DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

INFORMATION BULLETIN

August 7, 2002

SUMMARY OF 2001 CALIFORNIA SCHOOL BUS COLLISION DATA

The following is a summary of California school bus collision data for the 2001 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 should assist school pupil transportation agencies in reducing incidents of school bus-involved collisions and ensure the safe transportation of California's school pupils.

SYNOPSIS

In 2001, 25,496 school buses were operated in California, a decrease of 795 from 2000. These vehicles traveled 6.8 percent less miles in 2001 (342,936,178) when compared to calendar year 2000 (367,893,624).

The total number of school bus collisions in 2001 increased by 65 to 2,238 over the previous year's total of 2,173, reflecting a three percent increase. Of these collisions, five were fatal, reflecting a three percent increase from the previous year. However, the fatalities did not occur in school buses, maintaining zero school pupil passengers killed since 1996.

The total number of injury collisions in 2001 decreased to 447 from the previous year's total of 525, reflecting a 14.9 percent decrease.

School Bus Driver-at-Fault Collisions: School bus driver error was the primary collision factor for 42 percent of the school bus collisions for 2001, representing a one percent increase from the previous year. Of the driver-at-fault collisions, 693 (74 percent) occurred in Type 1 school buses and 247 (26 percent) occurred in Type 2 school buses. A Type 1 school bus is a vehicle designed to carry more than 16 passengers and the driver. A Type 2 school bus is a vehicle designed to carry not more than 16 passengers and the driver, or a vehicle manufactured on or after April 1, 1977, having a manufacturer's gross vehicle weight rating of 10,000 pounds or less, and designed to carry not more than 20 passengers and the driver.

Other Causes: Drivers of other vehicles were responsible for 977 (45 percent) of the total school bus collisions. Collisions attributed to non-specific causes totaled 305 (13 percent) of the school bus collisions.

Table 1 represents overall figures for school bus accidents, types of injuries, total number of buses, and miles driven for the 1999, 2000 and 2001 calendar years.

TABLE 1

CALIFORNIA SCHOOL BUS INJURY COLLISION STATISTICS BY CATEGORY

1999 TO 2001

CATEGORY	1999	2000	2001
Fatal School Bus Collisions	2	2	5
Pupil Passengers Killed	0	0	0
Pupil Pedestrians Killed	0	0	1
Injury Collisions	491	525	447
Percentage of Change	-4.1%	+7%	-14.9
Pupil Passengers Injured:			
Severe Injuries	1	16	2
Moderate Injuries	110	192	101
Possible Injuries	647	904	526
Total Pupil Passengers Injured	758	1,112	629
Pupil Pedestrians Injured:			
Severe Injuries	1	0	0
Moderate Injuries	2	1	2
Possible Injuries	3	2	0
Total Pupil Pedestrians Injured	6	3	2
Property Damage Collisions (school bus vs motor vehicle)	1,101	1,187	1,285
Percentage of Change	-2.3%	+7.8%	8.3%
Property Damage Collisions (school bus vs other objects)	510	459	501
Percentage of Change	+9.4%	-10%	9.2%
Total Collisions	2,104	2,173	2,238
Percentage of Change		+3.3%	3%

CATEGORY	1999	2000	2001
Total School Buses	25,273	26,291	25,496
Percentage of Change	+3.7%	+4%	-3%
Total Mileage	354,260,319	367,893,624	342,936,178
Percentage of Change	+6.9%	+3.8%	-6.8%

♦ Indicates less than one percent.

Table 2 represents 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 CONTRIBUTING CIRCUMSTANCES

2001

Primary Collision Factor	Type 1	Type 2	Total
Improper Turning	421	115	536
Other Hazards	295	96	391
Unsafe Speed	232	141	373
Unsafe Start and Backing	223	97	320
Car Right-of-Way	112	38	150
Changing Lanes	107	36	143
Improper Passing	75	27	102
Traffic Signs and Signals	54	20	74
Wrong Side of the Road	50	13	63
Unknown Causes	42	5	47
Following Too Closely	7	6	13
Pedestrian Violation	9	4	13
Hazardous Parking	4	3	7
Pedestrian Right-of-Way	3	22	5
Brakes	0	1	1
TOTAL	**1634**	**624**	**2238**

