



Ensuring the Safety of Our Children: A Report on School Bus Safety in Alberta

October 2008

Alberta

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Executive Summary

Every year in rural Alberta, more than 126,000 students are transported over 76 million kilometres in almost 3,000 school buses. Another 97,000 students in Edmonton and Calgary and over 42,000 students in other urban centres receive provincially funded transportation.

School buses are considered to be one of the safest modes of transportation. According to Transport Canada, buses provide passengers with remarkably safe travel compared with other road vehicles and other modes of transport.



The students who ride school buses every day in Alberta are precious cargo and both parents and children deserve the safest school transportation system possible. Parents put their trust in school divisions and bus drivers to get their children to and from school safely. That is a tremendous responsibility and one that the Government of Alberta and the school bus industry take very seriously. That is why such a high priority is placed on school bus safety.

School bus safety is part of the provincial government's overall commitment to traffic safety. Alberta's Traffic Safety Plan is a comprehensive strategy designed to reduce all traffic-related deaths and injuries in Alberta. It outlines key initiatives to help prevent motor vehicle collisions, build safer roads, enforce traffic laws, and better educate all Albertans about traffic safety. A continued commitment to reducing the overall incidence of road collisions also contributes to school bus safety. The Traffic Safety Plan can be found online at: <http://www.transportation.alberta.ca/>.

Despite high standards for safety and statistics that indicate school bus collisions are rare in Alberta, any collision involving a school bus is cause for concern, whether the collision is a minor fender-bender or a more serious incident resulting in injuries. In the past year, there unfortunately were a number of school bus collisions, including two with tragic outcomes. That has raised the profile of school bus safety and has resulted in important public discussion on the issue.

The Government of Alberta is continually reviewing the safety of school buses and the students who ride them, and exploring ways to enhance that safety. Alberta Transportation, with the assistance of Alberta Education, began a review of school bus safety last fall and examined the cause of collisions in recent years to determine what else might be done to ensure even greater safety of school bus operations.

The review found that while high standards already exist for school bus safety in Alberta and excellent measures to prevent injuries or fatalities are in place, there are additional steps that can be considered to further enhance the safety of students riding school buses. These steps include:

- making the installation of amber flashing lights mandatory;
- making strobe lights mandatory;
- retrofitting buses with reflective tape;
- making the 'S' endorsement mandatory within one year of being licensed to drive a bus; and
- helping to develop consistent hiring criteria for drivers.

Introduction



"Ensuring the Safety of our Children: A Report on School Bus Safety in Alberta" contains an overview of all aspects of school bus safety including buses, drivers and carriers/school bus companies, and provides recommendations for enhancing safety.

While conducted by Alberta Transportation and Alberta Education, the review incorporates ongoing input from stakeholders and builds on the already strong relationships between government, school divisions and the school bus industry.

A lot of work and coordination on school bus safety is done through the Alberta School Bus Safety Committee. The committee consists of representatives from school divisions, carriers, the Alberta Student Transportation Advisory Council (ASTAC), the Student Transportation

Association of Alberta (STAA), and the Alberta School Bus Contractors Association (ASBCA). The committee is hosted by Alberta Transportation but is administered and chaired by industry and provides an effective forum for sharing best practices, addressing safety concerns, and allowing industry input into government policies and legislation.

The review builds on a separate, independent report and statistical analysis done by Opus Hamilton of school bus collisions in Alberta during a five-year period (September 2001 to June 2006).¹ The statistical analysis also includes fatal collisions to June 2008. The Opus Hamilton report reviewed trends related to school bus collisions and also provided recommendations related to improvements that can be made to reduce collisions involving school buses. Some of those recommendations have been incorporated into this report. The Opus Hamilton report is available online at: <http://www.transportation.alberta.ca/601.htm>.

Government and industry are open to changes that keep buses and the passengers on and around them safe. The ultimate goal of no injuries or fatalities may be challenging to achieve, but it's certainly a goal worth striving for.

The Vehicle

Federal Safety Standards

Transport Canada has regulatory responsibility for safety design and engineering standards for new buses. School buses have high structural integrity standards. The federal standards address such things as roof strength, fuel system integrity, bus window retention and school bus joint strength; all designed to mitigate the effect on passengers in the event of a collision.

