
1991 Fatal Collisions in Washington

March 1992

Source:
*Washington Fatal Accident
Reporting System (FARS)*



WASHINGTON TRAFFIC SAFETY COMMISSION
1000 South Cherry Street ■ P. O. Box 0944
Olympia, Washington 98504-0944 ■ (206) 753-6197

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Preface

This document summarizes fatal traffic collisions which occurred during 1991 on Washington State roadways. The major data source used is the Washington Fatal Accident Reporting System (FARS), a traffic records system managed by the National Highway Traffic Safety Administration (NHTSA). A more comprehensive report, the Data Summary and Problem Analysis, is published later in the year. It will include data on all reported collisions, including injury and property damage as well as fatal collisions.

Note: There may be minor revisions in FARS statistical information after the date of this publication.

Other data sources used in 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).

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I. Overview

**1991 Fatal Collisions
in Washington**
Source: FARS

Overview of fatalities and exposure
Two-year comparison

category	1991	1990	'91 vs prev year
Fatal collisions	601	726	-17.2%
Persons killed	681	825	-17.5%
Persons injured (in fatal clsns)	654	754	-13.3%
Miles traveled (in millions)*	46,365	44,694	3.7%
Deaths per 100 million miles*	1.47	1.83	-19.7%
Licensed drivers	3,572,038	3,366,146	6.1%
Registered vehicles*	4,384,000	4,233,853	3.5%
Population	5,000,400	4,866,692	2.7%

*Preliminary for 1991

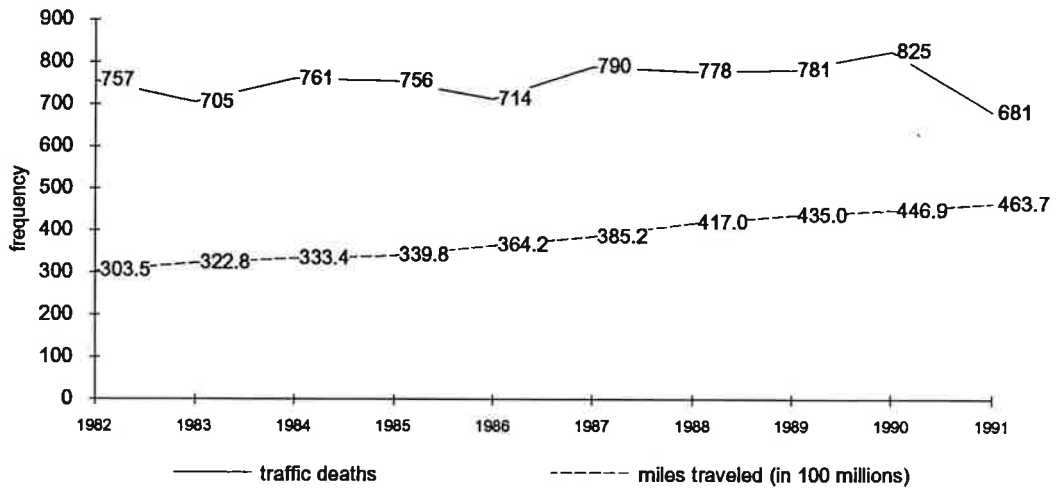
Other source: DOL, WSDOT, OFM

Fatal collisions and fatalities by month
Two-year comparison

month	fatal collisions		fatalities	
	1991	1990	1991	1990
January	44	60	53	63
February	39	48	49	53
March	51	57	55	61
April	35	48	47	55
May	59	68	64	75
June	45	69	51	82
July	51	72	58	85
August	61	78	73	92
September	63	69	66	80
October	57	55	62	62
November	49	51	54	56
December	47	51	49	61
Total	601	726	681	825

**1991 Fatal Collisions
in Washington**
Source: FARS

**Traffic deaths and miles traveled
Ten-year comparison**



Other source: WSDOT, WSP

**Fatalities by status of person killed
Four-year comparison**

status	1991	1990	1989	1988	'91 vs	
					prev 3-yr avg	prev 3-yr avg
Vehicle driver	378	438	420	394	417	-9.4%
Vehicle passenger	176	232	174	200	202	-12.9%
Pedestrian	79	80	110	97	96	-17.4%
Motorcycle driver	35	57	59	66	61	-42.3%
Motorcycle passenger	8	4	10	9	8	4.3%
Pedalcyclist	5	14	8	12	11	-55.9%
Total	681	825	781	778	795	-14.3%

**1991 Fatal Collisions
in Washington
Source: FARS**

**Population, vehicle, travel and fatality summary
1972 - 1991**

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	1.83
1991	5,000,400	3,572,038	4,384,000	46,365.0	681	1.47

Other source: WSP, OFM, DOL, WSDOT

* In millions; preliminary estimate for 1991

+ 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.

