

# INFORMATION BULLETIN

August 31, 2001



## SUMMARY OF 2000 CALIFORNIA SCHOOL BUS COLLISION DATA

The following is a summary of California school bus collision data for the 2000 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 2000, 26,291 school buses were operated in California, an increase of 1,018 from 1999. In 2000, these vehicles traveled a total of 367,893,624 miles, 3.8 percent more (13,633,305) than in 1999 when they traveled 354,260,319 miles.

The total number of school bus collisions in 2000 increased by 69 to 2,173 over the previous year's total of 2,104, reflecting a 3.3 percent increase. Of these, 2 were fatal, remaining the same as in 1999. The fatalities did not occur in school buses.

The total number of injury collisions in 2000 increased by 34 to 525 over the previous year's total of 491, reflecting a 7 percent increase.

School Bus Driver at-Fault Collisions: School bus driver error was the primary collision factor for 41 percent of the school bus collisions for 2000, representing no significant change from the previous year. Of the driver at-fault collisions, 671, or 75 percent, occurred in Type 1 school buses and 220, or 25 percent, occurred in Type 2 school buses. A Type 1 school bus is one designed for carrying more than 16 passengers and the driver. A Type 2 school bus is one designed for carrying not more than 16 passengers and the driver; or manufactured on or after April 1, 1977, having a manufacturer's gross vehicle weight rating of 10,000 pounds or less, and designed for carrying not more than 20 passengers and the driver.

Other Causes: Drivers of other vehicles were responsible for 977, or 45 percent, of the total school bus collisions. Collisions attributed to non-specific causes totaled 305, or 14 percent, of the school bus collisions.

Table 1 reflects overall figures for school bus accidents, types of injuries, and total number of buses and miles driven for 2000 and the previous two years.

**TABLE 1**

**CALIFORNIA SCHOOL BUS INJURY COLLISION STATISTICS BY CATEGORY**

**1998 TO 2000**

<b>CATEGORY</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Fatal School Bus Collisions	3	2	2
Pupil Passengers Killed	0	0	0
Pupil Pedestrians Killed	0	0	0
Injury Collisions	512	491	525
Percentage of Change		-4.1%	+7%
<u>Pupil Passengers Injured:</u>			
Severe Injuries	3	1	16
Moderate Injuries	89	110	192
Possible Injuries	571	647	904
Total Pupil Passengers Injured	663	758	1,112
<u>Pupil Pedestrians Injured:</u>			
Severe Injuries	0	1	0
Moderate Injuries	2	2	1
Possible Injuries	0	3	2
Total Pupil Pedestrians Injured	2	6	3
Property Damage Collisions (school bus vs motor vehicle)	1,127	1,101	1,187
Percentage of Change		-2.3%	+7.8%
Property Damage Collisions (school bus vs other objects)	466	510	459
Percentage of Change		+9.4%	-10%
Total Collisions	2,108	2,104	2,173
Percentage of Change		*	+3.3%
Total School Buses	24,372	25,273	26,291
Percentage of Change		+3.7%	+4%
Total Mileage	331,343,687	354,260,319	367,893,624
Percentage of Change		+6.9%	+3.8%

\* Indicates less than one percent.

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 COLLISIONS BY PRIMARY COLLISION FACTOR**

2000

Primary Collision Factor	Type 1	Type 2	Total
Improper Turning	393	102	495
Other Hazards	293	112	405
Unsafe Speed	245	113	358
Unsafe Start and Backing	219	105	324
Car Right-of-Way	114	48	162
Improper Passing	80	27	107
Changing Lanes	75	25	100
Traffic Signs and Signals	43	26	69
Wrong Side of the Road	45	19	64
Unknown Causes	42	7	49
Following Too Closely	13	7	20
Pedestrian Right-of-Way	3	4	7
Pedestrian Violation	3	3	6
Hazardous Parking	3	1	4
Brakes	3	0	3
<b>TOTAL</b>	<b>1,574</b>	<b>599</b>	<b>2,173</b>

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

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

2000

Primary Collision Factor	Type 1	Type 2	Total
Improper Turning	307	65	372
Unsafe Start and Backing	137	61	198
Speed	68	27	95
Other Hazards	60	21	81
Car Right-of-Way	32	12	44
Changing Lanes	19	8	27
Wrong Side of the Road	15	7	22
Improper Passing	13	9	22
Traffic Signs and Signals	7	2	9
Pedestrian Right-of-Way	3	4	7
Following Too Closely	2	3	5
Unknown Causes	4	0	4
Hazardous Parking	2	1	3
Brakes	2	0	2
Pedestrian Violation	0	0	0
<b>TOTAL</b>	<b>671</b>	<b>220</b>	<b>891</b>