As school bus design evolves, Transport Canada ensures vehicle safety by continually reviewing the performance of school buses. The federal department consults with provincial governments, stakeholders, school bus manufacturers and the Canadian public. Transport Canada also considers U.S. standards due to comparable safety experiences and to achieve a certain amount of industry integration.^{2,3}

As well, the Canadian Standards Association D250 Technical Committee for school bus standards has gone beyond Transport Canada regulations to define additional stringent standards for all yellow school buses manufactured in Canada. The 2007 CSA standards (known as CSA D250-07) include:



- improved access to the rear emergency door;
- mandatory rear door lock and roof hatch performance criteria;
- an exit lamp above the service door to improve visibility of the danger zone on the right side of the bus during stops;
- modified seat spacing to allow for either an anchor for a child car seat, or an integrated seat;
- a prohibition of interior luggage racks unless the bus is equipped with seat belts for all passengers; and
- clarified wording on floor covering and traction.⁴

CSA D250-07 will be adopted in Alberta with the completion of the *Commercial Vehicle Safety Regulation*.

Mechanical Safety

Every six months school buses in Alberta must undergo a Commercial Vehicle Inspection (CVI) mechanical safety check through the Vehicle Inspection Program (VIP). These are comprehensive mechanical safety inspections performed:

- within an Alberta licensed facility;
- by an Alberta licensed and certified technician; and
- with shop tools and equipment.



Commercial vehicle inspections are done twice a year to ensure that school buses are in safe operating condition. Each vehicle safety system is closely examined, including the steering, braking and vehicle lighting systems.

The CVI follows national criteria and is closely monitored for quality control and integrity. The carrier, or school bus owner, is responsible for ensuring all vehicles in its fleet comply with mechanical safety requirements, including current commercial vehicle inspections.



School buses are also subject to roadside inspections that follow Commercial Vehicle Safety Alliance (CVSA) criteria for mechanical fitness. Over the period April 2003 through March 2008, a total of 8,280 school buses were inspected. Of these, 572 (6.91%) were placed out-of-service, but the vast majority of defects could be corrected immediately, allowing the bus to proceed. Only six (0.07%) were towed.

This compares favourably to the provincial out-of-service rate for all commercial vehicles, which is approximately 34 per cent.

School buses are subject to harsh operating conditions (such as operating on gravel or uneven roads, constant stopping and starting, significant kilometres) that make a zero out-of-service rate highly unlikely.

Provincial commercial vehicle transport officers and police officers in the cities of Edmonton, Calgary and Lethbridge conduct most of the school bus inspections in Alberta.

To avoid interfering with student movement, school buses are not inspected while students are on board. School buses are inspected with a carrier representative or the driver present. Generally, officers request that carriers produce buses at a specified maintenance shop or they attend local schools and inspect the vehicles after they are unloaded.

Inspecting officers may direct that a school bus be removed from the highway or from operation. Out-of-service vehicles must not move under their own power. Inspecting officers normally do not release school buses and/or drivers from an out-of-service notice until the school bus has been repaired, serviced, altered or otherwise dealt with so that it is rendered safe to operate.

It's important to note that the CVSA North American Standard Inspection Program is not a periodic inspection program or a preventative maintenance program for carriers and drivers. It is a roadside inspection program which provides a random sample of the situation of school bus maintenance throughout Alberta and determines the effectiveness of a company's or driver's maintenance and safety management program.



Under Alberta's proposed *Commercial Vehicle Safety Regulation*, all school bus drivers will be required to document their pre-trip vehicle inspections and the carrier will be required to maintain the trip inspection reports for six months to confirm compliance in the event of an audit.

Safety Devices

There are a number of mandatory and optional safety devices that are part of the design of school buses. The design and effectiveness of these devices are regularly reviewed by federal and provincial governments.

Stop Arms

Federal regulation has progressively addressed the safe loading and unloading of school bus passengers. For instance, the standard requiring stop-arms came into effect in July 1996, complementing the long-standing red flashing lights and provincial traffic regulation that requires other vehicles to stop while a school bus is loading or unloading passengers.

Red Flashing Lights

In Alberta, all school bus drivers must activate the alternately flashing red lights when loading and unloading passengers, except when operating on a road where a bylaw prohibits their use.