@ Estimated for 1991

1973: Speed limit reduced to 55 mph.

1979: DWI law modified to make .10 BAC illegal per se.
Mandatory day in jail for first time DWI offense.

1983: Open container law for alcoholic beverages.
Mandatory child restraint law.

1986: Mandatory seat belt law.

1990: Mandatory motorcycle helmet law.

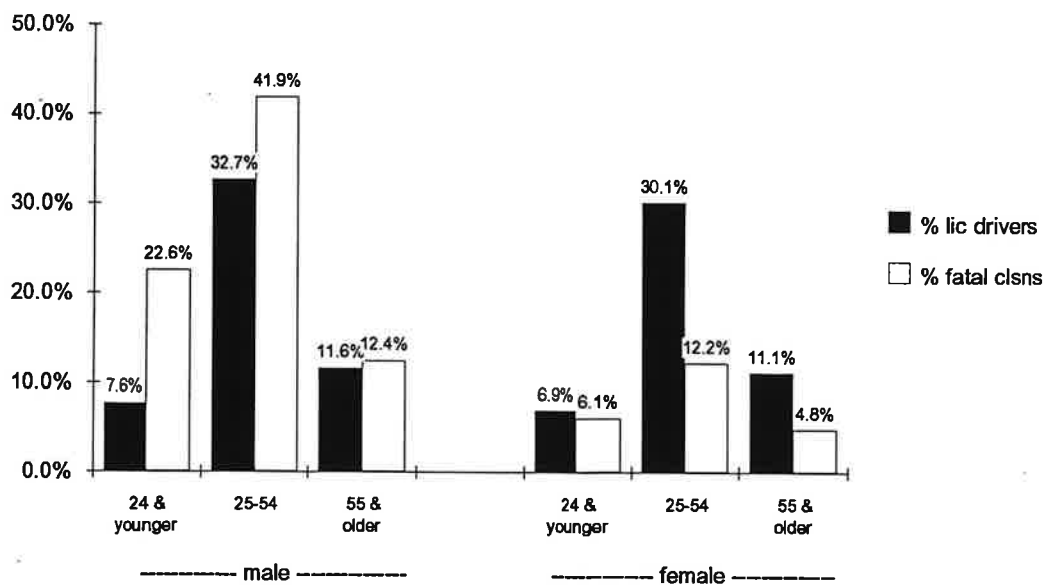
**1991 Fatal Collisions
in Washington**
Source: FARS

**Licensed drivers and fatal collision involvement
By age group and sex - 1991**

	male				female			
	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	38,024	1.1%	22	2.5%	34,317	1.0%	14	1.6%
18-20	89,307	2.5%	79	9.0%	79,421	2.2%	18	2.1%
21-24	145,766	4.1%	97	11.1%	131,212	3.7%	21	2.4%
25-34	435,531	12.2%	195	22.3%	401,644	11.2%	50	5.7%
35-44	444,186	12.4%	109	12.4%	415,728	11.6%	33	3.8%
45-54	286,739	8.0%	63	7.2%	258,739	7.2%	24	2.7%
55-64	187,211	5.2%	43	4.9%	172,636	4.8%	13	1.5%
65 & over	226,431	6.3%	66	7.5%	225,146	6.3%	29	3.3%
Total	1,853,195	51.9%	674	76.9%	1,718,843	48.1%	202	23.1%