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

TABLE 3

SCHOOL BUS COLLISIONS BY PRIMARY COLLISION FACTOR

ATTRIBUTED TO THE SCHOOL BUS DRIVER

2001

Primary Collision Factor	Type 1	Type 2	Total
Improper Turning	304	75	379
Unsafe Start and Backing	136	52	188
Speed	73	47	120
Other Hazards	80	33	113
Car Right-of-Way	31	15	46
Changing Lanes	28	6	34
Improper Passing	14	5	19
Wrong Side of the Road	15	3	18
Traffic Signs and Signals	3	3	6
Pedestrian Right-of-Way	3	2	5
Following Too Closely	1	3	4
Unknown Causes	2	2	4
Hazardous Parking	3	1	4
Brakes	0	0	0
Pedestrian Violation	0	0	0
TOTAL	**693**	**247**	**940**

Table 4 represents 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

MILEAGE COLLISIONS BY SCHOOL BUS TYPE AND OPERATION

2001

Type 1 School Buses

Category	Buses	Miles	Collisions	Collisions per Million Miles
Public School	13,127	163,343,764	1,085	6.64
Contractor	5,214	77,026,915	513	6.66
Private School	675	6,542,845	36	5.50
TOTAL	**19,016**	**246,913,524**	**1,634**	**6.62**

Type 2 School Buses

Category	Buses	Miles	Collisions	Collisions per Million Miles
Public School	2,269	29,737,828	237	7.97
Contractor	3,887	62,966,541	322	5.11
Private School	324	3,318,285	45	13.56
TOTAL	**6,480**	**96,022,654**	**604**	**6.29**

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

TABLE 5

SCHOOL BUS COLLISIONS BY TYPE OF INVOLVEMENT

2001

Category	Type 1 School Bus	Type 2 School Bus	Total Collisions
Other Motor Vehicles	995	408	1,403
Parked Motor Vehicles	210	90	300
Fixed Objects	194	53	247
Non-Collisions (see note)	151	29	180
Other Objects	36	12	48
Pedestrians	18	7	25
Animals	17	2	19
Bicyclists	7	3	10
Motor Vehicles Other Road	6	0	6
Train	0	0	0
TOTAL	**1,634**	**604**	**2,238**

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; a passenger injured from striking the interior of a vehicle due to motion of the vehicle, such as a sudden stop.

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

TABLE 6

SCHOOL PUPIL PASSENGER VICTIMS BY TYPE OF INVOLVEMENT

2001

Category	Killed	Injured	Severely Injured	Moderately Injured	Possibly Injured
Other Motor Vehicle					
School bus was: Type 1	0	209	1	11	197
Type 2	0	37	0	7	30
Parked Motor Vehicle					
School bus was: Type 1	0	13	0	2	11
Type 2	0	2	0	0	2
Fixed Object					
School bus was: Type 1	0	34	0	10	24
Type 2	0	1	0	0	1
Non-Collision					
School bus was: Type 1	0	289	0	58	231
Type 2	0	27	1	12	14
Other Object					
School bus was: Type 1	0	4	0	1	3
Type 2	0	2	0	0	2
Pedestrian					
School bus was: Type 1	0	7	0	0	7
Type 2	0	1	0	0	1
Animal					
School bus was: Type 1	0	3	0	0	3
Type 2	0	0	0	0	0
Bicyclist					
School bus was: Type 1	0	0	0	0	0
Type 2	0	0	0	0	0
Motor Vehicle Other Road (see note)					
School bus was: Type 1	0	0	0	0	0
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
TOTAL					
School bus was: Type 1	0	559	1	82	476
Type 2	0	70	1	19	50
Grand Total	0	629	2	101	526

NOTE: "Motor Vehicle Other Road" means a collision involving a motor vehicle which leaves the roadway and collides with another motor vehicle on another roadway. Example: A bus crosses a median divider and collides with another vehicle traveling in the opposite direction.

Table 7 represents school bus collision activity by month for calendar year 2001. Historically, the month of October has had the highest number of school bus collisions. The 2001 statistics reaffirm the historical trend.

TABLE 7

SCHOOL BUS COLLISIONS BY MONTH

2001

Month	Collisions
January	236
February	176
March	219
April	182
May	219
June	136
July	83
August	58
September	226
October	297
November	233
December	173

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