Under the *Traffic Safety Act*, municipalities may establish by-laws that prohibit the use of red flashing lights on school buses when operating in urban areas. It was recognized that the use of such lights in urban areas could disrupt the efficient and safe flow of traffic; for example:

- The large number of school buses, displaying both amber and red flashing lamps, would distract from traffic control devices at intersections.
- School bus flashing lamps are used when children cross the roadway; in urban areas, children are directed to cross the roadway at intersections.
- Vehicles going both ways must stop for a school bus operating alternating red flashing lamps.

Amber Flashing Lights

Amber flashing lights are currently optional on buses in Alberta. The *Alberta Vehicle Equipment Regulation* allows for an amber flashing light to be mounted beside each front red flashing light and beside each rear red flashing light. The amber flashing lights are to be activated as the bus begins to slow down for a stop to load or unload passengers. This is a long-standing practice when the use of red flashing lights is required. Proposed changes would make the amber flashing lights mandatory, not optional, whenever the flashing light warning system is required to be used.

Recommendation 1: It is recommended that the *Alberta Vehicle Equipment Regulation* be amended to make amber flashing lights mandatory on all school buses whenever the eight light (red and amber) warning system is required to be used.

Strobe Lights

A newly revised CSA D250-07 standard outlines the requirements for strobe lights on school buses, which are optional. Strobe lights are white and centred in the roof in the rear third of the bus. The use of strobe lights can greatly enhance visibility for a bus and help prevent rear-end collisions, particularly in foggy conditions in rural areas. However, the use of strobe lights in urban areas may not have the same effect and could in fact be distracting to drivers in high-traffic areas. It is acknowledged that many urban municipalities have by-laws preventing the use of alternately flashing red and amber lights and strobe lights.

Thirteen school divisions and two school bus contractors currently use strobe lights on their buses.

Recommendation 2: It is recommended that the *Alberta Vehicle Equipment Regulation* be amended to make a strobe light a requirement in Alberta for all buses whenever the eight light (red and amber) warning system is required to be used. New buses should be equipped with strobe lights and the Government of Alberta should fund the retrofitting of existing buses in school divisions where the eight-light system is required, such as rural areas.

Reflective Tape

The use of reflective tape on the side and rear is required on school buses manufactured on or after March 31, 1998. Though not mandatory at this time for school buses manufactured prior to 1998, Alberta Transportation is including the requirement in proposed changes to the *Alberta Vehicle Equipment Regulation*. Reflective tape makes buses more visible, particularly in the dark. The use of such tape could help prevent incidents like rear-end collisions.

Recommendation 3: It is recommended that all buses be retrofitted with side and rear reflective tape to the CSA D250 standard.

Mirror Systems

An October 1997 amendment to federal regulation introduced a much more comprehensive section on school bus mirror systems; a six-mirror system with defined fields of view designed to help drivers see pedestrians close to the vehicle front and sides. The standard requires both flat-nose and long-nose buses To provide the specified field of view.

Emergency Exit

Safely exiting a school bus in case of a fire is a particular concern with respect to younger or disabled persons. Both Canada and the U.S. have comprehensive emergency exit requirements. These address both the emergency exit capability and flame retarding specifications for interior bus materials. The use of flame retardant interior materials gives passengers the opportunity to safely exit in the event of a fire.

Many devices address the environment around school buses. Some of these have been widely installed because of school board and operator interest in safety solutions. There are two types of devices - physical barriers and driver warning systems.

Crossing Control Arms

Pedestrian-student crossing control arms are required on all school buses manufactured after January 2000. This device is an arm along the front bumper, which swings out whenever the stop arm and alternately flashing red lights are activated. The arm extends forward to form a barrier perpendicular to the front of the bus, preventing pedestrians from crossing in front of the bus, out of view of the driver.

Driver Warning Systems

Driver warning systems warn bus drivers of pedestrians or obstructions close to the front and sides of the bus. These optional systems include motion detectors, video cameras and other sensors coupled with warning systems and logic to minimize false alarms.


Seat Belts

The issue of seat belts on school buses has been widely discussed and debated, And is one the Government of Alberta is constantly studying.

No Canadian province requires seat belts on school buses and Alberta is not considering a requirement for seat belts at this time. While any injury or fatality involving a school bus is one too many, studies have found that due to the design of school buses, seat belts would not necessarily make buses safer and may, in some circumstances, put students at greater risk of injury.

School buses use a passenger protection strategy known as compartmentalization, with strong, closely-spaced seats having energy-absorbing seat backs that protect students in the event of a crash. Compartmentalization is viewed throughout North America as the safest method known for transporting large groups of students of varying ages and sizes. The bus seats are spaced and the seat backs sized to prevent passengers being thrown around in an impact. A barrier in front of the first row of seats protects first row passengers. The design balances the energy absorption and strength of the seat backs and barrier.