Other source: DOL

**Percent of licensed drivers vs percent of fatal collisions
By sex and age group**



**1991 Fatal Collisions
in Washington**
Source: FARS

Drivers in fatal collisions by previous DWI record
Four-year comparison

previous DWIs*	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
With valid license						
0 prev DWI	736	865	878	899	881	-16.4%
1 prev DWI	9	13	13	22	16	-43.8%
2 or more DWIs	0	2	0	0	1	-100.0%
Unknown	0	1	0	0		
Total w/valid license	745	881	891	921	898	-17.0%
Invalid license						
0 prev DWI	94	98	85	46	76	23.1%
1 prev DWI	19	22	22	9	18	7.5%
2 or more DWIs	2	3	6	2	4	-45.5%
Unknown	1	4	0	1		
Total w/invalid license	116	127	113	58	99	16.8%
Total drivers	861	1008	1004	979	997	-13.6%

* Over 3 previous years

Drivers in fatal crashes by previous moving violations*
Four-year comparison

prev moving violtns	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Valid license						
0 prev mvs	273	406	397	400	401	-31.9%
1 prev mv	307	309	323	337	323	-5.0%
2 prev mvs	108	101	104	120	108	-0.3%
3 or more mvs	57	63	67	64	65	-11.9%
Unknown	0	2	0	0		
Total w/valid lic	745	881	891	921	898	-17.0%
Invalid license						
0 prev mvs	42	41	45	35	40	4.1%
1 prev mv	38	44	39	14	32	17.5%
2 prev mvs	17	11	14	7	11	59.4%
3 or more mvs	17	23	15	0	13	34.2%
Unknown	2	8	0	2	3	-40.0%
Total w/invalid lic	116	127	113	58	99	16.8%
Total drivers	861	1,008	1,004	979	997	-13.6%

* Not including DWI

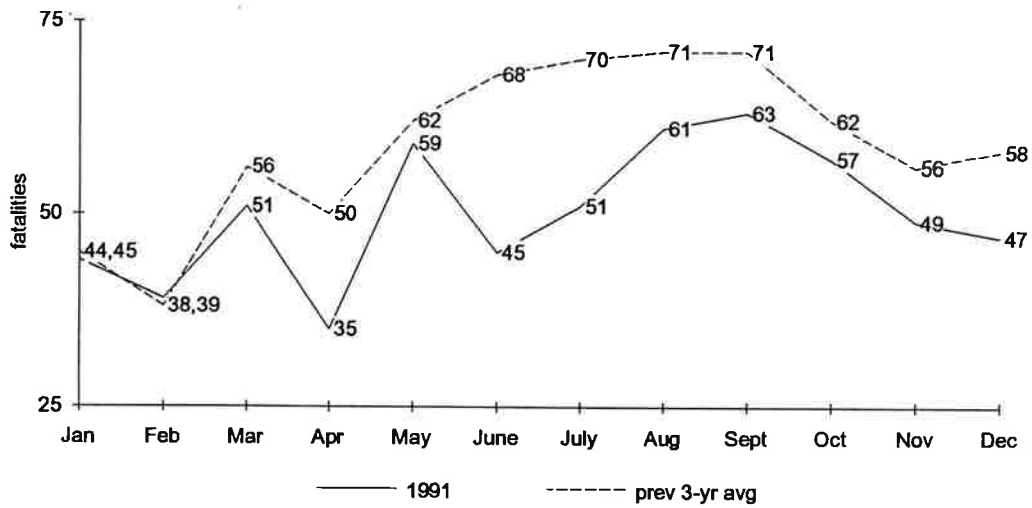
II. Fatal collisions

**1991 Fatal Collisions
in Washington**
Source: FARS

**Fatal collisions by month
Four-year comparison**

month	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
January	44	60	37	38	45	-2.2%
February	39	48	30	37	38	1.7%
March	51	57	51	59	56	-8.4%
April	35	48	48	54	50	-30.0%
May	59	68	63	55	62	-4.8%
June	45	69	60	74	68	-33.5%
July	51	72	66	71	70	-26.8%
August	61	78	61	74	71	-14.1%
September	63	69	78	65	71	-10.8%
October	57	55	71	61	62	-8.6%
November	49	51	60	57	56	-12.5%
December	47	51	69	55	58	-19.4%
Total	601	726	694	700	707	-15.0%

