

INFORMATION BULLETIN

February 25, 1999



REVISED SUMMARY OF 1997 CALIFORNIA SCHOOL BUS COLLISION DATA

The California Highway Patrol recently received corrected 1997 school bus mileage figures from school bus contractors in California. These figures alter the total number of miles driven by school buses previously reported in the *SUMMARY OF 1997 CALIFORNIA SCHOOL BUS COLLISION DATA*, July 14, 1998. The new figures appear in tables one and four of this report. School pupil transportation industry members should disregard the *SUMMARY OF 1997 CALIFORNIA SCHOOL BUS COLLISION DATA*, July 14, 1998.

The following is a summary of California school bus collision data for the 1997 calendar year. This data reflects those collisions which occurred while school buses were transporting one or more students to or from school, or school-related activities. School pupil transportation agencies may use this information to identify primary collision factors and direct their training resources accordingly. This data may assist school pupil transportation agencies in reducing the incidence of school bus-involved collisions and ensure the safe transportation of California's school pupils.

SYNOPSIS

In 1997, 22,878 school buses were operated in California, an increase of 536 from 1996. These vehicles traveled 8.8% more miles (25,260,283) in 1997 when compared to calendar year 1996.

There were four fewer school bus accidents in 1997 than during the previous year. However, during 1997 there were six fatal school bus accidents, compared to none in 1996. There were no school pupil passenger or school pupil pedestrian fatalities resulting from these accidents.

The total number of injury collisions increased by 3.2% in 1997. However, this calendar year saw an 8.2% decrease from 1996 in the total number of collisions per million miles traveled.

School Bus Driver at Fault Collisions: School bus driver error was the primary collision factor for 832 (40.7%) of the total number of school bus accidents for 1997, a slight increase of 0.4% from the previous year. Of these accidents, 588 (70.7%) occurred in Type 1 school buses and 244 (29.3%) occurred in Type 2 school buses.

Other Causes: Other vehicles were responsible for 942 (46.1%) of the school bus accidents, a slight decrease of (0.6%) from the previous year. Accidents attributed to nonspecific causes totaled 270 (13.2%), a slight increase (0.2%) from the 1996 calendar year.

TABLE 1

CALIFORNIA SCHOOL BUS INJURY COLLISIONS STATISTICS BY CATEGORY

1995 TO 1997

CATEGORY	1995	1996	1997
Fatal School Bus Accidents	4	0	6
Pupil Passengers Killed	2	0	0
Pupil Pedestrians Killed	1	0	0
Injury Collisions	484	495	511
Percentage of Change	(-4.2%)	(+2.3%)	(+3.2%)
<u>Pupil Passengers Injured:</u>			
Severe Injuries	6	3	2
Moderate Injuries	116	133	90
Possible Injuries	646	633	540
Total Pupil Passengers Injured	768	769	632
<u>Pupil Pedestrians Injured:</u>			
Severe Injuries	Not Available	1	0
Moderate Injuries		1	2
Possible Injuries		1	0
Total Pupil Pedestrians Injured	Not Available	3	2
Property Damage Collisions	979	1,108	1,048
Percentage of Change	(-42.3%)	(+13.1)	(-5.4)
Total Collisions	1,930	2048	2044
Percentage of Change	(-12.6%)	(+6.1%)	(-0.2)
Total School Buses	22,279	22,342	22,878
Percentage of Change	(-2.6%)	(+0.3%)	(+2.4%)
Total Mileage	305,012,946	287,697,152	312,957,435
Percentage of Change	(-1.7%)	(-5.7%)	(+8.8%)

Table 2 reflects the most frequently reported primary collision factors in school bus collisions and identifies the type of school bus involved.

TABLE 2

SCHOOL BUS ACCIDENTS BY PRIMARY COLLISION FACTOR

1997

Primary Collision Factor	Type-1 School Bus	Type-2 School Bus	Total
Improper Turning	305	120	425
Other Hazards	321	93	414
Unsafe Speed	226	134	360
Unsafe Start and Backing	187	87	274
Car Right-of-Way	89	64	153
Changing Lane	76	30	106
Traffic Signs and Signals	59	28	87
Improper Passing	61	18	79
Unknown Causes	46	12	58
Wrong Side of the Road	26	19	45
Following too Closely	7	5	12
Pedestrian Violation	9	3	12
Hazardous Parking	7	0	7
Brakes	6	1	7
Pedestrian Right of Way	4	1	5
TOTAL	1429	615	2044

Table 3 reflects the most frequently reported primary collision factors in school bus collisions assigned to the school bus driver and the type of bus involved.