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Both the National Highway Traffic Safety Administration in the U.S. and Transport Canada have studied the use of seat belts extensively. Transport Canada conducted consultations on this issue in both the 1970s and 1990s, and based on the evidence concluded that seat belts do not provide additional safety benefits in large school buses.

Seat belts could possibly diminish the existing passenger protection by being a potential cause of injury in a severe impact, for which the present passive passenger protection was designed and is effective. Some advocate three point seat belts to minimize such potential. Three point seat belts are significantly more complex and have their own safety problems, such as ease of use, which is necessary to encourage wearing, and safe fit for a wide variety of passengers.

Even the best seat belts enhance safety only if properly worn. The feasibility of overall seat belt management is therefore a safety issue. A local school board deciding to install seat belts without a comprehensive program to ensure their proper use would, in the event of a potentially tragic crash happening in that jurisdiction, fail to realize the intended benefit.

Experience where seat belts are available suggests that very young children will use them as instructed but that use diminishes into the secondary school age.²

Transport Canada does not recommend the use of lap belts on mid to large sized school buses due to a greater risk of head and upper body injury. While neither Transport Canada nor the Government of Alberta recommend retrofitting school buses with seat belts, carriers and school divisions have the option to have them installed on newly manufactured, smaller (mini) buses.

In April 2007, a new federal regulatory amendment came into effect, requiring all newly manufactured school buses to have a specified number of seating positions with either an anchorage for a child car seat or an integrated seat.⁵ This is subject to further review by Transport Canada and the Government of Alberta will monitor future developments in this area.

The Driver

Licensing Requirements

School bus drivers must have a valid Class 4 or Class 2 driver's licence. Drivers with a Class 4 licence may only operate a bus that has a seating capacity of not more than 24 passengers, excluding the driver. Holders of a Class 2 licence may operate any size of school bus.

The following are requirements for a Class 2 driver's licence:

- must be at least 18 years old and have, at minimum, a Class 5 non-Graduated Driver Licence (non-probationary);
- have a satisfactory medical report and vision screening;
- pass both a knowledge and road test;
- the road test for a Class 2 licence must be conducted in a bus that has a seating capacity that exceeds 24 passengers;
- Class 2 licence applicants must successfully demonstrate a highway turnaround, passenger pick up/drop-off and a rural uncontrolled railway crossing procedure; and
- if the bus is equipped with air brakes, an air brake "Q" endorsement is also required.



A driver examiner licensed by Alberta Transportation conducts Class 2 road tests. In addition to licensed examiners, there are three school bus companies and five licensed examiners authorized to conduct road tests through the Alberta Industrial Certification Program. All examiners are regularly audited and monitored to ensure quality testing standards are consistently applied.

'S' Endorsement - School Bus Driver Improvement Program

Developed in 1984, the School Bus Driver Improvement Program, or "S" endorsement, is a 16-hour training course that evaluates drivers based on written tests, a pre-trip bus inspection and an on-road driver assessment. Drivers complete a six-hour defensive driving component, which qualifies candidates who successfully complete the program to have three demerits removed from their driving record.

In 1995, the Alberta Student Transportation Advisory Council (ASTAC) entered into an agreement with Alberta Transportation to take over most of the program's day-to-day administration. Sixty certified agents deliver the program throughout the province. School bus fleets with 15 or more buses may apply for delivery agent status. The specialized "S" endorsement instructors and school bus instructors are employees in the safety and training divisions of the carriers or the school divisions. Private driver training schools can also be certified to instruct the "S" endorsement program.

The "S" endorsement program was originally introduced as a voluntary, post-licence improvement program for drivers with some school bus driving experience. Although the "S" endorsement is not mandatory from a licensing perspective, most school divisions in Alberta require drivers to complete "S" endorsement training. In many cases, new drivers must complete the "S" endorsement program within the first year of their employment as a condition of contract or employment.

Ideally, to ensure that prospective school bus drivers have received important core information on the operation of the school bus and in passenger management issues, including the proper care of students with special needs or disabilities, it would be best if every school bus driver could have the benefit of this information before starting to drive. However, the reality of the school bus industry is that drivers are often required at very short notice and their hiring may not coincide with the next formal "S" endorsement class. Small carriers without their own "S" instructors do not have control over the timing of these courses and are therefore dependant on the scheduling of certified driver training schools.

