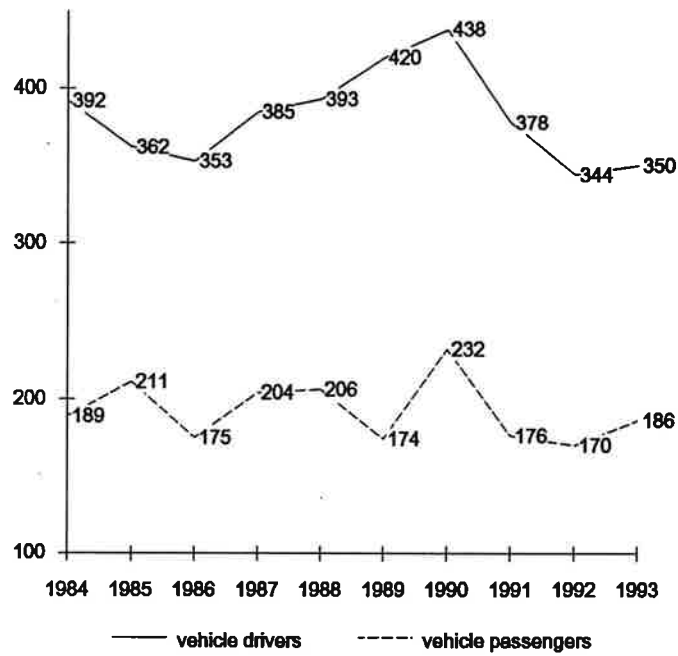
By month - 1993

month	total	vehicle			
		occupants	pedestrians	motorcyclists	pedalcyclists
January	47	38	8	1	0
February	43	34	6	2	1
March	36	29	3	3	1
April	54	41	10	2	1
May	52	44	2	6	0
June	49	42	4	2	1
July	59	51	2	5	1
August	77	65	6	3	3
September	71	53	12	6	0
October	72	57	9	5	0
November	56	45	9	2	0
December	45	36	7	1	0
Total	661	535	78	38	8

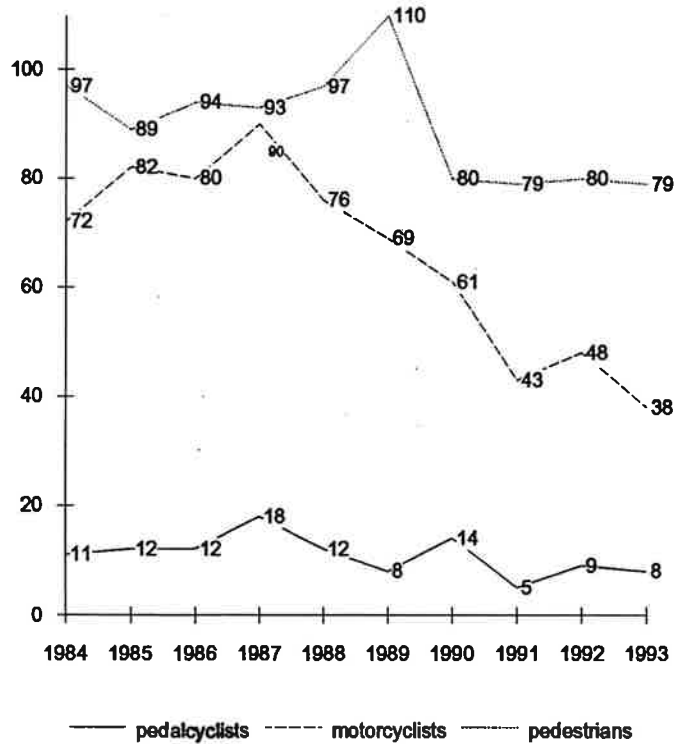
Status of persons killed - 1993



Drivers and passengers killed Ten-year trend



Pedestrians, motorcyclists & pedalcyclists killed Ten-year trend



Chronology of Traffic Safety Legislation

- 1967 Creation of Washington Traffic Safety Commission.
Mandatory motorcycle helmet law.
Driver education required for licensing at age 16.
- 1968 Implied consent law.
- 1971 Habitual traffic offender law.
- 1973 Speed limit reduced to 55 mph.
- 1975 Negligent homicide statute. Deferred prosecution statute.
- 1977 Property damage reporting threshold raised to \$300 from \$100.
Motorcycle helmet law repealed.
- 1979 DWI law modified to make .10% BAC illegal per se.
Mandatory day in jail for first DWI offense.
- 1980 Fatality reporting threshold changed from one year to 90 days from date of collision.
- 1982 "Day in Jail" changed to mean 24 consecutive hours.
Alcohol assessment and education/treatment required for DWI.
- 1983 Vehicular homicide and assault statute. Open container law for alcoholic beverages.
Mandatory child restraint law.
- 1984 Mandatory child restraint law became chargeable traffic violation.
License confiscated, temporary license issued at time of DWI arrest.
- 1986 Mandatory seat belt law.
- 1987 Mandatory seat belt law became a chargeable traffic violation.
Speed limit increased to 65 mph (60 mph for trucks) on rural interstate highways.
Motorcycle Helmets required for persons under 18 years of age.
Children under 5 years of age prohibited from riding on motorcycles. Property damage reporting threshold raised to \$500 from \$300.
- 1988 Vehicle registration cancellation for driving with a suspended drivers license.
- 1989 Fatality reporting threshold changed from 90 days to 30 days from date of collision. Youth under 19 years lose license for DWI for 90 days or until age 19 (whichever is longer).
- 1990 Mandatory insurance required.
Mandatory motorcycle helmet law.
- 1991 Mandatory installation of crossing arms on school buses.
- 1992 DWI victim panels authorized as a sentencing option
- 1993 Age requirement for child safety seats raised from 1 to 2 years.
Pedestrian crosswalk law upgraded.