**Fatal collisions by month
1991 vs previous 3-year average**



**1991 Fatal Collisions
in Washington**
Source: FARS

Fatal collisions by first harmful event
Four-year comparison

	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Collision w/other motor vehicle	225	275	284	269	276	-18.5%
Collision w/fixed or other object	180	217	183	207	202	-11.0%
Vehicle overturned	103	120	104	102	109	-5.2%
Vehicle - pedestrian	70	78	100	92	90	-22.2%
Vehicle - pedalcycle	5	14	8	12	11	-55.9%
Vehicle - railway vehicle	7	6	6	6	6	16.7%
Vehicle - animal	2	1	1	2	1	50.0%
Other	7	14	5	9	9	-25.0%
Not stated	2	1	3	1		
Total	601	726	694	700	707	-15.0%

Fatal collisions by location in trafficway
Four-year comparison

location	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
On roadway	319	391	400	388	393	-18.8%
Shoulder	22	31	32	37	33	-34.0%
Median	21	30	19	18	22	-6.0%
Roadside	137	168	127	166	154	-10.8%
Outside right of way	31	48	36	14	33	-5.1%
Off roadway - location unknown	67	54	74	73	67	0.0%
Other (in parking lane, etc.)	2	4	6	4	5	-57.1%
Unknown	2	0	0	0		
Total	601	726	694	700	707	-15.0%

**1991 Fatal Collisions
in Washington**
Source: FARS

Vehicles in fatal collisions by motor vehicle class
Four-year comparison

vehicle type	1991	1990	1989	1988	'91 vs	
					prev 3-yr avg	prev 3-yr avg
Passenger vehicles	491	592	575	585	584	-15.9%
Light trucks (under 10,000 lb)	248	274	272	240	262	-5.3%
Medium & heavy trucks	55	73	75	70	73	-24.3%
Utility trucks	39	47	38	41	42	-7.1%
Motorcycles	42	62	71	74	69	-39.1%
Buses	6	6	4	1	4	63.6%
Other	4	9	4	7	7	-40.0%
Unknown	11	7	9	5		
Total vehicles	896	1,070	1,048	1,023	1,047	-14.4%

Vehicles in fatal collisions by severity of damage
Four-year comparison

	1991	1990	1989	1988	'91 vs	
					prev 3-yr avg	prev 3-yr avg
Towed away	813	949	919	898	922	-11.8%
Driven away	79	119	129	123	124	-36.1%
Abandoned	2	1	0	1	1	200.0%
Unknown/not reported	2	1	0	1	1	200.0%
Total	896	1,070	1,048	1,023	1,047	-14.4%