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**

**COLLISIONS BY SCHOOL BUS TYPE AND OWNERSHIP**

2000

**Type 1 School Buses**

<b>Category</b>	<b>Buses</b>	<b>Miles</b>	<b>Collisions</b>	<b>Collisions per Million Miles</b>
Public School	13,561	170,886,430	1,062	6.2
Contractor	5,017	78,219,527	472	6
Private School	678	6,189,890	39	6.3
<b>TOTAL</b>	<b>19,256</b>	<b>255,295,847</b>	<b>1,573</b>	<b>6.2</b>

**Type 2 School Buses**

<b>Category</b>	<b>Buses</b>	<b>Miles</b>	<b>Collisions</b>	<b>Collisions per Million Miles</b>
Public School	2381	33,766,406	258	7.6
Contractor	4,358	75,920,736	320	4.2
Private School	296	2,910,635	22	7.6
<b>TOTAL</b>	<b>7,035</b>	<b>112,597,777</b>	<b>600</b>	<b>5.3</b>

Table 5 reflects the occurrence of school bus collisions by type of involvement and type of bus.

**TABLE 5**

**SCHOOL BUS COLLISIONS BY TYPE OF INVOLVEMENT**

2000

<b>Category</b>	<b>Type 1 School Bus</b>	<b>Type 2 School Bus</b>	<b>Total Collisions</b>
Other Motor Vehicles	939 (60%)	385 (64%)	1,324
Parked Motor Vehicles	193 (12%)	92 (15%)	285
Non-Collisions (see note)	187 (12%)	45 (8%)	232
Fixed Objects	188 (12%)	38 (6%)	226
Other Objects	25 (2%)	17 (3%)	42
Bicyclists	13 *	9 (2%)	22
Animals	15 *	6 (1%)	21
Pedestrians	10 *	6 (1%)	16
Motor Vehicles Other Road	4 *	1 *	5
Train	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>2,173</b>

\* Indicates less than one percent.

NOTE: "Non-Collisions" means any of the following: overturning after swerving to avoid a collision, striking a surface irregularity (uneven road surface, holes, bumps, or ruts), an occupant falling or jumping from the vehicle, damage involving only the motor vehicle, or a passenger injured from striking the interior of a vehicle due to motion of the vehicle, such as a sudden stop.

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

**TABLE 6**

**PUPIL PASSENGER VICTIMS BY TYPE OF INVOLVEMENT**

**2000**

<b>Category</b>	<b>Killed</b>	<b>Injured</b>	<b>Severely Injured</b>	<b>Moderately Injured</b>	<b>Possibly Injured</b>
Other Motor Vehicle					
School bus was: Type 1	0	261	1	8	252
Type 2	0	38	0	5	33
Fixed Object					
School bus was: Type 1	0	60	1	2	57
Type 2	0	3	0	0	3
Parked Motor Vehicle					
School bus was: Type 1	0	15	0	1	14
Type 2	0	2	0	0	2
Non-Collision					
School bus was: Type 1	0	286	0	64	222
Type 2	0	49	1	14	34
Other Object					
School bus was: Type 1	0	3	0	2	1
Type 2	0	1	0	1	0
Animal					
School bus was: Type 1	0	0	0	0	0
Type 2	0	0	0	0	0
Pedestrian					
School bus was: Type 1	0	1	0	0	1
Type 2	0	1	0	0	1
Bicyclist					
School bus was: Type 1	0	6	0	1	5
Type 2	0	0	0	0	0
Motor Vehicle Other Road (see note)					
School bus was: Type 1	0	9	0	0	9
Type 2	0	0	0	0	0
Train					
School bus was: Type 1	0	0	0	0	0
Type 2	0	0	0	0	0
<b>TOTAL</b>					
School bus was: Type 1	0	641	2	78	561
Type 2	0	94	1	20	73
Grand Total	0	735	3	98	634

NOTE: "Motor Vehicle Other Road" means collision involving a motor vehicle which leaves the roadway and collides with another motor vehicle on another roadway.

Example: A bus crosses a median strip and collides with a vehicle traveling in the opposite direction.

Table 7 reflects the months of peak school bus collision activity. Historically, the month of October has had the highest number of school bus collisions. During the 2000 calendar year, most school bus accidents occurred during this month. This reaffirms the historical trend.

**TABLE 7**

**SCHOOL BUS COLLISIONS BY MONTH**

**2000**

<b>Month</b>	<b>Collisions</b>
January	187
February	215
March	240
April	186
May	237
June	143
July	54
August	75
September	230
October	273
November	186
December	147

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