

Ventura County Grand Jury

2010 - 2011



Final Report

School Bus Safety

June 3, 2011

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School Bus Safety

Summary

Following a fatal school bus accident in Missouri, the 2010-2011 Ventura County Grand Jury (Grand Jury) began an investigation into school bus safety within Ventura County (County). The Grand Jury also considered the issue of seat belts on school buses. [Ref-01]

School bus safety is a serious issue. A study by the National Highway Traffic Safety Administration (NHTSA) revealed that, during the eleven-year period from 1998 through 2008, an average of 19 school-age children died in school transportation-related traffic crashes each year. The majority of people killed in school transportation-related crashes are not school-age bus riders, but are occupants of other vehicles involved or pedestrians. [Ref-02]

The Grand Jury reviewed school bus-related information provided by all 21 school districts (Districts) within the County, including the Ventura County Office of Education (VCOE). The information provided to the Grand Jury by the Districts appears to indicate that school bus travel in the County is safe. The Grand Jury estimated that the number of daily student bus riders in the County for the 2009-2010 school year was 16,167. The Grand Jury found that there were a total of 41 school bus-related accidents in that school year, resulting in four injuries to student bus riders. However, the Grand Jury found that there is a lack of comparable, consistent data between Districts which makes objective measure of school bus safety difficult. The Grand Jury searched the websites of all 21 Districts and a representative sample of individual school websites and was unable to find school bus safety statistics. The Grand Jury was unable to identify any agency with the responsibility for collecting and reporting County school bus safety information at the County level.

The Grand Jury recommends that the VCOE assumes responsibility for the collection and reporting of school bus safety information within the County and develop a standard form for the collection of such information from the Districts. The Grand Jury recommends that the Districts use this standard form to collect school bus safety information, report this information to the VCOE, and post it on District websites. The Grand Jury recommends that the VCOE reports District school bus safety information on its website for the County as a whole.

After a study of the issues surrounding seat belts on school buses, the Grand Jury found that it is unclear whether seat belts on school buses significantly increase school bus safety.

Background

News reports of a fatal school bus accident in Missouri prompted the Grand Jury to initiate an investigation into school bus safety within Ventura County. [Ref-01]

Student transportation systems date to the end of the 19th century. In 1900, 17 states had student transportation systems and by 1910, 30 states had such systems in place. At first, students were transported to school in horse-drawn carriages, wagons, and carts. In 1914, the first motorized carriage was developed, a predecessor to the modern school bus. [Ref-03 and Ref-04]

With the expansion of the nation's system of roads in the 1920s and 1930s, came a greater need for vehicles to transport children to school, prompting the manufacture of school buses. The first all-steel body school bus was built in 1927. [Ref-03 and Ref-04]

Following several events resulting in student deaths, school officials recognized the serious need for safety regulations for school buses. In 1939, representatives from all 48 states met at the first National Conference on School Transportation to propose uniform minimum standards for school bus construction. At that Conference, it was determined that school buses would be painted "school bus yellow" for visibility. [Ref-03 and Ref-04]

In 1964, the first major test of school bus crashworthiness was conducted and pointed out weaknesses in school bus design. In 1967, the National Transportation Safety Board (NTSB) was established and NTSB school bus highway accident reports brought national attention to the issue of school bus safety. In 1974, the United States (U.S.) government published Federal School Bus Standard 17, which described the federal government's role in student transportation. A revised version, renamed Guideline 17, is still in force. In 1977, Federal Motor Vehicle Standards for school buses were adopted. In 1987, additional Federal Motor Vehicle Safety Standards for all school buses were introduced. [Ref-03 and Ref-04]

Over the years, concerns for student safety have prompted exhaustive study and regulation of all facets of student transportation. Federal regulations govern the safety performance and manufacture of school buses and establish minimum recommendations for pupil transportation safety programs. State and local regulations and industry guidelines also govern aspects of school bus safety.

Methodology

The Grand Jury conducted internet and newspaper searches on the topic of school bus safety. The Grand Jury searched the websites of all 21 County Districts and the websites of a representative sample of individual schools for information on school bus safety. The Grand Jury searched a representative sample of individual School Accountability Report Cards for information on school bus safety.

The Grand Jury studied government, scientific, and industry publications. The Grand Jury reviewed California State (State), County, and District policies and administrative regulations regarding school buses, school bus drivers, and student school bus riders. The Grand Jury reviewed information received from all school districts within the County and from the VCOE, regarding student enrollment, numbers of student school bus riders, school bus-related accidents and injuries, school bus-related behavioral incident reports, round trips traveled, and passenger miles.