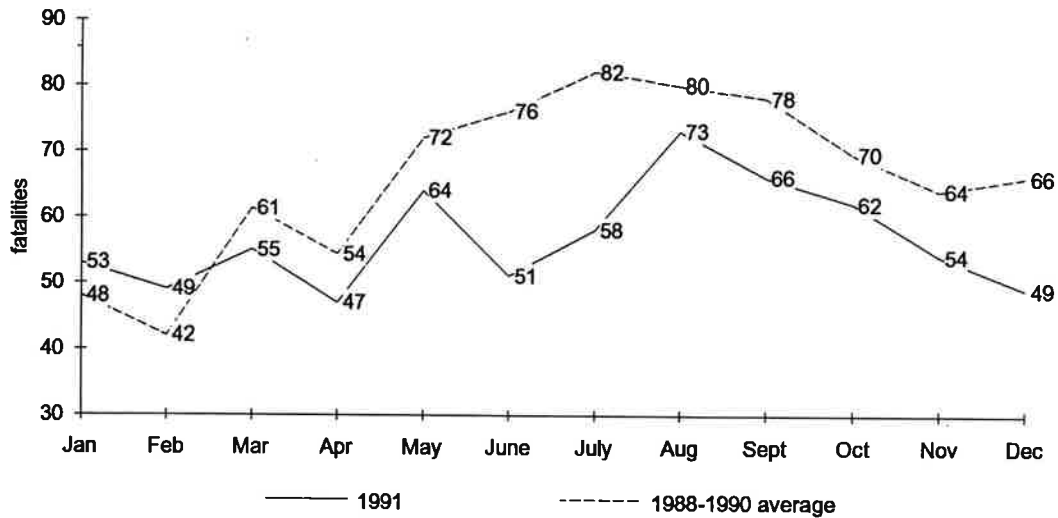
III. Traffic fatalities

**1991 Fatal Collisions
in Washington**
Source: FARS

**Traffic fatalities by month
Four-year comparison**

	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
January	53	63	42	40	48	9.7%
February	49	53	33	41	42	15.7%
March	55	61	53	69	61	-9.8%
April	47	55	52	55	54	-13.0%
May	64	75	74	68	72	-11.5%
June	51	82	65	82	76	-33.2%
July	58	85	76	84	82	-29.0%
August	73	92	72	77	80	-9.1%
September	66	80	85	69	78	-15.4%
October	62	62	81	66	70	-11.0%
November	54	56	71	66	64	-16.1%
December	49	61	77	61	66	-26.1%
Total	681	825	781	778	795	-14.3%

**Traffic fatalities by month
1991 vs previous 3-year average**



**1991 Fatal Collisions
in Washington**
Source: FARS

Traffic fatalities by county
Four-year comparison

county	1991	1990	1989	1988	'91 vs	
					prev 3-yr avg	prev 3-yr avg
Adams	9	8	13	11	11	-15.6%
Asotin	2	1	1	1	1	100.0%
Benton	17	22	11	8	14	24.4%
Chelan	17	12	15	7	11	50.0%
Clallam	2	17	19	12	16	-87.5%
Clark	32	36	33	27	32	0.0%
Columbia	0	3	4	1	3	-100.0%
Cowlitz	13	23	21	15	20	-33.9%
Douglas	7	9	6	6	7	0.0%
Ferry	3	9	5	8	7	-59.1%
Franklin	12	14	11	10	12	2.9%
Garfield	0	0	1	1	1	-100.0%
Grant	12	24	23	16	21	-42.9%
Grays Harbor	20	15	14	20	16	22.4%
Island	5	8	8	10	9	-42.3%
Jefferson	6	3	15	6	8	-25.0%
King	123	170	146	170	162	-24.1%
Kittitas	27	39	29	19	29	-6.9%
Kitsap	28	11	19	18	16	75.0%
Klickitat	4	13	2	9	8	-50.0%
Lewis	17	26	23	16	22	-21.5%
Lincoln	7	2	3	3	3	162.5%
Mason	7	11	15	16	14	-50.0%
Okanogan	8	11	13	16	13	-40.0%
Pacific	6	2	5	2	3	100.0%
Pend Oreille	2	3	4	5	4	-50.0%
Pierce	61	85	68	92	82	-25.3%
San Juan	6	1	1	2	1	350.0%
Skagit	16	24	16	27	22	-28.4%
Skamania	2	2	5	3	3	-40.0%
Snohomish	69	76	66	57	66	4.0%
Spokane	26	39	43	46	43	-39.1%
Stevens	10	16	6	7	10	3.4%
Thurston	22	17	17	23	19	15.8%
Wahkiakum	0	0	1	0	0	-100.0%
Walla Walla	14	7	8	14	10	44.8%
Whatcom	16	21	32	18	24	-32.4%
Whitman	12	7	13	7	9	33.3%
Yakima	41	38	46	49	44	-7.5%
Total	681	825	781	778	795	-14.3%

**1991 Fatal Collisions
in Washington**
Source: FARS

Fatalities by age group
Four-year comparison

age group	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
0 - 14	43	51	50	50	50	-14.6%
15 - 17	42	60	41	47	49	-14.9%
18 - 20	74	73	89	98	87	-14.6%
21 - 24	89	107	82	94	94	-5.7%
25 - 34	144	203	204	186	198	-27.2%
35 - 44	84	116	102	119	112	-25.2%
45 - 54	48	74	55	43	57	-16.3%
55 - 64	45	41	49	45	45	0.0%
65 & older	111	100	109	94	101	9.9%
Unknown	1	0	0	2		
Total	681	825	781	778	795	-14.3%