Recommendation 4: It is recommended that specific core components of the "S" endorsement be mandatory training prior to operating a school bus. The full "S" endorsement would be required once a driver has operated a school bus for one year.

Recently, Alberta Transportation and the school bus industry collaborated on a comprehensive revision of all components of the "S" endorsement program, including the creation of an Instructor's Guide and Program of Studies. ASTAC rolled out the new program in spring 2008 with cooperation and funding from Alberta Transportation.

Orientation sessions throughout the province presented instructors with the new materials and resources for the program. Alberta Transportation has also committed to review all current "S" endorsement policies with school bus industry representatives.

Driver Recruitment, Training, and Retention

A shortage of drivers is one of the key challenges facing the school bus industry. The combination of a strong economy and active job market have led to hiring difficulties and high turnover rates. This results in some school divisions not being able to fill all required routes within their jurisdictional areas.

In order to recruit the best professional drivers to operate school buses, the industry is embarking on a marketing campaign to recruit qualified and skilled drivers.

Recommendation 5: It is recommended that Alberta Transportation provide funding to the industry marketing initiative to recruit qualified and skilled drivers.

The school bus industry has also indicated a desire for standardized hiring criteria for drivers. The criteria would assist carriers, regardless of their size, in hiring to a standard that exists province-wide and would help drivers reach the highest skill and safety levels possible.

Recommendation 6: It is recommended that Alberta Transportation work with the industry to standardize hiring criteria for school bus drivers to ensure consistency and maintenance of high Standards.

Many school divisions and carriers have their own training programs for drivers that go over and above the basic driver licensing requirements that include a knowledge test, vision screening, driver's medical and road test. This extra training, in addition to the "S" endorsement, includes topics such as first aid, student management and conflict resolution, along with area-specific subjects that focus on school division policies and misconduct reporting.

Stakeholders have also identified the need for enhanced training related to winter driving conditions. Opus Hamilton found that January through March are the highest risk months for school bus collisions, with 40 per cent of total collisions in the time period studied occurring in those months.

Additional training geared to winter driving or "refresher" courses could help address this issue.

Recommendation 7: It is recommended that Alberta Transportation work with the school bus industry to provide "refresher training" throughout the year, especially at high risk collision times (winter months). Such training would also allow employers to target individual drivers' needs and challenges such as winter driving conditions.

Consistent approaches to such training and reaching drivers across the province can be challenging, so new approaches need to be considered. Innovative approaches to driver training should be used, such as distance training through technology and standardized key safety messages and fact sheets that could be provided to drivers on a regular basis.

Another challenge affecting school bus driver training has been inconsistencies in maintaining driver records. A Commercial Driver Profile program is currently being developed that will help the commercial vehicle industry monitor the activities of its professional drivers. School bus drivers could be included in this new initiative.

Recommendation 8: It is recommended that Class 2 drivers be included in the Commercial Driver Profile program that is being developed by Alberta Transportation.

Though one of the recommendations in the Opus Hamilton report was to implement an annual safety performance award/recognition system for carriers and drivers, recognition by industry and government of drivers and companies that are excelling at school bus safety already exists.

There may be opportunities to enhance the general recognition of the industry through such events and promotions as Provincial School Bus Driver Appreciation Day. This could help industry and government efforts to attract and retain excellent professional drivers.

The Carrier

Carrier Requirements



The National Safety Code (NSC), introduced in 1987, applies vehicle inspection and maintenance standards as well as driver qualifications, training, log book and hours of service requirements to school buses. Safety fitness is key to the NSC and under the safety rating standards and data exchange program, motor carriers, including school bus operators, are closely monitored for safe performance.

The *Commercial Vehicle Certificate and Insurance Regulation* specifies that a carrier must establish, maintain and follow a written safety program and retain it at the carrier's principal place of business in Alberta.

The carrier must designate an employee to maintain and implement the safety program and ensure compliance with safety laws. As a condition of every safety fitness certificate, the carrier and its employees must comply with the safety program. In addition, driver files and other files must be maintained for a five-year period.

Another issue highlighted in the Opus Hamilton report is bus route safety. The report recommends a documented road safety assessment of all bus routes be conducted by drivers within one month of the start of every school year, using a simple, standardized checklist. Many carriers already require such assessments, but there is no consistent, province-wide approach.