The Grand Jury spoke with representatives of the California Highway Patrol (CHP). The Grand Jury reviewed CHP documents and studied statistics of school bus-related accidents and injuries in Ventura County.

Facts

FA-01. Every weekday during the school year, transportation systems in the U.S. operate approximately 440,000 school buses to provide transportation for more than 24 million school-aged children, according to a report by the Transportation Research Board of the National Research Council (TRB). [Ref-05]

FA-02. A study by the NHTSA revealed that, during the eleven-year period from 1998 through 2008, an average of 19 school-age children died in school transportation-related traffic crashes each year in the U.S.; 5 were occupants of school transportation vehicles and 14 were pedestrians.

During that same time period, the NHTSA study showed that an average of 142 total fatalities per year occurred due to school transportation-related crashes; 72% were occupants of other vehicles involved, 20% were non-occupants, including pedestrians and bicyclists, and 8% were occupants of school transportation vehicles. [Ref-02]

FA-03. In 2007, the national school bus accident rate was 0.01 per 100 million miles traveled, compared to 0.04 for trains, 0.06 for commercial aviation, and 0.96 for other passenger vehicles, according to the National Safety Council. The National Safety Council no longer estimates the annual number of school bus injuries because of inadequate, inconsistent reporting by the states. [Ref-06 and Ref-07]

FA-04. A 2002 TRB report studied safety issues relating to the transportation of students to and from both school and school-related activities by various modes of transportation for the time period 1991 through 1999.

The TRB report indicated that, during the period studied, 25% of student trips and 28% of student miles traveled were made on school buses. However, only 4% of all injuries and 2% of all student deaths were associated with school buses. In comparison, passenger

vehicles with a teen driver made up 14% of student trips and 16% of student miles traveled. However, 51% of injuries and 55% of fatalities were associated with this mode of travel. [Ref-08]

FA-05. According to the information provided by the Districts, aspects of pupil transportation and school bus safety are governed by sections of the: California (CA) Education Code, CA Government Code, CA Health and Safety Code, CA Penal Code, CA Vehicle Code, CA Welfare and Institutions Code, CA Administrative Code, CA Code of Regulations, U.S. Code, and Code of Federal Regulations, as well as by court decisions.

FA-06. In addition to government regulations, student transportation systems are guided by standards such as the "National School Transportation Specifications and Procedures" adopted in 2010 by the Fifteenth National Congress on School Transportation which makes recommendations for school buses and their operation at the state and school district levels, but not at the county level. [Ref-09]

FA-07. The County includes 21 school districts: Briggs Elementary, Conejo Valley Unified, Fillmore Unified, Hueneme Elementary, Mesa Union Elementary, Moorpark Unified, Mupu Elementary, Oak Park Unified, Ocean View Elementary, Ojai Unified, Oxnard Elementary, Oxnard Union High, Pleasant Valley Elementary, Rio Elementary, Santa Clara Elementary, Santa Paula Elementary, Santa Paula Union High, Simi Valley Unified, Somis Union Elementary, Ventura Unified, and the VCOE.

Of these Districts, four do not offer transportation to and from school for their students, but contract for bus services for field trips or special events. Districts providing school transportation either own, operate, and maintain their own school buses and employ their school bus drivers, or contract for some or all of these services.

FA-08. Each District within the County operating a school transportation program has extensive board policies, administrative regulations, procedures, and rules regarding school buses, school bus drivers, and student school bus riders.

FA-09. Information on school bus safety statistics is not available on District websites. Examination of a representative sample of individual school websites revealed that none contained such information.

FA-10. The Grand Jury requested school bus-related data for the 2009-2010 school year from the Districts, including: the number of student school bus riders, the number of school bus-related accidents and injuries, and total school bus passenger miles.

Many school districts responded with clear, thorough answers. Some responses appeared incomplete and some were ambiguous and difficult to understand. The information was not provided in a comparable, consistent manner.

Three school districts stated that they do not maintain passenger mile information. Two school districts said that they do not keep statistics on school bus accidents or injuries.

One school district referred the Grand Jury to private, contracted school bus companies, to the VCOE, and to the CHP for information this district does not maintain.