Fatalities by sex
Four-year comparison

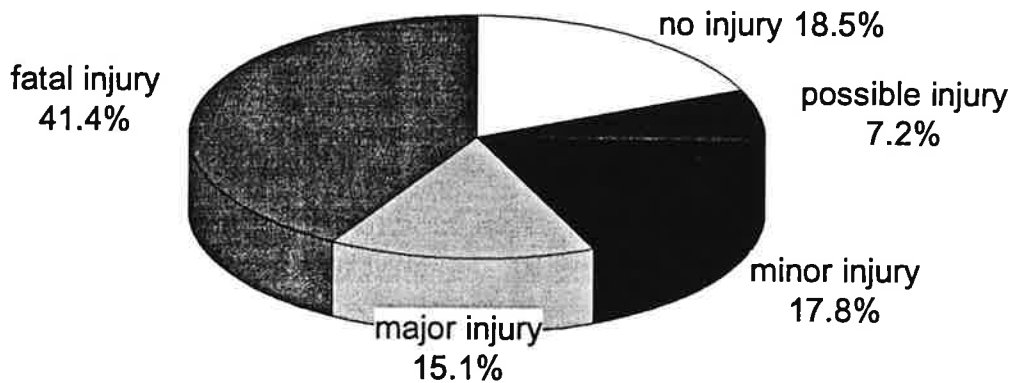
sex	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Male	476	588	531	567	562	-15.3%
Female	205	237	250	211	233	-11.9%
Total fatalities	681	825	781	778	795	-14.3%

**1991 Fatal Collisions
in Washington**
Source: FARS

Severity of injuries in fatal crashes
Four-year comparison

severity	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Fatal injury	681	825	781	778	795	-14.3%
Major injury	248	336	295	349	327	-24.1%
Minor injury	293	309	257	260	275	6.4%
Possible injury	113	109	105	108	107	5.3%
No injury	304	363	388	361	371	-18.0%
Total persons	1,639	1,942	1,826	1,856	1,875	-12.6%

**Injury severity of persons involved
in fatal collisions - 1991**



**1991 Fatal Collisions
in Washington**
Source: FARS

Fatalities by road type
Four-year comparison

road type	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Interstate system	77	96	79	96	90	-14.8%
Other federal-aid primary	226	274	292	254	273	-17.3%
Federal-aid secondary	136	159	152	174	162	-15.9%
Federal-aid urban arterials/collectors	241	296	258	245	266	-9.5%
Not stated	1	0	0	9		
Total	681	825	781	778	795	-14.3%

Restraint/safety equipment use by persons who died
Four-year comparison

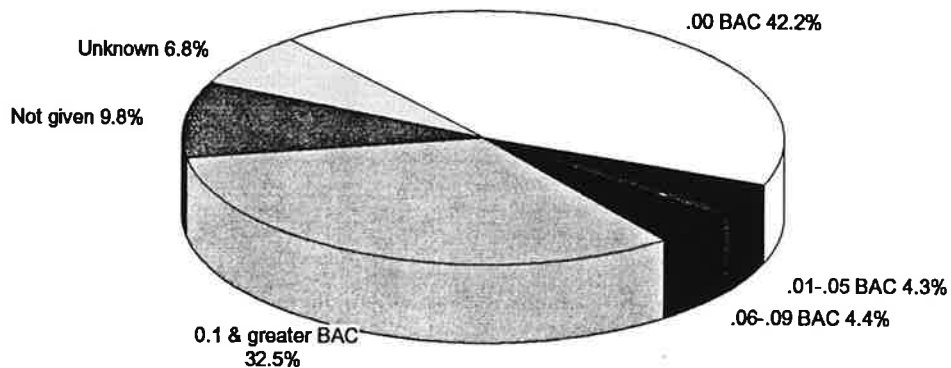
restraint use	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
Lap belt	24	30	20	40	30	-20.0%
Lap & shoulder	151	137	122	116	125	20.8%
Child safety seat	4	3	1	3	2	71.4%
Total restraints used	179	170	143	159	157	13.8%
% used	32.3%	24.9%	22.4%	24.7%	24.0%	34.5%
No restraint used	346	480	454	454	463	-25.2%
% not used	62.3%	70.2%	71.0%	70.5%	70.6%	-11.7%
Unknown restraint use	30	34	42	31	36	-15.9%
% unknown use	5.4%	5.0%	6.6%	4.8%	5.5%	-0.9%
Motorcycle helmet worn	36	44	21	24	30	21.3%
% worn	83.7%	73.3%	30.9%	32.4%	45.5%	83.8%
Motorcycle helmet not worn	7	16	47	50	38	-81.4%
% not worn	16.3%	26.7%	69.1%	67.6%	54.5%	-70.1%