The intent of the assessment is to identify potential road-related hazards so drivers can make safer decisions about their route.

Recommendation 9: It is recommended that Alberta Transportation and Alberta Education work with the bussing industry to develop a standardized route risk assessment checklist to ensure that all areas of the province are consistently applying best practices concerning the safety of routes and any modifications required due to adverse conditions such as weather.

School divisions and carriers would be responsible for conducting the risk assessment and monitoring its use at the beginning of the school year.

School bus drivers are never prohibited from exercising their best judgment about driving relative to vehicle, weather or roadway conditions.

In general, school bus drivers do an excellent job in assessing risk and they take appropriate precautions on a daily basis. For example, they continually assess operating conditions of their bus and the need for safety signage.

Most boards have an inclement weather policy and when weather conditions place the safety of students at risk, the School Superintendent, in consultation with the School Manager of Transportation, may suspend bus services and/or close schools. There are boards that leave such weather related operating decisions in the hands of the bus operator.

Implementation of the 'risk assessment' related recommendation will ensure route specific risk assessments are conducted and mitigation strategies prepared. This consistent and proactive approach will assist critical decision making for all parties.

Carrier Monitoring



All registered owners of a school bus who are required to operate their vehicles under the authority of a safety fitness certificate are monitored for convictions, CVSA inspection results, collisions, and compliance audits. Carrier performance is reviewed monthly, based on the most recent 12 months of information available.

Alberta Transportation also conducts compliance audits of school bus carriers if they are identified by automated monitoring programs or they

have been randomly selected.

These audits verify compliance to the following requirements:

- a written safety program;
- a written maintenance program (required only if the buses are used for purposes other than just school pick-up/drop-off);
- driver files;
- vehicle files;
- hours of service; and
- insurance documents.

All carriers identified as non-compliant are required to correct the deficiencies. A carrier may be re-audited to confirm that they have updated their programs and implemented the improvements directed. Enforcement action may be taken for severe violations.

Various monitoring stages that a carrier has reached are used to evaluate their overall performance and assist the department in determining how best to intervene with the carrier.

Alberta Transportation's progressive discipline program ensures that non-compliant carriers are approached in a consistent, fair and objective manner. The program has clearly defined steps/levels, yet it is flexible enough to allow for special circumstances. To modify a carrier's behavior and obtain positive change, discipline levels are identified. A carrier could progress through these levels until their activities are managed in an appropriate and safe manner; however, carriers who present an immediate risk to public safety will be dealt with at any level of discipline deemed necessary.

If a carrier fails to properly manage their regulated administrative and safety processes, they may ultimately lose any permit privileges, have their safety fitness certificate cancelled and be issued an "unsatisfactory" safety fitness rating. If a carrier's rating is downgraded to unsatisfactory, it would effectively mean that the carrier could no longer operate commercial vehicles on any highway as defined by the *Traffic Safety Act*. The department's policy is to notify school divisions in writing when one of its carriers has its safety rating downgraded.

Carriers wishing to further develop their monitoring practices to ensure the highest standards are consistently met have access to a key tool in achieving such a level of success – the Partners in Compliance Program (PIC). PIC was developed in 1995 as a joint venture of Alberta Transportation and many safety-focused motor transport operators from the Alberta commercial vehicle industry. The program offers members a number of tools to help them attain exemplary safety performance, including continuous improvement practices, open sharing of safety results and best practices, and consistent and meaningful data to allow members to measure their safety performance against other operators.

Currently in Alberta, there are two school bus carriers or 1,850 school buses enrolled in the PIC Program. Contracting with PIC carriers is one action available to school divisions to provide the due diligence necessary for transportation safety.

Moving Forward



While safety is always a priority and the rate of school bus collisions and injuries or fatalities is low (the rate of collisions for school buses is less than all vehicle types), there are still some things that can be done to improve safety.