- FA-11.** The Grand Jury was only able to estimate the number of student school bus riders from the information provided by the Districts because of inconsistent reporting of data. For the 2009-2010 school year, the estimated average number of daily student bus riders in the County was 16,167.
- FA-12.** The 20 County school districts that do keep information on school bus-related accidents and injuries recorded a total of 41 school bus accidents in the 2009-2010 school year, resulting in four injuries to student bus riders, the only injury statistic studied by the Grand Jury. Eleven school districts reported zero accidents during that school year.
- FA-13.** The Grand Jury was unable to calculate a school bus accident rate, i.e., the number of accidents per passenger mile, for the 2009-2010 school year since mileage figures provided by the Districts were not comparable.
- FA-14.** The VCOE stated that each District is a Local Educational Agency and a self-governing governmental entity. Therefore, the VCOE does not collect countywide school bus safety data. According to the VCOE, the only County school bus-related information they collect is financial in nature.
- FA-15.** All public schools in the State are required to complete a Student Accountability Report Card annually containing information required by State and federal laws. Student Accountability Report Cards are intended to provide the public, including parents of school children, with important information about each public school and to communicate a school's progress in achieving its goals. Schools have the option to supplement the required data. However, school bus safety statistics are not a requirement. [Ref-10 and Ref-11]
- FA-16.** An examination of a representative sample of Student Accountability Report Cards for schools within the County revealed that none contained information on school bus safety statistics.
- FA-17.** In 1959, the State Legislature designated the CHP as the department responsible for supervision of the school pupil transportation industry. The CHP adopts and enforces rules and regulations relating to the equipment, maintenance, construction, design, color, and operation of school buses.

Among CHP responsibilities are:

- inspecting and certifying all school buses at least once each school year
- inspecting and licensing private school bus contractors
- inspecting driver records and school bus preventive maintenance and inspection records
- investigating school bus accidents
- administering written and driving tests for applicants seeking to renew or obtain school bus driver certificates
- fingerprinting applicants for an original certificate to drive a school bus

[Ref-12 and Ref-13]

FA-18. The CHP Statewide Integrated Traffic Records System is a database that serves as a means to collect and process data from collision scenes. School bus-involved collision data is available by California county, but not by school district. [Ref-14]

The data available for the County includes all school bus accidents occurring within the County, whether or not the school buses involved were County school buses or from other jurisdictions.

FA-19. According to the CHP, it does not gather information on County school bus passenger miles.

FA-20. Effective April 1, 1977, Federal Motor Vehicle Standard 222, "School Bus Passenger Seating and Crash Protection," established occupant protection requirements for school bus passenger seating and restraining barriers. Standard 222 requires that:

- all newly manufactured small buses (with a gross vehicle weight under 10,000 pounds) be equipped with lap belts
- all newly manufactured large buses (with a gross vehicle weight over 10,000 pounds) be required to protect riders through compartmentalization, which utilizes higher, padded seat backs, narrow seat spacing, and stronger seat structure to protect passengers from crash impact

[Ref-15 and Ref-16]

FA-21. A 1989 TRB report concluded that the potential benefits of requiring seat belts on large school buses were insufficient to justify a federal requirement. [Ref-17]

FA-22. In 2008, the NHTSA ruled that all new small school buses manufactured on or after September 1, 2011 be equipped with three-point, lap/shoulder belt systems. [Ref-15]

- FA-23.** The California Vehicle Code requires three-point lap/shoulder belts on all school buses manufactured after July 1, 2005. [Ref-18]
- FA-24.** The California Code of Regulations requires that all school bus passengers use seat belts, if provided, and that all pupils be taught how to use seat belts in an age-appropriate manner. [Ref-18]
- FA-25.** State requirements for three-point lap/shoulder belts on small and large school buses exceed federal standards. No national consensus exists on the benefits of seat belts on all school buses. [Ref-15 through Ref-21]
- FA-26.** Advocates of school bus seat belts, including the American Academy of Pediatrics and the National Coalition for School Bus Safety, recommend that all newly manufactured school buses be equipped with three-point lap/shoulder belts. They argue that seat belts would reduce injuries or deaths. They maintain that the use of seat belts would also improve student behavior, reduce bullying, and decrease behavior that might be a distraction to school bus drivers. [Ref-19 and Ref-20]
- FA-27.** Other organizations, including the National Association of State Directors of Pupil Transportation Services and the National Association of School Transportation, assert that school buses are already the safest way for students to travel to and from school. They contend that seat belts on school buses would result in little or no improvement in school bus safety at significant expense. [Ref-20]
- FA-28.** A 2010 Summary Report of a University Transportation Center for Alabama investigation into the implementation of seat belts on school buses reached the following conclusions: seat belt use on school buses is extremely variable, school bus seat belts reduce capacity, and the costs of school bus seat belts “far exceed” the benefits. [Ref-21]