**1991 Fatal Collisions
in Washington**
Source: FARS

**Fatalities by BAC level
Four-year comparison**

BAC test	1991	1990	1989	1988	prev 3-yr avg	'91 vs prev 3-yr avg
.00	288	352	329	300	327	-11.9%
.01 - .05	29	41	32	31	35	-16.3%
.06 - .09	30	26	26	42	31	-4.3%
.1 & greater	221	299	257	279	278	-20.6%
Not given	67	106	137	126	123	-45.5%
Unknown	46	1	0	0		
Total fatalities	681	825	781	778	795	-14.3%

Fatalities by BAC level - 1991

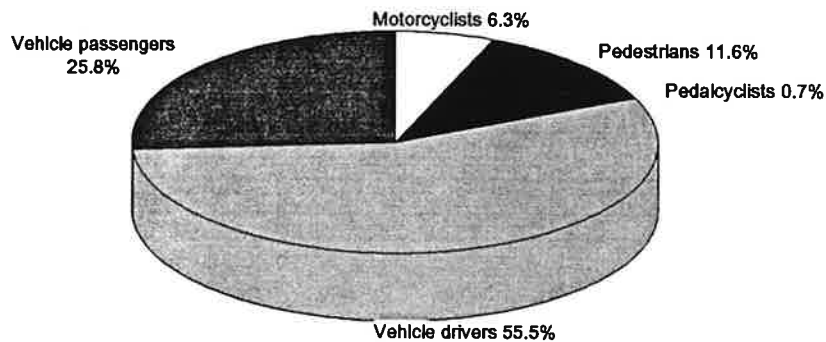


**1991 Fatal Collisions
in Washington**
Source: FARS

**Status of persons killed
By month - 1991**

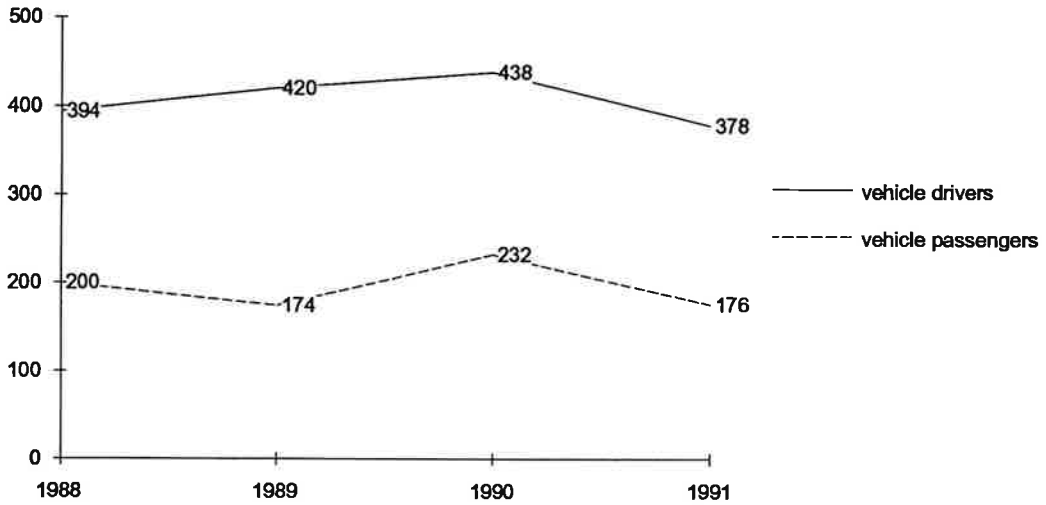
month	total killed	vehicle occupants	pedes- trians	motor- cyclists	pedal- cyclists
January	53	40	13	0	0
February	49	41	7	1	0
March	55	42	7	4	2
April	47	41	1	5	0
May	64	51	5	7	1
June	51	42	3	6	0
July	58	48	3	7	0
August	73	57	9	6	1
September	66	56	5	5	0
October	62	53	6	2	1
November	54	42	12	0	0
December	49	41	8	0	0
Total	681	554	79	43	5

Status of persons killed - 1991



**1991 Fatal Collisions
in Washington**
Source: FARS

**Vehicle drivers and passengers killed
4 - year comparison**



**Pedestrians, motorcyclists and pedalcyclists killed
4 - year comparison**