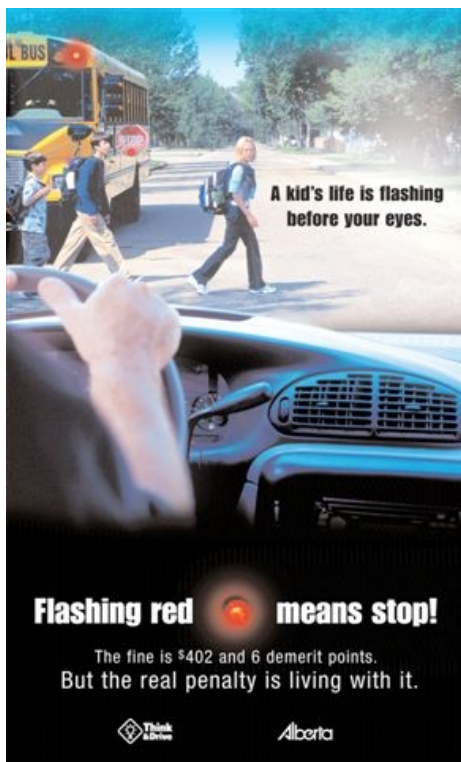
Implementing the recommendations in this report will go a long way toward enhancing school bus safety but responsibility also lies with all drivers on Alberta roads. They need to understand and follow the rules of the road related to school buses. The Opus Hamilton collision analysis found that while bus drivers were in error in 29 per cent of major injury collisions between 2001 and 2006, other drivers were in error 51 per cent of the time.



Alberta Transportation is already working on increasing the involvement of the law enforcement community in enforcing adherence to driving rules concerning school buses. An enforcement coordinator will work with the Alberta School Bus Safety Committee to ensure coordination of targeted enforcement throughout the province.

However, enforcement is only one tool. Enhancing the profile of school bus safety and raising awareness across Alberta about all aspects of safety will require a coordinated and strategic approach to communicating with Albertans.

Recommendation 10: It is recommended that a comprehensive communications plan be developed by Alberta Transportation and Alberta Education to increase awareness about school bus safety and to help ensure all drivers on the road are aware of the existing laws related to sharing the road with school buses.



Alberta Transportation also plans to review the resources allocated to school bus safety within the department to determine the best ways to improve coordination and enhance the focus on school bus safety. As well, further work will be done with Alberta Education to coordinate visits by both departments to school bus carriers to ensure the efficient oversight of compliance to standards.

Work will begin immediately by Alberta Transportation and Alberta Education on implementing the recommendations in *“Ensuring the Safety of our Children: A Report on School Bus Safety in Alberta”*, with the aim of having some in place early in the 2008-09 school year.

Both departments will continue to work closely with the Alberta School Bus Safety Committee and all stakeholders involved in seeing that children get to and from school safely.



Summary of Recommendations

Recommendation 1

It is recommended that the *Alberta Vehicle Equipment Regulation* be amended to make amber flashing lights mandatory on all school buses whenever the eight light (red and amber) warning system is required to be used.

Recommendation 2

It is recommended that the *Alberta Vehicle Equipment Regulation* be amended to make a strobe light a requirement in Alberta for all buses whenever the eight light (red and amber) warning system is required to be used. New buses should be equipped with strobe lights and the Government of Alberta should fund the retrofitting of existing buses in school divisions where the eight-light system is required, such as rural areas.

Recommendation 3

It is recommended that all buses be retrofitted with side and rear reflective tape to the CSA D250 standard.

Recommendation 4

It is recommended that specific core components of the 'S' endorsement be mandatory training prior to operating a school bus. The full 'S' endorsement would be required once a driver has operated a school bus for one year.

Recommendation 5

It is recommended that Alberta Transportation provide funding to the industry marketing initiative to recruit qualified and skilled drivers.

Recommendation 6

It is recommended that Alberta Transportation work with the industry to standardize hiring criteria for school bus drivers to ensure consistency and maintenance of high standards.

Recommendation 7

It is recommended that Alberta Transportation work with the school bus industry to provide “refresher training” throughout the year, especially at high risk collision times (winter months). Such training would also allow employers to target individual drivers' needs and challenges such as winter driving conditions.

Recommendation 8

It is recommended that Class 2 drivers be included in the Commercial Driver Profile program that is being developed by Alberta Transportation.

Recommendation 9

It is recommended that Alberta Transportation and Alberta Education work with the bussing industry to develop a standardized route risk assessment checklist to ensure that all areas of the province are consistently applying best practices concerning the safety of routes and any modifications required due to adverse conditions such as weather.

Recommendation 10

It is recommended that a comprehensive communications plan be developed by Alberta Transportation and Alberta Education to increase awareness about school bus safety and to help ensure all drivers on the road are aware of the existing laws related to sharing the road with school buses.

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