Findings

- FI-01.** School transportation systems have been studied extensively at the national level, and that information indicates that school buses are one of the safest modes of transportation. (FA-01 through FA-04)
- FI-02.** Nationally, the majority of people killed in school transportation-related crashes are not school-age bus riders, but are occupants of other vehicles involved or pedestrians. Students are safer as passengers on school buses than they are as passengers in cars involved in crashes with school buses, or as pedestrians in school bus crashes. (FA-02)
- FI-03.** Not all Districts maintain information on school bus safety statistics. Some Districts do not track this information at all, while others rely on their contracted bus companies to do so. (FA-10)

- FI-04.** Due to the lack of comparable, consistent school bus safety statistics provided by the Districts, it is not possible to determine objective measures of school bus safety, such as accident rates. Thus, it is difficult to conclude that school bus transportation in the County is safe, as previously demonstrated at the national level. It is only possible to infer that school bus transportation in the County is safe from the information provided by the Districts.
(FA-03, FA-10 through FA-13)
- FI-05.** School bus safety statistics, for Districts or for individual schools, are not readily available to the public. (FA-09, FA-15 and FA-16)
- FI-06.** The efforts of the CHP, including certifying school bus drivers, investigating school bus accidents, and inspecting school buses, contribute significantly to ensuring school bus safety in California. However, the CHP does not collect information at the school district level. (FA-17 through FA-19)
- FI-07.** The Grand Jury was unable to identify any single local agency responsible for collecting, collating, and reporting County school bus safety information on a countywide basis. (FA-14, FA-18, and FA-19)
- FI-08.** It is unclear whether seat belts on school buses significantly increase school bus safety. (FA-21, FI-25 through FA-28)

Recommendations

- R-01.** The VCOE should assume responsibility for the collection, collating, and reporting of County school bus safety information. (FI-07)
- R-02.** The VCOE should develop a standard form for the annual collection of school bus safety information from the Districts. This information should include: the total number of students who ride the bus to and from school on a daily basis; the total number of students who are transported for field trips, special events, or athletic events; total miles ridden by students; and total number of school bus-related accidents and injuries resulting from those accidents.
(FI-04)
- R-03.** The Districts should use the VCOE standard form recommended in R-02, above, to collect school bus safety information, report this information to the VCOE, and post it on District websites. (FI-03 through FI-05)
- R-04.** The VCOE should use the forms provided by the Districts to collate school bus safety information for the County and post it on its website. (FI-05 and FI-07)

Responses

Responses Required From:

County Board of Education, Ventura County Office of Education
(FI-03 through FI-05 and FI-07) (R-01 through R-04)

Board of Trustees, Briggs Elementary School District
(FI-03 through FI-05) (R-03)

Board of Education, Conejo Valley Unified School District
(FI-03 through FI-05) (R-03)

Board of Education, Fillmore Unified School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Hueneme Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Mesa Union Elementary School District
(FI-03 through FI-05) (R-03)

Board of Education, Moorpark Unified School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Mupu Elementary School District
(FI-03 through FI-05) (R-03)

Board of Education, Oak Park Unified School District
(FI-03 through FI-05) (R-03)

Governing Board, Ocean View Elementary School District
(FI-03 through FI-05) (R-03)

Board of Education, Ojai Unified School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Oxnard Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Oxnard Union High School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Pleasant Valley Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Rio Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Santa Clara Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Santa Paula Elementary School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Santa Paula Union High School District
(FI-03 through FI-05) (R-03)

Board of Education, Simi Valley Unified School District
(FI-03 through FI-05) (R-03)

Board of Trustees, Somis Union Elementary School District
(FI-03 through FI-05) (R-03)

Board of Education, Ventura Unified School District
(FI-03 through FI-05) (R-03)

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Glossary

| <u>TERM</u> | <u>DEFINITION</u> |
|--------------------|---|
| CA | California |
| CHP | California Highway Patrol |
| County | Ventura County |
| Districts | The 21 school districts in Ventura County, including the Ventura County Office of Education |
| Grand Jury | 2010–2011 Ventura County Grand Jury |
| NHTSA | National Highway Traffic Safety Administration |
| NTSB | National Transportation Safety Board |
| State | State of California |
| TRB | Transportation Research Board of the National Research Council |
| U.S. | United States |
| VCOE | Ventura County Office of Education |