TABLE 3
SCHOOL BUS ACCIDENTS BY PRIMARY COLLISION FACTOR
ATTRIBUTED TO THE SCHOOL BUS DRIVER

1997

Primary Collision Factor	Type-1 School Bus	Type-2 School Bus	Total
Improper Turn	232	73	305
Unsafe Start and Backing	114	49	163
Other Hazards	94	36	130
Speed	72	44	116
Car Right-of-Way	23	23	46
Wrong Side of the Road	12	5	17
Changing Lanes	11	5	16
Improper Passing	10	4	14
Traffic Signals and Signs	5	3	8
Pedestrian Right-of-Way	4	0	4
Hazardous Parking	4	0	4
Unknown Cause	3	1	4
Brakes	2	0	2
Following too Closely	2	0	2
Pedestrian Violation	0	1	1
TOTAL	588	244	832

Table 4 reflects the breakdown of school buses by type, category of operation, number of buses per operation, number of miles traveled, number of collisions, and mileage versus collisions.

TABLE 4

SCHOOL BUSES, MILEAGE COLLISIONS

1997

Type 1 School Buses

Category	Buses	Miles	Collisions	Collisions per Million Miles
Public School	11,956	153,214,663	992	6.5
Contractor	3,812	58,405,757	396	6.8
Private School	659	5,808,811	41	7.1
TOTAL	16,427	217,429,231	1,429	6.6

Type 2 School Buses

Category	Buses	Miles	Collisions	Collisions per Million Miles
Public School	2,194	29,609,612	221	7.5
Contractor	3,915	62,249,569	361	5.8
Private School	342	3,669,023	33	9.0
TOTAL	6,451	95,528,204	615	6.4

Table 5 reflects school bus accidents by type and their percentage occurrences in several categories.

TABLE 5

SCHOOL BUS ACCIDENTS BY TYPE OF INVOLVEMENT

1997

Category	Type-1 School Bus	Type-2 School Bus	Total Accidents
Other Motor Vehicles	791 (55%)	414 (67.3%)	1,205 (59%)
Parked Motor Vehicles	184 (12.9%)	82 (13.3%)	266 (13%)
Fixed Objects	210 (14.7%)	54 (8.8%)	264 (12.9%)
Non-Collisions	171 (12%)	33 (5.4%)	204 (10%)
Other Objects	27 (1.9%)	12 (2%)	39 (1.9%)
Pedestrians	17 (1.2%)	*5	22 (1%)
Animals	17 (1.2%)	*5	22 (1%)
Bicyclist	*8	*7	*15
Motor Vehicles Other Road	*4	*3	*7
Train	0	0	0
TOTAL	1,429	615	2,044

* Indicates less than one percent.

Table 6 reflects the number of pupil passengers killed or injured by type of involvement and bus.

TABLE 6
PUPIL PASSENGER VICTIMS

1997

Category	Killed	Injured	Severely Injured	Moderately Injured	Possibly Injured
Non Collision					
Type 1	0	279	1	56	222
Type 2	0	42	0	15	27
Other Motor Vehicle					
Type 1	0	221	1	7	213
Type 2	0	37	0	2	35
Fixed Object					
Type 1	0	28	0	5	23
Type 2	0	2	0	1	1
Motor Vehicle Other Road					
Type 1	0	6	0	1	6
Type 2	0	1	0	1	0
Parked Motor Vehicle					
Type 1	0	6	0	0	6
Type 2	0	0	0	0	0
Animal					
Type 1	0	3	0	1	2
Type 2	0	1	0	0	1
Other Object					
Type 1	0	3	0	2	1
Type 2	0	1	0	0	1
Bicyclist					
Type 1	0	1	0	0	1
Type 2	0	0	0	0	0
Pedestrian					
Type 1	0	1	0	0	1
Type 2	0	0	0	0	0
Train					
Type 1	0	0	0	0	0
Type 2	0	0	0	0	0
TOTAL					
Type 1	0	548	2	71	475
Type 2	0	84	0	19	65
Grand Total		632	2	90	540

Table 7 reflects the months of peak school bus collision activity. Historically, the months of May and October have had the highest number of school bus collisions. Again, during the 1997 calendar year, most school bus accidents occurred during these months, reaffirming the historical trend.

TABLE 7

SCHOOL BUS ACCIDENTS BY MONTH

1997

Month	Accidents	Month	Accidents
January	200	July	64
February	194	August	49
March	210	September	231
April	187	October	244
May	236	November	155
June	105	December	169

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